

# OUR NATION'S INFRASTRUCTURE

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**HEARINGS**  
BEFORE THE  
**JOINT ECONOMIC COMMITTEE**  
**CONGRESS OF THE UNITED STATES**  
NINETY-EIGHTH CONGRESS  
FIRST SESSION

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AUGUST 9, 31, AND SEPTEMBER 7, 1983

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Printed for the use of the Joint Economic Committee



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# OUR NATION'S INFRASTRUCTURE

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TUESDAY, AUGUST 9, 1983

CONGRESS OF THE UNITED STATES,  
JOINT ECONOMIC COMMITTEE,  
*Washington, D.C.*

The committee met, pursuant to notice, at 10 a.m., the Galt House, Louisville, Ky., Hon. Lee H. Hamilton (vice chairman of the committee) presiding.

Present: Representatives Hamilton and Mazzoli.

Also present: Deborah Matz, professional staff member.

## OPENING STATEMENT OF REPRESENTATIVE HAMILTON, VICE CHAIRMAN

Representative HAMILTON. The meeting of the Joint Economic Committee will come to order. It is a pleasure for us to be in Louisville this morning and I am delighted to welcome our distinguished witnesses and guests.

We have heard a great deal in recent months about the deterioration of the Nation's infrastructure—its roads, bridges, sewers, ports, and wastewater treatment plants. Although estimates of need range as high as \$3 trillion, we have very little specific information about actual conditions. In fact, in most instances, we are not even aware of a potential problem until a bridge collapses or a dam bursts.

For that reason, the Joint Economic Committee initiated a State-by-State infrastructure study. It was begun in only four States but interest was so widespread that all States were invited to participate. Presently, 21 States are being evaluated. Each participating State has contributed funds which are being channeled to researchers at State universities. These researchers are evaluating the present condition to the State's infrastructure and projecting State infrastructure needs and financing capacity for the next two decades. The study will also evaluate the various options for Federal assistance, if Federal assistance is deemed appropriate.

As you know, there is a great deal of concern in Congress about the condition of our infrastructure. Members of Congress are anxious to learn how deteriorated our public facilities really are, what the effect is on national productivity, costs, and human health and, finally, what the Federal response ought to be. The Joint Economic Committee study will go a long way toward answering some of these questions and toward providing Members of Congress with information pertinent to the consideration of important legislation.

A number of bills have been introduced which attempt to reverse the decline in our public works investment. Bills to establish a Fed-

eral capital budget and national infrastructure banks are pending before the House and Senate public works committees. It is unlikely, however, that any action will be taken on these bills in the near future. On the other hand, by a vote of 306-113, the House passed H.R. 10 on July 12. This bill amends the Public Works and Economic Development Act of 1965 and would provide \$500 million a year for 3 years for economic development investment. This bill is now pending before the Senate Committee on Environmental and Public Works, which recently reported out legislation which would, among other things, provide public works assistance to distressed small communities, and would establish a program to provide jobs for young adults in community improvement projects. It is anticipated that this bill will be considered in conjunction with the EDA bill by a conference committee and that ultimately the legislation will reach the President's desk.

The Joint Economic Committee will be holding hearings around the Nation and in Washington to gather information about how communities, businesses, and residents are being affected by infrastructure problems, to learn what steps are being taken to cope with the problems and what additional assistance is needed. The result of this undertaking should be that policymakers at all levels of Government will be better equipped to assess the magnitude of their infrastructure needs and to prescribe proper treatment.

Although the immediate effect of infrastructure problems is local in nature, ultimately our entire Nation suffers when roads, bridges, and sewers in city after city and State after State are in disrepair. Our systems of interstate commerce, transportation, and communications, as well as our national productivity, rely on effective and efficient facilities which can be counted on to provide adequate services on a routine and consistent basis. Improving and maintaining the condition of our public facilities will assure the vitality of our national economy. Moreover, citizens will be guaranteed safe bridges, adequate amounts of drinking water, and sturdy dams.

Your testimony today will form a part of an extremely important record which will, at the very least, assist Members of Congress in trying to develop policies to preserve our public facilities—one of the Nation's most precious resources.

I am very pleased to have Congressman Mazzoli joining us here today.

Congressman Mazzoli serves on four separate committees of the Congress—which is an extraordinary heavy assignment. He is on the Judiciary, the Intelligence, the District of Columbia, and Small Business Committees. We are delighted to have Congressman Mazzoli here with us and now, I would like to ask if he would like to make an opening statement.

#### OPENING STATEMENT OF REPRESENTATIVE MAZZOLI

Representative MAZZOLI. Thank you very much, Mr. Vice Chairman, and I would just take a moment of the time. I want to thank you and the members of the Joint Economic Committee for selecting our locality as one of the sites for the hearings on the question of the infrastructure.

Let me first hasten to say that every now and then someone in Washington stumbles on a word that seems to be the kind of word that everyone sort of bandies around—it says a lot and maybe does not say anything. And infrastructure may have been one of those words.

When I first heard it I thought it might have been some kind of a submicroscopic particle that some physicist has stumbled on or found, or it might be some new form of expletive not always deleted but maybe people have used.

But, of course, I came to realize what infrastructure was and I was rather surprised, actually, when—just with respect to Louisville and Jefferson County we have something like over 2,000, and ours in not a gigantic community really, but something like over 2,000 miles of water mains, over 1,000 miles of sewer, we have over 300 busses—I guess rolling equipment fits into infrastructure, we have over 500 bridges and over 2,000 miles of highway.

So as Vice Chairman Hamilton has said it is very important for us to first survey our needs and then analyze what the Federal Government can do in association with State and local governments. And this kind of a meeting should be a very strong step forward.

So I want to thank Vice Chairman Hamilton, with whom I serve on the Intelligence Committee and who has, in his short time in Washington, become a very strong leader in the House, and not just on economic matters—and he is the vice chairman of the Joint Economic Committee—but in matters of foreign policy and in matters of domestic policy.

So it is a pleasure to join him again and to see all of our friends here from Indiana and Kentucky. Thank you.

Representative HAMILTON. Thank you very much, Congressman Mazzoli. We have two panels this morning. The first will be a panel representing State government, and we are pleased to have representatives of four States with us—Indiana, Missouri, Ohio, and Kentucky.

We have Lt. Gov. John Mutz from Indiana; Mark J. Rhoads, the deputy director, Department of Consumer Affairs, Regulation and Licensing, State of Missouri; Ms. Marnie Shaul, deputy director, Department of Development, State of Ohio; Ms. Jackie Swigart, secretary of natural resources and environmental protection cabinet, State of Kentucky; Merl Hackbart, budget director, State of Kentucky.

We are very pleased to have these high officials with us this morning and we will begin the testimony at this time. I would mention to our panelists that their statements will be submitted in full as part of the record without any objection, and we will ask them to summarize their statement in approximately 10 minutes, if they would.

Also, if you would, speak very carefully into the microphone so your voice will carry to the back of the room. And we will begin with you, Lieutenant Governor Mutz. We are delighted to have you. We appreciate your coming down from Indianapolis today to be with us.



STATEMENT OF HON. JOHN M. MUTZ, LIEUTENANT GOVERNOR,  
STATE OF INDIANA

Mr. MUTZ. Thank you very much. It seems that it might be appropriate as we approach the subject to provide to you some information which has been the result of a study done at the Indiana University School of Business concerning the estimates of infrastructure needs.

I, too, share the problem with the word "infrastructure," I get kidded about it everywhere I go and it has become a piece of jargonese, I guess. But for lack of a better term I will use it today.

When I speak about it I am referring to highways, roads, bridges, transportation facilities in general, including mass transportation facilities. The only element of what I call infrastructure that is not included in the figures I am about to use is water. The water service systems in Indiana largely have been financed by revenue bonds and by increases in user service charges of some kind or another, and they are not included in the figures I am about to give you.

This particular study attempts to evaluate Indiana's infrastructure needs between the year 1982 and the year 2000. It attempts to do this by applying different degrees of need to some of the perceived needs that may be present on the part of local officials—I think we recognize there is a varying degree of crisis in terms of how you look at these things.

What we tried to do here was to come up with a realistic evaluation. The estimate made by the researchers in this case indicates a need between 1982 and the year 2000 in Indiana of \$48.3 billion. Against this we estimate we will receive from various governmental sources—the property tax and other sources, including user service charge—about \$19 billion during the same time period.

And so the gap, if you want to call it that in this situation, in funding to supply the kind of infrastructure I think most experts will agree—at least in our State—is required if we are to remain a viable entity from an economic development standpoint, is about \$29 billion.

And, of course, by the time you adjust that for inflation and so forth, I think you are talking about a \$2 billion-a-year gap on the average during this 18 year period of time.

As the Lieutenant Governor of Indiana I also serve, by statute, as the Director of the Department of Commerce in our State, so economic development and job creation is my No. 1 priority and my major responsibility. Unlike most other States, in Indiana we actually gave the Lieutenant Governor something to do.

And as far as I am concerned, in terms of our situation, the issue is not whether to shore up the Nation's interskeleton of transportation, power, and commerce, the issue is finding essentially the right mix of resources and keeping financing costs down.

As far as we are concerned in Indiana the first roads to be fixed should be those roads that lead to employment opportunities and to the retention of existing employment opportunities in our State.

Now having said that I would mention too that if we had our preference in Indiana as to how any estimated Federal support for

infrastructure would be made available to us, we would opt for a block grant in this respect.

We would opt for a block grant because we believe that the needs in terms of infrastructure are becoming more diverse as population shifts take place in the United States.

We also think there are some advantages for a block grant, a general block grant, in this regard—the first being that States can set their own priorities; the second being that the so-called log-rolling approach that is sometimes associated with capital expenditures at the Federal level might be avoided in this process, if some kind of mutually agreeable formula could be developed for block grants of this kind.

Third, we believe that because we have the ability to effectively mix the various kinds of resources—Federal, State and local, and private sector, on occasion—that this would be the most effective way to use the money and would probably provide more leverage for the money that was made available.

And then I think finally we would be able to at least in part prevent what I perceive as the beginning of what may be considered regional economic warfare in these United States.

We begin to see it in a variety of concerns—how we are going to handle acid rain, that problem, for example; we see it in a variety of other concerns. For years the Federal Government has supported water projects in the West, probably encouraging economic development in that part of the country, and out here in the Middle West we lament the fact that our population doesn't grow as fast as theirs, and as a matter of fact the question is, will we have an infrastructure that meets the economic development needs of our region?

And this pulling and tugging that is taking place between the States—we see it in terms of energy resources, the use of severance taxes in the West on coal, for example, which allows us in Indiana to pay substantial parts of local government costs in Montana and other places—are good examples of that kind of pushing around.

So one of the real difficult questions for the Congress to deal with is whether or not we are going to allow the States to involve themselves in economic warfare, or in fact, whether or not Congress is going to find a way to spread the burden.

I guess my preference would be in fact to spread that burden because I believe our major focus in the United States needs to be to continue to make our country competitive with the economic world.

Having said that about the preference that I would express, I think it is important to consider a second issue involving the infrastructure. Among all of the things that local and State governments do that does occasionally lend itself to financing, it is infrastructure improvements, and for many years, obviously, the tax exempt method of financing infrastructure has been a dominant feature of financing.

Recently the Federal Government has taken the position that tax exempt financing is in fact an assault on the Federal treasury. Now I am not sure that I necessarily agree with that particular philosophy because sophisticated investors find ways to move their

dollars to those areas in which they can minimize their tax liability.

But, nevertheless, there is argument that can be made that tax exempt financing, instruments of one kind or another, do in fact have an impact on the amount of money received at the Federal level.

Given the fact that we are going to have enormous financing needs required, one of the difficult issues that Congress has to deal with, it seems to me, is how much tax exempt financing is going to be allowed to take place in the future.

If the question of "how much" can be resolved, then the question is what are the priorities for its use. In this regard we are constantly facing the battle of the sunseting of IRB legislation. That sunset date is in statute currently and when finalized it would eliminate that method of tax exempt financing for industrial job creation projects.

I am sure that the needs of all the States are the same in this regard. I am not sure it is in the best interest of Indiana or the Middle West, for that matter, to be deprived of tax exempt financing for industrial development projects, but it seems like we are headed inevitably in that direction.

The reason we are headed in that direction is because of the enormous competition for capital. Now that competition for capital is not limited to tax exempt financing, of course, it is also affected by deficits at the Federal level and other questions that are far too numerous and complex to discuss at this meeting.

But the point I make is you at some time may have to face the reality of the allocation of tax exempt financing to the States. While you may not want to do that at this point—I am not sure I would want to do it if I were sitting in Congress—I, nevertheless, feel that may be one of the requirements for a fair and equitable program for capital investment in the future and for infrastructure replacement.

Having said those things about the future of our infrastructure needs I would summarize by saying that in the Middle West, without any question, and the States and their Governors having said that economic development and job creation and job retention is their major priority, one of the basics that every investor expects is a reasonably priced infrastructure available to that particular community.

Of all the things that we ask of government it seems that infrastructure is one of the key ones at least at local and State levels—obviously at the Federal level national defense is a priority. But for the investor he looks first, I think, at the availability of the infrastructure, and second, at the availability of a quality public education system.

Those are the two things that seem to have the most to do with location decisions.

So I am suggesting to you that the Federal Government's involvement in the program is one that asks us all: working in unison find the right mix of resources between the Federal, State, and local governments—a tough job, but that requires, in my opinion, a liberal contribution by us all.

Then finally, recognizing the fact that if we are talking about the economic renaissance of this region of this United States, and I think it is possible, then we have to be sure that we find ways to adequately finance infrastructure because of all of the things that I have to absolutely guarantee will be available to those who want to invest in our State, this is one of the ones that is most important. Thank you very much.

Representative HAMILTON. Thank you very much, Lieutenant Governor Mutz. Our next panelist will be Mark Rhoads, the deputy director, Department of Consumer Affairs, Regulation and Licensing, State of Missouri. We are delighted to have you. You may proceed.

**STATEMENT OF MARK J. RHOADS, DEPUTY DIRECTOR, DEPARTMENT OF CONSUMER AFFAIRS, REGULATION AND LICENSING, STATE OF MISSOURI**

Mr. RHOADS. I am glad to be here. And by the way we're seeking a change for the department next year so it might simplify matters when I next come before you.

Representative HAMILTON. We are very good at that in Federal Government.

Mr. RHOADS. Speaking for the State of Missouri, I very much appreciate the opportunity to present testimony today on the subject of infrastructure and the serious needs and problems which must be addressed if we are to insure a reasonable quality of life in this Nation. By anyone's standard, the task of rebuilding the Nation's basic public infrastructure is overwhelming. Due to inadequate tax revenues, extremely high interest rates coupled with an economic recession and a general decline of Federal grants and aids, the public and private sectors of this country have reduced the Nation's infrastructure to inferior structure.

I would emphasize from the start that it is difficult to find comprehensive studies and information concerning all aspects of infrastructure in Missouri. I most certainly am no expert in this area and, in fact, in preparing this testimony had my eyes opened to the seriousness of the inadequateness of our systems in Missouri. Dr. Kenneth Hubbell, a professor with the University of Missouri, is currently working on a comprehensive study relating to infrastructure in Missouri for the joint committee. His study will address, in a comprehensive fashion, the areas and issues that I bring to your attention this morning. I would like to acknowledge Dr. Hubbell's assistance in preparing this testimony.

Today, I will emphasize the current status, needs and problems primarily associated with Missouri's roads, bridges, and wastewater systems. I intend to only briefly touch upon ports, airports, and mass transit. These areas represent the most immediate and critical concerns facing the State of Missouri.

By far, one of the most pressing needs relating to infrastructure in the State is the upgrading and maintenance of the existing highways. The State of Missouri ranks seventh largest in the country in terms of highway mileage, having 118,956 miles of public roads and street mileage in 1982. Of that, over 32,000 miles of highways are under the jurisdiction of the State, approximately 74,300 miles of

road are under the jurisdiction of counties and small urban centers and approximately 12,500 miles are city streets under the jurisdiction of local municipalities. The Federal Highway Administration's standards are applicable to 35,707 miles in Missouri and have found 58½ percent of those miles to be deficient in one way or another. The great majority of the deficiencies relate to State supported primary and supplementary rural road systems. It is estimated that the correction of these highway deficiencies will cost approximately \$13½ billion. Approximately 96 percent of the total cost would go for structural changes and improvements, with only 4 percent for resurfacing. These cost figures do not even touch upon the over 83,000 highway miles not included in the highway performance monitoring system.

The question which we must address in the immediate future is how State and local governments can meet the ever increasing backlog of necessary road improvements and upgrading. Primarily, Missouri's highways are financed from the receipts of motor vehicle fuel taxes, licenses, and fees. In 1980, road user tax revenues accounted for approximately 72 percent of total receipts while property taxes accounted for approximately 12 percent. The bottom line is that total receipts for the fiscal period 1981-82 approaches one-half billion dollars, yet we have just identified \$13½ billion in backlog improvements for a small portion of Missouri's highways and roads.

The State of Missouri has even a more pressing concern regarding bridges and bridge safety. At the end of 1982, the State had 23,783 bridges of all sizes and shapes. Approximately 9,250 of those are on the State highway system with the remaining on city streets and county roads. At the end of 1982, approximately 5,000 bridges were declared deficient according to the guidelines developed by the Federal Highway Administration. Even more disconcerting, about 11,400 bridges were categorized as functionally obsolete. Translated, this indicates that approximately 69 percent of the bridges in the State are deficient making Missouri the fourth worst State in the Nation. The Missouri Highway Department estimates that given the age distribution of the over 7,000 span-type bridges and their normal life expectancy, it should be replacing an average of 145 bridges per year. The department has averaged less than 30 replacement bridges per year over the past few years. Bridge repairs in the last 2 fiscal years were approximately one-half the amount spent in the previous 2 years. In fiscal year 1982, \$41,357,000 was spent on bridge construction repairs and maintenance. Obviously, a great need exists to maintain adequate bridges and to protect the public from unsafe bridge conditions.

Missouri can also identify a serious backlog of needs regarding wastewater treatment. The Environmental Protection Agency's assessment of Missouri backlog needs indicates that the total cost to meet existing needs is approximately \$2,316,000,000. This translates into a per capita cost of \$465, with the national average backlog per capita cost being \$387.

The 1982 total outlays for wastewater and wastewater treatment in Missouri totaled \$86.1 million. If one were to accept the EPA assessment of backlog and assume that total outlays would remain at essentially the same level, Missouri could make considerable head-

way in meeting the wastewater needs by the year 2000. Missouri, as well as other States in the Nation, have the Federal Government to thank for that type of progress. The bad news is that I do not accept the EPA analysis. Last week, I called Metropolitan Sewer in the city of St. Louis to discuss their current needs. They indicated that the Environmental Protection Agency has required the city to convert to a secondary treatment system by the year 1988. That project alone, which is in the planning stages, will cost approximately \$300 million. In addition, the city of St. Louis has another \$160 million tied up in existing and ongoing improvements to their wastewater treatment system. I sincerely believe that the needs are much greater than anyone realizes and that the considerable progress that I spoke of a moment ago is improbable without additional funding sources.

Permit me to briefly touch upon several areas regarding Missouri's infrastructure and the needs corresponding thereto. An integral part of any infrastructure program for a large metropolitan area must necessarily be urbanized public transit systems. Currently, the State of Missouri has five metropolitan areas which support transit systems. On the average, only 25 percent of the revenues to support transit systems are generated from fares. During the fiscal year 1982, a total of \$115 million was expended to operate and maintain the public transit systems in the five areas and an additional \$44 million was spent in capital outlays for the systems.

Dr. Hubbell is currently assessing the future needs of public transit systems. While it is difficult to assess the future needs, I can say with some confidence that these systems require a long-term financial commitment from Federal, State, and local governments just to maintain their current operations. It is my understanding that both Kansas City and St. Louis are seriously considering fixed rail systems to meet the public transit needs which are mounting in both cities. The cost for these two projects alone is approximately \$500 million. The Federal Government has historically assisted and supported urbanized public transit systems and I would urge continued support.

Regarding airports and ports in Missouri, I am ill prepared to estimate current needs and projected needs. I gather from my discussions with port and airport facility operators that their needs exceed available revenues. These facilities, like our highways and bridges, are vital to a strong economy and to the attraction of major industry to the State.

Since I have fulfilled my primary obligation—that is, presentation of Missouri's infrastructure needs—allow me to, at least in general terms, address several areas which I believe would assist the States in meeting those needs. There can be no question that adequate investment in transportation, sewer, and water distribution systems is essential for maintaining a strong economy. The first step in this direction, which this committee is to be commended for, is the identification and compilation of data on the condition of infrastructure and future investment needs. I firmly believe that the State, and even more so, local governments, can accurately identify infrastructure needs so that adequate capital initiatives can concentrate on those problem areas. One of the weaknesses of the past with which we must now deal has been inadequate capital

planning at the State and local government levels. As an example, much of the sewer system in St. Louis City was haphazardly constructed during the Civil War period and cannot accommodate the increased demands due to population growth which have occurred. Adequate capital planning would have permitted the city to initiate capital improvements which would balance the needs of growing and mature areas. I am convinced that local government has, in recent years, stepped up initiatives to improve capital planning and I would urge other areas of the Nation to do so.

Obviously, the continuation of financing infrastructure improvements must continue to be shared by the Federal, State, and local governments. One area which, in my opinion, has been lacking in the past, is support from the private sector. We must continue to strengthen and expand the role of the private sector in the development of financing options, including whether private users pay an adequate share of the cost of capital facilities and whether private management would improve cost effectiveness.

It is essential that continuous research and development of new technologies for rehabilitation and construction techniques be emphasized and financially subsidized when possible. In addition, regional or Federal clearinghouses for information sharing on innovative infrastructure concepts should be encouraged.

The State of Missouri must do its share in resolving the infrastructure problems that currently exist. The Missouri General Assembly should consider legislation which would permit local governments to finance construction of new streets and sewers by issuing a limited amount of special-assessment, general-obligation bonds without a public vote. Missouri is only 1 of 5 States in the Union which requires a two-thirds majority of those voting on a bond issue to approve the authorization for the sale of bonds.

I firmly believe that State and local government officials are beginning to realize the importance of adequate infrastructure. Last year, the Missouri General Assembly passed legislation to permit an additional one-half cent county sales tax, the revenues of which would be earmarked for inadequate roads, bridges, jails, and other major capital improvement needs. The increased sales tax, which requires voter approval, gives the counties an additional revenue tool to meet infrastructure needs.

Gov. Christopher Bond has embarked upon a \$600 million bond program which is designed, in part, to finance major highway and bridge, port, airports, storm water, sewer systems, and soil conservation projects. In 1982, the general assembly authorized \$75 million and will convene in October to consider authorization of an additional \$250 million. It is estimated that approximately \$36 million of the \$250 million will be dedicated to upgrading and maintenance of roads and highways, ports and airports. In addition \$12.1 million will be spent on rural water systems and \$18 million on storm water systems in Jackson County and St. Louis City and County.

Last week, my department announced the cities and counties which won grant awards in the community development block grant program. This year, approximately \$12.3 million in Federal bloc grants are going to 57 communities for renovation and con-

struction of water and sewer systems and streets. The downside is that for every \$8 requested, only \$1 was available.

There is much to be accomplished in meeting the ever-growing demands for an adequate infrastructure system in Missouri. Emphasis must be placed on an organized educational system for the citizens of the State. In the past few years, the electorate has voted down numerous attempts to raise additional revenues for infrastructure needs. A notable example is the 1982 defeat of a proposal to increase the State gasoline tax from 7 cents to 11 cents per gallon. To succeed in convincing the citizenry of the need for additional revenues, both private- and public-sector forces must be marshaled.

Thank you for your patience and the opportunity to present testimony today.

Representative HAMILTON. Thank you very much, Mr. Rhoads. The next witness is Ms. Marnie Shaul, who is the deputy director, Department of Community Development, State of Ohio. Ms. Shaul, we are delighted to have you with us and look forward to your testimony.

**STATEMENT OF MARNIE SHAUL, DEPUTY DIRECTOR, COMMUNITY DEVELOPMENT DIVISION, DEPARTMENT OF DEVELOPMENT, STATE OF OHIO**

Ms. SHAUL. Thank you Congressman Hamilton and the Joint Economic Committee. It is a pleasure to have the opportunity to talk with you today about a problem that faces every State in the Nation.

As I have listened to my two colleagues I think we may have all gotten together ahead of time because I think the issues are so similar for all of us.

Our analysis shows that Ohio lacks the financial resources to meet its infrastructure needs. Although the State has raised sales and income taxes to maintain historical levels of services, Federal participation in nonhighway areas has declined and we have an increased burden on the State.

As the Lieutenant Governor from Indiana pointed out a major problem in the Midwest is unemployment. Ohio has set as its No. 1 priority generating jobs, and in order to generate jobs we need an adequate infrastructure.

I will be speaking here from only the highlights of my prepared statement. If you would like to see my prepared statement for more numbers I would hope you would turn to that.

The data base we used was from Michael Pagano, who is a political science professor at Miami University. He has done a graph study as part of the study coordinated by the Joint Economic Committee.

Before I start reciting some numbers I would like to point out that it is difficult to get precise data. I outline in my prepared statement what some of the problems are, including such things as some of the data that are collected essentially represent wish lists, some of the data represents strictly engineering standards, and do not necessarily have relationship say to how a road is used. Some of the data are for Federal standards, and one might be concerned



about whether infrastructure standards, particularly around EPA wastewater treatment, are appropriate.

Let me turn to reviewing what our best estimates for the infrastructure needs are in three important categories for Ohio—highways, wastewater treatment, and water supplies.

In highways, the operation and maintenance needs are staggering. In 1980 dollars, Ohio's total highway operations and maintenance needs exceeded \$2.3 billion, yet for fiscal year 1981 expenditures financed from State and local own-source revenues amounted to only \$915.6 million—a gap of well over \$1 billion.

Ohio's Department of Transportation says that the total of fair-condition highways is 95 percent of urban highways and 80 percent of rural highways. These highways all need maintenance and repair.

Our deteriorated highways, which need reconstruction and major rehabilitation, are 17 percent of Ohio's interstate highway traffic.

Turning to our sewer collection and treatment systems, they are also very high. In Ohio, EPA needs survey indicates that the backlog needs exceeded \$11 billion for the State in 1982. By the year 2000, secondary treatment requirements are projected to exceed \$1 billion.

New collectors and interceptors amount to over \$1.5 billion in needs. The needs figures were derived to meet the requirements of USEPA and do not include EPA ineligible portions of wastewater treatment systems, nor do the data include maintenance for operating figures.

Our public-water-supply systems also need attention. Currently the backlog of expansion needs for water supply exceeds \$330 million. Including this backlog over \$834 million should be spent on municipal water supply systems over the next 40 years.

In addition, almost half of all of Ohio's water systems were constructed prior to World War II, so replacement and renovation needs on existing physical plants can be expected to require substantial investment.

Let me turn now to why all this matters. The Lieutenant Governor of Indiana said it very eloquently: The States in the Midwest have suffered very high unemployment rates.

In April this year, Ohio had approximately 650,000 people out of work. This has been devastating. This has also forced, because of the economic conditions, local governments to cut back on infrastructure investment, while at the same time, outside of highways, the Federal Government has reduced its investment in our State.

Meanwhile, our infrastructure that is existing continues to deteriorate. Given our economic profile it is absolutely critical that the State of Ohio turns its attention to creating jobs. In order to do that we need an adequate infrastructure.

Infrastructure plays a key role in retaining businesses, having business firms expand and having new firms come first to Ohio. So that infrastructure provides roads for markets and workers, provides water supplies and wastewater treatment, just to mention a few that are absolutely crucial elements.

In addition, worn out infrastructure is costly in terms of both financial and human resources. For example, the inconvenience and delay caused by deteriorated infrastructure facilities increases time

costs and therefore production costs, reducing a firm's competitiveness.

To foster economic development in Ohio, State and local government must target its dollars to capital investments to encourage economic development, but our resources are not sufficient to meet the capital needs I have described so far.

Let me tell you just a little bit about what the State budget has been like in the last few years. Economic downturn very seriously affected our resources. First, in 1982, we had to have some cutbacks and temporary tax increases. In addition, we raised our gasoline fuel tax because of reduced revenues in that area.

When Governor Celeste took office in January 1983 we faced a projected deficit of over one-half billion dollars. He made additional cutbacks and made the income tax increase and sales tax increases permanent in order to avoid a deficit.

So you can see that we are attempting to keep raising our taxes in order to raise revenues. But when we look at the infrastructure needs I just cited before that is not going to be adequate to finance the infrastructure for economic development.

We did some gap work as well. Comparing the projected capital expenditures based on our revenue estimates for the years 1984 and 1985, with the revenue needs we have talked about we calculated an unfinanced gap for bridges, State highway capital programs, State and local highway operations and maintenance, and wastewater treatment for EPA-eligible portions.

The gap for fiscal 1984 is projected to be \$1.9 billion. We also projected a gap for the biennium which is \$3.9 billion. The size of this gap is so substantial that any measurement problems we might have in infrastructure I think are unlikely to detract from the real need for more revenue.

Since we have the attention of the Federal Government today I would like to turn to just a few things I hope—

Representative HAMILTON. Just a very small portion of it.

Ms. SHAUL. It seems appropriate to speak of Ohio suggestions for Federal policies. In the past, the Federal Government has played a major role in providing infrastructure resources and directing public works policy. Through its matching conditions and grant policy the Federal Government in recent years has encouraged State and local governments to assume greater fiscal responsibility for their infrastructure needs, and I think States have attempted to do this.

However, because of the Federal Government's ability to make substantial infrastructure investment it must determine what areas, such as interstate highways and wastewater, are of national interest or have substantial interstate effects.

Once the Federal Government has designated these investments, they should be funded primarily with Federal dollars. Matching requirements for States on this type of investment should be low.

The Federal Government should attend to how Federal regulations affect particular regions. For example, the 5-cent Federal gasoline tax has regulations which restrict activities to large scale resurfacing, reconstruction, rehabilitation, and repair.

This prevents Ohio from doing necessary patchwork activities with Federal dollars.

Differences in States, as pointed out earlier, such as population growth versus stable population, imply differences in infrastructure needs. Growing States probably prefer capital expansion whereas States with stable populations, like some of those in the Midwest may prefer a greater emphasis on maintenance.

This suggests that Federal funds might be more effective as block grants for infrastructure in order to allow the States more choice in how to allocate resources given differing State priorities.

It may be useful for the Federal Government to evaluate the appropriateness of various standards and regulations related to infrastructure facilities in order to decide which projects to fund and what requirements to stipulate.

Since the amount of resources needed for infrastructure at all levels of government is so enormous, stringent requirements should be evaluated to assure their applicability for particular States. For instance, safety standards or expansion requirements may not be appropriate for a road in less populated areas where use is minimal. It is this type of evaluation and careful distribution of regulated funds that would help the Nation's States and localities develop cost-effective infrastructure projects.

As I have tried to emphasize in this testimony, the magnitude of the infrastructure problem for Ohio as well as other States, suggests that we should not look at infrastructure as pork barrel projects. Instead, all levels of government need to look at the role of infrastructure in the context of overall capital investment.

Although short-term construction jobs that result from infrastructure investment are important, the long-term effect of infrastructure on economic development is crucial for making States and the Nation competitive in world markets and for improving citizen's lives.

Thank you for the opportunity to speak with you.

[The prepared statement of Ms. Shaul follows:]

## PREPARED STATEMENT OF MARNIE SHAUL

It is a pleasure to have the opportunity to talk with you today about a problem that faces every state in the nation: the adequacy of existing infrastructure and our ability to invest in new bridges, roads, sewers, and the many other critical components of public investment. Our analysis shows that Ohio lacks the financial resources to meet its infrastructure needs. Although the state has raised sales and income taxes to maintain historical levels of service delivery, federal participation in non-transportation areas has declined, putting an increased burden on the state.<sup>1</sup> Ohio's major problem is unemployment, so state government has as its number one priority the retention and expansion of existing firms and encouraging the birth of new firms. An adequate infrastructure is essential to achieving our development goals and improving the quality of life for all Ohioans.

The data base I relied on to address these issues is derived from a draft report on Ohio's infrastructure which is part of a national infrastructure study coordinated by the Joint Economic Committee. The principal investigator for the Ohio infrastructure study is Michael A. Pagano, Assistant Professor of Political Science at Miami University. Some of the tables he prepared are in a data appendix.

<sup>1</sup> Although the federal government has increased grants to Ohio over the years, the reason can be explained because from FY 81 through FY 85 revenues from federal fuel tax and unemployment insurance increased; therefore fewer federal dollars were available for other infrastructure activities.

## DATA AVAILABILITY

Before I report on Ohio's infrastructure, I would like to raise a qualifying consideration. I and others can recite numbers about needed infrastructure, but these numbers do not carry the exactness of a 12 inch ruler. The difficulty in obtaining precise data serves as an obstacle in defining the precise scope of the infrastructure problem. One measurement problem is that existing "needs assessment" are often nothing more than "wish lists." Needs should be related to other social or economic objectives, rather than just to "wishes." Needs should also be concerned with usage or demand for infrastructure rather than strictly engineering design and safety standards. Although design and safety are important components of any needs analysis, cost-effectiveness must be considered as well. Unfortunately the needs figures reported herein were derived from documents that dealt minimally with cost-effectiveness, but they are the best estimates we have.

Another measurement problem is that infrastructure investment takes place at the local, state and federal levels of government, making a comprehensive data base difficult to compile. State agencies do have data; however, this information often is compiled for reasons other

than an infrastructure needs analysis and is therefore not a complete and accurate assessment of the nature of the infrastructure problem. For instance, because of the Clean Water Act and the EPA grants for wastewater treatment (mandated by P.L. 92.500, the federal Water Pollution Control Act Amendments), data are collected by the state at the Ohio Environmental Protection Agency for approximately 500 of the 800 wastewater treatment plants in Ohio. Most of the data, however, refer to the needs of wastewater treatment systems in terms of meeting the fishable/swimmable goals of federal legislation. Given the gap associated with these goals, one might be concerned about the realism of the standard itself. Furthermore, the needs estimates do not include replacement and rehabilitation requirements of already constructed systems.

A final example of measurement problems is in the maintenance of highways and bridges. The Ohio Department of Transportation Operations and Maintenance data (O & M) refer almost exclusively to the state-owned system (approximately 19,000 miles) which is a small proportion (17 percent) of the total (approximately 110,820 miles of streets, roads, and highways). In order to gain some perspective on the non-state system, estimates for the remainder

of the system are based on the assumptions used to derive needs estimates for the state system - a less than totally satisfactory approach.

Although as previously noted, a statewide comprehensive data base does not exist for Ohio's infrastructure facilities, the Urban Institute of Washington D.C. has published quite complete reports on two of Ohio's major cities, Cleveland and Cincinnati. These studies, titled "The Future of Cleveland's Capital Plant" and "The Future of Cincinnati's Capital Plant," address the cities' urban capital stock and the costs of improving it. As is the case with most infrastructure needs assessments, the list of desirable and even necessary capital projects far exceeds the available financing resources. These studies are indicative of the seriousness of the problem facing local governments in financing infrastructure. This type of study, if conducted at the local, state and federal levels, could help Ohio, and other states, develop a crucial infrastructure data base to rely on in making financing decisions.

#### The Magnitude of Infrastructure Needs in Three Important Areas

Having given you some caveats about the precision of our data, I would like to review our best estimates of Ohio's infrastructure needs in three

important categories: highways and bridges, wastewater treatment and water supplies.

#### Highways and Bridges

The gap between the needs estimate for Ohio's state and local governmental units and the total state and local expenditures on operations and maintenance (O & M) is staggering. In 1980 dollars, Ohio's total highway O & M needs exceeded \$2.3 billion, yet the FY 1981 expenditure financed from state and local own-source revenues amounted to only \$915.6 million. Based on a 1981 Ohio Department of Transportation study of the state's highway performance and monitoring system, the vast majority of Ohio's highways are in "fair" condition which would indicate need for maintenance and repair activities. The total of "fair" condition highways is 95 percent of the urban highways and 80 percent of the rural highways. Of the "deteriorated" highways, which are defined as in need of reconstruction and major rehabilitation, most of the roads are on the urban interstate highway system or the interstate system in rural areas. The deteriorated portion of Ohio's system accounts for 17 percent of Ohio's interstate highway traffic.



The capital needs for Ohio's primary and urban highway systems, interstate highways, and bridges also fall drastically short of the expenditure levels for capital improvements.<sup>2</sup> For instance, the capital needs for 1981 for just the primary and urban system programs far outweighed the 1981 expenditures for the entire highway and bridge system (See Tables 1-4).

#### Sewer collection and treatment systems

Expenditures for operations, maintenance, and capital improvements of sewer collection and treatment systems increased rapidly between 1976 and 1980. In current dollar terms personnel costs increased 40 percent; O & M costs increased over 70 percent; interest on debt increased by almost 90 percent; and capital costs went up by 60 percent, mostly as a result of federal laws, EPA grants and state participation. These figures might be compared to an inflation rate of 44.9 percent. Even with what appears to be substantial federal participation, the Ohio EPA Needs Survey for 1982 indicates that in order to meet the needs of six categories of wastewater treatment systems, federal and local expenditures must be augmented immediately and substantially. Backlog needs alone exceeded \$11 billion for the state in 1982, the largest unmet needs occurring in the

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<sup>2</sup> Needs are estimated based on engineering safety design standards which may not correspond to system use.

area of the treatment and/or control of stormwater (\$4.8 billion backlog) followed by a \$3.9 billion backlog in the category of correction of combined sewer overflows.

By the year 2000, the needs estimate for Ohio (in 1982 dollars) are projected to climb 40 percent (to \$3.4 billion) over the 1982 figure, an increase that discounts the effects of inflation. The largest category of expenditures, secondary treatment requirements, is projected to exceed \$1 billion, while new collectors and interceptors amount to over \$1.5 billion in needs. The needs figures, as indicated above, were derived to meet the requirements of EPA, not to replace, rehabilitate, or restore EPA ineligible portions of wastewater treatment systems, and certainly not for maintaining and operating the system. Indeed, since maintenance is a wholly local responsibility, no estimates are available for maintenance needs on these systems (See Table 5).

#### Public water supply systems

Over 1600 public water supply systems exist within the state of Ohio supplying over 1,438 million gallons daily (MGD) to almost 9 million inhabitants. The major source of water for the municipal water supply system is Lake Erie with lesser amounts from inland surface water, underground water and the Ohio River.

Currently, the backlog of expansion needs exceeds \$330 million and 670 MGD. If that backlog is addressed, which officials at the state considered impossible, over \$300 million would need to be spent between 1980 and 2000 (or \$15 million annually) and \$195 million between 2000 and 2020 (or over nine million annually). Including the backlog of expansion needs, over \$834 million (1980 dollars) should be spent on municipal water supply systems over the next forty years. The state of Ohio, through Ohio Department of Natural Resources' Division of Water, can participate in some water projects in which case the state becomes part owner. It has requested over \$84 million for FY 85-88, but expects to receive considerably less. That price tag, however, is almost inconsequential when compared with just the backlog of expansion needs (\$330 million, See Table 6).

Although water systems are generally in good fiscal condition, their capital needs for expansion exceed projected revenues. According to one official at Ohio EPA, almost half of all Ohio's water systems were constructed prior to World War II, so replacement and renovation needs of the existing physical plant must surely play an important role in any water

authority's capital plans. The expansion needs cited above, therefore, become only a small part of the overall water supply needs of the state when discussed in conjunction with renovation and replacement needs of an aging water system. Unfortunately no data on these latter sets of needs exist in aggregate form.

#### LINKING ECONOMIC DEVELOPMENT TO INFRASTRUCTURE

The nature of Ohio's infrastructure problem is integrally related to the socio-economic transformations the state has experienced in the past decade. Ohio, like most states in the Industrial Heartland, has suffered a high rate of unemployment and out-migration. As of April 1983, approximately 650,000 people were jobless in Ohio. Before 1980, Ohio's unemployment rate was similar to the national average; however, since 1980, Ohio's rate of unemployment has been 25 percent higher than the national rate. The hardship implied by these numbers has been stressful for state and local governments in Ohio. The devastating effect of the economic situation in many Ohio communities such as Youngstown, which had an unemployment rate that peaked at 22 percent in November 1982, has forced local governments to cut back infrastructure investment at the same time that the federal government has placed more responsibility on state and local governments for providing infrastructure. Meanwhile, an increasing amount of Ohio's infrastructure

facilities is becoming older and deteriorated; much of it requires preservation, restoration and maintenance repair.

Given the economic profile in Ohio, it is imperative that Ohio and its local governments approach the infrastructure issue in relation to the state's economic development and job-generation strategies. Infrastructure plays a key role in fostering the expansion, retention, and creation of small business because it provides an operating base of necessary support services -- roads for markets and workers, water supply, and wastewater treatment, to mention a few.

In contrast, worn out infrastructure is costly in terms of both financial and human resources. For example, the inconvenience and delay caused by deteriorated infrastructure facilities increases time costs and therefore production costs, reducing a firm's competitiveness. In Ohio 721 bridges on the state highway system are characterized by a sufficiency rating of less than 50 percent, which means these bridges need to be replaced. If these bridges are unable to be used, economic development incentives are greatly reduced.

Thus, it seems that in order to foster economic development in Ohio, as well as enhance the overall quality of life for citizens, Ohio's state and local governments must target their limited financial resources for capital investment in a way that encourages economic development. However, state and local resources alone are insufficient to meet the capital needs described here.

#### STATE REVENUES AND THE NEED GAP

The economic downturn in the United States' economy damaged considerably the fiscal picture of Ohio in FY 82 and FY 83. Cutbacks in proposed outlays and temporary increases in the state income and sales taxes were employed in FY 82. After Governor Celeste assumed office in January 1983, the state faced another projected deficit in FY 83 of over one-half billion dollars. Additional cutbacks of \$282 million were ordered and the income tax and sales tax became permanent in order to avoid a FY 83 deficit (See Table 7). Further, as a result of declining fuel tax revenues (due to decreased consumption levels and more fuel-efficient automobiles), tax increases went into effect over a two-year period between 1981 and 1982 on fuel consumption in order to generate

funds for Ohio's highway programs. Gross revenues from motor vehicles fuel taxes fell from \$416.6 million in FY 79 to \$377.9 million in FY 81. Due to the tax increases which raised the tax per gallon from seven cents to 12 cents, motor vehicle fuel tax revenues increased to \$554.7 million by FY 82 (See Table 8).

Although Ohio's revenues increased by about 22.5 percent in FY 83 compared to FY 82 because of the aforementioned tax increases, revenues in this biennium are expected to grow slowly -- by 11.2 percent in FY 84 and 7.2 percent in FY 85. Revenue from the federal government also is expected to rise from \$2.3 billion in FY 82 to over \$3.3 billion in FY 85, an increase from 21 to 23 percent of total state revenues.

Transportation is an extremely important part of state infrastructure spending so the total federal-state budget of ODOT deserves special mention. Total ODOT revenues for FY 84 are projected to increase by 21.8 percent (from a total of \$868.5 million in FY 83 to \$1074 million) and then to decrease slightly by FY 85 to \$1040.4 million. The FY 84 total ODOT budget increased

dramatically over the FY 83 budget primarily because of federal grant increases due to anticipated revenues from the five cents per gallon increase in the federal motor fuel tax. Federal Bridge Replacement funds also will increase significantly. Revenues from the federal government are estimated at \$556.1 million in FY 84 and \$545.0 million in FY 85 -- almost double the FY 83 figure of \$265 million.

Comparing projected capital expenditures based on revenue increases in FY 84 and FY 85 with infrastructure "needs" cited earlier, an unfinanced "gap" was calculated for bridges, state highway capital programs, state and local highway O & M, and wastewater treatment (EPA-eligible portions only). The gap for FY 84 is projected to be \$1.9 billion and for the biennium FY 84 - FY 85, \$3.9 billion (See Table 9). The size of this gap is so substantial that the measurement problems mentioned earlier are unlikely to detract from the real need for more revenues to make infrastructure adequate.

#### STRATEGIES FOR IMPROVING OHIO'S INFRASTRUCTURE

Two ideas which may not be innovative but certainly could be advantageous to Ohio's approach to infrastructure needs are a public education campaign and the coordination of federal and state funds used for infrastructure.



One of the essential elements to tackle successfully the infrastructure problem is a public education campaign at all levels of government. Despite news coverage that has heightened the awareness of a potential infrastructure crisis, it is imperative that governments educate citizens about the magnitude of the problem and the serious consequences of inadequate government capital investment. Much infrastructure is invisible, either because its underground or because deterioration occurs slowly. So, during recent periods of financial stress, infrastructure maintenance and capital expenditures were deferred in order to minimize the reduction of other services -- especially programs that have better organized constituencies. This pattern of postponing capital investment must be changed.

A second direction that Ohio recently has begun to take is treating infrastructure as one element in a comprehensive approach to economic development and financial allocations. Infrastructure investment should leverage funds from a variety of federal, state, local and private sources in order to develop a coordinated and strategic approach to Ohio's economic development and in order to enhance the quality of life in the state's communities.

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For instance, this year a portion of the Ohio Small Cities Community Development Block Grant Program's 1983 funds are targeted to alleviate the tragic effects of unemployment and business decline. Integral to this goal are programs designed to leverage dollars for infrastructure improvement particularly for designated community reinvestment areas. The state's mixed formula/competitive system is focused so that a "critical mass" of public infrastructure investment can be reached and jobs are generated.

Similarly, Appalachian Regional Commission grants to Ohio support projects that generate jobs in Appalachian Ohio. Approximately \$4 million will be spent over the next year on infrastructure. Furthermore, it is our intention to join the ARC and CDBG programs whenever possible for maximum effect.

An idea we are now considering is a tracking system to compile a place-specific breakdown of state and federal capital investment dollars. With this type of investment overlay, the state could better analyze whether or not the allocations make sense from a developmental perspective and

the extent to which the expenditures generate jobs. For Ohio, with its high unemployment and stable population, both federal and state infrastructure resources may be more effective if targeted to maintenance and repair rather than to new construction. The notion of developing a comprehensive approach to investing infrastructure funds is one that deserves to be pursued at both the state and federal levels.

Finally, an old remedy for infrastructure financing -- user charges -- needs to be re-examined for appropriateness both at the state and local level. User fees not only provide funds but also reveal public preferences, important information in determining actual need.

#### THE FEDERAL ROLE

In the past, the federal government has played an important role in providing infrastructure resources and directing public works policy. Interstate highway systems and wastewater facilities are examples of areas that the federal government historically has been involved in. Through its matching conditions and grant policy, the federal government in recent years has encouraged state and local governments to assume greater fiscal

responsibility for their infrastructure needs, except for highways. Ohio has begun to assume this responsibility by increasing its gasoline and personal income taxes.

Because of the federal government's ability to make substantial infrastructure investment, it must determine which areas, such as interstate highways and wastewater, are of national interest or have substantial interstate effects. Once the federal government has designated these investments, they should be funded primarily with federal dollars. Matching requirements for states on this type of investment should be low.

The diversity of the states and the complex array of issues around infrastructure policy suggest that the federal government should attend to how federal regulations affect particular regions. For instance, the five cent federal gasoline tax, although useful, has regulations which restrict activities to large scale resurfacing, reconstruction, rehabilitation and repair. This limitation prevents Ohio from doing necessary patchwork activities with federal dollars. So if the state wants to use federal dollars for interstate roads, it is forced to wait until road deterioration is in an advanced stage before initiating improvements.

Differences in states, such as population growth versus stable population, imply differences in infrastructure needs. Growing states probably prefer capital expansion whereas states with stable populations may prefer a greater emphasis on maintenance. For example, because Ohio has a sizeable highway system already in place, the state is more in need of funds for maintenance than for new construction. This suggests that federal funds might be more effective as block grants for infrastructure in order to allow the states more choice in how to allocate resources given differing state priorities.

It may be useful for the federal government to evaluate the appropriateness of various standards and regulations related to infrastructure facilities in order to decide which projects to fund and what requirements to stipulate. Since the amount of resources needed for infrastructure at all levels of government is so enormous, stringent requirements should be evaluated to assure their applicability for particular states. For instance, safety standards or expansion requirements may not be appropriate for a road in less populated areas where use is minimal. It is this type of evaluation and careful distribution of regulated funds that would help the nation's states and localities develop cost-effective infrastructure projects.

As I have tried to emphasize in this testimony, the magnitude of the infrastructure problem for Ohio as well as other states, suggests that we should not look at infrastructure as pork barrel projects. Instead, all levels of government need to look at the role of infrastructure in the context of overall capital investment. Although short-term construction jobs that result from infrastructure investment are important, the long-term effect of infrastructure on economic development is crucial for making states and the nation competitive in world markets and for improving citizens' lives.

Table 1  
 Pavement Condition of Ohio's Highways  
 by Functional Classification, 1981

	Rural				Percent State Re- sponsi- bility	Urban				Percent State Re- sponsi- bility
	DVMT	% DVMT	No. Miles	Per- cent		DVMT	% DVMT	No. Miles	Per- cent	
Interstate										
Good	2,561	15.3	166	18.8		4,122	14.5	113	17.2	
Fair	11,332	67.8	545	61.9		19,217	67.6	448	66.9	
Deteriorated	2,814	16.8	170	19.3		5,089	17.9	104	15.9	
	16,706		881	100.0	100.0	28,428		654	100.0	100.0
Other Principal Arterials										
Good	1,646	17.2	230	14.9		1,044	17.4	46	13.8	
Fair	7,338	76.6	1,202	78.0		4,566	76.1	267	79.5	
Deteriorated	592	6.2	109	7.1		396	6.6	22	6.7	
	9,575		1,541	100.0	100.0	6,000		336	100.0	100.0
Other Freeways and Expressways										
Good										
Fair										
Deteriorated										
Minor Arterials										
Good	2,084	18.1	582	17.9						
Fair	9,082	79.0	2,612	80.4		23,082	100	1,967	100	
Deteriorated	326	2.8	56	1.7		5		0	0	
	11,492		3,250	100.0	100.0	23,087		1,967	100	77.1
Major Collectors										
Good	204	1.0	163	1.4						
Fair	20,213	99.0	11,646	98.6		14,165	99.6	2,623	99.9	
Deteriorated	0	0.0	0	0.0		0	0.0	0	0.0	
Unpaved										
	20,417		11,810	100.0	73.8	14,220		2,626	100.0	35.6
Minor Collectors										
Good	117	2.7	140	1.9						
Fair	3,716	87.3	6,471	85.9		5,438	99.9	3,894	99.9	
Deteriorated	13	0.3	27	0.3		0	--	--	--	
Unpaved	412	9.7	893	11.9		--	--	1	0.0	
	4,259		7,530	100.0	17.7	5,442		3,897	100.0	4.9

Table 1  
(contd.)

Pavement Condition of Ohio's Highways  
by Functional Classification, 1981

	<u>DVMT</u>	<u>% DVMT</u>	<u>Rural No. Miles</u>	<u>Per- cent</u>	<u>Percent State Re- sponsi- bility</u>	<u>DVMT</u>	<u>% DVMT</u>	<u>Urban No. Miles</u>	<u>Per- cent</u>	<u>Percent State Re- sponsi- bility</u>
Local										
Good	NA	NA	NA	NA		NA	NA	NA	NA	
Fair	NA	NA	NA	NA		NA	NA	NA	NA	
Deteriorated	NA	NA	NA	NA		NA	NA	NA	NA	
			56,840		0.0			19,492		0.0

Condition Rating: Good = PSR of 3.5 or greater; Fair = PSR of 2.0 to 3.4; Deteriorated = PSR of 1.9 or less.

Source: Computer print-out from ODOT, Bureau of Technical Services, July 1983.

Cited in: "An Analysis of Ohio's Infrastructure: A Case Study,"  
draft study prepared by Michael A. Pagano.



Table 2

Capital and Maintenance Expenditures  
for Ohio's State-Owned Highways  
(millions of current dollars)

	<u>Maintenance (own force)</u>	<u>Maintenance Contracts</u>	<u>Total Maintenance</u>	<u>Capital Improvement</u>
1974 <sup>1</sup>	\$36.0	--	\$36.0	\$360.6
1975 <sup>1</sup>	45.0	--	45.0	348.5
1976 <sup>1</sup>	49.4	--	49.4	395.4
1977 <sup>2</sup>	62.6	--	62.6	363.2
1978 <sup>2</sup>	40.7	\$25.4	66.1	346.0
1979 <sup>2</sup>	39.7	29.6	69.3	430.4
1980 <sup>2</sup>	45.2	16.6	61.8	307.9
1981 <sup>2</sup>	48.9	28.8	77.7	325.7
1982 <sup>2</sup>	55.0	31.2	86.2	627.7
1983 <sup>3</sup>	56.3	NA	NA	594.3
1984 <sup>3</sup>	59.3	NA	NA	768.8
1985 <sup>3</sup>	61.8	NA	NA	743.8

<sup>1</sup> Actual expenditures; accounts closed, from Ohio DOT, Financial and Statistical Report, Fiscal Year 1982.

<sup>2</sup> Appropriation; some accounts are still open, from same source as Footnote 1.

<sup>3</sup> Requests as presented in The State of Ohio's Executive Budget for the biennium July 1, 1983, to June 30, 1985, prepared by The Office of Budget and Management.

Cited in: "An Analysis of Ohio's Infrastructure: A Case Study," draft study prepared by Michael A. Pagano.

Table 3

COUNT DISTRIBUTION FOR BRIDGES ON THE STATE HIGHWAY SYSTEMLISTED BY OWNERSHIP (Maintenance Responsibility), ESTIMATED REMAINING LIFE AND DEFICIENT BY SUFFICIENCY  
as of OCTOBER 1980NOTE: Estimates of remaining life are the judgments of the applicable State District Bridge Engineers or Ohio Turnpike Engineers.  
All Bridges 10' or more in overall length over or carrying an Interstate, U.S., or State Route are counted

ESTIMATED REMAINING LIFE IN YEARS	OWNING AGENCY (Maintaining Agency)									SYSTEM TOTALS
	ODOT	OHIO TURNPIKE	COUNTY & TOWNSHIP	MUNICIPAL	FEDERAL	RAILROAD	PRIVATE	COMBINATION	UNKNOWN	
Less than 5	316	0	34	2	0	9	0	4	0	365
10	1,172	20	168	6	0	71	4	12	0	1,453
20	2,279	0	271	35	2	103	13	17	0	2,720
30	2,367	5	274	66	2	51	7	19	0	2,791
40	4,234	2	374	202	2	79	24	25	0	4,942
50	1,086	1	107	27	0	9	6	11	0	1,249
60	114	0	12	2	0	0	0	3	0	131
70	21	0	3	1	0	0	0	0	0	25
80	39	602	2	0	0	1	0	0	0	644
90	6	0	0	0	0	1	0	0	0	7
Totals	11,634	630	1,245	341	6	324	54	93	0	14,327
Deficient By Sufficiency										
Less than 50%	605	2	92	2	0	10	1	9	0	721
50 thru 80%	3,660	275	526	86	1	16	4	30	0	4,598
Totals	4,265	277	618	88	1	26	5	39	0	5,319

Source: ODOT, Ohio State Transportation Program: Bridges (February 1981).Cited in: "An Analysis of Ohio's Infrastructure: A Case Study," draft study  
by Michael A. Pagano.

Table 4  
Highway Operations and  
Maintenance Expenditures  
and "Needs"

(O & M -- 100% State Funds)

	Actual FY 80	Approx. FY 81	Appropri- tion for FY 82	1980 Dollars Desired
Personal Services <sup>1</sup>	\$133,129,000	\$144,319,000	\$154,625,000	\$192,000,000
Supplies & Maintenance Material	47,430,000	53,515,000	56,004,000	60,000,000
New & Replacement Equipment <sup>2</sup>	2,653,000	2,032,000	2,840,000	3,995,000
Research	1,200,000	1,200,000		1,200,000
Maintenance Contract: Bridge Paint & Repair <sup>3</sup>	7,584,000	7,687,000	8,000,000	10,000,000
Interstate Maintenance <sup>4</sup>	4,411,000	5,400,000	6,500,000	6,000,000
Spot Patch, Slips, etc. <sup>5</sup>	2,634,000	3,931,000	5,040,000	17,000,000
Guard Rail <sup>6</sup>	214,000	2,470,000	2,750,000	7,600,000
Pavement Making <sup>7</sup>	1,927,000	3,800,000	2,710,000	4,500,000
Signing & Lighting	1,927,000	3,698,000	2,710,000	4,500,000
Raised Pavement Markers	229,000	2,000,000	1,800,000	3,000,000
Roadside Maintenance <sup>8</sup>	204,000	520,000	1,000,000	1,884,000
Resurfacing <sup>9</sup>	25,429,000	35,002,000	92,101,000	99,786,000
Replacement of Heavy <sup>10</sup> Capital Equipment	6,447,000	7,860,000	8,400,000	8,300,000
Capital Improvements to Lands & Buildings <sup>11</sup>	3,772,000	5,228,000	5,000,000	5,775,000
TOTAL	\$237,804,000	\$278,662,000	\$350,130,000	\$425,540,000

Highway Operations and  
Maintenance Expenditures  
and 'Needs'

(Table 4 cont'd)

	# of Employees			TOTAL
	Admin.	Plan. & Ser.	Const. & Oper.	
Nov. '75	679	1,388	6,214	8,281
Nov. '80	648	994	5,185	6,827
Desired	678	1,084	6,465	8,227

Exp. for FY 80:           \$133,129,000  
(approx.) for FY 81:   \$144,319,000  
FY 81 "Desired":       \$192,000,000

<sup>2</sup>"Desired" based on 6 year replacement cycle for 1,500 autos and 1,750 vans & trucks; also, replacement cycle for communications equipment at 10 years as recommended by FCC rather than current 15 years.

<sup>3</sup>Assumes doubling current rate of painting 366 of the 7,500 bridges on Rural State Highway System that need painted every 10 years (there are 11,634 bridges on this system)

<sup>4</sup>Performs maintenance within cities of 100,000 or more

<sup>5</sup>Estimated that 5% of system must be improved annually (spot patching mainly on secondary system) which is badly needed:

Spot patch, seals, cracks & joints	\$ 7,000,000
Slides & slips	6,000,000
Drainage and Ditch Repair	2,000,000
Fence Replacement	2,000,000
	\$17,000,000

<sup>6</sup>8.96 million feet are substandard.

Assume 35 year cycle for replacement or	267,745 linear feet per year	\$2,700,000
Upgrade	448,000 linear feet per year	4,500,000
Assume 4 year paint cycle for non-galvanized guardrails or		
	943,500 linear feet per year	400,000
		\$7,600,000

<sup>7</sup>Assumes 12,000 miles of center line, 5,000 miles of lane line, 17,000 miles of edge line.

<sup>8</sup>Erosion Control, Seeding, Sodding, Fertilizing, Mowing and Herbicidal Spraying.

Highway Operations and  
Maintenance Expenditures  
and "Needs"

(Table 4 cont'd)

<sup>9</sup> Assume a 10-year resurfacing cycle:

Interstate:	1,250 miles x 1/10 x \$132,500/mile =	\$16,562,500
Four lane:	1,350 miles x 1/10 x \$102,250/mile =	13,803,750
Two lane:	14,800 miles x 1/10 x \$41,500/mile =	61,420,000
Urban:	1,600 miles x 1/10 x \$50,000/mile =	8,000,000
	(Excludes federal 3R allocation)	<u>\$99,786,000</u>

<sup>10</sup> 656 pieces of heavy equipment have depreciated to a point where they have no book value; estimated replacement cost = \$12 million

<sup>11</sup> 22 ODOT garages (of 326 buildings) are older than 40 years.  
Assume 3 county garages replaced/year = \$3,400,000  
plus other building replairs/replacements.

Source: State of Ohio, Department of Transportation, Ohio State Transportation Program: State Highway Operations and Maintenance (February 1981)

Cited in: "An Analysis of Ohio's Infrastructure: A Case Study," draft study by Michael A. Pagano.

Table 5  
 EPA Estimates of Backlog  
 Needs and Projected Year 2000  
 Needs by Category  
 (millions of 1982 dollars)

		Backlog Needs, 1980	Backlog Needs, 1982	Projected Needs, 2000
I	Secondary Treatment	\$652	\$693	\$1,045
II		459	462	641
IIA	Advanced Secondary Treatment	---	393	522
IIB	Advanced Treatment	---	69	119
IIIA	Infiltration/Inflow Correction	255	134	135
IIIB	Major Sewer System Re- habilitation	13	21	21
IVA	New Collectors and Appurtenances	663	669	806
IVB	New Interceptors and Appurtenances	312	464	781
(	Correction of Combined Sewer Overflows	3,695	3,878	3,878
VI	Treatment and/or Control of Stormwaters	4,847	4,753	4,753
	Total I-IV	\$ 2,354	\$ 2,443	\$ 3,429
	TOTAL	\$10,896	\$11,074	\$12,060

Source: 1982 Needs Survey, Cost Estimates for Construction of Publicly Owned Wastewater Treatment Facilities, December 31, 1982.

Cited in: "An Analysis of Ohio's Infrastructure: A Case Study,"  
 draft study by Michael A. Pagano.

TABLE 6: Expansion (Capacity) Needs of Municipal Water Supply Systems  
(1980 Dollars)

	Backlog	1980-2000	2000-2020	TOTAL
Cost	\$331,864,000	\$307,526,000	\$195,028,000	\$834,418,000
MGD	670.14	629.92	350.88	1,650.94

SOURCE: ODNR, Water Resources Development Section, Division of Water,  
THE OHIO WATER PLAN: RESOURCE DEVELOPMENT NEEDS FOR PUBLIC WATER  
SUPPLY, 1982 (Draft Document).

Cited in: An Analysis of Ohio's Infrastructure: A Case Study,"  
draft study by Michael A. Pagano.

TABLE 7  
 INCOME - ALL FUNDS  
 FISCAL YEARS 1980 THROUGH 1985  
 (IN MILLIONS)

INCOME SOURCE	Actual 1980	Actual 1981	Actual 1982	Actual 1983	Actual 1984	Actual 1985
Personal Income	1,137.4	1,245.6	1,362.1	2,134.0	2,538.9	2,832.6
TOTAL	8,101.7	9,428.2	9,904.0	12,132.0	13,485.2	14,462.6

Source: OBM, Executive Budget for The Biennium, July 1, 1982 to June 30, 1985.

Cited in: "An Analysis of Ohio's Infrastructure: A Case Study,"  
 draft study by Michael A. Pagano.



TABLE 8

F.Y.	Gross Revenues from Motor Vehicle Fuel Tax (\$millions)	All Fuel (millions)	Gasoline (millions of gallons)
1972	\$350.1	5,133.1	4,673.5
1973	371.2	5,463.3	4,940.6
1974	371.4	5,459.4	4,902.9
1975	371.3	5,458.4	4,929.9
1976	379.6	5,593.5	5,031.5
1977	397.7	5,835.4	5,212.8
1978	405.8	5,951.7	5,284.8
1979	416.6	6,100.4	5,365.1
1980	391.7	5,730.0	4,999.1
1981	377.9	5,455.6	4,723.1
1982	554.7	5,252.4	4,508.2 *

\*Incorporates tax increase

SOURCE: ODOT, "Motor Vehicle Fuel Taxes", May 1983, internal document developed for testimony to Ohio General Assembly (these figures do not correspond with those in Table 25; these data are revised as of May 1983).

Cited in: "An Analysis of Ohio's Infrastructure: A Case Study," draft study by Michael A. Pagano.

Table 9

Preliminary

Gap Between Projected Expenditures and  
"Needs" for FY 84 and for the FY 84-FY 85  
Biennium

(Millions of nominal dollars)

	<u>FY 84</u>	<u>FY 84-FY 85</u>
Bridges	\$38.5	\$89.7
Federal Aid Highways (1)	(150)	(250)
Local Highway	NA	NA
O & M - State	181	384.3
O & M - Local	1,684.1	3,368.2
Wastewater Treatment	149	298
Total	\$ 1,902.6	\$ 3,900.2

(1) Because "needs" estimates were developed for the Federal Aid Secondary system which is 8,482 miles in length, capital "needs" for the state system presented in Tables 8-10 represent only a reduced portion of total "needs". Total primary, urban, and interstate "needs" amount to \$330 million (1980 dollars) on an annualized basis. By inflating the \$330 million annualized "needs" figure, it is estimated to be \$417.8 million in FY 84 and \$441.6 million in FY 85.

The state expects to spend approximately \$530 million per year (excluding bridge outlays); therefore, the gap between "needs" and revenues results in a net "surplus" of \$150 million in FY 84 and \$100 million in FY 85. Again, because of the exclusion of the secondary system (which is almost half of the entire Federal Aid systems), these figures are misleading. Also, the principal reason for the "surplus" is the projected federal revenues based on the nickel-a-gallon tax.

If FY 83 capital outlays --- which were made prior to the new federal gasoline tax -- are compared with "needs", the picture changes dramatically. In FY 83, capital outlays were only \$426 million compared with "needs" of \$400 million for a much smaller net "surplus" than the FY 84 and FY 85 projections. However, after FY 85 the picture may worsen considerably. If total revenues tend to stabilize after FY 85, the "needs" gap will become insurmountable because of the following reasons: (1) "needs" estimates for the Primary system after FY 85 are estimated to be \$8.7 billion (1980 dollars); (2) "needs" for the Interstate system after FY 86 are projected at \$432.7 million (1980 dollars); (3) "needs" for the Urban system are predicted to exceed \$586 million (1980 dollars); (4) the Secondary system has yet to be included; and (5) inflation, even if only modest, can wreak havoc with any cost projections.

Representative HAMILTON. Thank you very much. We have two statements from the Commonwealth of Kentucky. I think the first is to be delivered by Merl Hackbart, who is the budget director, State of Kentucky. Mr. Hackbart, we are pleased to have you, sir.

**STATEMENT OF MERL HACKBART, BUDGET DIRECTOR, STATE OF KENTUCKY**

Mr. HACKBART. Thank you for the opportunity to address this committee concerning the infrastructure needs of Kentucky and the responsibilities of each level of government to assist in meeting that need for the next decade.

I guess at the outset I move to congratulate the State of Missouri regarding their innovativeness in the selection of their respondent this morning. I only wish that we had gone with our initial plan and selected Mr. Bridges who would complement Mr. Rhoads.

The concern of the State regarding infrastructure, and the concern of Governor Brown's administration, is a natural one based upon the importance and fundamental importance of infrastructure to economic development.

Over the past year, considerable national attention has been focused on the condition of our Nation's infrastructure. Population growth, deterioration of facilities due to age or lack of maintenance, and changing technologies have caused our existing infrastructure to become inadequate to the demands of a growing society.

This problem has been exacerbated by the revenue implications for State and local governments of the most severe economic recession since the 1930's and the record high deficits being experienced by the Federal Government.

I applaud this committee's efforts to solicit testimony from State and local officials in order that all levels of government can evaluate their present and future "infrastructure actions." Such evaluation can lead to more effective decisions regarding the enhancement of and financing for our Nation's public infrastructure.

A clear and concise definition of infrastructure is required in order to deal with broad public/private sector and intergovernmental issues. To some extent the terms "infrastructure," "public works," and "public capital investment" have been used interchangeably. However, programmatically, they are often perceived to denote different public sector investment efforts. Public works has tended to infer those works constructed by the Government for the public's use or service, a rather narrow term in meaning. Public capital investment is somewhat more inclusive and typically refers to the tangible long-term investment made by Government for physical structures. However, the all-inclusive term, and currently popular one, hence the one used throughout our discussion, is infrastructure, taken to mean the basic installations and facilities on which the economic growth of a community or State depend.

Beyond this rather broad definition, the term infrastructure can usually be broken down into three types which may permit us to more effectively deal with intergovernmental relationships and responsibilities in this area. These categories are as follows:

### BASIC PUBLIC INFRASTRUCTURE

Basic or traditional infrastructure includes highways, public transit, airports, municipal water supply, wastewater treatment, and other investments in basic public service facilities.

### HUMAN SERVICES PUBLIC INFRASTRUCTURE

Human service infrastructure is provided as part of State and local governments' programs to meet human service needs, such as educational and humanities facilities, as well as correctional facilities.

### QUASI-PUBLIC DEVELOPMENT INFRASTRUCTURE

The newest form of infrastructure, has emerged over the past several years, and involves direct State and local government investment in specific economic development and revitalization projects such as civic centers, parking garages, hotels, and other joint public private ventures. In a time of record-high interest rates, and a depressed economy, public sector involvement in these economic development revitalization infrastructure projects has emerged as a major public sector activity. Such risk sharing efforts have the ultimate goal of enhancing the general economic welfare of citizens by making substantial financial commitments through the mechanism of State and local bonded indebtedness.

The importance of basic infrastructure to Kentucky is considerable. The Commonwealth's agricultural and coal mining economy dictates a strong need for the basic or traditional infrastructure system. This need is increased over the remainder of this century when you consider that Kentucky's population is expected to grow nearly 30 percent by the year 2000, occurring predominately in the rural areas of the State. This will require sizable investment in drinking water and wastewater treatment facilities if minimum Federal quality levels are to be met.

The second and third types of infrastructure are also very important to Kentucky. We are presently under a court order to reduce the prison population in our existing facilities, and our mental hospitals are old and in need of replacement. The last session of Kentucky's General Assembly authorized the sale of \$20 million in bonds to construct a new mental health facility and renovate another. Another \$66 million in State bonds will be requested over the next few years to finance the capital investment needs of our correctional system. In Kentucky, local school district construction is primarily a local funding responsibility. The projected need in Kentucky for classroom facilities alone is \$340 million. The Kentucky School Building Authority has authorized bond sales of \$90 million for construction of new buildings, building additions, administrative offices, and bus garages since 1978.

Economic development is the cornerstone of Kentucky's future. The Brown administration sought, and the legislature authorized in 1982, \$100 million in bonds in order to assist the private sector in developing a strong and diversified economic development program. This program is for construction of industrial parks, river-

port development, downtown development, and recreational facilities.

Therefore when one assigns responsibility for the financing of infrastructure programs, we must look at the entire infrastructure package. Kentucky is not alone in funding the economic development infrastructure activities. Many States are moving into this area and it is emerging as a responsibility of the States and localities to finance this type of infrastructure. The same is true of the infrastructure for human needs such as correctional and educational facilities. These are State programs and the infrastructure needs associated them should be the responsibility of the States and local units of government.

This leaves us with the basic or traditional type of infrastructure to be funded by all three levels of government. The need for this infrastructure investment is not only substantial for Kentucky, but for the entire nation. The Congressional Budget Office in its report, "Public Works Infrastructure: Policy Considerations for the 1980's," estimated annual capital needs for all States from 1983 to 1990 for traditional infrastructure programs. These needs under current Federal policy, total over \$53 billion (1982 dollars). This figure includes \$27.2 billion annually for highways, \$6.6 billion annually for wastewater treatment facilities, and \$7.7 billion annually for drinking water supply (see chart A).

CHART A—ESTIMATED ANNUAL CAPITAL NEEDS FOR SELECTED INFRASTRUCTURE PROGRAMS UNDER CURRENT FEDERAL POLICY, 1983-90

[In billions of 1982 dollars]

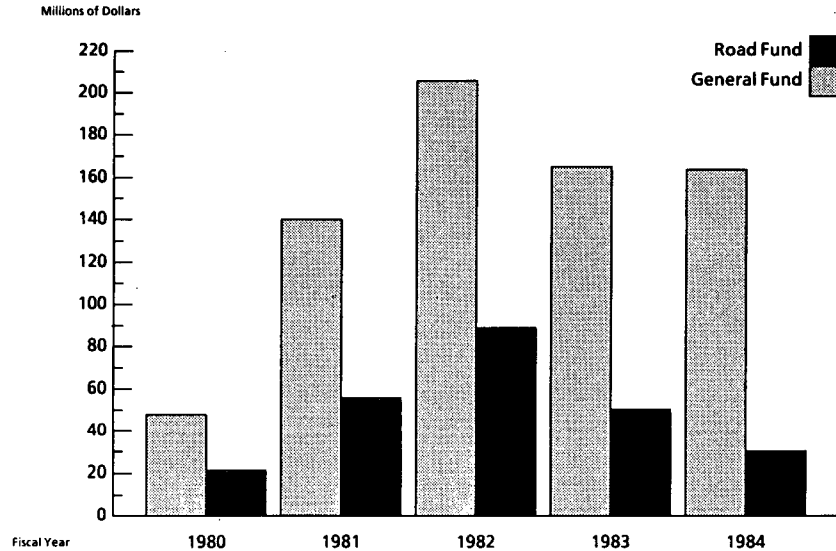
Infrastructure system	Total	New Construction	Repair, rehabilitation and replacement
Highways .....	27.2	9.9	17.3
Public transit .....	5.5	2.2	3.3
Wastewater treatment.....	6.6	6.1	.5
Air traffic control.....	.8	.1	.7
Airports.....	1.5	1.0	.5
Municipal water supply.....	7.7	3.6	4.1
<b>Total.....</b>	<b>53.4</b>	<b>25.2</b>	<b>28.2</b>

Source: Congressional Budget Office, "Public Works Infrastructure: Policy Considerations for the 1980's."

Before we discuss the historical funding pattern for the basic or traditional infrastructure system, let us examine the fiscal condition in which the States now find themselves. Unlike the Federal Government, virtually all States are required to end their fiscal year without deficits. This is becoming increasingly difficult for States to accomplish. In Kentucky, for example, since 1980, we have experienced revenue shortfalls of \$1 billion in addition to the \$900 million in Federal funds we have lost over this period (see chart B).

Chart 3

State Tax Revenue Shortfalls During the Brown Administration\*  
(in million of dollars)



State Tax Revenue Shortfalls  
(in million of dollars - rounded)

	FY 1980	FY 1981	FY 1982	FY 1983	FY 1984	Total
General Fund	48	140	206	165	164	723
Road Fund	22	56	89	50	30	247
						970

\*In addition to these state tax revenue shortfalls, the Commonwealth has also experienced federal budget cuts of approximately \$900 million during this same period.

FY 1980 - 1983 data are actual.  
FY 1984 data is estimated.

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The news from Washington is that the economy is growing and that the recession is coming to an end. Most States have yet to experience the effects of any upswing in the economy. In fact, fiscal year 1983 saw more States implementing budget reduction strategies than in fiscal year 1982. Twenty-seven States implemented across-the-board cuts in fiscal year 1983, up from 17 in fiscal year 1982. Twelve additional States implemented selective program cuts. Twenty-seven States enacted permanent tax increases and 24 enacted temporary increases, which were not for new or expanded programs, but were necessary to maintain the existing revenue base. Over the past 2 years 36 of the 50 States have imposed tax increases (see chart C).

CHART C.—SUMMARY CHART (50 STATES) STATES ADOPTED VARIOUS AUSTERITY MEASURES

Measure	Fiscal year—	
	1982	1983
Across-the-board cuts.....	17	27
Selective program cuts.....	25	37
Permanent revenue increases.....	12	27
Temporary revenue raising measures.....	14	24
Capital finance to bonds.....	5	6
Move general funds to:		
Special funds.....	8	17
Other government entities.....	1	3
Unpaid employees furloughs.....	4	9
Hiring limits.....	37	42
Layoffs.....	20	22
Restricted travel:		
Out-of-state.....	24	32
In-state.....	16	23

Source: "Governors, Response to Fiscal Austerity" August 1983, National Governors' Association and National Association of State Budget Officers.

A survey by the National Governors' Association and the National Association of State Budget Officers underscores the problem of State finances when it reports that the aggregate surplus for State governments was \$4.7 billion in fiscal year 1981, \$2.3 billion in fiscal year 1982, and \$0.5 billion in 1983. The 1983 surplus represents 0.2 percent of current expenditures.

State taxes made up 48 percent of State revenue while nontax revenue, including Federal grants, totaled 25.3 percent of States' 1981 income. The percentage of nontax revenue is projected to decline to 16.4 percent of State budgets by 1985.

Besides the reduction in Federal grants coming to the States, Federal tax reductions contained in the Economic Recovery Tax Act (ERTA) of 1981 will negatively affect State revenues. The National Governors' Association estimates that the accelerated cost recovery provisions contained in ERTA will cost the States \$2 billion in lost corporate tax revenues. Kentucky estimates that it will lose \$65 million per year.

The reasons for the deterioration of the fiscal health of the States can primarily be placed in the deepest and longest recession this country has experienced in its history. Besides the recession, there are three other major reasons for the plight in which the States find themselves. The first factor was a drop in the inflation rate from 10.3 percent in fiscal year 1981 to 3.3 percent in fiscal



year 1983. This drop was not anticipated by the State revenue forecasters; thus, tax receipts from sales and individual income taxes, which are affected by the inflation rate, did not materialize as expected. The second reason for the decline is the fact that the recession followed so closely on the heels of the tax revolt movement that swept this country in the late seventies. Had this revolt been followed by a period of economic growth, then State revenues may have been sufficient to maintain services, but due to the long recession State governments were forced to use their surpluses and finally cut services and raise taxes. The third is the reduction in Federal aid between fiscal year 1981 and fiscal year 1983 which placed additional burdens on State governments at the same time revenues from traditional sources were stagnant or falling.

This reduction in the growth of State tax receipts is coming at a time when the nontax revenue portion of the budget (Federal funds) is decreasing by 9 percent over 3 years, while mandated services are substantially the same.

Considering the present fiscal condition of the States and the fact that real growth in State revenues is projected to be limited over the next several years, we must look elsewhere for financial support for the basic public infrastructure system. This is especially true when one considers that States are almost totally responsible for funding the other major categories of infrastructure, that is, human services public infrastructure, and quasi-public development infrastructure.

The concern shared by many of us in State and local government is that while the Federal Government is reducing Federal financial assistance to the States for federally mandated programs in the health and welfare area, a similar trend appears to be emerging in the Federal support for the basic public infrastructure system. Between 1980 and 1982, the proportion of total spending on infrastructure activities undertaken by the Federal Government has declined. Thus, the share of the burden borne by State and local governments increased. This decline in Federal support is estimated by the Congressional Budget Office to continue. The Congressional Budget Office reports that the annual capital spending needs for the basic or traditional infrastructure system is about \$53.4 billion annually under current Federal policy. The Federal share of this total would be about \$28.2 billion, or 52.8 percent. This would represent a decline from 54.6 percent in 1982 (see chart D).

CHART D.—ANNUAL SPENDING ON CAPITAL INFRASTRUCTURE

[In billions of 1982 dollars]

Year	Federal		State and local		Total
	Amount	Percent	Amount	Percent	
1960.....	\$14.0	41.8	\$19.5	58.2	\$33.5
1965.....	18.2	46.1	21.3	53.9	39.5
1970.....	16.7	41.3	23.7	58.7	40.4
1975.....	18.9	50.9	18.2	49.1	37.1
1980.....	22.0	55.4	17.7	44.6	39.7
1982.....	20.1	54.6	16.7	45.4	36.8

It should be apparent that infrastructure investment and maintenance is a problem of national scope in terms of the financial resources needed to support the system. A trend of declining government spending on infrastructure as a proportion of overall spending has occurred at both the Federal as well as the State and local levels. Spending by all levels of government on infrastructure has declined from 2.2 percent of gross national product (GNP) in 1960 to 1.3 percent of GNP in 1980. The U.S. General Accounting Office points out that State and local capital investment as a percentage of total budget outlays declined from approximately 25 percent in 1960 to 14 percent in 1980. Faced with revenue constraints and increased demands for other services, many State and local governments have chosen to balance their budgets by deferring or eliminating capital investment and maintenance. The Federal Government has acted in similar fashion. Such recent action represents deferrals of the necessary financial commitments to the infrastructure system.

Kentucky has begun to meet the infrastructure financing problem directly. In addition to the State and local support for economic development projects and capital investment in correctional facilities, mental health hospitals, and educational institutions, Kentucky has recognized the need for additional financial support for the basic or traditional infrastructure systems. For example, the 1980 Kentucky legislature authorized the sale of \$300 million in revenue bonds to construct or reconstruct roads which enhance economic development in the Commonwealth.

Recognizing that the ability to finance public infrastructure is a major challenge to the Commonwealth, the Brown administration is pursuing a wide variety of capital planning initiatives to deal with emerging investment needs. Among these are: the development of a Strategic Planning and Program Analysis (SPPA) process; the creation of formal evaluation criteria for the review of capital projects; the comprehensive assessment of infrastructure investment needs; the utilization of debt management procedures, and the development of a 5-year capital plan identifying public service infrastructure needs for State government through fiscal year 1989.

In conjunction with the SPPA process, we have recognized the need to create evaluation criteria for the review of capital projects. These evaluation criteria will enable us to prioritize capital construction projects such that the projects which have the greatest need, while producing the maximum benefit for the dollars invested, will receive initial consideration. Within the Finance and Administration Cabinet's Office for Policy and Management, a Capital Construction Task Group has been working on this issue and should complete a report regarding the formal evaluation criteria by early fall.

One of the first steps should be the identification of future and existing needs for infrastructure investment. To accomplish this task, the Finance and Administration Cabinet, through a contractual agreement with the University of Kentucky's Martin Center for Public Administration, is conducting a study of the Commonwealth's future infrastructure needs. The results of this soon to be published study will assist Kentucky officials in a twofold fashion:

identifying infrastructure needs in aggregate terms; and establishing strategies for infrastructure needs.

By reviewing the historical levels of expenditure for infrastructure in Kentucky by the Federal, State, and local governments, the study provides a base from which future capital planning can be undertaken. Preliminary results from the study reveal that from fiscal year 1975 to fiscal year 1982 the Federal Government provided over half of the funds used for the construction of highways and bridges, wastewater treatment, and water supply facilities in Kentucky (see table).

CAPITAL OUTLAYS FOR THE CONSTRUCTION OF INFRASTRUCTURE SELECTED CATEGORIES—  
FISCAL YEARS 1975-82

[In millions of 1982 dollars]

	Federal	State	Local	Total
Highways and bridges.....	1,375.2	1,535.4	NA	2,910.6
Wastewater treatment.....	510.8	NA	140.0	650.8
Water supply.....	251.7	NA	347.7	599.4
Total.....	2,137.7	1,535.4	487.7	4,160.8
Percent.....	51.4	36.9	11.7	100.0

In addition, the study attempts to project the level of infrastructure need Kentucky will experience over the next several years. At this time, the preliminary draft of the case study is under review by the Finance and Administration Cabinet and conclusive results are not yet available for some infrastructure categories.

If the level of Federal funds and State tax revenues committed to financing the Commonwealth's infrastructure remains constant, while the need to increase infrastructure investment grows, the only feasible alternative for the State is to finance infrastructure needs through bonded indebtedness. However, the amount of debt a State can support is also limited. That limitation is generally conceded to be a function of the State's future revenue flows and demographic patterns. Thus, it is recognized that the Commonwealth can only sell a limited amount of bonds for any given fiscal year and maintain its bond credit rating. Therefore, constant real commitments of Federal and State revenues supplemented by debt-financing may still be insufficient to meet the infrastructure needs of a growing society.

Incidentally, the growing importance of bonded indebtedness in the infrastructure financing picture has led the administration to establish a comprehensive debt management program. The Finance and Administration Cabinet, as an integral part of the strategic planning and program analysis process, is attempting to achieve two debt management related objectives. First, 28 debt authorities currently exist in Kentucky State government. For debt management to be a successful portion of the strategic planning process, centralization and coordination of the State's debt authorities is needed given emerging State needs and financing capabilities. Without such control, the assignment of infrastructure priorities cannot be achieved. Hence, the Cabinet has developed debt issuance review procedures which require the debt authorities of the state to finance only those projects which have been identified as

short-term priorities through the strategic planning and program analysis process.

Second, the Cabinet has been working to develop a "debt capacity index" for the Commonwealth. This index will be utilized to identify a manageable level of new debt which the State can support for a given budget period. Again, this index is based upon the State's revenue patterns and demographic patterns.

These two debt management initiatives are integral to the success of the Commonwealth's strategic planning and program analysis process and, thus, the future funding of the State's infrastructure requirements.

In concluding my statement, I would like to touch on the future role of the Federal Government with regards to infrastructure.

As I stated previously, there are three distinct types of infrastructure, and State and local governments have virtually total responsibility for two of the three. However, it is the basic public infrastructure system where responsibility is divided among all three levels of government.

I feel, as I'm sure most State and local officials feel, that the Federal Government has a role and a responsibility in developing and maintaining our basic infrastructure system. How this role should evolve over the coming decade and beyond is the question.

The General Accounting Office states that "The federal-aid highway program may have set the stage for deterioration of the nations highways by effectively subsidizing State and local construction, but not maintenance." This emphasis on new construction needs to be curtailed in favor of allowing State and local governments to repair existing facilities which are now allowed to deteriorate and thus require funds for new construction.

This committee should review the present Federal standards and priorities and determine whether Federal funds could be better utilized by granting more flexibility to the States when setting priorities and standards. While the States have been less than encouraged with the block grant approach in other areas under the Reagan administration, a concept similar to block grants, or special revenue sharing for infrastructure projects, may be useful.

The infrastructure needs of each State are dependent upon economic and demographic characteristics. To base the Federal funding of infrastructure facilities on a formula applied to all States does not fairly distribute available funds. Furthermore, the disbursing of funds to each State on a project-by-project basis creates excessive administrative costs. The Environmental Protection Agencies [EPA] wastewater treatment construction grants program reflects this point. By employing population as a dominant factor in the EPA funding formula a bias toward the more urban and industrial States is created. In addition, the Environmental Protection Agency makes 500 to 700 projects each year. According to the Congressional Budget Office, in 1981 perhaps \$10 million in Federal administrative costs could have been reallocated to direct Federal aid if a revenue-sharing arrangement had been in effect.

Under such an infrastructure revenue-sharing plan, each State would receive an amount of funds based on its demonstrated need, population, and economic condition. Once received, it would be the State's responsibility to establish priorities for the expenditure of

these funds. In addition, using these funds, States could create bond banks or pools from which local governments could borrow at reasonable interest rates. Furthermore, it would be the individual-State's decision whether to use these funds for new construction or maintenance and rehabilitation of existing facilities.

Thank you again for giving me the opportunity to express some concerns from Kentucky on this subject of importance to us all. There is a lot of discussion today regarding our intergovernmental system and the relative roles of responsibilities of the States and the Federal Government. Hopefully, the area of infrastructure will give us an opportunity to work together at all levels of government to address this critical national need.

Representative HAMILTON. Thank you very much, Mr. Hackbart. We will conclude the first panel this morning with the testimony of Ms. Jackie Swigart, secretary of the natural resources and environmental protection cabinet. Ms. Swigart, we are delighted to have you.

**STATEMENT OF JACKIE SWIGART, SECRETARY, NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET, STATE OF KENTUCKY**

Ms. SWIGART. Thank you, Mr. Chairman, and also Congressman Mazzoli. My remarks today will address the areas of drinking water supply, water quality, and water resources, which are the responsibility of my cabinet.

Under Kentucky revised statutes 146, 151, 223, and 224, the cabinet is statutorily responsible for achieving the Commonwealth's safe drinking water, water quality maintenance, and water resources management, including water availability, goals. To carry out its responsibilities in these three areas, the cabinet operates regulatory, education and technical assistance, and in the past, capital construction programs.

While it is the principal decisionmaking agency, the natural resources and environmental protection cabinet is not the only entity involved in developing and managing the Commonwealth's wealth of water resources. In addition to the cabinet, at least eight other State agencies are engaged in some aspect of capital provision or regulatory programs relating to water-based public works. Also numerous substate organizations, to include municipalities, county governments, and special water districts, have a direct and significant role in water management decisionmaking. Further, as many as 20 Federal agencies in the Departments of Interior, Army, Agriculture, and Commerce, as well as independent agencies like the Environmental Protection Agency and the Tennessee Valley Authority, are intimately involved in infrastructure decisions affecting the Commonwealth's water,

Of equal importance, the legislative branches of both Federal and State government establish the overriding direction for each administrative agency's water projects and programs. Last, the private sector must certainly be included in the lengthy list of parties engaged in water facility investment and development. Without question, this complex array of factors must be recognized and

taken into consideration when addressing State and National water infrastructure needs.

#### WATER-BASED INFRASTRUCTURE

Perhaps more than any other type of public works structure, water facilities exemplify the capital dilemma facing the Commonwealth. Simply put, the problem is one of increasing need, resulting from facility obsolescence and deferred maintenance, expanded demand for services, and continued introduction of previously unaddressed environmental and performance standards, versus declining resources.

This situation has not emerged overnight, as pointed out in a recent Congressional Budget Office [CBO] report on public works infrastructure. Federal spending for water resources development and water supply has declined or remained constant since the early 1960's. Coincidentally, State and local expenditures committed for both purposes have remained constant—for water resources development—or increased only slightly—for single-purpose municipal water supply—while a new source of capital for municipal point-source wastewater treatment has been available since the early 1970's. The CBO report also presented data indicating that aggregate Federal and non-Federal construction spending under title II of Public Law 92-500 has been less annually than the per annum amount spent by local jurisdictions for wastewater capital and operation and maintenance [O&M] costs during the 1960's and early 1970's. As a final note, CBO correctly reported that increasing amounts of money are being spent on water supply, wastewater treatment, and water resources facility O&M relative to new construction costs.

A more detailed review of Kentucky's water quality and wastewater treatment, water supply, and water resources needs and expenditure trends serves to strongly validate CBO's national conclusions.

#### WATER QUALITY—WASTEWATER TREATMENT

Any effort to establish future capital requirements for water quality maintenance must begin by assessing past investment patterns. Although only crudely representative, it is probably reasonable to conclude that previous public wastewater treatment expenditures, with the exception of any backlog of uncompleted projects, are roughly equivalent to past point-source control needs. Table 1 summarizes estimated public expenditures for point-source

TABLE 1.—*Estimated municipal wastewater treatment expenditures 1972-1982*

[In millions of dollars]

EPA construction grants program.....	485.3
Other Federal grants and loans <sup>1 2</sup> .....	129.0
Local debt and revenues <sup>1 3</sup> .....	200.0
Total .....	814.3

<sup>1</sup> Extrapolated from 1975-1982 data.

<sup>2</sup> Based on FmHA, HUD, EDA, and ARC data.

<sup>3</sup> Based on 1982 Kentucky Local Debt Report.

municipal wastewater treatment in Kentucky for the period 1972 through 1982. Private treatment expenditures are not reflected in the table.

The \$814 million total figure presented in table 1 assumes a 75 percent Federal and 25 percent non-Federal matching requirement for conventional treatment and an 85-15 cost-share for innovative systems. Importantly, a review of past facility funding indicates that many smaller communities have utilized loan and grant funds obtained from Federal agencies other than the U.S. Environmental Protection Agency to provide most or all of their required non-Federal match.

According to EPA's 1982 Needs Survey, point-source municipal wastewater treatment expenditures in Kentucky would need to total approximately \$2.5 billion and \$3.1 billion for 1980 population backlog needs and 2000 population projected needs, respectively, in order to meet water pollution control requirements for the eight previously eligible construction grant categories. However, eligibility and reserve capacity changes resulting from the 1981 municipal construction grants amendments, Public Law 97-117, reduce the 1980 population backlog needs level to approximately \$372 million for five facility categories currently eligible for funding. Table 2 presents a summary of Kentucky data by eligibility category from the 1982 Needs Survey.

#### INVESTMENT NEEDS FOR WASTEWATER FACILITIES, 1982-2000

(In millions of 1982 dollars)

Facility	Backlog needs 1980 population	Projected needs 2000 population
I..... Secondary treatment.....	294	397
II-A..... Advanced secondary treatment.....	83	112
II-B..... Advanced treatment.....	0	0
III-A..... Infiltration/inflow.....	104	104
III-B..... Major rehabilitation of sewers.....	5	5
IV-A..... New collector sewers.....	398	477
IV-B..... New interceptor sewers.....	161	524
V..... Correction of combined sewer overflows.....	1,450	1,450
Total.....	2,499	3,070

Source: Tables 1, 15, and 21; U.S. EPA, 1982 Needs Survey cost Estimates for construction of publicly owned wastewater treatment facilities; December 31, 1982.

Elimination of eligible categories and reserve capacity, that is capacity for future growth, should not be misconstrued or misinterpreted to mean that a need for treatment no longer exists. Instead, the deletion merely shifts the burden for addressing certain problems away from the Federal level to State and local governments.

In some categories however, the Needs Survey may actually overestimate needed investment in treatment facilities. A perfect example would involve those stream segments that are degraded by causes other than wastewater and where secondary or better treatment of municipal discharges will not, by itself, result in compliance with ambient or instream surface water quality standards. Since approximately 60 to 65 percent of the current pollution loading in the Commonwealth is attributable to nonpoint pollution

sources, Kentucky may encounter many stream segments like those referred to in the preceding example. Clearly, the limited financial resources now contributed by Soil Conservation Service, the Agricultural Stabilization and Conservation Service, and the Forest Service for land conservation and the control of nonpoint source pollution are wholly inadequate to address the magnitude of problem. While yet unquantified and, therefore, unconsidered, capital investment requirements for the State to abate nonpoint sources of pollution could be staggering.

As a final observation, the figures that have been presented do not include any real consideration of facility maintenance, repair, rehabilitation, or replacement costs. These amounts will become even more significant when the new Public Law 97-117 cost-sharing percentages (55 percent Federal and 45 percent non-Federal for convention systems and 75 percent Federal and 25 percent non-Federal for innovative systems) for facility construction are imposed in Federal fiscal year 1985. The impact of this conflict is inescapable when it is recognized that non-Federal entities in Kentucky will have to double their current capital spending just to meet projected construction needs under the new cost-sharing formula.

Overall, legislative changes in the construction grants program will make it exceedingly difficult for Kentucky's rural and smaller urban communities to properly plan for and construct wastewater treatment facilities. This prospect is especially troublesome since rural communities, where water quality has historically been less degraded, are projected to experience the State's greatest population growth through the year 2000 and beyond.

Last, I do not wish to leave the impression by talking about the year 2000 that Kentucky's financial needs are exclusively long-term. Rather, the problem is immediate. Between 1983 and 1987, approximately \$195 million of Federal and non-Federal funds will have to be expended just to address the needs of large and small communities currently comprising Kentucky's construction grants priority list.

Possible solutions to the capital financing problem facing the commonwealth's wastewater facilities are varied. Of the options available, greater self-sufficiency through the imposition of equitable rate systems and user charges that are sufficient to retire debt, pay for O&M, and accumulate replacement funds must be viewed as the preferred choice. Other State alternatives include more fully utilizing the revenue bonding and dedicated tax capability of Kentucky's pollution abatement authority, targeting financial assistance for water quality enhancement through source protection, and insuring that facilities are properly designed and economically managed. In addition to a continued commitment of Federal financial support through EPA and other Federal agencies, other national options, such as allowing States to use construction grants as loans, as provided for in S. 532, and the ability to use funds for facility repair and rehabilitation rather than only new construction, present worthwhile alternatives. Finally, other alternatives, to include sound land management and development practices, private sector financing, and European approaches to environmental pricing, require continued exploration and adoption where appropriate.



## WATER SUPPLY, TREATMENT, AND DISTRIBUTION

Approximately 3 million people, or about 85 percent of Kentucky's 1980 population, presently rely on slightly more than 1,000 public systems to supply their water. Of the total number of systems, the rates of only 21 percent are regulated by the State's public service commission. The remainder consist of municipal systems, systems operated by schools and educational institutions, and systems operated by and serving single business establishments. In addition, approximately one-third of Kentucky's rural population relies on private, individual water supply sources, such as wells, springs, cisterns, et cetera.

Problems plaguing Kentucky's water supply systems are virtually identical to those articulated by CBO in the National infrastructure report. The three include, first, deteriorated or inadequate distribution systems, second, the need for new supply sources, and third, inadequate treatment facilities. Little data is available, however, to establish the severity of each problem and, therefore, for use in estimating water supply investment need. Because of the lack of substantiating data, it is again necessary, as with wastewater, to assume for the purpose of presenting a figure on future financial requirements that past investment expenditures have basically met investment need. We must clearly recognize that such is not the real world case because of the acknowledged problems of deteriorated or inadequate treatment and conveyance systems. In fact, if past expenditures and needs were roughly equivalent, we would not have the treatment and distribution system problems that are known to exist in the State. While undocumented, it is also my opinion that insufficient water supply sources are an important State problem.

Recognizing the inherent discrepancy in the preceding assumption, table 3 presents an historical summary of publicly owned water supply system expenditures for the period 1972-82.

TABLE 3.—HISTORICAL EXPENDITURES FOR PUBLICLY OWNED WATER SYSTEMS

(In millions of dollars)

	General grants and loans	Local debt	Total
1972-1974 <sup>1</sup> .....	94.4	130.4	224.8
1975-1982 .....	<sup>2</sup> 251.7	<sup>3</sup> 347.7	599.4
Total .....	346.1	478.1	824.2

<sup>1</sup> Extrapolated from 1975-1982 data.<sup>2</sup> ARC, EDA, FmHA, and HUD data.<sup>3</sup> 1982 Kentucky Local Debt Report Data.

By combining historical expenditure levels with projected population growth, a first cut estimate of investment needs for water supply, treatment, and distribution can be derived. Use of this approach yields an approximate investment need of \$1.4 billion to \$1.5 billion between 1982 and 2000. This figure may not be truly representative because of several factors. First, the figure does not reflect investment costs required to correct existing deficiencies. It must, therefore, be inflated to include them. Second, the inflated

value would overestimate need because (a) not all of the new population growth will be serviced by public systems, (b) variable levels of excess or growth capacity already exists in many systems, (c) system consolidation and regionalization will take advantage of scale economies to improve efficiency and reduce costs, and (d) since future demand is nonlinear, a saturation level of service provision will be reached beyond which new construction will be economically infeasible. Third, the figure will again need to be inflated to reflect the treatment technology costs for controlling new contaminant parameters,

While the cost for water supply development in the Commonwealth will be very high, it is presently impossible to definitively ascertain the cost for future needs. It is reasonable to expect, however, that statewide need may in fact be in the range of between \$1 and \$2 billion for the period 1982 through 2000. Such a level of public capital investment would not be inconsistent with the annual levels of funding of \$10 to \$15 billion for urban and rural needs that were reported by CBO.

Major problems resulting from insufficient public water supply investment include failure to realize a reasonable quality of life for parts of Kentucky's population, potential adverse health impacts, and the imposition of barriers to economic development and recovery. In order to address these problems, a combination of alternative solutions will need to be employed. Options available include reforming rates and accessing true pay for service user charges, reducing demand through sound conservation planning—which will have the spinoff effect of reducing the need for wastewater treatment investment—improving efficiency and reliability through system consolidation, establishing development funds that require new users to pay for expanded capacity, improving access to capital, and continuing or increasing Federal capital assistance.

#### WATER RESOURCE DEVELOPMENT

Capital investment in water resources has historically been the responsibility of Kentucky State government in partnership with Federal construction agencies like the U.S. Army Corps of Engineers and the U.S. Department of Agriculture's Soil Conservation Service. Capital construction facilities of primary water resource development importance include single- and multiple-purpose reservoirs and single-purpose flood control structures. However, other functional areas like hydroelectric power facilities, waterborne transportation appurtenances, and water-related outdoor recreation also represents potential capital investment liabilities.

##### *A. Dam safety*

Since 1975, the Commonwealth has operated a limited capital construction program for the repair of State-owned dams. During the 8-year period through 1982, approximately \$5.25 million has been expended to address safety problems at 23 structures.

At the present time, 63 structures are classified as State-owned. Of the 63 dams, 33 are in need of repair. Table 4 lists the number of structures needing remedial work according to their hazard clas-

sification and presents estimates of design and construction costs necessary to alleviate potential risks to property and life.

TABLE 4.—STATE-OWNED DAM REPAIR ESTIMATE

(In 1982 dollars)

	7 "A" class or low hazard structures	16 "B" class or Moderate hazard structures	10 "C" class or high hazard structures	33 total structures
Design.....	44,500	395,000	285,000	724,500
Construction.....	550,000	3,815,000	5,850,000	10,215,000
Total.....	594,500	4,210,000	6,135,000	10,939,500

Based on an anticipated continuation of State appropriation levels of approximately \$1 million per year, 11 years, excluding any inflation factor, will be required to correct existing safety deficiencies. Since a level of risk from potential failure is involved, 11 years may represent too long of a response period.

For this reason, recent action by Congressman Roe and others to establish a loan fund for non-Federal, publicly owned class C hazard structures through H.R. 3678 is strongly supported by the cabinet. Creation of a Federal loan fund to be used in addressing the more urgent financial needs associated with high hazard dams will allow limited State resources to be targeted for loan repayment and work on lower priority structures.

### *B. Flood control*

In the past, the Cabinet operated a community flood damage abatement program (CFDAP). The structural and nonstructural capital cost-sharing program was designed to resolve flooding problems that could not be addressed by either the corps or the soil conservation service because of statutory or administrative limitations. Through the 6-year history of the program (1977-82), 94 local projects, amounting to a State share of \$12.47 million, were funded. However, since the State's contribution consisted of revenue-sharing funds, discontinuance of Federal revenue sharing resulted in suspension of the CFDAP effort.

At the time the program was suspended in 1982, a backlog of more than 100 small projects existed. By converting project application costs to 1982 dollars, an estimate of slightly more than \$49 million can be derived for backlog needs. Given the lack of State revenues to support program reestablishment, it appears certain that small flood damage prevention needs in Kentucky cannot currently be met.

One option for addressing the capital shortfall could be to use the revenue bonding capability vested in Kentucky's water resources authority. Even if the access to capital problem is overcome through bonding and the establishment of a loan program, better use of the taxing authority vested in the State's special flood control and watershed conservancy districts will be needed to repay project costs.

### *C. Federal-State cost-sharing*

While the Commonwealth has established and operated several small capital water resource construction programs in the past, the vast majority of water resource initiatives in the State are carried out by Federal agencies. On numerous occasions, however, Federal, State, and local agencies have cooperated, to include in some cases sharing costs, on navigation, water supply, recreation, hydropower, fish and wildlife enhancement, and mitigation studies and projects.

Overall, the cabinet is committed to increasing State involvement in water resource development activities in the future. The single biggest impediment to realizing the Commonwealth's goal is, however, access to sufficient capital.

Kentucky is not the only State expressing this opinion. Through my roles as a member of the Board of Directors of the Interstate Conference on Water Problems (ICWP) and chairperson of the conference's cost-sharing task force, I am keenly aware that a majority of senior State water management officials in the Nation support my contention.

In order to put forward a State's position on water project cost-sharing, the ICWP cost-sharing task force has developed and ICWP's board has approved a conceptual paper which presents a preferred State approach. Key provisions of the proposal, which will be voted on by all ICWP members at the annual meeting in September, include: First, reducing the backlog of authorized projects through economically selective grandfathering; second, distinguishing between national projects and projects of State priority, and setting up separate National and State Systems for project selection, authorization, and appropriation; third, establishing a national water infrastructure authority to loan development capital to the States; and fourth, proposing specific pay-back cost-sharing rates that are acceptable to the States.

In an effort to operationalize its position, ICWP has reviewed all major infrastructure and cost-sharing proposals currently before the Congress. Further, written and oral testimony has been or will be provided on the six or seven major bills that ICWP believes to exhibit the greatest potential for addressing the water resources problem. At the committee's pleasure, I would be happy to provide you with copies of the ICWP position paper after its adoption in September.

In summary, the cabinet believes that, as with water supply and water quality, the beneficiaries of vendible products produced by water resource developments should pay their appropriate share of investment costs. However, such arrangements must be phased in and must address the overriding issues of capital formation and continued Federal financial participation.

#### CONCLUSIONS

The cabinet estimates that between \$1.7 and \$2 billion of Federal, State, and local funds have been expended on wastewater treatment, water supply, and water resource facilities in the Commonwealth over the past 10 years. Preliminary estimates indicate that between two and three times that amount, at a minimum, must be spent between now and the end of this century to meet the State's

and, in the case of programs and projects with national and multi-State implications, America's deferred and future water infrastructure needs.

In reviewing 18 legislative proposals on infrastructure now before Congress, all but two or three acknowledge a national interest in and responsibility for resolving presently identified capital financing problems. Without question, the Kentucky Natural Resources and Environmental Protection Cabinet clearly believes that it must be a partner with the Federal Government in revitalizing the Nation's public works.

The Cabinet recognizes, however, that solutions will not be developed and adopted overnight. Instead, problem resolution will be a long-term venture requiring continued Federal financial support and equitable transition periods where shifts in responsibility and resources are to occur. It will also demand that currently fragmented decisionmaking responsibility be much better coordinated. Finally, development of a documentable data base or inventory from which to begin problem assessment and response must be recognized as a high-priority need.

I commend this committee for their interest, effort, and contribution to obtaining the information that will lead to the eventual solution of this local, State, regional, and National dilemma.

Representative HAMILTON. Ms. Swigart, I must say that I have been very impressed by the high quality of the statements made. A tremendous amount of research has gone into these statements, and that kind of effort is exceedingly helpful to us in trying to assess the infrastructure needs in the Nation.

I want to thank each of you and the States that you represent for your willingness to participate in the study that is going forward by the Joint Economic Committee to assess these infrastructure needs.

I guess my overwhelming impression after listening to you is that the needs that we confront really are quite staggering and it will be a long-term project to meet the infrastructure needs of the country.

You have given us not only good statistical information but very graphic illustrations of the needs that your respective States confront.

We will begin the questions with Congressman Mazzoli.

Representative MAZZOLI. Thank you very much, Mr. Vice Chairman. And let me ask each of the panelists this question, I think Lieutenant Governor Mutz started it out by suggesting that some form of block-grant program would be advisable. Governor, maybe you could—and each one of you panelists could—again suggest for the record why you do that rather than certain forms of categorical programing.

Mr. MUTZ. Congressman, I indicated in my comments there were really four reasons. I do not know that I need to repeat those at this point, but to say that our experience with block grants in Indiana has indicated that although they are small in the total impact they have on our Government, from our Federal Government, the one that I administer in the Department of Commerce, is the community development block-grant program for small cities, for populations under 50,000.

In this particular case we have in essence changed priorities. This is an example of where State government really did change priorities. In the other eight block grants that Indiana administers presently, quite frankly very few priorities were changed, because what we are continuing to do is support existing programs.

In this particular case we actually made some very big decisions to move the money into the economic development realm.

Representative MAZZOLI. And were those decisions made, Governor, in part in collegial activity with local government where local people had a chance in this new direction of economic development to have their say?

Mr. MUTZ. Of course the stipulations in the Federal act require extensive involvement of the local governments—local government officials as well as those associations that represent local officials—town councils, city/county council members, and the like. And they were deeply involved in this situation, as is always the case of arriving at a consensus, which is tough to do.

And the ultimate decision was ours, as far as the State level was concerned.

Representative MAZZOLI. But there was a consultation. You would see something in that form, with respect to the infrastructure, some kind of consultation with the final judgment made at a State level or city hall level or county courthouse level?

Mr. MUTZ. I would like to see that happen, yes. I think the question we ultimately get down to is what ought to be included in the block grant—is it highway funds, wastewater treatment funds, mass transit funds, all of them, or do you need to separate them?

And I guess my feeling is that leaving the highway fund in a separate category is certainly one we could live with without any problem. But the other things put in a block grant would make a great deal of sense to me.

Representative MAZZOLI. Mr. Rhoads, do you see the block grant as the way to go for future planning?

Mr. RHOADS. I do indeed, and I would concur with the thoughts of Lieutenant Governor Mutz. We as well regulate and administer the grant program for the State of Missouri.

We also shifted directions in the last 2 years with regards to the community development block-grant program. We have shifted more and earmarked more funds over to economic development. More emphasis has been placed on the streets, the sewer systems, wastewater treatment systems than was placed when the program was administered federally.

Representative MAZZOLI. The local people have a chance to have their say and the final judgment made by elected officials. Is that how the program works?

Mr. RHOADS. Yes, sir, that is basically how the program works.

Representative MAZZOLI. Do you see that for this infrastructure program?

Mr. RHOADS. I think it is critical for this program.

Representative MAZZOLI. Ms. Shaul, do you see the block grant again as the preferable way to finance, at least with respect to those basic infrastructure needs which everyone suggests are a Federal—at least in part a Federal responsibility?

Ms. SHAUL. Yes, I think many of those could go into a block grant. I, too, also have the responsibility for administering the small cities community development block-grant program.

This year we have taken the opportunity to shift it away from a general revenue-sharing formula to the localities, to one which is on infrastructure for economic development. And to look at the leveraging of other sources of Federal, local, and State dollars, as well as private sector dollars.

Representative MAZZOLI. And the only way that it gives you the flexibility you need to shift in midstream to something which is more important, or to make it flexible, would be some kind of a block-grant program?

Ms. SHAUL. I think that is right. And I think the Federal Government was wonderfully cooperative with the State of Ohio when we wanted to change our priorities in this program, and we really appreciate that.

Let me just add one other thing, and that is, it seems that many of the existing programs for infrastructure at the Federal level have a bias toward new construction and I think that is great for expanding areas of the country but not for places like Ohio where we have a lot of infrastructure in place that is older.

We would prefer some opportunity to invest some maintenance in a timely fashion so that the problems do not get out of hand.

Representative MAZZOLI. Ms. Swigart, I think Mr. Hackbart dealt with it at some length in his statement. Do you generally agree with that?

Ms. SWIGART. He may have a different opinion than I do in terms of things that this cabinet deals with. I do not favor block grants. I do not deal with community development money, so I cannot speak for that.

But our real needs expressed by the Environmental Protection Cabinet are to build sewage treatment plants and we need capital money. And I do not think the block grant is the way to go. Our categorical grants provide program money to run our programs.

Representative MAZZOLI. But if they are categorical you do not have any discretion in the matter and you have to settle for exactly that. Yet your colleagues seem to think that sometimes local areas need something different than has been dictated by Washington.

Ms. SWIGART. Yes; but that money that we receive now really cannot be used for any capital needs. The sewage treatment plant money, we just simply set up a priority system, and that is funneled through us. The grants for air pollution are for programs and money for programs.

So I really would not favor a block grant. I think our needs would be lost in the overall picture.

Representative MAZZOLI. Mr. Hackbart, if I remember your statement you said something sort of like a block grant, yet you were not quite sure it was the way to go either.

But is there a suspicion in Kentucky toward the Government or toward the Reagan administration more so than the other States, is that part of it?

Mr. HACKBART. Possibly two points to put this in perspective. I think first of all the area of infrastructure is unique among programs that were facing this nation.

I think there are probably wider differences in infrastructure needs among the States than there may be in other areas, for example, human services, were standards across the Nation were critical.

Obviously that is a generalized statement, you have to look at it in more detail, for example, certainly those infrastructure systems which go across States the needs for standards are absolutely fundamental.

So I think when we talk about infrastructure I think there is a real danger in taking that word and trying to paint it across all needs for capital investment. There may be areas that the real need may be simply to broaden or increase the flexibility of categorical grants.

Representative MAZZOLI. If I understand it correctly, certain kinds of activity in infrastructure may be that kind of activity. There is a wider array of needs locally that may be in the second and third category of your infrastructure; therefore, this kind of bloc grant and this kind of revenue sharing may be more serviceable in this infrastructure than maybe in some of the things, perhaps some of the things Ms. Swigart mentioned; is that correct?

Mr. HACKBART. It is conceivable. The second point I would make briefly is the fact that one major advantage, financially, is ability to do greater packaging of funds. And I think with the unlimited needs that the various people have talked about, the ability to package the different sources of funds becomes pretty fundamental.

Representative MAZZOLI. I think Ms. Shaul said that in using leverage in different kinds of activities.

I had one more question. I again would like to have the panel interact on this question because each dealt with it differently and some more emphatic than others. And that is the use of user fees. I think Mr. Rhoads suggested maybe there might even be some turn-over to private parties for management and maintenance for some of what we have run with city, State, and Federal employees.

Let me ask you, Governor, has the State of Indiana—do you have some feeling on a greater use of user charges, or is that rap that waterways are not being paid for correctly by the users, that the big trucks tear our roads up and they do not pay anything for the roads relative to the damage they do to them.

In Kentucky, the coal roads in Kentucky are just battered the minute they are finished. Is it fair for the taxpayers to have to pay for those when maybe the users should share a greater responsibility?

Mr. MUTZ. In the case of local government, without any question, the easiest kind of local revenue source to make available is a user fee. I recognize that the individual users may clamor and argue against them but, given the overall picture, I think it is probably easier to provide more money for whatever our concerns are by the use of the user fee.

I think the second comment I would make in that respect is that the use of private entrepreneurs who in effect use user fees as their



source of ongoing cash flows to support the service they provide, is proving to be a successful venture for several kinds of programs.

In many parts of Indiana, the scavenger service trash collection, solid waste, things of that kind, many of them are being moved to private kinds of programs and with a good deal of efficiency based on the studies that we have done. As a matter of fact those efficiencies show a number of things begin to happen when a profit incentive becomes part of the way you control cost.

And we are finding some real success in that regard, not the least which is the public-sector officeholders no longer have to deal with public-sector employee union organizations, which have been one of the sources of increase in cost in that regard.

So there are a lot of things to recommend it. I know that in Kentucky you have had some experience with private-sector maintenance and operation of facilities that provide service for the mentally retarded. My examination of those programs has been that they are reasonably successful. So there are a number of things—

Representative MAZZOLI. There are some things that we should look at because it appears—I think everybody does agree with the fact that the Federal Government does not have the money, State and local governments do not have the ability to raise the money, so Mr. Rhoads, if I could ask you, do you see some—you may have brought it up in your statement about the private entrepreneurial activities as well—increased reliance on fairly established user fees?

Mr. RHOADS. Yes, Congressman, I suggested that one of the things that we might want to look at is the private sector's use of facilities and whether or not they do actually pay a fair share for those facilities.

I do not know the answer to that question. It was just something that I was bringing to your attention. We have in the State of Missouri relied heavily on users fees and taxes in the past to finance particularly our roads and bridge construction.

However, we are a very conservative State and we have a hard time selling an increase. For example, in 1982, Missouri had a 7-cent gasoline tax, and a proposition went on the ballot for an increase to 11 cents and it was defeated.

Representative MAZZOLI. Ms. Shaul, how do you in Ohio see the use of user fees as one way to finance, as the vice chairman said, incredible, just gigantic problem here?

Ms. SHAUL. I do mention that in my prepared statement. As an economist, I certainly am convinced that user fees are an important way to finance infrastructure. I think it has been a particularly successful technique at the local level although I think the State could do more as well.

It is a way to reveal preference and instead of having this wish list of demands you can get a better sense of what it is people are going to pay for.

Can I also add one other thing. On the question of private-sector involvement. At the moment the State is starting a program of bonds for jails for counties. And there is some interest in the private sector, I am not sure where this is going to go, to build the jails for the counties. So there may be some interesting—

Representative MAZZOLI. There is even some interest in Washington, is there not Mr. Vice Chairman, of having somebody build ships and run them for the Navy.

Ms. SWIGART. I am surprised that you have not brought up the new word that has been coined "privatization." It is being discussed almost as much as infrastructure these days, and in conjunction with. But in the area of environmental protection I have a very real concern about privatization and I think we are very limited because the Federal environmental laws are so strong and have set rigid standards for our States and local governments to meet, that I am very concerned about what would happen if private investment takes over a sewage treatment plant, for example, and they simply cannot make a go of it and close it down.

Now you are dealing with the public's health and welfare in environmental programs. So I think there is a very clear need to have Government involvement.

On the subject of user fees I think that is an option to be explored and one that we have not utilized fully particularly under the Clean Water Act where the responsibility for developing user fees lies in the local communities. That just happens to be where the strongest political pressure is and I think a lot of times those costs are not met because people cannot face up to the tough politics.

Mr. HACKBART. Just a couple of things. Certainly if you look at the national statistics, local governments have been shifting toward user fees as an additional source of revenue. But certainly there are limitations. Obviously we utilize this particular source traditionally for some infrastructure financing. At the same time, as Ms. Swigart inferred, there are external benefits which accrue to a number of our public investments, for example, in the natural resources and environmental protection area, and certainly as you mentioned in transportation systems, there are external benefits which go beyond the basic process.

I think we've got to caution ourselves if we look at it as a panacea, but it certainly is a possible solution and something that we have to look at, and probably more viable at the local level, but also it has limitations.

Representative MAZZOLI. Thank you very much, and Mr. Vice Chairman, thank you for your indulgence. Let me salute the panel for five very excellent statements which will be very useful in this.

Representative HAMILTON. Thank you very much, Congressman Mazzoli. I am very conscious of our time restraints. We have another excellent panel coming up and I know I indicated to several of you we would finish at 11:30. I have dozens of questions and I am going to forgo those. I am only going to ask one and then we will conclude this panel and bring in the next one.

As strange as it may sound, I am having a little difficulty accessing the severity of the infrastructure problem.

The question on my mind is—are we in a crisis requiring some extraordinary and unusual steps, or is it still a kind of routine problem that we confront, perhaps important, but still of a routine nature?

I get pretty uneasy when I look at the needs and compare them to what is happening in the Congress. What is happening in the

Congress is that this year we will probably pass a piece of legislation or perhaps a couple of pieces of legislation in the categorical grant area. These will be nothing extraordinary in terms of funding, very modest, as a matter of fact, and will not begin to approach the kind of needs that you have set forward for us today.

So the question then is: What is the urgency of the problem, how do you assess it at this point, and what kind of a response is required at the Federal and State level? I want to get that assessment from each of you as leading State officials.

Mr. MUTZ. Briefly, there was a crisis in terms of roads, and bridges, and highways, and I believe the increased funding level that the Federal Government has acted on has taken the edge off the crisis.

In the areas other than that it is not a crisis in my view, it is one which if you continue your current level of Federal support and were to provide it in the form of a block grant we could manage rather well.

What I am getting at, of course, is some of the restraints on expenditures, the so-called requirements, guidelines, and so forth, are a problem. That is not to say that as we look in the longer term in this situation that there could not be a crisis in the wastewater treatment area in the future.

But in Indiana there is not a crisis at this moment. In the case of mass transit, not a crisis as of this moment, but some severe down-the-road considerations that need to be part of the plan.

Mr. RHOADS. Congressman, I believe a crisis does exist with regards to our bridge-safety situation in the State of Missouri. Just the past 5 years historically proved that the amount of deterioration is unprecedented in our State. The additional funding to resolve that situation has not yet been forthcoming at any level of government. So I do believe we have a crisis here.

I would just simply remark that in your own comments you suggested that the longer we delay the more problems that we will have. I think that is where we are going to face the crisis situation.

Ms. SHAUL. It seem to me we would be in much better shape with infrastructure today if the last 10 years had not been filled with stresses of inflation on State and local budgets.

What that has meant is that there has been a deferral of maintenance in favor of social programs. So the kind of continued attention to infrastructure has not gone on in the past 10 years in a way that it ought to have.

I think that brings us to a situation today where we are—I wouldn't call it a crisis but a serious situation. You know, how many things do you need to see like the one on television last night where you see people get killed by tons of concrete dropping on them in a transit system.

I do think there are particular areas of crises—I would not say so much in Ohio on bridges, but I think there are other places in the Midwest where it was pointed out that bridges are a crisis.

In terms of our economic development it is a serious problem when half of our bridges are probable not safe in ways that are appropriate for commercial transit.

So it is not a crisis but it is serious and if we do not start putting money into it at the local, State, and Federal level, it can become a crisis.

Ms. SWIGART. I would like to suggest if the State of Indiana does not have a crisis that they give us their construction grants money.

One of our leading citizens said many years ago, Ron, that maybe what we need in this State is a typhoid epidemic. I sometimes think that is what it takes to create an awareness among the public. Certainly when you are dealing with the public's health, and welfare, and you are dealing with environmental problems, you are dealing with a tinderbox. And I would suggest that we not put this crisis off any longer.

Mr. HACKBART. I think perhaps what we are really faced with is the realization that in fact the United States has approached the time period where we have grown into a very mature stage as an economy and as a nation. And I think what we are really faced with is some basic reflection upon our national priorities.

I think traditionally in the area of infrastructure we have looked at infrastructure in terms of new activities, new investments, new things, whereas, I think as we reflect on ourselves as a mature society that whole problem of maintenance and retrofitting our existing system becomes much more critical.

I think the other issue that was previously raised, I think by Ms. Shaul, was the fact that if we do have a crisis it is probably fundamentally a result in the short term of the recent economic conditions we have gone through—deferral of maintenance has probably accentuated this fundamental problem of simply the aging of our national infrastructure system.

We may have a difficult time dealing with the short term. I think in the long term it is probably as manageable by just a realistic assessment of our needs, and priorities, and establishment of sound intergovernmental relationships in dealing with the issues, and just manage our way through it.

Representative HAMILTON. OK. Thank you very, very much for your participation. We will conclude this session of the panel and ask that our next group of panelists step forward. Thank you very much.

We would like to welcome our next group of panelists. We are very pleased to have you here representing, to the Joint Economic Committee, your respective local governments.

I apologize to you for not being right on time. We hoped to start this session at 11:30 and so we are about a half hour late and I will ask you to cooperate and summarize your statements for me, if you will, so that we can have some opportunity for questions.

It is my hope that we can finish our session right at or very close to 1 o'clock because of commitments that I and others have this afternoon.

So we are very pleased indeed to have you. We will begin with you, Mr. Hillenburg, as the president of the Indiana Association of County Commissioners. We welcome you before the committee.

**STATEMENT OF CHARLES HILLENBURG, PRESIDENT, INDIANA  
ASSOCIATION OF COUNTY COMMISSIONERS**

Mr. HILLENBURG. Thank you, Mr. Vice Chairman, and members and ladies and gentlemen.

I am Charles Hillenburg, from Bedford, Ind., where I am serving my second, 4-year term on the Board of County Commissioners in Lawrence County. I am also serving this year—1983—as president of the Indiana Association of County Commissioners.

As president of our Commissioners Association, I have been invited to present a statement to your committee on the infrastructure problems of the Midwest and in particular on the problems facing local officials in Indiana, with respect to public works needs.

We are indeed privileged to appear before your committee. We also feel that we can provide some useful input, since Boards of County Commissioners and city mayors alike, are “down-in-the-trenches” every day trying, as best we can, to bridge the gap between the demand for local services and the limited resources available.

In approaching this assignment, our first effort was to get a better understanding of this new-found word: infrastructure. We soon learned that during the past 2 years this subject has been addressed by a number of national agencies and organizations. And with some groups and organizations, infrastructure has developed as the latest parlor game topic. This of course, signals a growing awareness that merits still further publicity and exposure of our public works needs.

In addressing the needs of local officials in Indiana we have organized our statement into four categories:

Roads & streets	Bridges
Sanitation	Public buildings

While some of our information is rather specific, certain other areas of need can only be addressed in a general way, largely because there is insufficient inventory data to provide a meaningful dimension to the need.

**LOCAL ROADS AND STREETS**

These needs are highly visible and therefore, in Indiana and nationwide, there is a great public awareness of these needs. Even so, the funding of local road and street needs continues to be a catch-up proposition.

As a result, the expenditures for roads and streets tend to concentrate on repair and maintenance in an attempt to protect the integrity of the system, leaving only minor amounts, if any, for new construction. In Indiana and nationwide, local road and street officials are plagued with rising costs and declining gas tax revenues.

A few years back our Indiana Legislature authorized a statewide needs study for highways, roads, and streets. Adjusted for price increases, the recommended bare-bones minimum annual needs for county roads and city streets is some \$708 million. Yet current revenues from all sources—including Federal-aid—for local roads and streets is in the order of \$260 million—or a shortfall of 63 percent.

The plight of local roads and streets have reached the point where many local units find it impossible to provide the 20 to 25 percent matching funds for Federal-aid projects. This is not to disparage the State or Federal highway funding programs—but it is the state of affairs in Indiana with respect to funding for local roads and streets.

In these times of declining revenues and rising costs, our Indiana experience is not unique. Most other States are experiencing the same funding problems for local roads and streets.

#### COUNTY BRIDGES

Even though a part of the total highway picture, bridges represent a special category of need at the local level. This develops primarily because of the great number of weak, antiquated, one lane bridges on the county road system. This is a prevailing problem in Indiana, as well as throughout the other Midwestern States. Of some 12,600 bridges on Indiana's county road systems, 8,800 bridges—or 70 percent of the total—are unsafe or substandard for today's traffic. Conservative estimates for the replacement of these unsafe and substandard bridges is set at some \$175 million.

While the Federal-aid funds provided for bridges in the 1982 Surface Transportation Act will do much to accelerate the replacement of our county bridges, our counties will still have a major problem in providing the local 20 percent match necessary to encumber their available Federal-aid bridge allocation.

#### BRIDGE INVENTORY A PLUS

Aside from the financial problem of bridge replacement, the Federal-aid program requiring the inventory and structural sufficiency rating of all highway bridges, has been a tremendous asset to the assessment of bridge needs. Both the safety and financial requirements were given dimensions that developed a public awareness and attention at all levels of government. The success of the bridge inventory leads to one of our recommendations to the committee:—that the inventory-technique be applied to all categories of infrastructure needs assessment.

#### SANITATION

This category of local needs covers a variety of issues and problems—sanitary sewers, storm sewers, waste water treatment, solid waste disposal, and hazardous waste disposal. While the issues and problems are generally defined—the dimension of impact and cost is not always clear.

#### WATER POLLUTION CONTROL

The Indiana State Board of Health identifies some 250 projects over the State that are needed to reduce the water pollution to required standards. These projects involve all sizes of cities and towns—big, small, and in between. The current estimated cost of all 250 projects is a staggering \$1 billion plus.

Under current regulations, the EPA-Federal cost share for all 250 projects total some \$710 million, with total local match at some

\$372 million. Many of the small cities and towns will find it all but impossible to develop the required matching funds for their projects. With Indiana's current EPA allocation at \$120 million, it is easy to see that our water pollution projects will be a long, painful effort.

#### STORM SEWER PROBLEMS

Our Indiana State Board of Health points out that many—but certainly not all—of our water pollution problems develop because of combined sanitary storm sewers. Many cities and towns have provided for a single sewer system—to reduce costs—to handle both sanitary waste discharge and storm water discharge. Even though dry weather operations may be tolerable, concentrated storm water discharges completely overwhelm the capacity of the waste water treatment facilities, allowing raw sewage discharges to pollute the lakes, rivers, and streams.

While increased waste water treatment capacity offers a possible remedy for the static, no-growth community, the only cost-effective remedy for a growing community is the development of a separate storm sewer system to accommodate surface runoff. Notwithstanding the cost-effective merits of this approach, EPA policy and regulations do not recognize storm sewer projects as being eligible for EPA funding—even though this approach might be the most cost-effective method of compliance with the EPA clean-water standards. Therefore one of our recommendations—on behalf of the State board of health—to the committee is to request a change in the EPA regulations that would broaden the use of EPA funds to cover the development of storm sewers where they offer a remedy to water pollution.

#### SOLID WASTE DISPOSAL

The disposal of solid waste is clearly a local government responsibility. There is general agreement on this point—however from this point forward is a maelstrom of frustration and confusion.

Suitable site locations for the burial of solid waste are increasingly difficult to find. Many sites are denied because of potential ground water pollution; others are denied because of zoning or remonstrance by the local residents. Faced with these constraints, many boards of county commissioners have been forced to opt for solid waste disposal sites that are 30 to 40 miles beyond their county line boundaries. For the megapolis of the eastern seaboard such haul distances may be common, but for predominantly rural Indiana counties, such a plan produces a tremendous tax burden for the local governmental unit.

Experimental plans for innovative approaches include transfer compaction stations to reduce the volume of waste, material recovery recycle plants, and incineration energy recovery plants. While these approaches are promoted as a method of reducing costs, they all require a capital outlay and they all require a favorable economic situation in order to be cost-efficient. However, new developing technology improves the chances for success with these innovative approaches for specific applications.

With respect to infrastructure needs, Indiana County Commissioners generally identify solid waste disposal as one of their most frustrating, long-range problems. Solid waste disposal is a major and rising cost to local government. Reducing these costs is a primary goal of local officials. And yet, developing workable solutions are fraught with a lot of uncertainty in the form of legal risk, financial risk, and political risk.

At present we do not have sufficient data to give solid waste the proper dimensions of quantity and cost to make an overall assessment of the problem. Therefore, we do not have any specific recommendations to the committee in this area, except to bridle, as best you can, the further proliferation of EPA regulations that impose a burden on local government.

#### PUBLIC BUILDINGS

This last category of local needs covers county jails and correctional facilities, school buildings, and local government buildings. Even though there are obvious and demonstrated needs for new structures to serve local government, there is a certain political apathy to committing local revenues to local needs. Therefore, unless there is some stimulus from the Federal level, initiatives at the local level from new public buildings will develop at a slow pace.

#### COUNTY JAILS

Periodic inspection of Indiana county jails by the State Department of Corrections indicates that we have some 31 county jails that need immediate replacement, at an estimated cost in the range of \$70 million. To upgrade another 14 jails that have questionable standards will probably cost another \$20 million.

True, the replacement of many of these antiquated jails is long overdue. However, the jail population and therefore the needs and standards interface with a number of factors that are beyond the control or even prediction of county officials. Societal behavior, changing penal codes by the State and the courts, Federal mandates, and ACLU litigation leave most county officials frustrated and confused when it comes to addressing long-range needs for correctional facilities.

Clearly, we believe there is a Federal cost-sharing role involved, particularly since the standards and therefore the resulting increased costs stem from decisions and mandates handed down from the Federal courts.

#### SCHOOL BUILDINGS

Facilities for grade and high school education are a heavy burden for local government. And the new Federal initiatives to upgrade the literacy standards of our school population will undoubtedly call for additional capital outlays by local government to carry this program—long overdue—forward.

The overall needs for school facilities rise and fall with the school population, which in turn is subject to changes in birth rates and geographic shifts in our population. In recent years, Indiana's



Department of Public Instruction has been annually approving construction plans in the amounts of \$300 to \$500 million, which does not necessarily include the needs for handicapped or special-education facilities.

#### LOCAL GOVERNMENT

The crowded, congested layouts in many of our county courthouses and city halls indicates a visible need for new, expanded and upgraded facilities. Metropolitan centers have been forced to provide the public citizenry with better access to the machinery of local government. The shift in authority, duties and responsibilities to local government from the State and Federal levels, adds a new burden to our existing local facilities. Here again, we are lacking an inventory of needs to provide a dimension to the problem.

#### RECOMMENDATIONS

In our statement of infrastructure needs of local government we have attempted to briefly address those problems and needs that we see as priority items with local officials in the State of Indiana. We believe that the most of these problems and needs generally prevail in all of the Midwestern States. We are submitting the following recommendations for the consideration of the Joint Economic Committee.

##### *1. Inventory of infrastructure needs*

The priority Federal role should be to provide incentive-funding to assist State and local governments in making a realistic Inventory of Need in the various sectors of our infrastructure. Such an inventory should not be a wish-list, but a verifiable listing of needs in each sector of the infrastructure.

This probably reinforces previous recommendations to the committee. However, our recommendation stems from the results and benefits that have developed from the national bridge inventory program. This Federal initiative based on safety has produced immeasurable benefits in creating a public awareness, at all levels of government for the increased funding needed to remedy the problem of hazardous, unsafe bridges. We believe that similar benefits and results can flow from the inventory of other sectors of our Infrastructure.

##### *2. Streamline application procedures for Federal grants and funding*

The slow, tedious pace of paper-shuffling from the time of application to the time construction starts on federally funded projects is a common complaint of local officials here in Indiana. Expediting the procedure may well be beyond the reach of your committee. However, the image and credibility of the Federal role would be greatly enhanced with local officials, if only they could get federally funded projects in-gear within a reasonable time after local funds are committed.

##### *3. Block-grants for infrastructure needs*

Where the inventory of infrastructure needs indicates a Federal role in the cost-sharing with local units of government, then it is

our recommendation that the Federal funding be provided through the block-grant concept rather than through categorical allocations. We are also recommending that the new federalism initiatives submitted to Congress early this year be brought forward for review and debate.

#### *4. Demonstration grants for solid waste disposal*

There is great need for solid waste demonstration projects to be developed for counties with a population of 30,000 to 50,000 and up. Therefore, where there is emerging, innovative technology for dealing with solid waste, we are recommending that Federal funding for demonstration grants be made to local units of governments.

#### CLOSURE

On behalf of the Indiana Association of County Commissioners and other local officials in Indiana and the Midwest, we wish to thank the Joint Economic Committee for the opportunity to review the infrastructure needs of local government. We will welcome the opportunity to provide further input for the committee should the need arise.

We believe your committee is on the right mission at the right time. Godspeed with your task.

Representative HAMILTON. Thank you very much, Mr. Hillenburg, for a fine statement. Mr. MacGregor, you are the representative from the private sector here this morning. We have had State officials and we have local officials now, but you speak for the private sector. We are very pleased to have you here and look forward to your testimony.

#### STATEMENT OF ROBERT W. MacGREGOR, PRESIDENT, CHAMBER OF COMMERCE OF GREATER KANSAS CITY

Mr. MacGREGOR. Thank you, Congressman, I really do not know how I got here as the only representative of the private sector.

I might add I spent some of the best years of my life on the city council in Minneapolis, and I did spend some time working with three mayors in the city of Chicago, and I belong to that very large and distinguished number of officials fired by former Mayor Jane Byrne. And I was appointed commissioner of planning and development, but I still work for the private sector.

And I might add, Mr. Congressman, that one of the nicest times that I had was before the Joint Economic Committee in Washington one time when the late Hubert Humphrey took me to lunch afterwards and it was the craziest lunch I ever had. I sent lunch back to the kitchen three or four times, but believe it or not we were talking about this very subject and some possible solutions which I am going to touch on at the end of my testimony.

At home in Kansas City the public's awareness of the infrastructure problem has been heightened by several recent events which might be of interest to you and which I would like to share with you.

First of all there was a timely article on the Nation's infrastructure published by a local research group, the Midwest Research Institute, which is based in Kansas City. Mr. Stahl, in his article,

which I made available to you—there are a number of articles here, it is an excellent article—reviews the infrastructure problems on a national perspective. I am not going to repeat all the things that he said.

Second, and more or less by coincidence, the Kansas City Times, our local newspaper, ran a week long series on infrastructure in the Kansas City area, and how it is decayed, and I xeroxed a whole series of articles for your committee, and I think you will find those interesting because they document the problem in the Kansas City area.

Now let me turn to the condition of the infrastructure in Kansas City and what I perceive as the cause of the problem and what can be done about it.

I brought along several other reports that your committee can also review.

Streets and highways. The total cost to maintain and improve the Kansas City area streets and highways network between 1982 and 1995 has been estimated at \$3.4 billion.

The improvements component of this program amounts to \$930 million, and the bridge component amounts to \$305 million to correct deficiencies in the area's 545 bridges.

Maintenance of the streets and highways system amount to \$21 billion. Because of rising construction costs and declining revenues there will be an annual shortfall of an estimated \$16 million in funds.

#### THE WATER SYSTEM

In the materials I am leaving with you there is a graph showing the amount of water lost by cities in Kansas and Missouri due to leakage. The losses range from 5.4 percent in the Johnson County Water District, to 25 percent in Joplin, Mo. Kansas City lost 16 percent of its treated water. And the reason for is deferred maintenance, due to lack of funds.

This problem is also true nationwide. As the American Waterworks Association estimated, the accumulated deferred maintenance at some \$30 billion.

In addition the water losses result in lost revenue. For example, the city of Springfield, Mo., estimated its loss at \$1 million last year.

#### SEWERS

Accounts of leaking sewers and overtaxed systems are common in the Kansas City area, as they are all over the county. In addition, a number of cities face the problem of polluted streams, raw sewage during heavy rain storms because of combined sanitary and storm sewer lines.

According to the Environmental Protection Agency, these cities of Missouri should spend some \$3 billion, and cities in Kansas \$1.2 billion by the year 2000 to upgrade the quality of water discharged into the State streams.

These two amounts are far in excess of the funds available from State and Federal sources, placing tremendous burdens on local

governments to finance these projects either through bond issues or user fees.

#### PUBLIC BUILDINGS

A review of the materials I distributed will also point out the state of disrepair of many of the public buildings in the Kansas City area and some of the outlying rural areas. Examples of falling plaster, leaking roofs, poor plumbing and electrical systems can be found in many public buildings according to recent reports.

The cost of repairing these structures has not been estimated, but it could conceivably amount to hundreds of millions of dollars.

#### CAUSES OF THE PROBLEM

Infrastructure in Kansas City and the Nation, as we know, have deteriorated, and for the most part because of a number of common problems, which I will quickly refer to.

First is the problem of the cost of construction. We know that they have gone up over 170 percent since 1970. Second, the cost of borrowing to finance a project. Interest rates we know have been at such high levels that many communities have been squeezed out of the capital market incurred by the reluctance of public support for bond issues at such high interest rates.

The third factor that vitally affects transportation infrastructure is the nature of the highway fuel taxes. The happy problem is that we have more fuel efficient vehicles, but, of course, this produces less revenue to maintain our highways.

A fourth complicating factor has been the depressed state of the national economy, which has affected most regions of the country, including Kansas City, where we have been hit hard by the recession and unemployment.

In addition, demands are placed on government for human social services. So many of our well intended programs have increased the cycle of dependency in this country. It is costly and monetary in human terms. We are continuing to make cripples of too many of our citizens in our cities—and I speak as a former president of a welfare board, and I have been involved in all of these programs. But these programs are now increasing the cost of government and not necessarily helping people.

The growing underclass in our cities should be shocking to all of us. We now see that 21 percent of the poor people in this country are children, and this is growing.

A fifth factor, which is more sociological than economical, is the growing distrust with government. Many citizens view government as inefficient. There are many studies going on now and I refer you to some of the things that are going on—I have attached all kinds of material on how we can now better deliver government services using the private sector as well.

We face such a problem in Missouri under the so-called Hancock amendment, which limits spending through tax limits. In addition, Missouri has a requirement that bond issues must pass by a two-thirds majority. Consequently, Kansas City has not passed a bond issue for the last 10 years.

## RECOMMENDATIONS

Let me now turn to my recommendations for how to solve this serious problem. I will begin by merely listing some traditional or conventional recommendations and then offer an additional unconventional recommendation in a little more detail.

In addition to the conventional methods, an ad valorem fuel tax, with a floor to maintain a minimum level of revenue. (2) Continued anti-inflation activities to control construction costs. (3) Reduce interest rates by reducing the Federal deficit and controlling inflation. (4) Restructure the Federal spending priorities away from defense, and capping some of the well-intended transfer payment programs and entitlement programs. (5) Adopt a capital budget to avoid pork barrel allocation of funds. (6) General revenue sharing.

As difficult as it is, State and local governments must raise local taxes and not assume that the Federal Government will take care of all of our needs.

It was pointed out just recently in Kansas City that we passed a half cent sales tax for capital improvements. The citizens of the State voted on a \$6 million bond program which we are now debating in a special session called by the Governor this October.

A positive sign is the Federal Government should continue to encourage this strong local effort.

Now for my unconventional proposal. I will start with the premise that the Nation, as you have asked your question, Congressman, is facing a problem of crisis proportions for which there is no "quick fix" and, therefore, the solution must be equal in scope.

The Chinese word for "crisis" means a problem of dangerous proportions and it also means an opportunity. So I do think we have an opportunity.

If we approach this crisis problem in the conventional way it will bankrupt our country. There is no way that we can pay for this in the conventional way or do it in the conventional way.

Therefore, as a solution, I propose a compulsory civilian or military service program for all young people, regardless of sex, race, or economic position, and this is what I was talking to Hubert Humphrey some years ago about. The length of service period would be for 2 years with the individual having the option of choosing military service or civilian service program.

The activities of the civilian corps would include park restoration, sidewalk and curb repair, building bike trails, street maintenance, painting, general construction labor, housing rehabilitation, and other labor intensive activities, and a whole host of other things.

The corps would be divided into local work units and closely supervised by the craftsmen from unions. Productivity and quality standards would be strictly enforced on each unit.

Funding for the corps would be provided by new versions of the reconstruction finance authority, the WPA, the CCC, and other alphabet-type agencies of the Roosevelt era.

Funding could also be taken from some of the transfer of payments programs or human resource programs, some of this funding could be shifted.

Now to the skeptics who say that young people cannot be mobilized to do this type of work, I refer them to the first successes of the 1930's. Second, I know from personal experience where I took ghetto young people, dropout young people and had them do gut rehab and they did a fantastic job in the city of Chicago, in cooperation with labor unions. Instructors taught young people to do many types of construction and to do it well.

I am a bike rider. I could not ride around on my sidewalk where I lived in Chicago, because of the disrepair of the sidewalks. Young people can repair our sidewalks in all kinds of neighborhoods.

#### RAILROAD TRACKS

I have ridden trains in Chicago and other places where they have had to go so slow because the tracks were in terrible condition. That is labor intensive, there is no reason why we cannot put our young people together, the unemployed together repairing our railroad tracks.

Darn it, gentlemen, we are facing a very serious problem in this country. When I see Coleman Young putting a curfew on in Detroit because of the idleness of our country that have nothing to do, strong husky people, women and men, it is time we begin to put them to constructive use—constructive work, as well as my affluent kids growing up either lazy or little sense of duty to the community or country.

We need an urban CCC-type of program today. I firmly believe that not only would the Nation rebuild its infrastructure through my proposal, it would also develop a sense of pride and self-esteem among many young people who have been denied the opportunity for employment due to discrimination—lack of training or general economic condition.

The dual effects of creating new capital and better trained, productive labor force will combine to propel this nation ahead during these competitive times and the long-term returns will far exceed the costs of the programs.

The conventional methods will not work today, we have to do something unconventional, which I am recommending today. Thank you, Congressman, for this opportunity and your careful attention to my comments.

[The prepared statement of Mr. MacGregor, together with the additional material referred to, follows:]

**PREPARED STATEMENT OF ROBERT W. MACGREGOR****I. INTRODUCTION**

THANK YOU FOR AFFORDING ME THIS OPPORTUNITY TO ADDRESS THE JOINT ECONOMIC COMMITTEE. I'M SURE THERE IS A LOT OF INTEREST IN YOUR HEARINGS HERE IN LOUISVILLE AS THERE WOULD ALSO BE BACK IN KANSAS CITY. AT HOME THE PUBLIC'S AWARENESS OF THE INFRASTRUCTURE PROBLEM HAS BEEN HEIGHTENED BY SEVERAL RECENT EVENTS, WHICH MIGHT BE OF INTEREST TO YOU AND WHICH I WOULD LIKE TO SHARE WITH YOU.

FIRST OF ALL, THERE WAS A TIMELY ARTICLE ON THE NATION'S INFRASTRUCTURE PUBLISHED BY THE MIDWEST RESEARCH INSTITUTE, WHICH IS BASED IN KANSAS CITY. DR. STAHL IN HIS ARTICLE, WHICH I'LL MAKE AVAILABLE TO YOU, REVIEWS THE INFRASTRUCTURE PROBLEM FROM A NATIONAL PERSPECTIVE. I FOUND HIS REPORT QUITE INTERESTING AND HOPE THAT YOU WILL ALSO.

SECOND, AND MORE OR LESS BY COINCIDENCE, THE "KANSAS CITY TIMES" RAN A WEEK LONG SERIES ON INFRASTRUCTURE IN THE KANSAS CITY AREA AND HOW IT HAS BEEN ALLOWED TO DECAY. THE "TIMES"

ARTICLES REVIEWED THE CONDITION OF THE SEWERS, WATER SUPPLY SYSTEMS, BRIDGES, ROADS AND OTHER TYPES OF INFRASTRUCTURE. I'LL ALSO LEAVE COPIES OF THESE ARTICLES FOR YOU TO REVIEW AND REFER TO THE SERIES LATER IN MY COMMENTS.

A THIRD REASON FOR THE RISING INTEREST IN INFRASTRUCTURE IN KANSAS CITY IS THE WORK OF THE GROWTH TASK FORCE SPONSORED BY THE CHAMBER OF COMMERCE OF GREATER KANSAS CITY. THE GOAL OF THE GROWTH TASK FORCE IS JOB CREATION AND, AFTER REVIEWING A NUMBER OF ISSUES IMPACTING JOB CREATION, THE TASK FORCE IDENTIFIED INFRASTRUCTURE AS A KEY ISSUE. THE STAFF IS CURRENTLY GATHERING INFORMATION ON INFRASTRUCTURE AND ITS ROLE IN ECONOMIC DEVELOPMENT WHICH WILL BE INCLUDED IN A PUBLISHED REPORT TO BE RELEASED THIS FALL.

LET ME NOW TURN TO THE CONDITION OF INFRASTRUCTURE IN KANSAS CITY, AND WHAT I PERCEIVE AS THE CAUSES OF THE PROBLEM AND WHAT CAN BE DONE ABOUT IT.

## II. INFRASTRUCTURE IN KANSAS CITY AREA

I HAVE BROUGHT ALONG SEVERAL REPORTS ON THE CONDITION OF KANSAS CITY'S INFRASTRUCTURE SO I'LL MERELY SUMMARIZE SOME OF THE FINDINGS AT THIS TIME.



A. STREETS AND HIGHWAYS

THE TOTAL COSTS TO MAINTAIN AND IMPROVE THE KANSAS CITY AREA'S STREET AND HIGHWAY NETWORK BETWEEN 1982 AND 1995 HAS BEEN ESTIMATED AT \$3.4 BILLION. THE IMPROVEMENTS COMPONENT OF THIS PROGRAM AMOUNTS TO \$930 MILLION AND THE BRIDGE COMPONENT AMOUNTS TO \$305 MILLION TO CORRECT DEFICIENCIES IN THE AREA'S 545 BRIDGES. MAINTENANCE OF THE STREET AND HIGHWAY SYSTEM AMOUNTS TO \$2.1 BILLION. BECAUSE OF RISING CONSTRUCTION COSTS AND DECLINING REVENUES THERE WILL BE AN ANNUAL SHORTFALL OF \$16 MILLION IN FUNDS FOR STREETS AND HIGHWAYS. (THE RECENT FIVE CENT PER GALLON INCREASE OCCURRED AFTER THE COMPLETION OF THIS STUDY SO THIS SHORTFALL WILL BE REDUCED SOMEWHAT)

B. WATER SYSTEMS

IN THE MATERIALS I AM LEAVING WITH YOU, THERE IS A GRAPH SHOWING THE AMOUNT OF WATER LOST BY CITIES IN KANSAS AND MISSOURI DUE TO LEAKAGE.

THE LOSSES RANGE FROM 5.44 PERCENT IN THE JOHNSON COUNTY WATER DISTRICT NO. 1 TO 25.82 PERCENT IN JOPLIN, MISSOURI. KANSAS CITY, KANSAS LOST 16.10 PERCENT OF ITS TREATED WATER

AND KANSAS CITY, MISSOURI, 15.73 PERCENT.

THE REASON FOR THE LOSSES IS DEFERRED MAINTENANCE, DUE TO LACK OF FUNDS. THIS PROBLEM IS ALSO TRUE NATIONWIDE AS THE AMERICAN WATER WORKS ASSOCIATION ESTIMATED THE ACCUMULATED DEFERRED MAINTENANCE AT \$30 BILLION.

IN ADDITION, THE WATER LOSSES RESULT IN LOST REVENUES. FOR EXAMPLE, THE CITY OF SPRINGFIELD, MISSOURI ESTIMATED ITS LOSSES UP TO \$1 MILLION A YEAR, ACCORDING TO THE "KANSAS CITY TIMES" SURVEY.

C. SEWERS

ACCOUNTS OF LEAKING SEWERS AND OVERTAXED SYSTEMS ARE COMMON IN THE KANSAS CITY AREA. OF ALL OF THE CASES REVIEWED, PROBABLY ONE OF THE MOST ILLUSTRATIVE EXAMPLES OF THE PROBLEM IS IN LEAVENWORTH, KANSAS WHERE THE CITY IS REPAIRING 150 YEAR OLD SECTIONS OF SEWER LINE, SOME OF WHICH ARE MADE OF WOOD. IN ADDITION, A NUMBER OF CITIES FACE A PROBLEM OF POLLUTING STREAMS WITH RAW SEWAGE DURING HEAVY RAINSTORMS BECAUSE OF COMBINED SANITARY AND STORM SEWER LINES.

ACCORDING TO THE ENVIRONMENTAL PROTECTION AGENCY, CITIES IN

MISSOURI SHOULD SPEND \$3 BILLION AND CITIES IN KANSAS \$1.2 BILLION BY THE YEAR 2,000 TO UPGRADE THE QUALITY OF WATER DISCHARGED INTO THE STATES' STREAMS. THESE AMOUNTS ARE FAR IN EXCESS OF THE FUNDS AVAILABLE FROM STATE AND FEDERAL SOURCES. PLACING A TREMENDOUS BURDEN ON LOCAL GOVERNMENTS TO FINANCE THESE PROJECTS EITHER THROUGH BOND ISSUES OR USER FEES.

D. PUBLIC BUILDINGS

A REVIEW OF THE MATERIAL I DISTRIBUTED WILL ALSO POINT OUT THE STATE OF DISREPAIR OF MANY OF THE PUBLIC BUILDINGS IN THE KANSAS CITY AREA AND SOME OF THE OUTLYING RURAL AREAS. EXAMPLES OF FALLING PLASTER, LEAKING ROOFS, POOR PLUMBING AND ELECTRICAL SYSTEMS CAN BE FOUND IN MANY PUBLIC BUILDINGS ACCORDING TO RECENT REPORTS.

THE COSTS OF REPAIRING THESE STRUCTURES HAS NOT BEEN ESTIMATED BUT IT CONCEIVABLY COULD AMOUNT TO HUNDREDS OF MILLIONS OF DOLLARS.

IN SUMMARY, THE FACTS SHOW THAT THE KANSAS CITY AREA FACES THE PROBLEM OF INFRASTRUCTURE DETERIORATION THE SAME AS OTHER AREAS OF THE COUNTRY. I CAN'T SAY THE EXTENT TO WHICH OUR PROBLEM EQUALS, EXCEEDS, OR FALLS SHORT OF THE PROBLEM, NATIONALLY. I

DO KNOW, HOWEVER, THAT IT EXISTS AND THAT IT ADVERSELY AFFECTS ECONOMIC DEVELOPMENT AND THE QUALITY OF LIFE IN THE REGION.

### III. CAUSES OF THE PROBLEM

INFRASTRUCTURE IN KANSAS CITY AND THE NATION HAS DETERIORATED, FOR THE MOST PART, BECAUSE OF A NUMBER OF COMMON PROBLEMS.

FIRST IS THE PROBLEM OF COSTS OF CONSTRUCTION. AS YOU ARE AWARE, CONSTRUCTION COSTS HAVE SKY-ROCKETED IN THE LAST DECADE. THE FEDERAL HIGHWAY ADMINISTRATION CONSTRUCTION COST INDEX HAS RISEN BY OVER 170 PERCENT SINCE 1970 AND THE EPA COST INDEXES ARE UP OVER 150 PERCENT. CONSEQUENTLY, COMMUNITIES ARE ABLE TO DO LESS IN THE WAY OF MAINTENANCE AND IMPROVEMENTS EVEN IF THEY HAD THE SAME NUMBER OF DOLLARS TO SPEND DUE TO THE INCREASE IN COSTS.

THE SECOND FACTOR CAUSING THE INFRASTRUCTURE PROBLEM IS THE COST OF BORROWING TO FINANCE PROJECTS. INTEREST RATES HAVE BEEN AT SUCH HIGH LEVELS THAT MANY COMMUNITIES HAVE BEEN SQUEEZED OUT OF THE CAPITAL MARKETS OR DETERRED BY THE RELUCTANCE OF THE PUBLIC TO SUPPORT BOND ISSUES AT SUCH HIGH INTEREST RATES.

A THIRD FACTOR THAT HAS ADVERSELY AFFECTED TRANSPORTATION

INFRASTRUCTURE IS THE NATURE OF HIGHWAY FUEL TAXES. SINCE TAXES HAVE TRADITIONALLY BEEN LEVIED ON A PER GALLON BASIS. THE HIGHWAY TRUST FUNDS HAVE NOT INCREASED AS THE COST OF GASOLINE HAS INCREASED. IN FACT, AS GASOLINE PRICE INCREASES HAVE LED TO MORE FUEL EFFICIENT VEHICLES AND THE COSTS OF IMPROVEMENTS AND MAINTENANCE OF TRANSPORTATION FACILITIES HAVE CONTINUED TO RISE. A TREMENDOUS SHORTFALL OF FUNDS HAS DEVELOPED. A RECENT STUDY BY THE MID-AMERICA REGIONAL COUNCIL IN KANSAS CITY PLACES THE SHORTFALL AT \$16 MILLION ANNUALLY IN THE KANSAS CITY AREA. FIGURES IN THE ATTACHED REPORTS DRAMATICALLY ILLUSTRATE THE DIVERGENCE BETWEEN THE GROWTH IN REVENUE AND THE COSTS OF MAINTAINING AND IMPROVING THE AREA'S TRANSPORTATION FACILITIES.

A FOURTH COMPLICATING FACTOR HAS BEEN THE DEPRESSED STATE OF THE NATIONAL ECONOMY WHICH HAS AFFECTED MOST REGIONS OF THE COUNTRY, INCLUDING KANSAS CITY. IN FACT, THE KANSAS CITY ECONOMY STARTED TO SLOW DOWN IN 1979 MAINLY DUE TO THE DOWNTURN IN THE AUTOMOBILE INDUSTRY. AS A RESULT OF THE RECESSION, GOVERNMENT REVENUES HAVE NOT GROWN AT A SUFFICIENT RATE TO FINANCE CAPITAL IMPROVEMENTS OR MAINTENANCE. IN ADDITION, THE DEMANDS PLACED ON GOVERNMENT FOR HUMAN SERVICE PROGRAMS INCREASED AS A RESULT OF THE RECESSION CAUSING A REALLOCATION OF FUNDS FROM INFRASTRUCTURE TO WELFARE AND OTHER HUMAN RESOURCE PROGRAMS.

A FIFTH FACTOR, WHICH IS MORE SOCIOLOGICAL THAN ECONOMIC, IS THE GROWING DISTRUST OF GOVERNMENT. MANY CITIZENS VIEW GOVERNMENT AS INEFFICIENT AND IN SOME CASES CORRUPT. CONSEQUENTLY, WHEN APPEALS ARE MADE TO SUPPORT SPENDING PROGRAMS FOR INFRASTRUCTURE THE PUBLIC RESPONDS BY REJECTING BOND ISSUES AND SAYING THAT MORE EFFICIENCY COULD CORRECT THE SHORTFALL IN REVENUES. IN ADDITION, THE PUBLIC HAS SQUEEZED GOVERNMENT PROGRAMS BY PLACING LIMITS ON SPENDING OR REVENUES THROUGH PROPOSITION 13 TYPE LEGISLATION.

WE FACE SUCH A PROBLEM IN MISSOURI UNDER THE SO CALLED HANCOCK AMENDMENT, WHICH LIMITS SPENDING THROUGH TAX LIMITS. IN ADDITION, MISSOURI HAS A REQUIREMENT THAT BOND ISSUES MUST PASS BY A TWO-THIRDS MAJORITY. CONSEQUENTLY, KANSAS CITY HASN'T PASSED A BOND ISSUE FOR THE LAST TEN YEARS.

#### IV. RECOMMENDATIONS

LET ME NOW TURN TO MY RECOMMENDATIONS FOR HOW TO SOLVE THIS SERIOUS PROBLEM. I'LL BEGIN BY MERELY LISTING SOME TRADITIONAL OR CONVENTIONAL RECOMMENDATIONS AND THEN OFFER AN ADDITIONAL UNCONVENTIONAL RECOMMENDATION IN SOME DETAIL.

AMONG THE CONVENTIONAL RECOMMENDATIONS ARE:

1. AN AD-VALOREM FUEL TAX (WITH A FLOOR TO MAINTAIN A MINIMUM LEVEL OF REVENUE)
2. CONTINUED ANTI-INFLATION ACTIVITIES TO CONTROL CONSTRUCTION COSTS
3. REDUCE INTEREST RATES BY REDUCING THE FEDERAL DEFICIT AND CONTROLLING INFLATION
4. RESTRUCTURE FEDERAL SPENDING PRIORITIES AWAY FROM DEFENSE
5. ADOPT A CAPITAL BUDGET TO AVOID PORK BARREL ALLOCATION OF FUNDS
6. GENERAL REVENUE SHARING

NOW FOR MY UNCONVENTIONAL PROPOSAL. I'LL START WITH THE PREMISE THAT THE NATION IS FACING A PROBLEM OF CRISIS PROPORTIONS FOR WHICH THERE IS NO "QUICK FIX" AND, THEREFORE, THE SOLUTION MUST BE EQUAL IN SCOPE.

AS A SOLUTION, I PROPOSE A COMPULSORY CIVILIAN OR MILITARY SERVICE PROGRAM FOR ALL YOUNG PEOPLE REGARDLESS OF SEX, RACE.

OR ECONOMIC POSITION. THE LENGTH OF THE SERVICE PERIOD WOULD BE FOR TWO YEARS WITH THE INDIVIDUAL HAVING THE OPTION OF CHOOSING MILITARY SERVICE OVER THE CIVILIAN SERVICE PROGRAM.

THE ACTIVITIES OF THE CIVILIAN CORPS WOULD INCLUDE PARK RESTORATION, SIDEWALK AND CURB REPAIR, BUILDING BIKE TRAILS, STREET MAINTENANCE, PAINTING, TUCK POINTING, GENERAL CONSTRUCTION LABOR, HOUSING REHABILITATION, AND OTHER LABOR INTENSIVE ACTIVITIES.

THE CORPS WOULD BE DIVIDED INTO LOCAL WORK UNITS AND CLOSELY SUPERVISED BY MASTER CRAFTSMEN OR EXPERTS. PRODUCTIVITY AND QUALITY STANDARDS WOULD BE STRICTLY ENFORCED ON EACH UNIT.

FUNDING FOR THE CORPS WOULD BE PROVIDED BY NEW VERSIONS OF THE RECONSTRUCTION FINANCE AUTHORITY, THE WPA, THE CCC AND THE OTHER ALPHABET TYPE AGENCIES OF THE ROOSEVELT ERA.

TO THE SKEPTICS WHO SAY THAT YOUNG PEOPLE CAN'T BE MOBILIZED TO DO THIS TYPE OF WORK, I REFER THEM FIRST TO THE SUCCESSES OF THE 1930'S. SECOND, I KNOW FROM PERSONAL EXPERIENCE IN CHICAGO THAT IT CAN BE DONE. IN CHICAGO, WE WERE ABLE TO GET THE COOPERATION OF LABOR UNIONS BY OFFERING EMPLOYMENT AS INSTRUCTORS TO THEIR MEMBERS. THE INSTRUCTORS TAUGHT YOUNG PEOPLE TO DO MANY TYPES OF CONSTRUCTION WORK AND TO DO IT WELL.



I FIRMLY BELIEVE THAT, NOT ONLY WOULD THE NATION REBUILD ITS INFRASTRUCTURE THROUGH MY PROPOSAL, IT WOULD ALSO DEVELOP A SENSE OF PRIDE AND SELF ESTEEM AMONG MANY YOUNG PEOPLE WHO HAVE BEEN DENIED THE OPPORTUNITY FOR EMPLOYMENT DUE TO DISCRIMINATION, LACK OF TRAINING OR GENERAL ECONOMIC CONDITIONS. THE DUAL EFFECTS OF CREATING NEW CAPITAL AND A BETTER TRAINED, PRODUCTIVE LABOR FORCE WILL COMBINE TO PROPEL THIS NATION AHEAD DURING THESE COMPETITIVE TIMES AND THE LONG RUN RETURNS WILL FAR EXCEED THE COSTS OF THE PROGRAMS.

THANKS AGAIN FOR THIS OPPORTUNITY AND YOUR CAREFUL ATTENTION TO MY COMMENTS.

# MIDWEST FOCUS

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A REVIEW OF ECONOMIC ISSUES BY MIDWEST RESEARCH INSTITUTE

## AMERICA'S INFRASTRUCTURE: A Shaky Foundation For Economic Renewal?

by Sheldon W. Stahl, Ph.D.

In hearings held last year by the Congress, James L. Oberstar, Chairman of the Subcommittee on Economic Development of the Committee on Public Works and Transportation, observed that:

... the Nation at every level of government is failing adequately to maintain or repair its priceless investment in public facilities ...

As many as three-fourths of the communities of this country may effectively be out of the business of economic development simply because their public capital will not allow them to participate in the development process. They will

not be able to make gains in economic development until major investments are made in the public facilities of these communities.

Testifying at those same hearings, Pat Choate, Senior Policy Analyst for Economics, TRW, Inc., and co-author with Susan Walter of *America in Ruins*, noted that:

... There is a growing awareness that the economic renewal of our nation is heavily dependent on rebuilding the basic public facilities that underpin the economy. There is also a growing awareness that the quality of life of all citizens is now threatened because of public works decline.

Are such views simply alarmist, or are the prospects for a healthy economy threatened by a crumbling public infrastructure?

### DEFINING THE SUBJECT

**Infrastructure:** the underlying foundation or basic framework (as of an organization or system) (Webster's Unabridged Dictionary, 3rd ed.)

As noted above, the infrastructure represents the basic foundation of any modern industrial economy. Indeed, what distinguishes most of the "have" nations in the world from the "have nots" is the richness and breadth of both the private and the public investment that is in place. Thus, the public infrastructure refers to investment by all levels of government in the vital life support systems of the economy that undergird and make possible economic growth. This public capital takes such physical forms as public buildings, water and sewage systems, roads and streets, bridges, tunnels and viaducts, mass transit systems, locks and dams, waterways, ports and terminal facilities, and so forth.

Viewed somewhat more expansively, the public infrastructure encompasses the provision of such traditional public services as police, fire, and

continued

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sanitation, as well as health care and education. One could expand the list to include public cultural and recreational offerings. For our purposes, however, attention will be directed to the physical elements of the public infrastructure. What do the data reveal?

### THE MAGNITUDE OF THE PROBLEM

Despite considerable efforts to measure the condition of our nation's stock of public capital, the fact remains that neither its present condition nor the future investment which may be required to repair, upgrade, or expand those public assets has thus far been determined with precision. Nonetheless, what is known provides ample cause for concern. The examples which follow have been identified by various official government agencies and by Choate and Walter in their recent study, *America in Ruins*, noted earlier.

The U.S. Interstate Highway System represents about 1 percent of our overall highway system, but it handles about 20 percent of all highway traffic. While the Interstate system is still incomplete, its deterioration is occurring at a rate necessitating the reconstruction of some 2,000 miles of road surface per year. As a consequence of earlier inadequate provision of funds for rehabilitation and rebuilding, more than 8,000 miles of road and 13 percent of the system's bridges have exceeded their design life and need to be rebuilt.

The Department of Transportation estimated in a 1980 report that, to maintain existing levels of service on nonurban highways during this decade, the costs of rehabilitation and new construction would be in

excess of \$700 billion. The enormity of this sum can be appreciated by noting that it exceeds the total public works expenditures by all governmental units during the 1970's. At the same time, the Department of Transportation noted in a 1981 report that perhaps one-fifth of the bridges in the United States require either major rehabilitation or reconstruction. Although the costs of such projects were estimated at some \$33 billion, the amount authorized for the repair of bridge deficiencies in fiscal year 1981 was \$1.3 billion.

To meet existing water pollution control standards, a 1979 report of the Environmental Protection Agency indicated that more than \$25 billion in government funds would be required over a five-year period. Looking at the nation's municipal water supply needs for the remainder of this century, a 1980 General Accounting Office report concluded that anywhere from \$75-\$110 billion would be needed to maintain the urban water systems of those cities with populations greater than 50,000. These estimates do not include the enormous sums of money associated with investments in water resource development for agricultural purposes in all regions of the nation. The ongoing depletion of the Ogallala aquifer, for example, affects not only the six states of the High Plains region that rely on it, but also our total food supply and our export markets.

An examination of the nation's ports, harbors, dams, mass transit systems, and school buildings reveals unmistakable evidence of serious deterioration. Our growing concern over the subject of crime and punishment must confront the reality that more than one-half of this country's jails are over 30

years old, and that more than one-third of them will require either substantial rehabilitation or total rebuilding.

To be sure, public infrastructure problems tend to be more closely identified with the older large urban areas, where fiscal problems are more pronounced. For example, Harrison J. Goldin, Comptroller for New York City, in testimony before a congressional committee in 1979, estimated that to reconstruct or replace the city's basic public works facilities and to repair and service its public assets would require about \$40 billion to be spent over a ten-year period. He noted that the financial plan of the city for the following four years called for public works expenditures of only \$1.4 billion per year. At the same time, Sunbelt cities are not immune from the need to address the condition of their streets, sewers, water systems, mass transit systems, and the like. Increasingly, they are discovering that their rapid growth, particularly during the past decade, is taxing the capabilities of their public infrastructure to serve not only current growth, but prospective growth as well.

Although this listing of infrastructure deterioration is far from all-inclusive, it is representative of the decline in both the quantity and quality of our public facilities that may now pose a clear and present danger to our nation's ability to generate strong and sustainable economic growth in the remainder of this decade and beyond. On the basis of work done for members of Congress, Choate has estimated that, for the period 1982-1991, the infrastructure reinvestment that would be required to maintain the current levels of service would total from \$2.5 to \$3 trillion, or roughly \$250-\$300 billion per year over the period. Given this

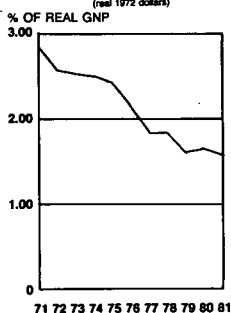
estimate of prospective needs, can one be optimistic that these needs will be met? An examination of public infrastructure spending in the last two decades may be instructive.

#### THE PAST AS PROLOGUE?

Research done by the Bureau of Economic Analysis of the Commerce Department demonstrates clearly that public sector investment in real terms has fallen sharply since peaking in 1968 at approximately \$68 billion. This level of absolute spending also coincided with a peak in per capita spending of \$338 (see Table 1). By 1981, total public investment in structure and equipment had shrunk to \$50 billion, while on a per capita basis it was only \$218. Thus, per capita investment in 1981 was lower than at any other time over the two decades shown in the table.

To further dramatize the steepness of the decline, Figure 1 illustrates

**FIGURE 1**  
Infrastructure Spending as a  
Percent of GNP, Federal, State  
and Local  
(real 1972 dollars)



Source: Chase Econometrics



graphically the course of events in the past decade. It measures nondefense federal and state and local government capital investment as a percentage of real gross national product (GNP) for the period 1971-1981. The data were prepared by Chase Econometrics in connection with a study for the Port Authority of New York-New Jersey. For the decade shown, real public infrastructure investment as a percentage of GNP fell by almost one-half — from 2.8 percent in 1971 to about 1.5 percent in 1981. Thus, at a time when infrastructure decay was becoming increasingly apparent,

the share of public investment outlays declined precipitously. What were some of the reasons for this decline?

#### BEHIND THE NUMBERS

To be sure, part of the decline was a reflection of shrinking investment in highway construction as the Interstate highway system moved nearer to completion. At the same time, demographic changes related to a slowing down in birthrates and a maturation of the progeny of the post-World War II baby boom were responsible for a slowing down of investment in physical plant for education. Still, a 1980 Commerce Department study of public works investment in the United States shows that, even when one excludes public investment for highways and education and includes the assumption of certain responsibilities for public works investment by the private sector, there still has been an absolute decline in the share of public infrastructure investment as a percentage of GNP.

The slowdown in the rate of average real GNP growth vis-à-vis the preceding decade and the serious recession in 1974-1975 adversely impacting revenues at all governmental levels must also be viewed as contributory factors. More recently, very large cuts in federal aid to state and local governments have constrained the rate of public investment. Federal grants-in-aid, which rose nearly fourfold in the decade of the 1970's, peaked in 1980 at about \$88 billion and are expected to be about \$10 billion less in 1983.

The growing dependence of state and local governments on this federal source of funding paradoxically contributed to the infrastructure problems of today.

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Many federal programs designed to assist state and local units do not permit the use of such funds

### The growing dependence of state and local governments on this federal source of funding paradoxically contributed to the infrastructure problems of today.

for the maintenance of public facilities. Thus, the bias toward new construction resulted in undermaintenance of previously existing facilities and equipment. At the same time, new facilities were added with insufficient provision for their long-term upkeep.

In addition to the above, the latter part of the 1970's was marked by an increased public dissatisfaction with and resistance to tax burdens at all levels of government. This was evidenced by the passage of Proposition 13 in California as well as tax-spending limitation initiatives in nearly a score of other states. Superimposed on this was the massive cut in federal taxes beginning in 1981, which served not only to dramatically reduce the tax base of the federal government, but to compromise state and local tax bases as well. The reductions in personal tax rates and the accelerated depreciation features of the 1981 Economic Recovery Tax Act adversely impacted revenues because of the close linkage between the state and federal tax systems. Additionally, there is a strong reliance by those states with a corporate income tax on the use of federal taxable income as their tax base.

At the same time their tax bases were coming under increasing stress, state and local units found themselves confronted by record-breaking interest rates. Even where there were no statutory proscriptions on the rates which could be paid, borrowing rates became — and still remain — prohibitive, so that debt-financing through state and municipal bond offerings in support of public investment fell sharply. The problem was compounded by the reduced attractiveness of state and local bonds to upper income bracket investors as a consequence of their newly lightened tax loads and a growing range of more attractive investment opportunities.

The result of this concomitance of forces was that all levels of government were put under increasing fiscal stress at a time of growing infrastructure needs. The dramatic bottom line measure of the implications for future infrastructure investment may be seen in Table 2. In the face of such

data, what might be done to alleviate the potential outcome?

### WHAT ARE THE OPTIONS?

To counter the revenue shortfalls noted, consideration might be given to more aggressive utilization of direct user charges to

### To counter the revenue shortfalls noted, consideration might be given to more aggressive utilization of direct user charges to finance public works investments.

finance public works investments. Additionally, despite the obvious resistance that would greet any attempt to substantially increase state or local taxes or to raise the federal tax base to finance public investment, this path cannot be ruled out. The sizable job of educating the public to the interrelationship between its economic well-being and the

**TABLE 2**  
**Comparison of Projected Capital Needs and Resources**  
**Federal State and Local**  
(billions of \$)

Year	Average Annual Investment Needed To Maintain Current Capital Stock <sup>1</sup>	Projected Federal, State, Local Public Capital Spending <sup>2</sup>	Annual Unmet Needs	Cumulative Backlog of Unmet Needs
1982	\$300.0	\$56	\$244	\$ 244
1983	300.0	59	241	485
1984	300.0	63	237	722
1985	300.0	67	233	955
1986	300.0	71	229	1,184
1987	300.0	75	225	1,409
1988	300.0	79	221	1,630
1989	300.0	84	216	1,846
1990	300.0	89	211	2,057
1991	300.0	94	206	2,263

**Notes:**

<sup>1</sup>Based on an estimate prepared by Pat Choate for the House Wednesday Group Special Project. Mr Choate estimates that infrastructure reinvestment needed to maintain current levels of service will total \$2.5 to \$3 trillion over the next ten years.

<sup>2</sup>Annual spending is projected to increase at a rate of 6 percent per year based on a Port Authority analysis of Chase Econometrics data on historical spending trends.

Source: Hearings Before the Subcommittee on Economic Development of the Committee on Public Works and Transportation, House of Representatives, 97th Congress, Second Session on H.R. 6521, September 14, 15, 21, and 22, 1982, p. 294.

quantity and quality of the infrastructure is an obvious prerequisite to any success in modifying public perceptions of the tax burden. However, were such an effort successful, it would likely produce a dividend in similarly encouraging the public's acceptance of more aggressive debt-financing through bond offerings as a means of generating the revenues to finance needed public investment.

Just as the need to explore avenues for increasing revenues is of prime importance, so too is the necessity of a critical look at public expenditures. In an environment

**Just as the need to explore avenues for increasing revenues is of prime importance, so too is the necessity of a critical look at public expenditures.**

of fiscal stringency, the claims on public revenues at all levels of government is an issue deserving enlightened debate and discussion. In such a debate, one category of spending can be assumed to be off limits in determining its priority in the hierarchy of public needs.

In this connection, a number of thoughtful observers have suggested that to help the federal government to better order its priorities and stabilize its finances, a capital budget should be developed. It would separate outlays into current costs to be financed from current income, and into capital expenditures which would be financed from debt issuance where necessary. A federal capital budget would help to free public capital projects from the current pork barrel approach to public investment decisions, where short-term expediency all too often prevails over a more efficient long-term use of scarce public capital resources. For those

who argue that more rational businesslike planning is needed to make government more efficient, a capital budget would provide a vehicle for expressly recognizing, prioritizing, and acting upon the substantial public investment needs that must be sorted out from the multitude of disparate claims on the public purse.

Another option frequently alluded to is that of privatization, or turning over to the private sector the responsibility for certain facilities or services that formerly have been provided by government. Examples of services currently being provided through privatization include water supply, certain utilities, fire protection, sanitation service, and health care. Owing to its greater flexibility and cost consciousness, the private sector may often be able to perform these functions more efficiently than could units of government. Yet it should be recognized that the potential for privatizing public services is limited. Many facilities and services are now provided by the government because they proved unable to generate adequate profitability, or because the private sector failed to perform satisfactorily. In any event, it should be noted that the option of privatization does not mitigate the need for infrastructure investment. It merely shifts it from the public to the private sector. Given our observed tendency to favor investments with quick payback periods, it is not at all certain that the long-term investment needs of the public sector would be optimally addressed simply by shifting responsibility for those functions to the private sector.

In the event that none of the aforementioned options provide adequate relief to our infrastructure problem, there is always the option of retrenching,

or learning as a society to do with less. To some extent, as the data have shown, this is the path that has been followed either consciously or by dint of circumstance. In taking this path, however, one must recognize that as a nation our aspirations for growth in the future must be constrained.

In the mid-1970's the Bureau of the Census undertook a study to attempt to measure the influence of public works on the location and investment decisions of individual firms. They discovered that the availability of public facilities proved to be a far more important factor in deciding where to locate than the existence of local tax incentives or the availability of local industrial revenue bond financing. Thus, while adequate public facilities may not assure economic growth, they are invariably a prerequisite for such development.

**Thus, while adequate public facilities may not assure economic growth, they are invariably a prerequisite for such development.**

#### A FINAL NOTE

No edifice that may be expected to last can be built on an inadequate foundation. In that same vein, the hopes for a long-lived and robust period of economic growth and renewal are dependent upon the firm footing of this country's infrastructure. While a great deal of attention has been directed to the need for private investment to enhance our growth potential, we appear to have ignored the corollary need for investment in the public domain. For, as was noted in a special report in the October 26, 1981, issue of *Business Week*, entitled "State and Local Government in Trouble,"

continued

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## INFRASTRUCTURE

... It is perfectly true that the private sector has carried the responsibility for economic growth throughout the history of this nation. But at virtually every stage of the nation's history, growth was dependent on a balance between private and public investment.

The record suggests that we have been consuming our public capital, and in the process we may have compromised our ability to attain the lofty economic goals we have set for ourselves. At the same

**The record suggests that we have been consuming our public capital, and in the process we may have compromised our ability to attain the lofty economic goals we have set for ourselves.**

time, we should not lose sight of the fact that if our failure to address our public investment needs has created an infrastructure crisis which now impedes our path to a healthier long-run economic outlook, then our resolve to address this crisis can afford us a golden opportunity to reshape that outlook.



**MRI** 

*Dr. Stahl is Senior Advisor for Economics and provides expertise in regional economics, business economics, and fiscal and monetary policy. He is also spokesman for MRI on economic issues and monitors and analyzes long-term trends.*

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mid-america regional council / 20 west ninth, suite 200 / kansas city, missouri 64105 / 816-474-4240  
STREET AND HIGHWAY FINANCIAL NEEDS

THE KANSAS CITY AREA

November 13, 1981

A review of the financial status of the Kansas City area's street and highway system has found that needed maintenance is being deferred and few major construction projects can be undertaken in the future because of lack of funds.

#### Costs of the Street and Highway System

The total costs to maintain the street and highway network and to build needed new projects between 1982 and 1995 were projected for the Kansas City Metropolitan Region. This includes both state highways and major local streets in Leavenworth, Johnson, Wyandotte Counties in Kansas and Cass, Clay, Jackson, Platte, Ray Counties in Missouri. Graph 1 shows the total cost of \$3.4 billion divided into three categories: major improvements, bridges, and maintenance and minor improvements. Graph 2 shows total costs are \$2.2 billion in the Missouri portion of the Kansas City area and \$1.2 billion in the Kansas portion.

Major improvements are those construction projects which add capacity to the system, e.g. new facilities and the addition of lanes to existing facilities. These costs include projects identified on the Transportation Improvement Program (TIP). The TIP is an up-to-date listing of transportation improvements identified as high priority by state and local governments. Major improvement costs from 1982 to 1995 are \$950 million, with \$552 million in the Missouri portion and \$378 million in the Kansas portion. MARC does not consider that this is a "wish list." State and local governments have removed numerous projects over the past several years to avoid showing planned projects which have no reasonable expectation of ever being built.

The bridge category includes bridges which have been identified as structurally deficient; these are bridges with safety problems. About \$305 million would be needed to correct the structural deficiencies of 275 bridges in Missouri; \$95 million would be needed for 270 bridges in Kansas.

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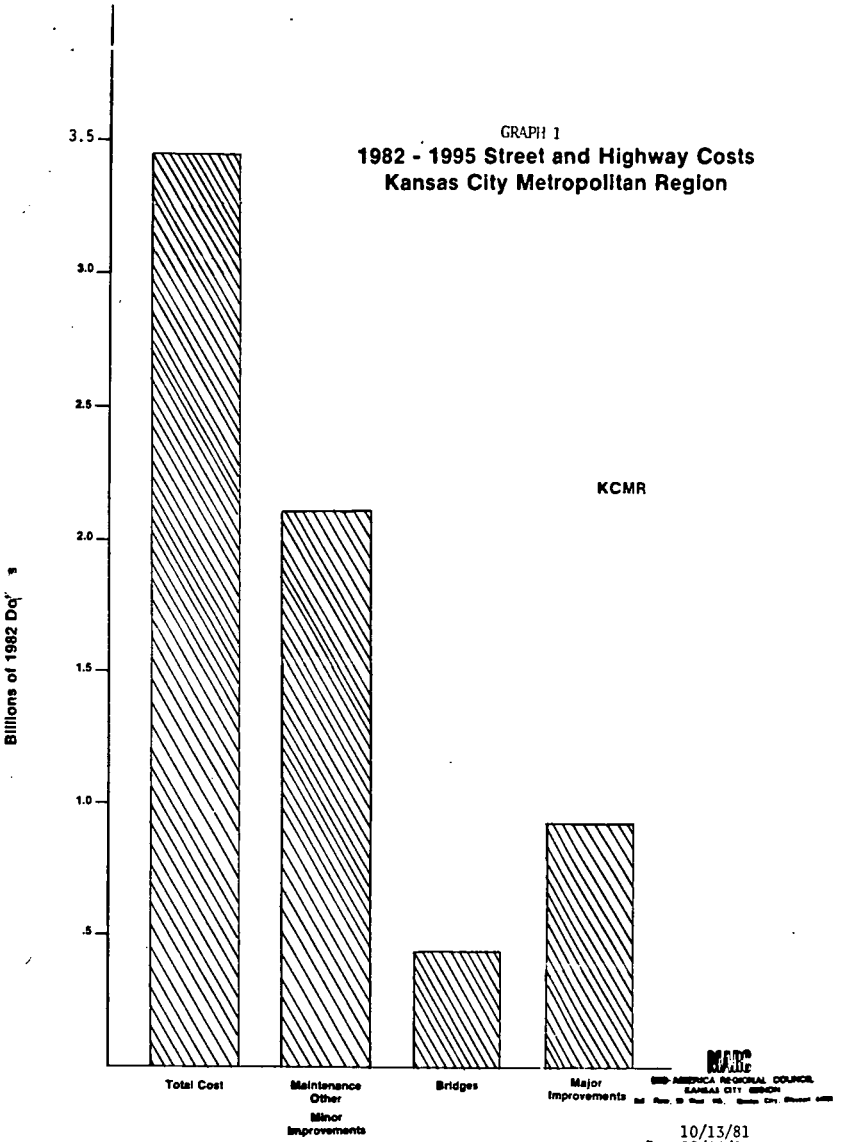
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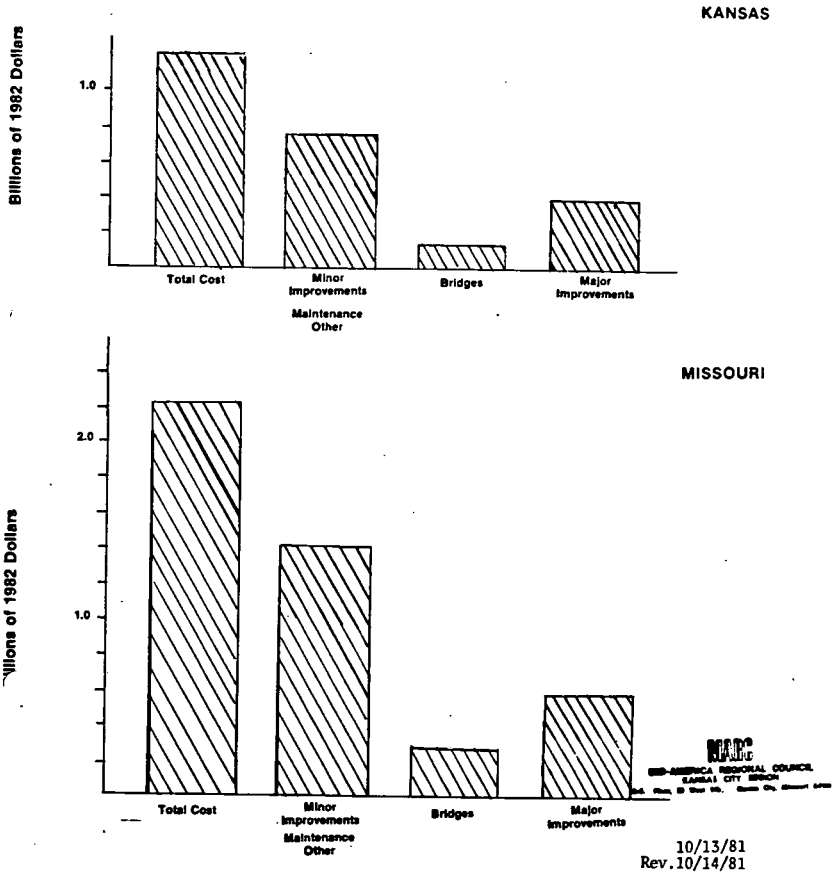
Executive Director  
PETER S. LEVI



GRAPH 1  
1982 - 1995 Street and Highway Costs  
Kansas City Metropolitan Region



GRAPH 2  
1982 - 1995 Street and Highway Cost  
Kansas City Metropolitan Region



The third category is maintenance and minor improvements. Maintenance includes routine items such as snow removal and patching potholes. Minor improvements enhance or maintain the efficiency of the current system and include, for example, intersection improvements and resurfacing. Maintenance and minor improvement costs for 1982-1995 are \$2.1 billion, with \$1.4 billion in Missouri and \$700 million in Kansas. Funding for maintenance and minor improvements is needed to keep the existing roadway system from deteriorating.

Of the \$3.4 billion total cost for street and highways in the Kansas City area, 61 percent of the costs is for maintenance and minor improvements, 12 percent is for bridges, and 27 percent is for major improvements. Maintaining the current system through bridge improvements, maintenance and minor improvements is therefore a major portion of projected costs.

The above costs are all in 1982 dollars; inflation is not taken into account. Adjusting for inflation, however, the total cost in 1982 would be \$246 million and by 1995 the cost will have risen to \$700 million. Major improvement costs were inflated by 9 percent a year; this is approximately the rate experienced from 1970 to 1980. Maintenance and minor improvement costs were inflated by 8 percent a year; this is the rate of general inflation from 1970 to 1980.

#### Street and Highway Revenues

Federal-aid has been a major source of revenue for streets and highways, but this fund has not been increasing as fast as construction costs and the magnitude of future funding is uncertain.

Table 1 presents the estimated sources of funds from 1976 to 1980 and indicates that 73 percent of funds have been federal-aid funds. The federal-aid portion of the state highway system major, minor and bridge improvement costs is greater than the federal-aid portion of the major urban road cost. Graph 3 shows that the 1982 projected federal-aid portion of state highway costs is 58 percent, down from 85 percent between 1976 and 1980. The 1982 projected federal-aid portion of city road costs is 12 percent, down from 29 percent of previous years.

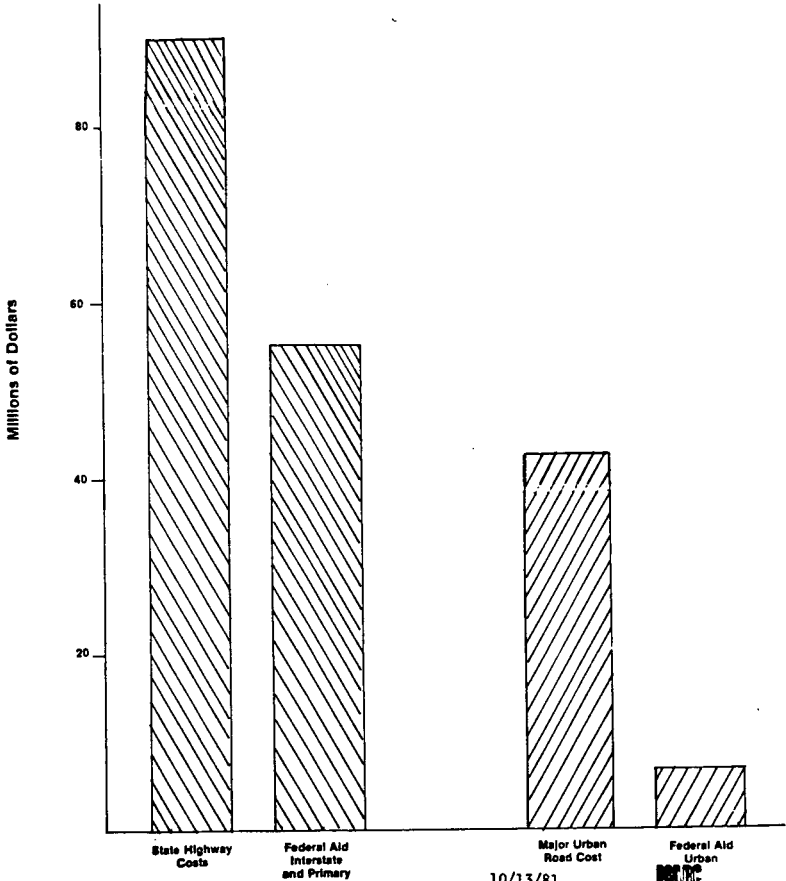
TABLE 1  
 ESTIMATED 1976-1980  
 SOURCES OF FUNDS FOR STREET AND HIGHWAY IMPROVEMENTS  
 KANSAS CITY METROPOLITAN REGION  
 (000's of \$)

	<u>KCMR</u>	<u>Kansas</u>	<u>Missouri</u>
Federal Funds			
Federal Aid Interstate	225,788	115,641	110,147
Federal Aid Primary	37,975	19,277	18,698
Federal Aid Safety	2,677	1,215	1,462
Federal Aid Off-System	2,013	1,319	694
Bridge Replacement Funds	2,000	2,000	---
Federal Aid Urban	<u>27,471</u>	<u>10,192</u>	<u>17,279</u>
TOTAL	297,924	149,644	148,280
State and Local Funds			
State Highways	45,901	22,882	23,019
Major Urban Roads	<u>66,082</u>	<u>40,681</u>	<u>25,401</u>
TOTAL	<u>111,983</u>	<u>63,563</u>	<u>48,420</u>
GRAND TOTAL	<u>409,907</u>	<u>213,207</u>	<u>196,700</u>
% Federal Aid	73%	70%	75%

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GRAPH 3  
Comparison of Cost and Federal Aid For  
Major, Minor and Bridge Improvements  
1982  
Kansas City Metropolitan Region



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Another major source of revenue is the state fuel tax. Kansas has an 8¢ per gallon tax on gasoline and a 10¢ per gallon tax on diesel fuel; Missouri has a 7¢ per gallon tax on fuel which is the third lowest in the nation.

#### Comparison of Costs and Revenues

The costs and revenues from 1982 to 1995 in inflated dollars were compared to identify the shortfall in funding. Graphs 4 and 5 show the costs divided into three categories. Funds for federal-aid major improvement projects in which local and state funds are used to match federal funds are obligated first; this category is of high priority so as to retain federal funds. Federal-aid funds are not projected to increase over time. The next high priority category is maintenance, bridges, and minor improvement costs; spending less than this amount means disinvestment in the current system. The last category is non-federal-aid major improvements, those projects in which federal funds are not used.

Given current revenue sources, the revenue from 1982 to 1995 does not increase as fast as costs increase. Since a major portion of revenues is from state and federal "cents per gallon" taxes on fuel, revenues are not sensitive to inflation. As the price of gasoline rises, less fuel is consumed, leading to fewer tax dollars.

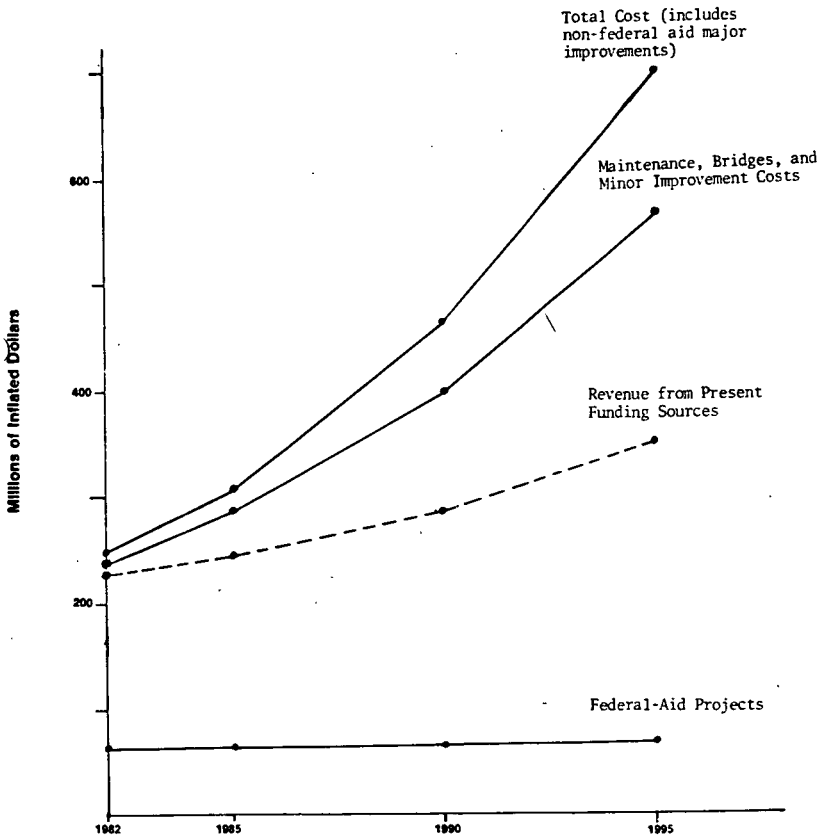
In 1982, the maintenance, bridges, minor improvement and federal-aid projects category is greater than revenues. This means that maintenance and upkeep of streets and highways is already falling behind at a rate of \$16 million annually in the Kansas City area. In 1985 this shortfall will have increased to almost \$48 million.

#### Funding Alternatives

Several examples of methods to fund the shortfall between revenues and needs were examined. Table 2 shows two revenue shortfalls. One is the difference of total costs including constructing needed new projects and revenues; the other is the difference of federal-aid projects, maintenance, bridges, and minor improvements. This second category will be referred to as the "maintain system" alternative; this strategy maintains the current system and the ability to match federal dollars. In 1985 the total shortfall of revenues in comparison to costs is \$66 million; the maintain system shortfall is \$48 million.

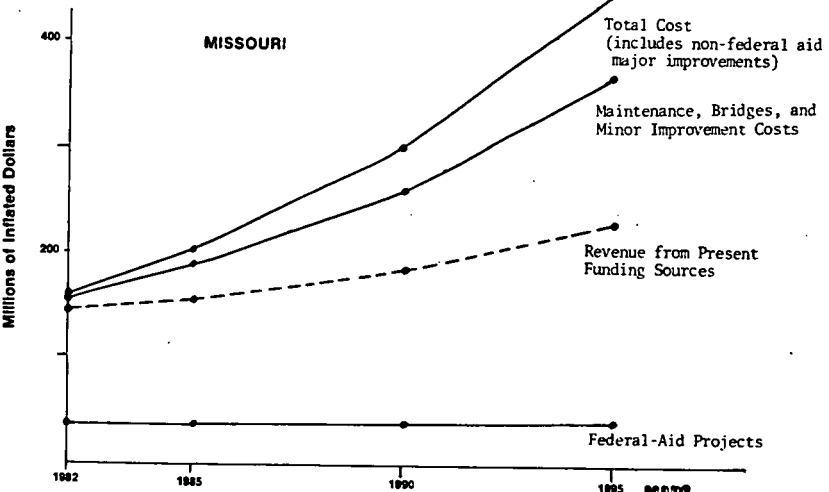
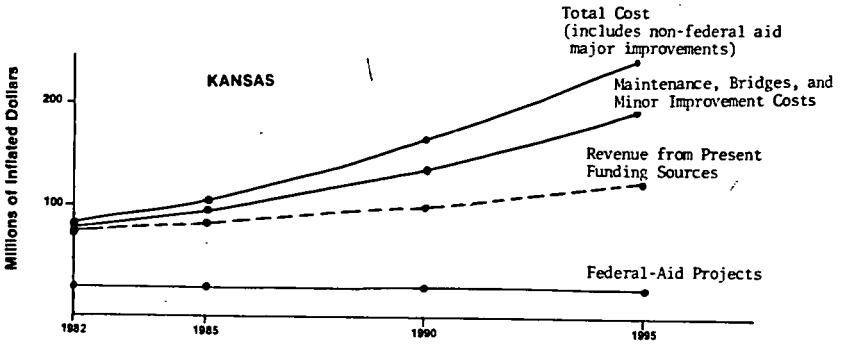
GRAPH 4  
**1982 - 1995 Comparison of Revenue  
 From Present Funding Sources and Costs  
 Kansas City Metropolitan Region**

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GRAPH 5  
**1982 - 1995 Comparison of Revenue  
 From Present Funding Sources and Costs  
 Kansas City Metropolitan Region**



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TABLE 2  
 FUNDING ALTERNATIVES TO ELIMINATE  
 1985 STREET AND HIGHWAY SHORTFALL  
 Kansas City Metropolitan Region

	KCMR 8 Counties	Kansas 3 Counties	Missouri 5 Counties
Total Shortfall	\$66,500,000	\$20,659,000	\$45,841,000
Maintenance, Bridges, Minor Improvement Federal-Aid Projects (Maintain System)	\$47,717,000	\$13,264,000	\$34,453,000
Funding Alternatives (additions to current funds)			
A. Cents per Gallon Fuel Tax			
-Total Cost	12¢	11¢	13¢
-Maintain System	9¢	7¢	10¢
B. General Sales Tax			
-Total Cost	.5%	.6%	.5%
-Maintain System	.4%	.4%	.4%
C. Payroll Tax			
-Total Cost	.5%	.5%	.5%
-Maintain System	.3%	.3%	.4%
D. Property Tax (\$ per \$1,000 assessed valuation)			
-Total Cost	\$14	\$13	\$14
-Maintain System	\$10	\$ 8	\$11
E. Percentage Fuel Tax (% of fuel price)			
-Total Cost	5.5% <sup>1</sup>	9% <sup>2</sup>	9.0% <sup>2</sup>
-Maintain System	4.0% <sup>1</sup>	7% <sup>2</sup>	7.5% <sup>2</sup>

<sup>1</sup>A regional percentage fuel tax assumes the current state cents per gallon tax and would be in addition to the current tax.

<sup>2</sup>A statewide percentage fuel tax assumes the replacement of the current state cents per gallon tax.

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Table 2 presents five tax alternatives for both total cost and maintain system strategies. In 1985, 12¢ over and above the current "cents per gallon" tax would be needed to eliminate the total shortfall and a 9¢ per gallon tax increase would be needed to maintain the current system. About half a percent general sales tax or payroll tax (earnings tax) would be needed. A property tax was also calculated.

A percentage fuel tax is a sales tax on gasoline. In 1985, if the current 7¢ per gallon state fuel tax were replaced with a percentage fuel tax, a 9 percent fuel tax would meet total revenue needs and a 7 percent fuel tax would maintain the current system. In 1995, a 7 percent fuel tax would also cover the maintain system shortfall. If a "cents per gallon" tax option is used to raise additional funds, a fuel tax increase of 9¢ will be needed to maintain the system in 1985. Inflation will escalate costs to the extent that to maintain the system in 1995, the fuel tax would have to be 41¢ higher than currently.

#### Summary

The forecast of the financial condition of the Missouri counties in the Kansas City area indicates the following conclusions. Current funding is not sensitive to inflation; revenue from a "cents per gallon" tax actually declines with inflation. Maintaining the current system is already being deferred, compounding the problem for future years. Few major improvement projects which have been identified by state and local governments as high priority will be able to be funded.

Representative HAMILTON. Thank you, Mr. MacGregor. Mayor Moody, we look forward to your comments.

**STATEMENT OF HON. TOM MOODY, MAYOR, CITY OF COLUMBUS, OHIO**

Mayor MOODY. Thank you, Congressman. In view of the hour and your request you will be delighted to know that I do not have a prepared statement to read, and I will comment on several questions that have arisen during the day.

I should like to point out, however, that I am testifying as the mayor of the city of Columbus, Ohio, and I have been the mayor for 12 years

I am testifying on behalf of the National League of Cities, the Nation's oldest and largest group of cities going together for purposes of affecting those State and Federal legislation which deals with their welfare.

In that regard I would call your attention to the testimony of Ms. Carol Belamy, president of the New York City Council, who testified on behalf of the National League of Cities on the Nation's infrastructure problems before the Senate Committee on Environment and Public Works on April 12 of this year.

Also, I would like to call your attention to the statement of Mayor Tom Bradley, of Los Angeles, and Mayor Richard Fulton, of Nashville, who testified before the Subcommittee on Economic Development on public works and transportation on April 21. The statement of Pamela Plumb, counselor from Portland, Maine, who testified on July 15 before the Senate Committee on Environment and Public Works.

Representative HAMILTON. All those statements you mentioned will be made part of the record, Mayor, as well as the pamphlet that Mr. MacGregor cited.

Mayor MOODY. Thank you. I would point out that I think that testimony which I have mentioned—and I would say, sir, all of the testimony which I have heard in this room I can agree with as a matter of fact and perspective.

I do not agree quite with all of the conclusions that were drawn from these facts, but I think the statements of facts given here today are unusually knowledgeable and correct and reflect the general situation.

It is my purpose to try to add a little perspective to this problem that has been talked about in terms of a trillion or sometimes trillions of dollars. That is a paralyzing number to think about.

For that reason I have submitted several copies to your staff of this report which was completed just within the last month. It is a 1983 Columbus Physical Improvements Needs Survey. It is broken down in 27 different community districts, and one category which deals with city wide projects that do not quite fit into one of the community areas.

I think that merely glancing through that gives you an indication of what is typical in this country. I would suggest, however, that this work is probable considerably better than most, but the underlying facts are about the same in most cities.

It is interesting that we have learned that over 90 percent of the cities have a very rational budgeting process for dealing with capital improvements and maintenance of infrastructure.

The Federal Government is a bad example in this regard, and I will speak a little bit later to that. I would, however, recommend just looking through this as being typical. I would point out that there is no bottom line on dollar costs in that book.

Last year when we did our 1982 survey the total of those projects was \$1,181 million for city of Columbus projects. There are no bridges included in that because under our system they are county and State responsibility.

There are also some other items that are vital parts of the Columbus infrastructure that are not there because they belong to other units of government.

I also point out in perspective that using the pattern of addressing of these needs, for the past 20 years we deal in each 4- or 5-year period with approximately three-quarters of 1 percent of those infrastructure needs. That is because every 4 or 5 years we pass a bond issue for as much as we can afford and it goes to meet the kinds of needs that are here.

In no way does this reflect a wish list. It does reflect a prioritized grouping, an inventory of needs within our city, as determined by city officials, and as determined by citizens in a lot of public hearings. So there are no soft or foolish things in here. There are obviously some that are farther down the list and we will probably never get to that.

This points out one of the startling facts about your question about crises. Every respondent was correct—the one who said we were in crisis is correct, and the one who said we are not in crisis was correct. What we have is an enormous need, and it is the kind of degradation of the environment which I can best illustrate by referring to an aquarium, a small kind of aquarium that we sometimes see in a restaurant or a public building which is left unattended and it becomes dirty and simply not satisfactory.

Well if you want to regard that as crisis then you can because it is a filthy place and not a nice thing to look at and it is not very functional either. On the other hand, it is amazing to know that the fish continue to live in there.

So it is not a crisis that threatens the life of the resident.

My own estimation, and I cannot document this at all, is that on a national basis about 10 percent of the infrastructure is a crisis. The city of Columbus has, in my opinion, the best maintenance of infrastructure of any major city in the country. Since I cannot take the credit for it I do not hesitate to announce that.

With that kind of situation we have an unmet backlog of more than 99 percent of our infrastructure needs. I would say that our crisis situation in the city is far less than 1 percent, but there are certain parts that either are a crisis or can quickly become a crisis. That is when concrete starts to fall from a viaduct or when bridges get to the point where concrete is falling off them, or you can look through the deck and see the water, and that sort of thing.

The Federal Government cannot and in my opinion should not try to solve the infrastructure problem. It is so large that it is beyond the reach of our Federal Government as it now stands.

In addition, it has traditionally been met by local and State units of government who have spent considerably more than the Federal Government ever could or should.

To the extent that some Federal Government help is desirable, and most of my colleagues would say that it is, they would like to have it in revenue sharing or block grant form, and I support the testimony of those who spoke on that subject and for the same reasons they gave.

Categorical programs have the virtue of being targeted, but the targets are often the wrong ones and they do not fit very well and they deny the flexibility that is necessary to meet reasonable circumstances at the local level.

I would point out one book published in April 1983 which represents the results of a survey of 809 major cities in this country. The startling thing is that no matter how large the problem is cities are prepared to address substantial portions of that problem within 3 months from the time the funding sources are identified, and over half of the projects less than 6 months from the time the financing is ready to go.

While we cannot deal with the full extent of the problem, and while an inventory would be desirable, my viewpoint very simply is we cannot wait for an inventory about which we can do nothing any how. We should start to deal with the problems that can be dealt with.

One of the fascinating facts that came out of our survey is that a very substantial number of projects which the cities prioritize in the highest degree are under \$5 million apiece. So there is something to get a handle on even if we cannot get a handle on the entire infrastructure problem.

I serve also as a member of the infrastructure task force for the NLC, and it has come up with some traditional and some innovative suggestions which have not yet been endorsed by our entire membership, but I feel they are worthy of reporting in the same spirit that Mr. MacGregor introduced some innovations, I shall at least in my instance introduce innovations.

We are concerned about the backlog of these needs and the inability to meet them, and for that reason we flatly asked for a new long-term Federal grant assistance program along the revenue sharing or block grant lines.

My colleagues are much more in favor of that than I am, but nonetheless it is an acceptable thing and I do not know of anyone who would refuse that money.

We are concerned very much with the market for State and local bond issues and our ability to leverage additional private sector capital for public infrastructure investment. Our task force has accordingly called for authorization of a Federal interest subsidy for taxable bonds to be issued at the option of State and local governments to finance traditional purpose public investment projects.

I point out that our membership certainly has not endorsed this and I am not sure that they will because we city people are so fearful about losing the tax exception on municipal bonds that they do

not want to give the Federal Government a foot in the door kind of thing.

But those who have spent much time and effort on this subject are of the opinion that this needs to be explored and that it makes sense for a Federal subsidy on that interest, on taxable municipal bonds, at the option of the municipality, and the same is true for the States.

We are concerned with the Federal capital investment decision-making and management. There was talk about logrolling and some other things up here in the first session. We in the task force have endorsed creation of a Federal domestic capital investment budget within the unified budget submitted to the Congress by the President each year.

Specifically in the sewer area, because we feel there is a need to extend the life of existing federally aided infrastructure investments, we call for a reversal of the 1981 and 1982 legislation that restricted the purposes for which wastewater treatment grant assistance could be used to allow Federal funding for major sewer system rehabilitation and correction of spill over from combined sanitary sewer storm drainage systems.

A further recommendation of the task force is that there be an increase in aviation user fees, the imposition of waterway user fees, and other user charges in general where appropriate.

I would point that some things that apparently bear no relationship whatsoever to the infrastructure problem are in our eyes factors having a major bearing on that problem.

I am concerned, for example, about the Pickle bill—I don't have the number in front of me I think it is 3110—but the result of the Pickle bill as was introduced—and it has been modified some in committee and the executive session—would be to increase the cost for local and State governments in areas it should not be increased at all.

I would also point out that it could increase the cost for many Federal projects. Let me give an example. We will have a staff under the New Jobs Training Partnership Act with perhaps 100, 125 persons, and those people have to be housed. We could not rent a new building for that staff, and certainly we don't want to house them in existing city buildings which are already crowded.

The rent that would have to be charged to us and paid by the Federal Government, in that case, would be considerably higher, because the owner of the building would be denied the use of the tax breaks he would get from anybody else.

Also, and this may seem like a long way from infrastructure, but it is not really, it would necessitate our paying a higher price for a Xerox machine to use in the city than it would for let us say for Standard Oil to use the Xerox machine, because Xerox Co. would be denied the depreciation in that case because we were leasing the thing.

There is another example. The tax exempt bond market has grown by leaps and bounds and the Congress appropriately targeted such things as industrial revenue bonds for economic development, mortgage bonds for single family housing, and so on.

The fact is, some of our cities and some of our States are effectively denied access to the bond market and many that do get in it

are in at such a high cost because of the competition for those funds that they are simply unable to proceed with the financing of infrastructure matters.

Mr. Congressman, you have been very patient with me. I was longer than I thought even in speaking to the few questions that came up. I am glad that I do not have a prepared statement to add to your burden.

Representative HAMILTON. It was a very good statement, Mayor Moody, and we appreciate it very much.

[The statements and survey referred to by Mayor Moody for the record follow:]

[Testimony before the Senate Committee on Environment and Public Works,  
Apr. 12, 1983, on Infrastructure and Jobs]

**STATEMENT OF HON. CAROL BELLAMY, PRESIDENT, NEW YORK  
CITY COUNCIL, ON BEHALF OF NATIONAL LEAGUE OF CITIES**

Ms. BELLAMY. Thank you, very much, Senator.

I appreciate the opportunity to testify. I am, along with Mayor Thomas Bradley of Los Angeles, cochairman of the National League of Cities' Infrastructure Task Force.

The National League of Cities, as you know, represents about 15,000 cities throughout the country, ranging in size from New York and Los Angeles to Scotland Neck, N.Y.

It is a pleasure to be with you today to discuss proposed solutions to the Nation's infrastructure problems. In our view, there is no more urgent task facing government at all levels today, and, indeed, the private sector, as well.

Our infrastructure task force, which I might say we very much appreciate your talking to us last month, Mr. Chairman, was established to deal with this critical problem.

Our first task, carried out in conjunction with the U.S. Conference of Mayors at the request of Congressman Jim Oberstar, was to survey the condition of our local public facilities and to determine our cities' needs for modernizing and replacing those facilities.

We are now in the process of analyzing the information submitted to us by about 850 cities, and we will be pleased to make this available data public and available to you very shortly.

The three bills before you today take different approaches to the infrastructure problem. S. 23, introduced by the senior Senator from my State, would establish a national commission to conduct an inventory of needed public improvements and to develop a national plan setting priorities and detailing the financial mechanisms required to make those improvements.

S. 532, introduced by Senator Domenici, would provide for the setting up of State infrastructure banks.

S. 724, introduced by yourself and Senator Randolph, would provide for a State bank, rural public facilities, countercyclical public works, historic preservation and various community improvements.

Unfortunately, I cannot comment in detail on each of these bills since they are now being analyzed by the various policy committees within the National League of Cities.

However, on behalf of the NLC, I would like to make some general comments on these various bills.

First, the cost of repairing, modernizing, and replacing our deteriorating infrastructure is enormous, with estimates commonly running into hundreds of billions of dollars.

In view of the budget constraints facing all levels of government today, it is unrealistic to expect public funding to fill more than a small fraction of the overall need. Consequently, we believe that private sector financing must be relied upon to the greatest extent possible.



In this context, the Congress should give careful consideration to Senator Domenici's second infrastructure bill, S. 533, which would provide interest subsidies for taxable bonds issued to finance infrastructure projects.

The advantages of such an approach are many. They include primary reliance on private sector capital stimulated by a relatively small amount of public subsidy; a reduction of costs to State and local government borrowers for essential projects; and only a minimal impact on the Federal budget as a result of a partial shift in State-local borrowing from the tax-exempt to the taxable credit market.

I do not bring up S. 533 to give it NLC's endorsement. Realistically, however, Congress can provide only a small part of the funds needed in this area.

Your bill, Mr. Chairman, would generally provide 50 to 75 percent of projected costs, a substantial subsidy, but for relatively few projects.

S. 533 would provide a small subsidy for many projects. Obviously, S. 533, if otherwise acceptable, would fund many more infrastructure projects at ultimately a lower cost to the Federal Government.

In addition, it should be noted that the greater the subsidy per project, the more incentive the recipients will have to wait for assistance rather than finding alternative sources of funding.

Second, not only is the cost of modernizing our public infrastructure great, but the variety of facilities that need that modernization are great, as well. Roads, bridges, water works facilities, port facilities, the list goes on and on. Just as government cannot reasonably be expected to bear the full cost of repairing the public infrastructure, we cannot repair or replace all facilities at once.

Choices must be made. A first priority, for example, might be afforded to projects that are crucial to economic revitalization; for example, key local roads and bridges, port facilities, public transit, and water and sewer facilities that serve industrial and commercial users.

In this connection, a very useful task could be performed under Senator Moynihan's bill, which calls for the preparation of a national infrastructure improvement plan.

Development of such a plan would require setting priorities among national and regional infrastructure needs by types of facility.

We believe that some priority-setting process at the Federal level, together with flexibility to meet local priorities, is essential in your development of any comprehensive infrastructure program. We urge you to include representatives of all levels of government and the private sector in that process.

Furthermore, the development of Federal capital budget, as called for in S. 23, would help to set priorities for Federal support of a wide range of infrastructure investments. As you know, Mr. Chairman, Federal aid for infrastructure is already substantial, particularly after enactment of the Surface Transportation Act of 1982. A capital budget would provide a mechanism for continuing analysis of what the Federal Government supports and to what extent, laying the basis for any changes that might be needed.

Third, we would urge full attention to the very difficult problem of rehabilitation and replacement of public facilities. Although most existing Federal infrastructure programs permit both rehabilitation and the construction of new facilities, it is, frankly, all too easy to choose to build new facilities rather than rehabilitate the old ones.

Because of the gigantic costs involved in this area, efficient use of both public and private funds should insure that a careful comparison is always made of the costs involved.

Whenever rehabilitation offers significant savings, new construction or replacement should be undertaken only for the most compelling reasons. In fact, you may want to consider specified incentives or higher levels of support for repair and rehabilitation than for new construction or replacement.

This is not to say, Mr. Chairman, that we regard the infrastructure problem as primarily one of repair and rehabilitation, although it clearly is in some communities. In others, however, the problems involve primarily growth and the need for new public facilities to accommodate that growth. A comprehensive infrastructure program must involve both rehabilitation and new construction.

Finally, Mr. Chairman, we would urge the committee to focus its attention directly on infrastructure needs, a serious and long-term problem that will require years of patient and determined effort. The country would have to deal with this problem even if national unemployment were low or there was little or no youth employment.

Therefore, we believe that the immediate job-creating titles of your bill, titles III, IV, and V, dealing with countercyclical assistance, historic sites, and youth unemployment, should be the basis of a second jobs bill.

We support enactment of such a bill to help reduce the Nation's highest level of unemployment in 50 years, and we will submit detailed comments on these bills to you shortly.

We do have serious reservations, however, on title II of your bill, which would terminate the EDA program and replace it with one administered by the Secretary of the Army through the Corps of Engineers. We see no good reason to place long-term economic development functions with the Secretary of the Army after two decades of such experience in the Economic Development Administration.

The House Public Works and Transportation Committee, as you know, has reported H.R. 10, which would make substantial reforms in the EDA program, including a stricter targeting of funds to communities with serious problems of long-term distress. Senator Mitchell of this committee has introduced similar legislation, S. 871. We strongly support these bills.

STATEMENTS OF

THE HONORABLE TOM BRADLEY  
Mayor of Los Angeles

and

THE HONORABLE RICHARD FULTON  
Mayor of Nashville

on behalf of

THE NATIONAL LEAGUE OF CITIES  
and  
THE U.S. CONFERENCE OF MAYORS

on the

JOINT SURVEY ON CAPITAL BUDGETING AND INFRASTRUCTURE

before the

SUBCOMMITTEE ON ECONOMIC DEVELOPMENT  
COMMITTEE ON PUBLIC WORKS AND TRANSPORTATION  
U.S. HOUSE OF REPRESENTATIVES

April 21, 1983

Good morning, Mr. Chairman and distinguished members of the Subcommittee. I am Tom Bradley, Mayor of Los Angeles. I appreciate the opportunity to appear before you today as a representative of both the National League of Cities -- where I serve as Co-chairman with Council President Carol Bellamy of New York, of the Infrastructure Task Force -- and the U.S. Conference of Mayors.

Mayor Richard Fulton of Nashville and I are here today to share with you the results of the Joint Survey on Capital Budgeting and Infrastructure, conducted by the League of Cities and Conference of Mayors over the past four months. Copies of the report on the Survey are before you for your review.

My testimony today will cover, first, a brief introduction to the Survey; second, a description of what we learned about city governments' capital budgeting practices; and, third, an analysis of the priorities that the survey respondents selected from among the types of infrastructure facilities that need major work in their cities. My colleague, Mayor Fulton, will share with you our findings from other parts of Survey.

#### ABOUT THE SURVEY

Of the nation's vast and complicated infrastructure network, this study reports only on certain capital facilities which are the responsibility of municipal governments. It also reports on how cities carry out that responsibility. It is one of the most comprehensive studies of local government capital investment practices and priorities ever undertaken.

Approximately 1,400 city governments were surveyed during December 1982 - February 1983. A total of 809 responses were received by March 1 and were analyzed for this report. Responses were received from cities in every region and every population category.

This report is deliberately titled an "Initial Assessment." Several dozen communities returned survey questionnaires after data runs had begun. These additional responses can be included in later analyses. Moreover, our analyses suggest still further research that can be done with this data.

The information gathered by this survey is significant -- and, indeed, we believe unprecedented -- and deserves considerable further research. We have not had time, for example, to cross-tabulate the answers to the survey questionnaires by some measure of city distress. Eligibility for the UDAG program could serve as such a measure.

I want also to note explicitly that research of this sort should be done on capital facilities that are the responsibility of federal and state governments, as well as local governments other than municipalities.

A sweeping picture of local infrastructure needs and capital budgeting practices emerges from the survey. The survey presents several major findings which must affect any consideration of the next decade's approach to public capital investment. Mayor Fulton and I will share those findings with you during our testimony.

#### CAPITAL BUDGETING

We found that cities make their decisions about capital investment needs through an orderly process. Over 90 percent of the 809 respondents reported that they either have a capital budgeting process or a substitute which accomplishes the same purpose.

Nearly all these capital budgets are approved by city councils, and 88 percent of the respondents said these budgets cover all city departments. The survey reveals widespread use of a variety of mechanisms to solicit public

comment on capital budgets. Almost 84 percent of the responding cities use public hearings and significant percentages use other techniques as well, such as special or general purpose advisory boards.

Economic development plays a significant role in local capital budgeting and planning.

National economic recovery and development require basically sound local infrastructure. This Survey shows that respondents have grasped this fact and that it plays a role in shaping the local budget planning process, as well as in the selection of priorities.

When asked to cite the reason for choosing priorities for public facilities work, the respondents cited protection of public health and safety and provision of essential services most frequently. This reflects the fact that local governments are still the providers of services and protectors of public health and safety first and foremost. But the third most frequently cited reason for choosing a priority was economic development, by a wide margin.

Moreover, 492 respondents (or 60.8 percent of the total) reported that economic development is taken into consideration when planning a capital budget.

We believe these findings point to a local base of activities and attitudes regarding the relationship between public capital investment and economic development that can be built upon in federal policy and programs. Federal assistance for public facilities that are related to economic development would not only help localities address some of their highest priority needs, but would also contribute to national economic growth.

Respondents were asked whether or not each of four categories of capital improvement work is included in their capital budgets. The frequencies with which respondents said each category is included in their budgets is summarized in this table.

Preventive Maintenance	43.4 percent said this is included in their budget
Major Maintenance	76.8 percent
Rehabilitation/Reconstruction	92.0 percent
Expansion/New Construction	94.7 percent

Respondents indicated that they rely on different financing mechanisms for each of these different categories of infrastructure work. Taken together, these responses show that responding cities make an important distinction in their capital budgeting: local taxes are used primarily to finance maintenance, and debt is primarily used to finance major rehabilitation, expansion, and new construction.

Large majorities of the responding cities indicated that they view the local capital budgeting process as effective with regard to a broad array of criteria. At the same time, the respondents indicated that their processes could be improved, and such areas as needs assessment, analysis of financing options, and development of priorities all receive high responses as areas worth improving.

Respondents felt that all levels of government have a role in financing improvements to local capital budgeting processes, with 85 percent citing a local responsibility, 65 percent a state responsibility, and 52 percent a federal responsibility.

The National League of Cities and U.S. Conference of Mayors urge the Subcommittee to consider seriously this finding of the survey. We strongly recommend that funding assistance for the improvement of local capital budgeting processes be included in any federal infrastructure program.

#### INFRASTRUCTURE PRIORITIES

Respondents were asked to choose, from among nineteen types of facilities, the three that are the highest priorities for capital expenditures in their communities. Priorities vary among different types of cities, but when the

three top priorities for all responding cities are combined (without weighting for first, second, or third places), the category of "streets and roads" is definitely the priority most often selected. The six facility types most frequently selected as priorities by respondents are as follows. (The "count" is the number of times that facility type was selected as a first, second, or third priority.)

<u>Facility Type</u>	<u>Priority Count</u>
Streets and Roads	518
Stormwater Collection	309
Wastewater Treatment	228
Sewage Collection	216
Public Buildings	197
Water Distribution	152

The other facility types have "counts" of 106 or less.

Identification of these priorities is a major finding of the survey, but these are differences among types of cities as regards their priorities. These results must also be viewed in the context of other major findings -- which Mayor Fulton will report -- that emphasize the variation among cities in the ability to finance and the condition of public capital facilities. This strongly supports the view that any national effort in this area should rely primarily on local planning and the local priorities, within broad national purposes.

The survey asked how long it would take to begin work on the priority projects if sufficient funds were available to finance the work. When all the first, second, and third priorities are accumulated (without weighting), it is clear that the vast majority of the respondents project start-up times for these priorities of under six months.



<u>Start Time</u>	<u>Count</u>
Under 3 months	799
4 to 6 months	833
7 to 12 months	549
Over 1 year	152

A major question which always arises when public works spending is discussed is who would do the actual work: public employees or private sector workers under contracts?

The survey asked cities to indicate how they would undertake their priority projects -- through city employees, through contracting out the work, or through some combination of the two.

When respondents' answers are totaled (without weighting), the unequivocal answer is that cities would contract out the work in the vast majority of the cases.

This is a major finding. It shows conclusively that investment in local infrastructure work translates directly into jobs in the private sector. This finding should end any charges that urban infrastructure funding would mean massive patronage and public hiring or distortions in the balance between public or private employment.

Mr. Chairman and members of the Subcommittee, this ends my portion of this presentation.

I want to say again -- on behalf of the nation's cities -- that we believe the issue of infrastructure is of utmost importance, and we believe these survey results are a major contribution to discussions of this issue.

Thank you. I will be glad to answer questions at the appropriate time.

Mr. Chairman, distinguished members of the Subcommittee, my name is Richard Fulton. I am the Mayor of Nashville, Tennessee, and I appreciate the opportunity to appear before you today as a representative of the U.S. Conference of Mayors -- where I serve as Vice-President -- and the National League of Cities -- of which my city is a member.

My colleague Mayor Bradley has outlined for you some of the findings from the Joint Survey on Capital Budgeting and Infrastructure, a copy of which you have before you. I will cover four principal areas in my testimony this morning. First, I will summarize the Survey's findings regarding the physical condition of nineteen different types of public facilities. I also will summarize the Survey's findings regarding the responding cities' ability to finance necessary improvements in these facilities.

Third, I will discuss the cost ranges which respondents told us would cover the expense of undertaking the priority needs summarized by Mayor Bradley. Finally, I will present some preliminary recommendations -- some of which Mayor Bradley has already mentioned -- for your review. We believe these can be drawn from the survey and could be helpful as the Subcommittee considers legislative initiatives in the infrastructure area.

#### CONDITION OF PUBLIC FACILITIES

The survey asked respondents to characterize the physical condition of 19 types of public facilities. Respondents could choose one of six characterizations--ranging from "in good condition" through various levels of needed work to "does not apply to this city"--for each of the 19 facility types. In addition, all of these results could be cross-tabulated by region, population size and city type, generating a very large data base.

The information generated by this question is extremely rich. It is impossible to characterize the findings adequately in a short summary. However, some major points should be noted.

First, in six of the facilities a majority of the respondents said the

facilities were "in good condition." These facility types were:

● Community social service facilities	58.8 percent said "in good condition"
● Parks and Recreational facilities, open space	55.7 percent
● Water Storage	54.8 percent
● Public building	54.4 percent
● Water treatment	50.6 percent
● Traffic control equipment	50.3 percent

However, for 10 of the facility types at least 30 percent of the respondents said they required major work. There is some overlap between the first and second group, indicating the varieties of local situations:

● Streets and roads	70.4 percent said major work needed
● Sidewalks and curbs	69.9 percent
● Storm water collection and drainage	67.4 percent
● Sewage collection	49.8 percent
● Bridges, overpasses and viaducts	44.9 percent
● Public buildings	42.9 percent
● Traffic control equipment	39.0 percent
● Parks, recreation facilities, open space	35.0 percent
● Wastewater treatment	34.7 percent
● Water distribution	31.3 percent

Finally, in six of the facility types, at least 25 percent of the respondents reported that the facility types "did not apply to this city:"

● Docks, wharves, and ports	77.9 percent said it didn't apply
● Public transportation facilities	64.3 percent
● Public transportation rolling stock	63 percent
● Public school buildings	56.9 percent
● Solid waste disposal facilities and resource recovery facilities	40.8 percent
● Water treatment	27 percent

This last finding bears further analysis. The survey data collected do not support any firm conclusions as to why these categories are so often characterized as "not applicable." It seems reasonable, however, to speculate

that in many cases, control over these facilities rests with independent boards or authorities, such as school boards. Thus, capital budget needs would not necessarily show up in city budgets.

Second, some of these facilities may be operated by the private sector.

Finally, it is possible that many of the respondents simply did not have these facilities in their jurisdictions. This is certainly likely in the case of public transportation, or docks and wharves. Also, among those who do have such facilities, many may use independent boards or authorities, or the private sector, to operate them.

There are some discernible differences in the responses from different regions, different sized cities, and different city types. These are discussed in greater detail throughout the report. We have provided an especially detailed analysis of these differences for the six high priority facility types mentioned by Mayor Bradley. However, we must stress: no region, no population class, and no city type emerges a clear winner or a clear loser in this matter. Cities from every classification report difficulties with some facilities. Local infrastructure needs and priorities vary widely among cities.

#### ABILITY TO FINANCE CAPITAL PROJECTS

The survey also asked respondents to characterize their ability to finance necessary work on each of the 19 types of public facilities. Respondents could choose one of six possible responses--ranging from "possible to finance out of own resources as a matter of course" through varying degrees of need for assistance from state or federal governments to "not in the municipal budget"--for each of the 19 facility types.

First, in five of these facility types, a majority of the respondents said they could finance necessary work out of their own resources either as a matter of course or with difficulty--

● Public building	67.8 percent
● Sidewalks and curbs	63.3 percent
● Water distribution	57.8 percent
● Water storage	53.4 percent
● Traffic control equipment	50.3 percent

However, for eight of the facility types, at least 30 percent of the respondents said that they required some degree of state or federal aid to finance the necessary work. There is some overlap between the first and second groups, thus indicating the differences in local situations. This second group includes:

● Streets and roads	62.0 percent
● Wastewater treatment	54.5 percent
● Bridges, overpasses, viaducts	54.4 percent
● Parks, recreational facilities, open space	49.2 percent
● Stormwater collection and drainage	48.3 percent
● Sewage collection	44.1 percent
● Traffic control equipment	38.6 percent
● Sidewalks and curbs	31.4 percent

Finally, in six of the facility types, at least 25 percent of the respondents reported that the facility type is "not in the municipal budget." These facility types are:

● Public hospitals and clinics	60.8 percent
● Docks, wharves and ports	57.7 percent
● Public school buildings	53.8 percent
● Public transportation facilities	50.1 percent
● Public transportation rolling stock	48.9 percent
● Solid waste disposal facilities and resource recovery facilities	29.2 percent

The overlap among categories and the variety of responses among different types of responding cities underlines another major, overriding finding of this survey: the ability to finance necessary infrastructure work varies widely among cities.

As before, some regions report they can finance some facilities more easily than others. Small cities report more often they need assistance with some types of work; large cities do so for other types. The same holds true for the type of city responding. These differences are explained in greater detail in the report. The striking finding is that cities from every region, from every size classification, and from every city type report that they need assistance for some infrastructure needs, while they can finance others locally.

#### COST RANGES FOR THE PRIORITIES

Respondents were asked to choose the most appropriate cost range for the capital costs of their priority projects. When the responses to all the ranges cited for all the priorities are added together, it becomes clear that the "\$1.0 million to \$5.0 million" range is by far the most frequent choice:

<u>Cost Range</u>	<u>Count</u>
Under \$0.5 million	291
\$0.5 million to \$1.0 million	380
\$1.0 million to \$5 million	728
\$5.0 million to \$10.0 million	78
\$10 million to \$20 million	268
\$20 million to \$50 million	180
\$50 million and over	150

This information does not permit any analysis of a total "bottom line" figure for urban infrastructure needs. The report does not provide one, and our statistical advisors tell us that no one should try to do so using these figures.

The responses to this question do show that among the respondents

to this survey, the most prevalent cost range for self-selected priority infrastructure projects is between \$1 million and \$5 million.

This is an important finding in its own right. Total public facilities needs across the country undoubtedly are quite formidable. At the local level, however, the specific needs for individual high priority projects can be less daunting in their magnitude.

Also, the wide distribution of responses among all the possible cost ranges leads to another major finding of the survey: the range of costs among cities for undertaking necessary work on priority infrastructure needs varies widely among the responding cities.

There is no question that a complete inventory of all necessary work on local capital facilities would give rise to a large total price tag for refurbishing America's urban infrastructure. We cannot give you such a total. The survey did not attempt to generate one.

The survey does demonstrate that there is a clear need for assistance at the state and federal level if we expect these needs to be met.

There is no inexpensive, quick or easy solution to the problem of urban infrastructure. It has taken years to develop, and will only be conquered by an equally long-term commitment by all levels of government.

The survey does show, however, that we need not be paralyzed by the overall magnitude of this problem.

Significant progress could and would be made in meeting priority needs if relatively modest amounts of assistance were available at the local level. Multiplied across many jurisdictions, this surely will add up. However, a start can be made. A start should be made.

#### LEGISLATIVE RECOMMENDATIONS

Mr. Chairman, I know that the Subcommittee at the present time does not have legislation before it which addresses the long-term infrastructure needs of cities. The U.S. Conference of Mayors and the National League of Cities believe that federal action on this matter is warranted, and we hope that you will move to consider such legislation.

If and when the Subcommittee takes up such legislation, we will be happy to share our thoughts with you on its specifics. In the meantime, however, the U.S. Conference of Mayors and the National League of Cities believe that this landmark survey leads to some preliminary recommendations some of which Mayor Bradley already has mentioned which would apply to any legislative initiative.

First, any federal effort to provide assistance in meeting infrastructure needs should provide funds directly to local governments. This survey shows that local governments can and do plan rationally for their capital expenditures. They know what their needs are and where their priorities lie. There is a clear and justifiable need for direct federal-city relationships in this area. Any future legislation should embrace this principle.

Second, the survey shows that these local needs vary widely. They differ among cities in different regions, of different sizes, and of different types. For this reason, any federal effort in this area should be designed to provide considerable local flexibility in the programming and use of funds, within clear national objectives. The approach taken by this Subcommittee in fashioning the National Development Investment Act of 1983 (H.R.10) is a good example of this principle at work. We appreciate this Subcommittee's sensitivity to this important principle.

Third, the survey shows that individual high priority projects chosen by the respondents can, in most cases, be undertaken with relatively modest amounts of funding. Thus, federal assistance could make a difference locally if it helped provide such amounts, and provided them consistently and predictably over time.



STATEMENT OF

PAMELA P. PLUMB

COUNCILOR, PORTLAND, MAINE

ON BEHALF OF

THE NATIONAL LEAGUE OF CITIES

AND

THE U.S. CONFERENCE OF MAYORS

ON THE

"JOINT SURVEY ON CAPITAL BUDGETING AND INFRASTRUCTURE"

BEFORE THE

COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS

U.S. SENATE

JULY 15, 1983

GOOD MORNING, MR. CHAIRMAN AND DISTINGUISHED MEMBERS OF THE COMMITTEE. I AM PAMELA PLUMB, COUNCILOR OF THE CITY OF PORTLAND, MAINE. I APPRECIATE THE OPPORTUNITY TO APPEAR BEFORE YOU TODAY AS A REPRESENTATIVE OF BOTH THE NATIONAL LEAGUE OF CITIES -- WHERE I SERVE AS VICE CHAIR OF THE COMMUNITY AND ECONOMIC DEVELOPMENT COMMITTEE AND A MEMBER OF THE INFRASTRUCTURE TASK FORCE -- AND THE U.S. CONFERENCE OF MAYORS -- WHERE I WAS A MEMBER OF THE TRANSPORTATION COMMITTEE WHEN I WAS MAYOR OF MY CITY IN 1980-81.

I AM HERE TODAY TO SHARE WITH YOU THE RESULTS OF THE JOINT SURVEY ON CAPITAL BUDGETING AND INFRASTRUCTURE, CONDUCTED BY THE LEAGUE OF CITIES AND CONFERENCE OF MAYORS FROM DECEMBER 1982 TO APRIL 1983. COPIES OF THE REPORT ON THE SURVEY WERE CIRCULATED TO YOU EARLIER FOR YOUR REVIEW.

MY TESTIMONY TODAY WILL COVER, FIRST, A BRIEF INTRODUCTION TO THE SURVEY; SECOND, A DESCRIPTION OF WHAT WE LEARNED ABOUT CITY GOVERNMENTS' CAPITAL BUDGETING PRACTICES; THIRD, AN ANALYSIS OF THE PRIORITIES THAT THE SURVEY RESPONDENTS SELECTED FROM AMONG THE TYPES OF INFRASTRUCTURE FACILITIES THAT NEED MAJOR WORK IN THEIR CITIES; FOURTH, A SUMMARY OF THE SURVEY'S FINDINGS REGARDING THE PHYSICAL CONDITION OF NINETEEN DIFFERENT TYPES OF PUBLIC FACILITIES AS WELL AS THE RESPONDING CITIES' ABILITY TO FINANCE NECESSARY IMPROVEMENTS IN THESE FACILITIES; FIFTH, AN ANALYSIS OF THE COST RANGES WHICH RESPONDENTS TOLD US WOULD COVER THE EXPENSE OF UNDERTAKING THE PRIORITY NEEDS OF THEIR CITIES; AND FINALLY, SOME POLICY RECOMMENDATIONS FOR YOUR REVIEW. WE

BELIEVE THESE RECOMMENDATIONS CAN BE DRAWN FROM THE SURVEY AND COULD BE HELPFUL AS THE COMMITTEE CONSIDERS LEGISLATIVE INITIATIVES IN THE INFRASTRUCTURE AREA.

ABOUT THE SURVEY

OF THE NATION'S VAST AND COMPLICATED INFRASTRUCTURE NETWORK, THIS STUDY REPORTS ONLY ON CERTAIN CAPITAL FACILITIES WHICH ARE THE RESPONSIBILITY OF MUNICIPAL GOVERNMENTS. IT ALSO REPORTS ON HOW CITIES CARRY OUT THAT RESPONSIBILITY. IT IS ONE OF THE MOST COMPREHENSIVE STUDIES OF LOCAL GOVERNMENT CAPITAL INVESTMENT PRACTICES AND PRIORITIES EVER UNDERTAKEN.

APPROXIMATELY 1,400 CITY GOVERNMENTS WERE SURVEYED DURING DECEMBER 1982 - FEBRUARY 1983. A TOTAL OF 809 RESPONSES WERE RECEIVED BY MARCH 1 AND WERE ANALYZED FOR THIS REPORT. RESPONSES WERE RECEIVED FROM CITIES IN EVERY REGION AND EVERY POPULATION CATEGORY.

THIS REPORT IS DELIBERATELY TITLED AN "INITIAL ASSESSMENT." SEVERAL DOZEN COMMUNITIES RETURNED SURVEY QUESTIONNAIRES AFTER DATA RUNS HAD BEGUN. THESE ADDITIONAL RESPONSES CAN BE INCLUDED IN LATER ANALYSES. MOREOVER, OUR ANALYSES SUGGEST STILL FURTHER RESEARCH THAT CAN BE DONE WITH THIS DATA.

THE INFORMATION GATHERED BY THIS SURVEY IS SIGNIFICANT -- AND, INDEED, WE BELIEVE UNPRECEDENTED -- AND DESERVES CONSIDERABLE FURTHER RESEARCH. WE HAVE NOT HAD TIME, FOR EXAMPLE, TO CROSS-TABULATE THE ANSWERS TO THE SURVEY QUESTIONNAIRES BY SOME MEASURE OF CITY DISTRESS. ELIGIBILITY FOR THE UDAG PROGRAM COULD SERVE AS SUCH A MEASURE.

I WANT ALSO TO NOTE EXPLICITLY THAT RESEARCH OF THIS SORT SHOULD BE DONE ON CAPITAL FACILITIES THAT ARE THE RESPONSIBILITY OF FEDERAL AND STATE GOVERNMENTS, AS WELL AS LOCAL GOVERNMENTS OTHER THAN MUNICIPALITIES.

A SWEEPING PICTURE OF LOCAL INFRASTRUCTURE NEEDS AND CAPITAL BUDGETING PRACTICES EMERGES FROM THE SURVEY. THE SURVEY PRESENTS SEVERAL MAJOR FINDINGS WHICH MUST AFFECT ANY CONSIDERATION OF THE NEXT DECADE'S APPROACH TO PUBLIC CAPITAL INVESTMENT. I NOW WANT TO SHARE THOSE FINDINGS WITH YOU.

#### CAPITAL BUDGETING

WE FOUND THAT CITIES MAKE THEIR DECISIONS ABOUT CAPITAL INVESTMENT NEEDS THROUGH AN ORDERLY PROCESS. OVER 90 PERCENT OF THE 809 RESPONDENTS REPORTED THAT THEY EITHER HAVE A CAPITAL BUDGETING PROCESS OR A SUBSTITUTE WHICH ACCOMPLISHES THE SAME PURPOSE.

NEARLY ALL THESE CAPITAL BUDGETS ARE APPROVED BY CITY COUNCILS, AND 88 PERCENT OF THE RESPONDENTS SAID THESE BUDGETS COVER ALL CITY DEPARTMENTS. THE SURVEY REVEALS WIDESPREAD USE OF A VARIETY OF MECHANISMS TO SOLICIT PUBLIC COMMENT ON CAPITAL BUDGETS. ALMOST 84 PERCENT OF THE RESPONDING CITIES USE PUBLIC HEARINGS AND SIGNIFICANT PERCENTAGES USE OTHER TECHNIQUES AS WELL, SUCH AS SPECIAL OR GENERAL PURPOSE ADVISORY BOARDS.

ECONOMIC DEVELOPMENT PLAYS A SIGNIFICANT ROLE IN LOCAL CAPITAL BUDGETING AND PLANNING.

NATIONAL ECONOMIC RECOVERY AND DEVELOPMENT REQUIRE BASICALLY SOUND LOCAL INFRASTRUCTURE. THIS SURVEY SHOWS THAT RESPONDENTS HAVE GRASPED THIS FACT AND THAT IT PLAYS A ROLE IN SHAPING THE LOCAL BUDGET PLANNING PROCESS, AS WELL AS IN THE SELECTION OF PRIORITIES.

WHEN ASKED TO CITE THE REASON FOR CHOOSING PRIORITIES FOR PUBLIC FACILITIES WORK, THE RESPONDENTS CITED PROTECTION OF PUBLIC HEALTH AND SAFETY AND PROVISION OF ESSENTIAL SERVICES MOST FREQUENTLY. THIS REFLECTS THE FACT THAT LOCAL GOVERNMENTS ARE STILL FIRST AND FOREMOST THE PROVIDERS OF SERVICES AND PROTECTORS OF PUBLIC HEALTH AND SAFETY. BUT THE THIRD MOST FREQUENTLY CITED REASON FOR CHOOSING A PRIORITY WAS ECONOMIC DEVELOPMENT, BY A WIDE MARGIN.

MOREOVER, 492 RESPONDENTS (OR 60.8 PERCENT OF THE TOTAL) REPORTED THAT ECONOMIC DEVELOPMENT IS TAKEN INTO CONSIDERATION WHEN PLANNING A CAPITAL BUDGET.

WE BELIEVE THESE FINDINGS POINT TO A LOCAL BASE OF ACTIVITIES AND ATTITUDES REGARDING THE RELATIONSHIP BETWEEN PUBLIC CAPITAL INVESTMENT AND ECONOMIC DEVELOPMENT THAT CAN BE BUILT UPON IN FEDERAL POLICY AND PROGRAMS. FEDERAL ASSISTANCE FOR PUBLIC FACILITIES THAT ARE RELATED TO ECONOMIC DEVELOPMENT WOULD NOT ONLY HELP LOCALITIES ADDRESS SOME OF THEIR HIGHEST PRIORITY NEEDS, BUT WOULD ALSO CONTRIBUTE TO NATIONAL ECONOMIC GROWTH.

RESPONDENTS WERE ASKED WHETHER OR NOT EACH OF FOUR CATEGORIES OF CAPITAL IMPROVEMENT WORK IS INCLUDED IN THEIR CAPITAL BUDGETS. THE FREQUENCIES WITH WHICH RESPONDENTS SAID EACH CATEGORY IS INCLUDED IN THEIR BUDGETS IS SUMMARIZED IN THIS TABLE.

PREVENTIVE MAINTENANCE	43.4 PERCENT SAID THIS IS INCLUDED IN THEIR BUDGET
MAJOR MAINTENANCE	76.8 PERCENT
REHABILITATION/RECONSTRUCTION	92.0 PERCENT
EXPANSION/NEW CONSTRUCTION	94.7 PERCENT

RESPONDENTS INDICATED THAT THEY RELY ON DIFFERENT FINANCING MECHANISMS FOR EACH OF THESE DIFFERENT CATEGORIES OF INFRASTRUCTURE WORK. TAKEN TOGETHER, THESE RESPONSES SHOW THAT RESPONDING CITIES MAKE AN IMPORTANT DISTINCTION IN THEIR CAPITAL BUDGETING: LOCAL TAXES ARE USED PRIMARILY TO FINANCE MAINTENANCE, AND DEBT IS PRIMARILY USED TO FINANCE MAJOR REHABILITATION, EXPANSION AND NEW CONSTRUCTION.

LARGE MAJORITIES OF THE RESPONDING CITIES INDICATED THAT THEY VIEW THE LOCAL CAPITAL BUDGETING PROCESS AS EFFECTIVE WITH REGARD TO A BROAD ARRAY OF CRITERIA. AT THE SAME TIME THE RESPONDENTS INDICATED THAT THEIR PROCESSES COULD BE IMPROVED, AND SUCH AREAS AS NEEDS ASSESSMENT, ANALYSIS OF FINANCING OPTIONS, AND DEVELOPMENT OF PRIORITIES ALL RECEIVE HIGH RESPONSES AS AREAS WORTH IMPROVING.

RESPONDENTS FELT THAT ALL LEVELS OF GOVERNMENT HAVE A ROLE IN FINANCING IMPROVEMENT TO LOCAL CAPITAL BUDGETING PROCESSES, WITH 85 PERCENT CITING A LOCAL RESPONSIBILITY, 65 PERCENT A STATE RESPONSIBILITY, AND 52 PERCENT A FEDERAL RESPONSIBILITY.

THE NATIONAL LEAGUE OF CITIES AND U.S. CONFERENCE OF MAYORS URGE THE COMMITTEE TO CONSIDER SERIOUSLY THIS FINDING OF THE SURVEY. WE STRONGLY RECOMMEND THAT FUNDING ASSISTANCE FOR THE IMPROVEMENT OF LOCAL CAPITAL BUDGETING PROCESSES BE INCLUDED IN ANY FEDERAL INFRASTRUCTURE PROGRAM.

INFRASTRUCTURE PRIORITIES

RESPONDENTS WERE ASKED TO CHOOSE, FROM AMONG NINETEEN TYPES OF FACILITIES, THE THREE THAT ARE THE HIGHEST PRIORITIES FOR CAPITAL EXPENDITURES IN THEIR COMMUNITIES. PRIORITIES VARY AMONG DIFFERENT TYPES OF CITIES, BUT WHEN THE THREE TOP PRIORITIES FOR ALL RESPONDING CITIES ARE COMBINED (WITHOUT WEIGHTING FOR FIRST, SECOND, OR THIRD PLACES), THE CATEGORY OF "STREETS AND ROADS" IS DEFINITELY THE PRIORITY MOST OFTEN SELECTED. THE SIX FACILITY TYPES MOST FREQUENTLY SELECTED AS PRIORITIES BY RESPONDENTS ARE AS FOLLOWS. (THE "COUNT" IS THE NUMBER OF TIMES THAT FACILITY TYPE WAS SELECTED AS A FIRST, SECOND, OR THIRD PRIORITY.)

<u>FACILITY TYPE</u>	<u>PRIORITY COUNT</u>
STREETS AND ROADS	518
STORMWATER COLLECTION	309
WASTEWATER TREATMENT	228
SEWAGE COLLECTION	216
PUBLIC BUILDINGS	197
WATER DISTRIBUTION	152

THE OTHER FACILITY TYPES HAVE "COUNTS" OF 106 OR LESS.

IDENTIFICATION OF THESE PRIORITIES IS A MAJOR FINDING OF THE SURVEY, BUT THESE ARE DIFFERENCES AMONG TYPES OF CITIES AS REGARDS THEIR PRIORITIES. THESE RESULTS MUST ALSO BE VIEWED IN THE CONTEXT OF OTHER MAJOR FINDINGS -- WHICH I WILL REPORT ON LATER IN THIS STATEMENT -- THAT EMPHASIZE THE VARIATION AMONG CITIES IN THE ABILITY TO FINANCE AND THE CONDITION OF PUBLIC CAPITAL FACILITIES. THIS STRONGLY SUPPORTS THE VIEW THAT ANY NATIONAL EFFORT IN THIS AREA SHOULD RELY PRIMARILY ON LOCAL PLANNING AND LOCAL PRIORITIES, WITHIN BROAD NATIONAL PURPOSES.

THE SURVEY ASKED HOW LONG IT WOULD TAKE TO BEGIN WORK ON THE PRIORITY PROJECTS IF SUFFICIENT FUNDS WERE AVAILABLE TO FINANCE THE WORK. WHEN ALL THE FIRST, SECOND, AND THIRD PRIORITIES ARE ACCUMULATED (WITHOUT WEIGHTING), IT IS CLEAR THAT THE VAST MAJORITY OF THE RESPONDENTS PROJECT START-UP TIMES FOR THESE PRIORITIES OF UNDER SIX MONTHS.

<u>START TIME</u>	<u>COUNT</u>
UNDER 3 MONTHS	799
4 TO 6 MONTHS	833
7 TO 12 MONTHS	549
OVER 1 YEAR	152

A MAJOR QUESTION WHICH ALWAYS ARISES WHEN PUBLIC WORKS SPENDING IS DISCUSSED IS WHO WOULD DO THE ACTUAL WORK: PUBLIC EMPLOYEES OR PRIVATE SECTOR WORKERS UNDER CONTRACTS?



THE SURVEY ASKED CITIES TO INDICATE HOW THEY WOULD UNDERTAKE THEIR PRIORITY PROJECTS -- THROUGH CITY EMPLOYEES, THROUGH CONTRACTING OUT THE WORK, OR THROUGH SOME COMBINATION OF THE TWO. WHEN RESPONDENTS' ANSWERS ARE TOTALED (WITHOUT WEIGHTING), THE UNEQUIVOCAL ANSWER IS THAT CITIES WOULD CONTRACT OUT THE WORK IN THE VAST MAJORITY OF THE CASES.

THIS IS A MAJOR FINDING. IT SHOWS CONCLUSIVELY THAT INVESTMENT IN LOCAL INFRASTRUCTURE WORK TRANSLATES DIRECTLY INTO JOBS IN THE PRIVATE SECTOR. THIS FINDING SHOULD END ANY CHARGES THAT URBAN INFRASTRUCTURE FUNDING WOULD MEAN MASSIVE PATRONAGE AND PUBLIC HIRING OR DISTORTIONS IN THE BALANCE BETWEEN PUBLIC OR PRIVATE EMPLOYMENT.

#### CONDITION OF PUBLIC FACILITIES

THE SURVEY ASKED RESPONDENTS TO CHARACTERIZE THE PHYSICAL CONDITION OF 19 TYPES OF PUBLIC FACILITIES. RESPONDENTS COULD CHOOSE ONE OF SIX CHARACTERIZATIONS -- RANGING FROM "IN GOOD CONDITION" THROUGH VARIOUS LEVELS OF NEEDED WORK TO "DOES NOT APPLY TO THIS CITY" -- FOR EACH OF THE 19 FACILITY TYPES. IN ADDITION, ALL OF THESE RESULTS COULD BE CROSS-TABULATED BY REGION, POPULATION SIZE, AND CITY TYPE, GENERATING A VERY LARGE DATA BASE.

THE INFORMATION GENERATED BY THIS QUESTION IS EXTREMELY RICH. IT IS IMPOSSIBLE TO CHARACTERIZE THE FINDINGS ADEQUATELY IN A SHORT SUMMARY. HOWEVER, SOME MAJOR POINTS SHOULD BE NOTED.

FIRST, IN SIX OF THESE FACILITIES A MAJORITY OF THE RESPONDENTS SAID THAT SIX OF THESE FACILITIES WERE "IN GOOD CONDITION". THESE FACILITY TYPES WERE:

● COMMUNITY SOCIAL SERVICE FACILITIES	58.8 PERCENT SAID "IN GOOD CONDITION"
● PARKS AND RECREATIONAL FACILITIES, OPEN SPACE	55.7 PERCENT
● WATER STORAGE	54.8 PERCENT
● PUBLIC BUILDINGS	54.4 PERCENT
● WATER TREATMENT	50.6 PERCENT
● TRAFFIC CONTROL EQUIPMENT	50.3 PERCENT

HOWEVER, FOR 10 OF THE FACILITY TYPES AT LEAST 30 PERCENT OF THE RESPONDENTS SAID THEY REQUIRED MAJOR WORK. THERE IS SOME OVERLAP BETWEEN THE FIRST AND SECOND GROUP, INDICATING THE VARIETIES OF LOCAL SITUATIONS:

● STREETS AND ROADS	70.4 PERCENT SAID MAJOR WORK NEEDED
● SIDEWALKS AND CURBS	69.9 PERCENT
● STORM WATER COLLECTION AND DRAINAGE	67.4 PERCENT
● SEWAGE COLLECTION	49.8 PERCENT
● BRIDGES, OVERPASSES AND VIADUCTS	44.9 PERCENT
● PUBLIC BUILDINGS	42.9 PERCENT
● TRAFFIC CONTROL EQUIPMENT	39.0 PERCENT
● PARKS, RECREATION FACILITIES, OPEN SPACE	35.0 PERCENT
● WASTEWATER TREATMENT	34.7 PERCENT
● WATER DISTRIBUTION	31.3 PERCENT

FINALLY, IN SIX OF THE FACILITY TYPES, AT LEAST 25 PERCENT OF THE RESPONDENTS REPORTED THAT THE FACILITY TYPES "DID NOT APPLY TO THIS CITY:"

● DOCKS, WHARVES, AND PORTS	77.9 PERCENT SAID IT DIDN'T APPLY
● PUBLIC TRANSPORTATION FACILITIES	64.3 PERCENT
● PUBLIC TRANSPORTATION ROLLING STOCK	63 PERCENT
● PUBLIC SCHOOL BUILDINGS	56.9 PERCENT
● SOLID WASTE DISPOSAL FACILITIES AND RESOURCE RECOVERY FACILITIES	40.8 PERCENT
● WATER TREATMENT	27 PERCENT

THIS LAST FINDING BEARS FURTHER ANALYSIS. THE SURVEY DATA COLLECTED DO NOT SUPPORT ANY FIRM CONCLUSIONS AS TO WHY THESE CATEGORIES ARE SO OFTEN CHARACTERIZED AS "NOT APPLICABLE." IT SEEMS REASONABLE, HOWEVER, TO SPECULATE THAT IN MANY CASES, CONTROL OVER THESE FACILITIES RESTS WITH INDEPENDENT BOARDS OR AUTHORITIES, SUCH AS SCHOOL BOARDS. THUS, CAPITAL BUDGET NEEDS WOULD NOT NECESSARILY SHOW UP IN CITY BUDGETS.

SECOND, SOME OF THESE FACILITIES MAY BE OPERATED BY THE PRIVATE SECTOR.

FINALLY, IT IS POSSIBLE THAT MANY OF THE CITIES SIMPLY DID NOT HAVE THESE FACILITIES IN THEIR JURISDICTIONS. THIS IS CERTAINLY LIKELY IN THE CASE OF PUBLIC TRANSPORTATION OR DOCKS AND WHARVES.

THERE ARE SOME DISCERNIBLE DIFFERENCES IN THE RESPONSES FROM DIFFERENT REGIONS, DIFFERENT SIZED CITIES, AND DIFFERENT CITY TYPES. THESE ARE DISCUSSED IN GREATER DETAIL THROUGHOUT THE REPORT. WE HAVE PROVIDED AN ESPECIALLY DETAILED ANALYSIS OF THESE DIFFERENCES FOR THE SIX HIGH PRIORITY FACILITY TYPES THAT I MENTIONED EARLIER. HOWEVER, WE MUST STRESS: NO REGION, NO POPULATION CLASS, AND NO CITY TYPE EMERGES A CLEAR WINNER OR A CLEAR LOSER IN THIS MATTER. CITIES FROM EVERY CLASSIFICATION REPORT DIFFICULTIES WITH SOME FACILITIES. LOCAL INFRASTRUCTURE NEEDS AND PRIORITIES VARY WIDELY AMONG CITIES.

ABILITY TO FINANCE CAPITAL PROJECTS

THE SURVEY ALSO ASKED RESPONDENTS TO CHARACTERIZE THEIR ABILITY TO FINANCE NECESSARY WORK ON EACH OF THE 19 TYPES OF PUBLIC FACILITIES. RESPONDENTS COULD CHOOSE ONE OF SIX POSSIBLE RESPONSES -- RANGING FROM "POSSIBLE TO FINANCE OUT OF OWN RESOURCES AS A MATTER OF COURSE" THROUGH VARYING DEGREES OF NEED FOR ASSISTANCE FROM STATE OR FEDERAL GOVERNMENTS TO "NOT IN THE MUNICIPAL BUDGET" -- FOR EACH OF THE 19 FACILITY TYPES.

FIRST, IN FIVE OF THESE FACILITY TYPES, A MAJORITY OF THE RESPONDENTS SAID THEY COULD FINANCE NECESSARY WORK OUT OF THEIR OWN RESOURCES EITHER AS A MATTER OF COURSE OR WITH DIFFICULTY--

● PUBLIC BUILDINGS	67.8 PERCENT
● SIDEWALKS AND CURBS	63.3 PERCENT
● WATER DISTRIBUTION	57.8 PERCENT
● WATER STORAGE	53.4 PERCENT
● TRAFFIC CONTROL EQUIPMENT	50.3 PERCENT

HOWEVER, FOR EIGHT OF THE FACILITY TYPES, AT LEAST 30 PERCENT OF THE RESPONDENTS SAID THAT THEY REQUIRED SOME DEGREE OF STATE OR FEDERAL AID TO FINANCE THE NECESSARY WORK. THERE IS SOME OVERLAP BETWEEN THE FIRST AND SECOND GROUPS, THUS INDICATING THE DIFFERENCES IN LOCAL SITUATIONS. THIS SECOND GROUP INCLUDES:

● STREETS AND ROADS	62.0 PERCENT
● WASTEWATER TREATMENT	54.5 PERCENT
● BRIDGES, OVERPASSES, VIADUCTS	54.4 PERCENT
● PARKS, RECREATIONAL FACILITIES	
OPEN SPACE	49.2 PERCENT
● STORMWATER COLLECTION AND DRAINAGE	48.3 PERCENT
● SEWAGE COLLECTION	41.1 PERCENT
● TRAFFIC CONTROL EQUIPMENT	38.6 PERCENT
● SIDEWALKS AND CURBS	31.4 PERCENT

FINALLY, IN SIX OF THE FACILITY TYPES, AT LEAST 25 PERCENT OF THE RESPONDENTS REPORTED THAT THE FACILITY TYPE IS "NOT IN THE MUNICIPAL BUDGET." THESE FACILITY TYPES ARE:

● PUBLIC HOSPITALS AND CLINICS	60.8 PERCENT
● DOCKS, WHARVES AND PORTS	57.7 PERCENT
● PUBLIC SCHOOL BUILDINGS	53.8 PERCENT
● PUBLIC TRANSPORTATION FACILITIES	50.1 PERCENT
● PUBLIC TRANSPORTATION ROLLING STOCK	48.9 PERCENT
● SOLID WASTE DISPOSAL FACILITIES	
AND RESOURCES RECOVERY FACILITIES	29.2 PERCENT

THE OVERLAP AMONG CATEGORIES AND THE VARIETY OF RESPONSES AMONG DIFFERENT TYPES OF RESPONDING CITIES UNDERLINES ANOTHER MAJOR, OVERRIDING FINDING OF THIS SURVEY: THE ABILITY TO FINANCE NECESSARY INFRASTRUCTURE WORK VARIES WIDELY AMONG CITIES.

AS BEFORE, SOME REGIONS REPORT THEY CAN FINANCE SOME FACILITIES MORE EASILY THAN OTHERS. SMALL CITIES REPORT MORE OFTEN THEY NEED ASSISTANCE WITH SOME TYPES OF WORK; LARGE CITIES DO SO FOR OTHER TYPES. THE SAME HOLDS TRUE FOR THE TYPE OF CITY RESPONDING. THESE DIFFERENCES ARE EXPLAINED IN GREATER DETAIL IN THE REPORT. THE STRIKING FINDING IS THAT CITIES FROM EVERY REGION, FORM EVERY SIZE CLASSIFICATION, AND FROM EVERY CITY TYPE REPORT THAT THEY NEED ASSISTANCE FOR SOME INFRASTRUCTURE NEEDS, WHILE THEY CAN FINANCE OTHERS LOCALLY.

COST RANGES FOR THE PRIORITIES

RESPONDENTS WERE ASKED TO CHOOSE THE MOST APPROPRIATE COST RANGE FOR THE CAPITAL COSTS OF THEIR PRIORITY PROJECTS. WHEN THE RESPONSES TO ALL THE RANGES CITED FOR ALL THE PRIORITIES ARE ADDED TOGETHER, IT BECOMES CLEAR THAT THE "\$1.0 MILLION TO \$5.0 MILLION" RANGE IS BY FAR THE MOST FREQUENT CHOICE:

<u>COST RANGE</u>	<u>COUNT</u>
UNDER \$0.5 MILLION	291
\$0.5 MILLION TO \$1.0 MILLION	380
\$1.0 MILLION TO \$5 MILLION	728
\$5.0 MILLION TO \$10.0 MILLION	378
\$10 MILLION TO \$20 MILLION	268
\$20 MILLION TO \$50 MILLION	180
\$50 MILLION AND OVER	150

THIS INFORMATION DOES NOT PERMIT ANY ANALYSIS OF A TOTAL "BOTTOM LINE" FIGURE FOR URBAN INFRASTRUCTURE NEEDS. THE REPORT DOES NOT PROVIDE ONE, AND OUR STATISTICAL ADVISORS TELL US THAT NO ONE SHOULD TRY TO DO SO USING THESE FIGURES.

THE RESPONSES TO THIS QUESTION DO SHOW THAT AMONG THE RESPONDENTS TO THIS SURVEY, THE MOST PREVALENT COST RANGE FOR SELF-SELECTED PRIORITY INFRASTRUCTURE PROJECTS IS BETWEEN \$1 MILLION AND \$5 MILLION.

THIS IS AN IMPORTANT FINDING IN ITS OWN RIGHT. TOTAL PUBLIC FACILITIES NEEDS ACROSS THE COUNTRY UNDOUBTEDLY ARE QUITE FORMIDABLE. AT THE LOCAL LEVEL, HOWEVER, THE SPECIFIC NEEDS FOR INDIVIDUAL HIGH PRIORITY PROJECTS CAN BE LESS DAUNTING IN THEIR MAGNITUDE.

ALSO, THE WIDE DISTRIBUTION OF RESPONSES AMONG ALL THE POSSIBLE COST RANGES LEADS TO ANOTHER MAJOR FINDING OF THE SURVEY: THE RANGE OF COSTS AMONG CITIES FOR UNDERTAKING NECESSARY WORK ON PRIORITY INFRASTRUCTURE NEEDS VARIES WIDELY AMONG THE RESPONDING CITIES.

THERE IS NO QUESTION THAT A COMPLETE INVENTORY OF ALL NECESSARY WORK ON LOCAL CAPITAL FACILITIES WOULD GIVE RISE TO A LARGE TOTAL PRICE TAG FOR REFURBISHING AMERICA'S URBAN INFRASTRUCTURE. WE CANNOT GIVE YOU SUCH A TOTAL. THE SURVEY DID NOT ATTEMPT TO GENERATE ONE.

THE SURVEY DOES DEMONSTRATE THAT THERE IS A CLEAR NEED FOR ASSISTANCE AT THE STATE AND FEDERAL LEVEL IF WE EXPECT THESE NEEDS TO BE MET.

THERE IS NO INEXPENSIVE, QUICK OR EASY SOLUTION TO THE PROBLEM OF URBAN INFRASTRUCTURE. IT HAS TAKEN YEARS TO DEVELOP, AND WILL ONLY BE CONQUERED BY AN EQUALLY LONG-TERM COMMITMENT BY ALL LEVELS OF GOVERNMENT.

THE SURVEY DOES SHOW, HOWEVER, THAT WE NEED NOT BE PARALYZED BY THE OVERALL MAGNITUDE OF THIS PROBLEM.

SIGNIFICANT PROGRESS COULD AND WOULD BE MADE IN MEETING PRIORITY NEEDS IF RELATIVELY MODEST AMOUNTS OF ASSISTANCE WERE AVAILABLE TO THE LOCAL LEVEL. MULTIPLIED ACROSS MANY JURISDICTIONS, THIS SURELY WILL ADD UP. HOWEVER, A START CAN BE MADE. A START SHOULD BE MADE.

#### LEGISLATIVE RECOMMENDATIONS

THE U.S. CONFERENCE OF MAYORS AND THE NATIONAL LEAGUE OF CITIES BELIEVE THAT THIS LANDMARK SURVEY LEADS TO SOME PRELIMINARY RECOMMENDATIONS WHICH WOULD APPLY TO ANY LEGISLATIVE INITIATIVE.

FIRST, ANY FEDERAL EFFORT TO PROVIDE ASSISTANCE IN MEETING INFRASTRUCTURE NEEDS SHOULD PROVIDE FUNDS DIRECTLY TO LOCAL GOVERNMENTS. THIS SURVEY SHOWS THAT LOCAL GOVERNMENTS CAN AND DO PLAN RATIONALLY FOR THEIR CAPITAL EXPENDITURES. THEY KNOW WHAT THEIR NEEDS ARE AND WHERE THEIR PRIORITIES LIE. THERE IS A CLEAR AND JUSTIFIABLE NEED FOR DIRECT FEDERAL-CITY RELATIONSHIPS IN THIS AREA. ANY FUTURE LEGISLATION SHOULD EMBRACE THIS PRINCIPLE.



SECOND, THE SURVEY SHOWS THAT THESE LOCAL NEEDS VARY WIDELY. THEY DIFFER AMONG CITIES IN DIFFERENT REGIONS, OF DIFFERENT SIZES, AND OF DIFFERENT TYPES. FOR THIS REASON, ANY FEDERAL EFFORT IN THIS AREA SHOULD BE DESIGNED TO PROVIDE CONSIDERABLE LOCAL FLEXIBILITY IN THE PROGRAMMING AND USE OF FUNDS, WITHIN CLEAR NATIONAL OBJECTIVES.

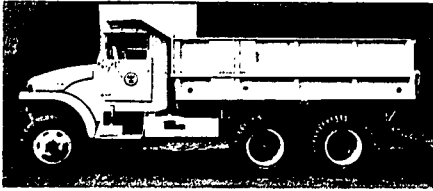
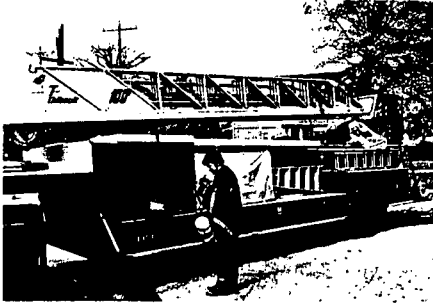
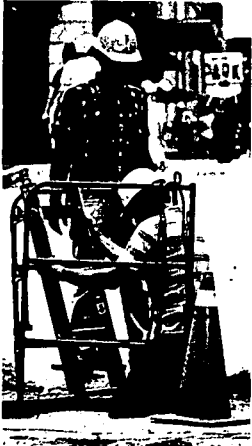
THIRD, THE SURVEY SHOWS THAT INDIVIDUAL HIGH PRIORITY PROJECTS CHOSEN BY THE RESPONDENTS CAN, IN MOST CASES, BE UNDERTAKEN WITH RELATIVELY MODEST AMOUNTS OF FUNDING. THUS, FEDERAL ASSISTANCE COULD MAKE A DIFFERENCE LOCALLY IF IT HELPED PROVIDE SUCH AMOUNTS, AND PROVIDED THEM CONSISTENTLY AND PREDICTABLY OVER TIME.

FOURTH, THE SURVEY SHOWS THAT RESPONDENTS FROM EVERY SIZE AND TYPES OF CITY GOVERNMENT IN EVERY REGION CAN IDENTIFY LEGITIMATE PUBLIC FACILITY NEEDS. FEDERAL LEGISLATION SHOULD BE DRAFTED TO ENSURE THAT NO PARTICULAR GROUP OF CITIES IS EXCLUDED FROM PARTICIPATING IN A NATIONAL EFFORT TO INCREASE INVESTMENT IN THESE FACILITIES.

FIFTH, THE SURVEY SHOWS THAT ECONOMIC DEVELOPMENT IS A SIGNIFICANT FACTOR IN LOCAL CAPITAL BUDGET PLANNING. HOWEVER, IT CLEARLY IS NOT THE MOST SIGNIFICANT FACTOR. TO THE EXTENT THAT THE CONGRESS AND THIS COMMITTEE WISH TO DIRECT NATIONAL RESOURCES TOWARDS REFURBISHING INFRASTRUCTURE TO INCREASE ECONOMIC PRODUCTIVITY AND GROWTH, HOWEVER, WE BELIEVE NATIONAL LEGISLATION COULD BE FASHIONED TO ENCOURAGE THIS. THE SURVEY SHOWS THAT THIS WOULD BE CONSISTENT WITH, AND NOT AT ODDS WITH, ALREADY EXISTING TRENDS.

SIXTH, WE STRONGLY RECOMMEND THAT FUNDING FOR THE IMPROVEMENT OF CAPITAL BUDGETING AND PLANNING PROCESSES AT THE LOCAL LEVEL BE INCLUDED IN ANY FEDERAL INFRASTRUCTURE AID PROGRAM. A MAJORITY OF THE CITIES SURVEYED SAID THEY WOULD SUPPORT SUCH ASSISTANCE, AND THAT SUCH AID WOULD BE HELPFUL IN IMPROVING LOCAL PROCESSES.

MR. CHAIRMAN, THANK YOU FOR THE OPPORTUNITY TO SHARE THIS IMPORTANT SURVEY WITH YOU. I WILL BE HAPPY TO ANSWER ANY QUESTIONS YOU MAY HAVE.



The City of Columbus  
Mayor Tom Mooney  
Department of Development  
Director Ralph W. Smithers

# 1983 COLUMBUS PHYSICAL IMPROVEMENTS NEEDS SURVEY

The City of Columbus  
Mayor Tom Moody



Department of Development  
140 Marconi Boulevard  
Columbus, Ohio 43215

Director Ralph W. Smithers

July 1983

Dear Citizens and City Officials:

As you are now aware, the City is preparing for submitting a 1984 bond package to the voters. In anticipation of this bond issue and as planning input to the City's future capital improvement planning process, the Department of Development has prepared, with considerable assistance from the various City service divisions and neighborhood organizations, the "Columbus Physical Improvements Needs Survey." The Survey is now being used by city planners and budget planners in evaluating neighborhood and physical improvement needs relative to a 1984 bond package. The Department of Development will also review community needs in the framework provided by the "Columbus Metropolitan Growth Potential" report.

This survey is further designed to provide City Council and citizens with improved information for evaluating the priority and delivery of City services. It should also provide a better understanding of the vast number of physical improvement projects that confront the City's relatively limited Capital Improvement Budget.

As the City generates the financial ability, the needs in this survey will be met through the annual Capital Improvements Program. However, as Columbus' population increases and its infrastructure continues to age, new needs will be added to the Survey and eventually find their way into an already overburdened Capital Program. As part of the programming and budgeting process, the citizens of Columbus, through their assistance in the preparation of this survey, have played, and will continue to play, a major role in determining the types and locations of future capital improvement projects.

Sincerely,

Handwritten signature of Ralph W. Smithers in dark ink.

RALPH W. SMITHERS, DIRECTOR  
DEPARTMENT OF DEVELOPMENT

Building Regulation  
222-7433

Code Enforcement  
222-7260

Community Development  
222-7336

Planning and  
Economic Development  
222-8172

RWS/KF/jmc

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CAPITAL IMPROVEMENTS PROGRAM AND NEEDS SURVEY

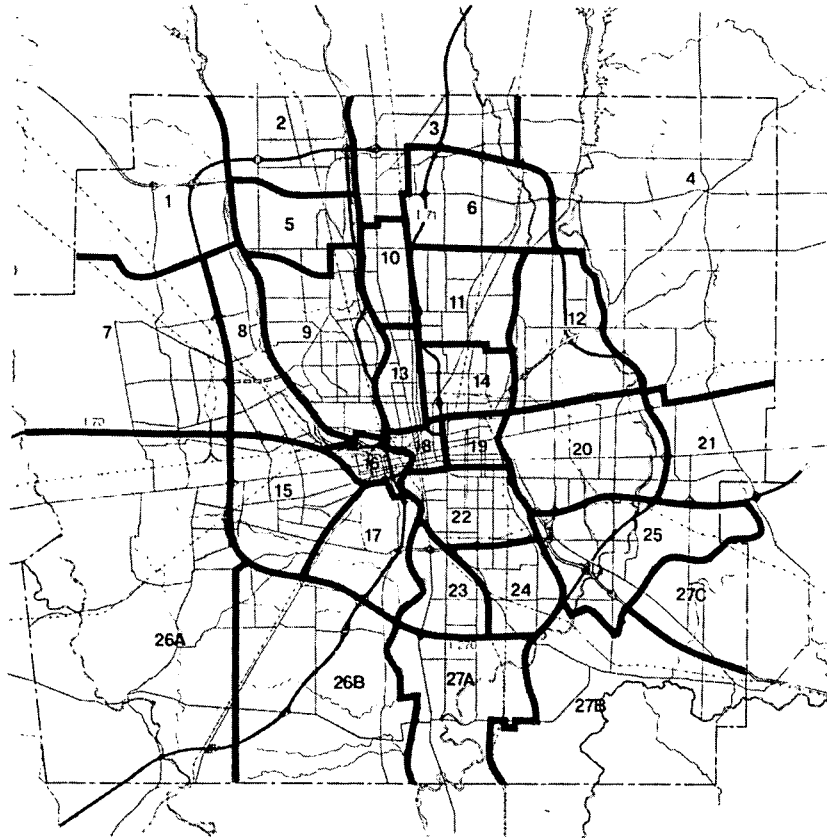
CITY OPERATING DIVISION CONTACT PERSONS

If you have any questions concerning projects or the Needs Survey itself, please do not hesitate to contact the appropriate City Operating Division. The individuals listed below coordinate the Capital Improvements Program for their Division. If they cannot answer your specific project question they will see that you are connected with someone who can:

Division of Sewerage and Drainage.....	Paul Koehler.....	222-6043
Division of Water.....	Bob Beer.....	222-6378
Division of Engineering and Construction.....	Jim Gabriel.....	222-7395
Division of Traffic Engineering and Parking.....	Dave Younger.....	222-7790
Division of Electricity.....	Don Bauman.....	222-7294
Division of Airports.....	Daniel Ginty.....	239-4000
Division of Fire.....	Cris Truesdell.....	222-8308
Division of Police.....	Lt. Morgan.....	222-4812
Department of Recreation and Parks.....	Jim Barney.....	222-7536
Division of Zoo.....	Jim Barney.....	222-7536
Division of Building Services.....	Tom Hoyle.....	222-7602

If you have any questions concerning the Needs Survey in general, please contact:

Division of Planning.....	Ken Ferrell.....	222-8172
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The City of Columbus  
 Mayor Tom Moody  
 Department of Development  
 Director Ralph W. Smithers

City of Columbus  
 Planning Area Boundaries

CPA	Description
1	Dick
2	East Columbus
3	Franklin Square Park
4	Northwest
5	Northwest
6	Northwest
7	Hill
8	West Hill
9	West Hill
10	West Hill
11	West Hill
12	West Hill
13	West Hill
14	West Hill
15	West Hill
16	West Hill
17	West Hill
18	West Hill
19	West Hill
20	West Hill
21	West Hill
22	West Hill
23	West Hill
24	West Hill
25	West Hill
26A	West Hill
26B	West Hill
27A	West Hill
27B	West Hill
27C	West Hill
28	West Hill



0 1 2 Miles

Community  
 Planning Areas



## SURVEY PROCESS

The 1983 Columbus Physical Improvements Needs Survey is an update of the last needs survey taken in 1982. Needs have been eliminated from the 1982 survey that have been taken care of through the City's Capital Improvement Program. However, many of the needs which were contained in the 1982 Survey and most of the projects which were approved by the voters in the 1981 Bond Issue still appear as needs in this document. This is mainly due to the criterion that projects will continue to be considered as needs until construction or installation is actually begun. Further, many new needs have been added to the survey that have been identified by both city agencies and the community. The survey is a comprehensive listing of physical capital improvement projects which are needed in specific community areas or on a city-wide basis. No attempt has been made to prioritize needs in this survey. However, every effort has been made to verify through the appropriate operating service division, that requested needs listed in this survey are valid. This survey will be an important tool in accessing neighborhood and city-wide needs relevant to voter bond packages and Capital Improvement Programs.

The Development Department has been organizing their planning efforts and information/data collection by the 27 community planning areas, now familiar to most citizens and officials, since 1976 (see Community Planning map on opposite page). The community Planning area boundaries were delineated to best reflect citizen perceptions of their local community relative to public service needs.

Therefore, community physical improvement needs have been inventoried and catalogued within the community planning areas they directly serve or benefit. If a physical improvement need was not located in any one specific Community Planning Area and/or benefited the entire City, it was catalogued under city-wide needs. Only those physical improvement needs which qualified as public capital improvement projects under the City's Capital Improvement Program were inventoried. Basically, this included projects which fit two basic determining criteria for public capital improvement projects:

1. Non-maintenance improvement or equipment which has a life expectancy of five or more years, and;
2. Costs \$5,000 or more to construct or purchase.

These criteria would typically exclude needs such as maintenance projects, personnel and/or operating expenses, expense for studies, code enforcement activities and police cruisers.

In May of 1983 the Planning Division requested City Operating Divisions to review the 1982 Survey in order to update needs for 1983. In addition to the agency input, a copy of relevant survey sections were sent to community organizations for their input. A total of 36 umbrella community organizations, representing the 27 Community Planning Areas were contacted to participate:

Capitol Square Commission  
Clintonville Area Commission  
Council of Southside Organizations  
Driving Park Area Commission  
Forest Park Civic Association  
Franklin Park Area Improvement Assoc.  
Franklinton Area Commission  
German Village Commission  
Greater Hilltop Area Commission  
Harrison West  
Hilltop Civic Council  
Hungarian Village Society  
Italian Village Commission  
Italian Village Society  
Linden Northeast Community Council  
Livingston Park Civic Association  
Milo-Grogan Area Council  
Near East Area Commission  
North Market Association  
Northland Community Council  
Northwest Civic Association  
Olde Sawmill Civic Association  
Olde Towne East  
Park Road Civic Association  
Reeb-Hosack Area Planning  
Riverside Green Civic Association  
Somerset Civic Association

South Linden Leadership Group  
South Side Business & Industrial Assoc.  
South Side United Neighbors  
Summerwood Civic Association  
The Glen Subdivision  
Town Franklin Neighborhood Association  
University Area Commission  
University District Organization  
Victorian Village Society

#### EXPLANATION OF MAPS AND FORMS

The maps and forms in the following survey have been designed to give the reader a brief description of both where the project is in the community and what physically is involved in its implementation. In the first column on each form each project has been assigned a number and symbol for ease of reference between maps and forms. The second column on the needs form entitled "Implementing City Agency" identifies the City agency which would normally provide a project's construction or purchase. The "Source of Need" columns indicate where the identification of need for a project originated. These sources are defined as follows:

1. **IMPLEMENTING AGENCY:** Neighborhood and city-wide physical needs as determined by the various city service divisions normally responsible for implementing the particular type of identified need.
2. **COMMUNITY:** Determined from previous community requests and as input to this survey. When a dot appears in the "Community" column it is an indication that the community organization either submitted the need as a request or that they are aware of it and in fact believe that it is needed. If a dot does not appear in the "Community" column this does not necessarily indicate that they do not support the listed need but rather that they are either not aware of it or not familiar enough with it to positively verify it as a source.

3. **PREVIOUS CAPITAL IMPROVEMENTS PLAN:** Projects which were identified in previous capital improvements plans for future budget planning purposes.
4. **AREA PLAN:** A series of 38 area studies examining demographic and physical characteristics of Columbus neighborhoods (1970-1974).
5. **COMMUNITY PLANNING AREA INFORMATION PROFILE:** A series of 27 neighborhood planning studies representing the most current information available on existing conditions and physical needs in Columbus neighborhoods (1976-1980).
6. **OTHER:** Previously published planning documents, task forces or agencies.

The "Status" Columns indicate a projects financial standing. These conditions are defined as follows:

1. **AGENCY PRIORITY NO FUNDING IDENTIFIED:** A high priority project for the implementing agency. However, no source of implementing funds have been identified.
2. **NEIGHBORHOOD PRIORITY NO FUNDING IDENTIFIED:** A high priority project for the neighborhood. However, no source of implementing funds have been identified.

When possible, under the column entitled "Anticipated Project Cost", the total construction or purchase costs for a project need has been identified. This figure would also include any source of matching funds other than City funds including but not limited to County, State and Federal sources. When included, anticipated project costs have been presented in thousands of dollars.

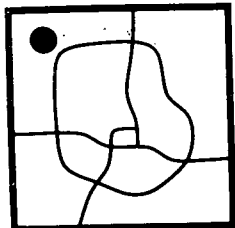
# **III. Community Planning Areas**











## **1-27**

## COLUMBUS PLANNING AREA PROFILE SERIES

### Community Planning Areas 1-27

The following community planning area needs information was collected and arranged within the City's 27 Community Planning Areas. All city planning and information/data collection for Columbus is performed within these accepted 27 Community Planning Areas. Furthermore, there exists a comprehensive planning study (the Profile Series) for each of the 27 areas. They were conducted by staff of the Planning Division in cooperation with citizens and public or private agencies. These studies were designed to bring the planning process to the community level and deal with the physical problems and opportunities of the respective Planning Areas. Each Planning Profile was based upon existing information, resources, and community cooperation and was tailored to reflect the particular nature and characteristics of the Community Planning Area Concerned.

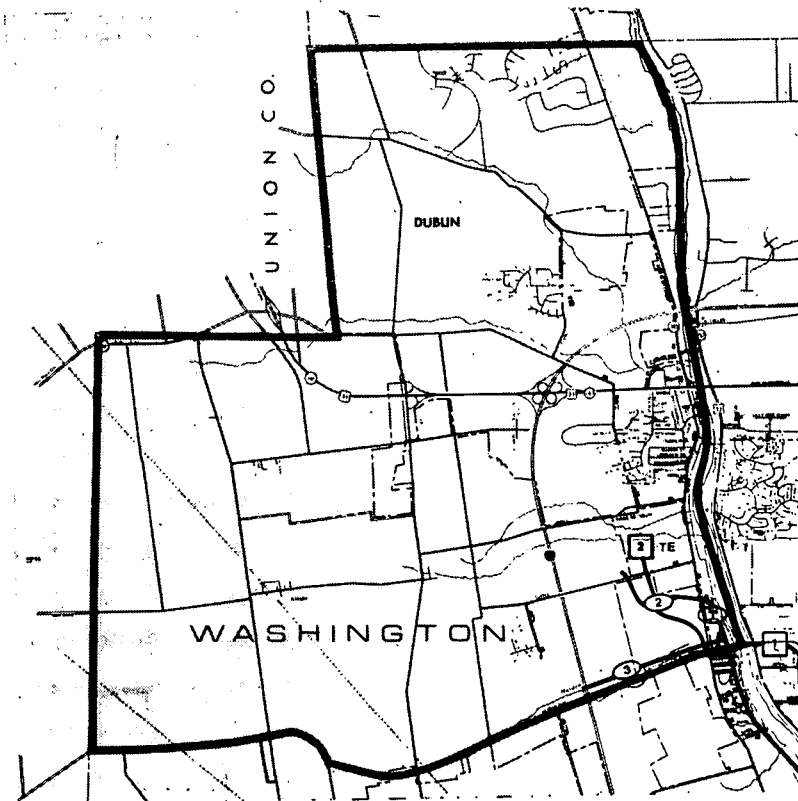


-  Division of Sewerage & Drainage
-  Division of Water
-  Division of Engineering & Construction
-  Division of Traffic Engineering & Parking
-  Division of Electricity
-  Division of Fire
-  Division of Police
-  Recreation & Parks
-  City of Columbus
-  County and other municipalities



**Dublin**  
Community Planning Area 1

June 1983



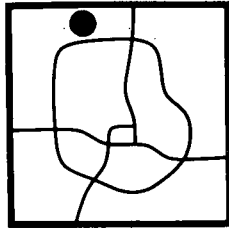
# COMMUNITY PLANNING AREA











1 DUBLIN

June 1983

Proposed Project	Project Map Reference Number	Imp Issuing City Agency	Imp Issuing Agency	Community	Previous CIP	Area Plan/Profile	Other (See footnote)	Source of Need			Anticipated Total Project Cost (in thous.) if Available	Status	Project Description
								CIP 1983 - 1988	Agency Priority	Neighborhood Priority			
Hayden Run Bethel Road Improvement	1	Engn				A	1					\$ 1,500	Connect Hayden Run Road to Bethel Road.
Frantz Road Extension	2	Tr Engn	●										Extend Frantz Road in Dublin south to connect Dublin Road as land development occurs. (Privately funded).
Upper Scioto West Branch Trunk-Part C	1	Sewer		●				85				\$ 3,316	The final phase of the Upper Scioto west trunk will extend this sanitary trunk north to Dublin.
Upper Scioto West Subtrunk-North of Hayden Run Road	2	Sewer	●					83-84				\$ 174	This project consists of a sanitary subtrunk sewer beginning at the Upper Scioto West trunk (C) to serve the Tuttle Road Area.
Upper Scioto West Subtrunk-South of Hayden Run Road	3	Sewer	●					83				\$ 1,035	This project consists of a sanitary subtrunk sewer originating at the Upper Scioto West trunk and continuing west along Hayden Run Road to I-270.

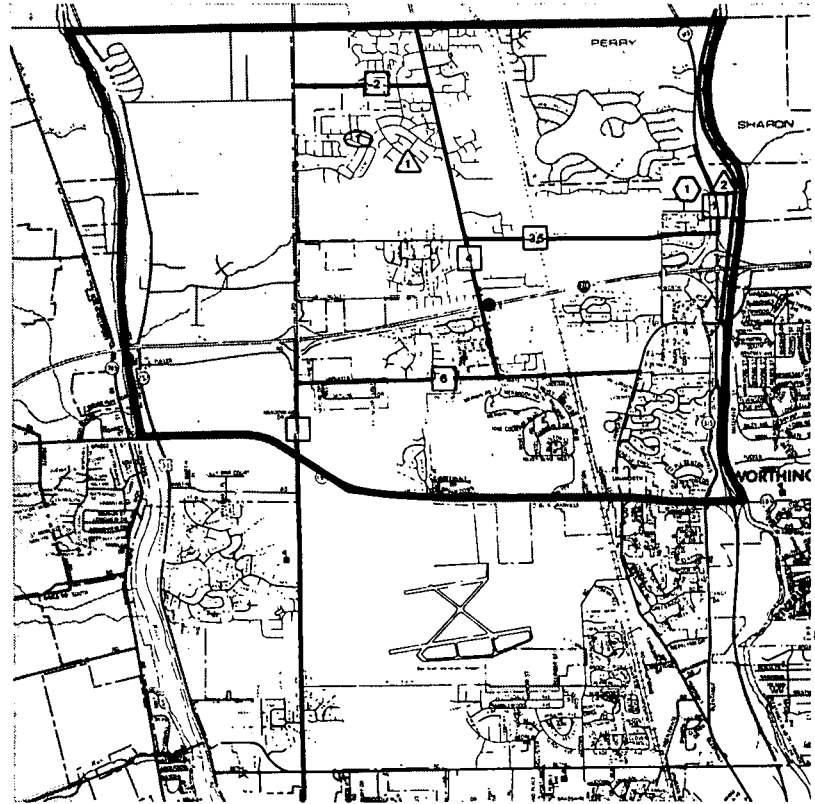
1. Thoroughfare Plan



-  Division of Sewerage & Drainage
-  Division of Water
-  Division of Engineering & Construction
-  Division of Traffic Engineering & Planning
-  Division of Electricity
-  Division of Fire
-  Division of Police
-  Recreation & Parks
-  City of Columbus
-  County and other municipalities



**Far Northwest**  
Community Planning Area 2





# COMMUNITY PLANNING AREA

2 FAR NORTHWEST

June 1983

Proposed Project	Project Map Reference Number	Implementing City Agency	Implementing Agency	Community	Previous CIP	Area Plan/Profile	Source of Need				Status		Project Description
							CIP 1980 - 1988	Agency Priority	No Funding Identified	No Projected Priority	Anticipated Total Project Cost (in thousands)	Anticipated	
Sewmill Road Improvement	1	Engn	●	●		1							Sewmill Road, Bethel to Summit Views will be widened to four and six lanes, and turning lanes as required including upgrading of I-270 interchange.
Summit View Road Improvement	2	Engn				2							Repave and widen to full two lanes from Sewmill to Smoky Row.
Warning Lights at Railroad Crossing on Hard Road	3	Engn	●							●			Railroad intends to use Federal funds through D00F to erect flashers; however, this crossing ranks low on the State-wide priority list. City will continue to monitor priority.
Minor Widening of Smoky Row Road	4	Engn	●			3							Minor widening to two full lanes, Snouffer Road to County line.
Minor Widening of Hard Road	5	Engn	●			3							Minor widening to two full lanes, Smoky Row Road to S.R. 315.
Minor Widening of Snouffer Road	6	Engn	●			3							Minor Widening to two full lanes, Sewmill Road to Linworth Road.
Widen Olentengy River Road (S.R. 315)	7	Engn	●			3							Widen to 4 lanes from Hard Road to Clubview Boulevard.
New Street	1	Elect	●	●				●	●				S.R. 351 at Hard Road.

1. Thoroughfare Plan  
2. Development Department Staff

3. Regional Transportation Plan

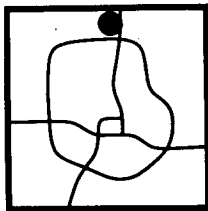
# COMMUNITY PLANNING AREA











2 FAR NORTHWEST

June 1983

Proposed Project	Project Map Reference Number	Implementing City Agency	Implementing Agency Community	Previous CIP	Area Plan/Profile	Other (see footnote)	CIP 1983 - 1988	Agency Priority	No Funding Available	Neighborhood Priority	No Funding Identified	Anticipated Total Project Cost (in thousands) if Available	Status	Project Description
Neighborhood Park	1	Parks	●				1						●	In Old Sawmill Area north of Hard Road.
Acquire Park Easements	2	Parks					p							West bank of Olentangy from Wilson Bridge Road north to Highbanks Park.
Olentangy Area Subtrunk	1	Sewer	●	●			'83						\$ 38	This project consists of a sanitary subtrunk sewer to serve the Sawmill and Summit View Area.
Tornado Siren	1	Commun	●					●	●				\$ 15	This is a request of the Summerwood Civic Association. The Safety Department is currently studying needs on a City-wide basis (see City-wide Needs, Communications Division).

1. Development Department Staff

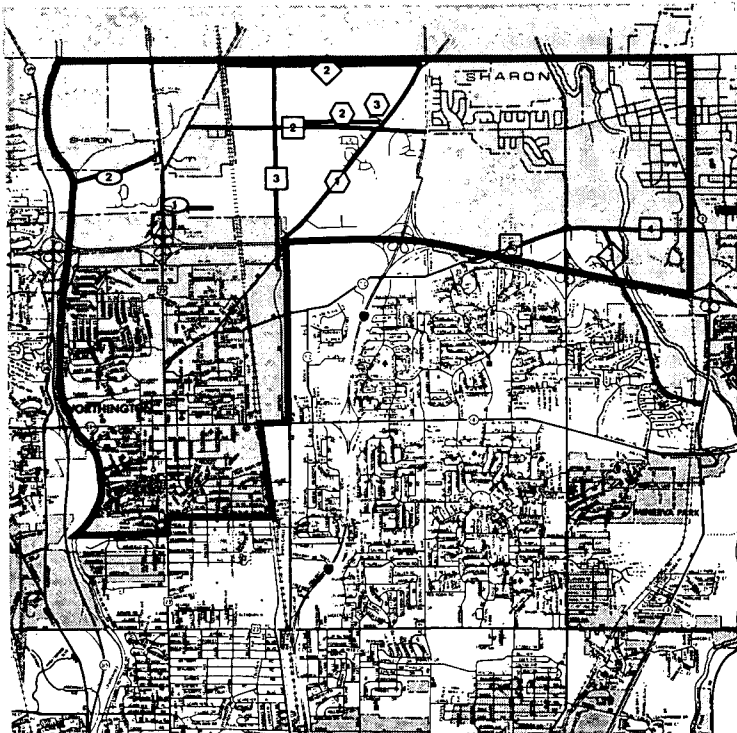


-  Division of Sewerage & Drainage
-  Division of Water
-  Division of Engineering & Construction
-  Division of Traffic Engineering & Parking
-  Division of Electricity
-  Division of Fire
-  Division of Police
-  Recreation & Parks
-  City of Columbus
-  County and other municipalities



**Josephinum/  
Spring Hollow**  
Community Planning Area 3

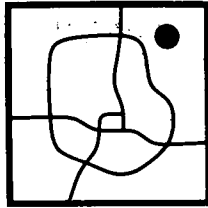
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








COMMUNITY PLANNING AREA		Project No	Reference Number	Implementing City Agency	Implementing Agency	Community	Previous CIP	Area Plan/Profile	Source of Need				Status		June 1983	
									Other (see footnote)	CIP 1983 - 1988	Agency PR or FY	Ne Funding Identified	Ne Funding Priority	Multiples Total Project Cost (in thousands) if available		
Proposed Project																Project Description
Schrock Road Improvements (1)	1	Engn	●	●	●			1 2	83-85				\$10,000			Schrock Road, I-71 to Cleveland Avenue, would be widened to a four lane arterial. Project length is approximately 1.9 miles, with 75% funding from Federal revenue.
Relocate Park Road	2	Tr Engn & Engn	●	●				1 2								From I-71 to U.S. 23 (High Street) to be constructed with land development. (Privately funded).
Extension of Huntly Road	3	Tr Engn & Engn	●	●				1		●						From I-270 to Lazelle Road to be constructed with land development. (Privately funded).
Schrock Road Improvements (2)	4	Engn	●					1 2								Widen to four lanes from State Street in Westerville to Cleveland Avenue. Primarily Franklin County and Westerville responsibility.
Widen North High Street	5	Engn	●					2								I-270 to Flint Road, widen to six lanes.
New Street Lighting	1	Elec	●	●						●	●					1.4 miles Worthington Galena Road, I-270 to Park Road.
New Street Lighting	2	Elec	●	●						●	●					1.5 miles Park Road - west of Worthington Galena
New Street Lighting	3	Elec	●								●					Lawson Drive - West of Worthington Galena (not verified by Division as of this date).

1. Thoroughfare Plan  
2. Regional Transportation Plan

COMMUNITY PLANNING AREA		Source of Need										Status	June 1983	
		Project No.	Reference Number	Implementing City Agency	Implementing Agency	Community	Previous CIP	Area Plan/Profile	Other (see footnote)	CIP 1983 - 1988	Agency Priority	Neighborhood Priority	No Funding Identified	Anticipated Total Project Cost (in thousands) if Available
3 JOSEPHINUM/ SPRING HOLLOW		Proposed Project											Project Description	
	1	Water	●	●					'83-'84				\$ 370	To construct approximately 6,000 feet of 12 inch line from Schrock Road at Cleveland Avenue along Schrock and Cooper Roads to Forest Hills Boulevard.
	2	Water	●						'86				\$ 1,330	Construction of 13,000 feet of 16 inch water line along Lezelle Road from U.S. 23 to Worthington Galena Road and 3,000 feet of 16 inch water line along Worthington Galena Road to Lawson Drive.
	1	Sewer	●	●					'83				\$ 734	East of High Street to the Railroad and from I-270 to Flint Road.
	2	Sewer	●	●										In the vicinity of Camp Mary Orton, West of S.R. 23 and north of Flint Road.

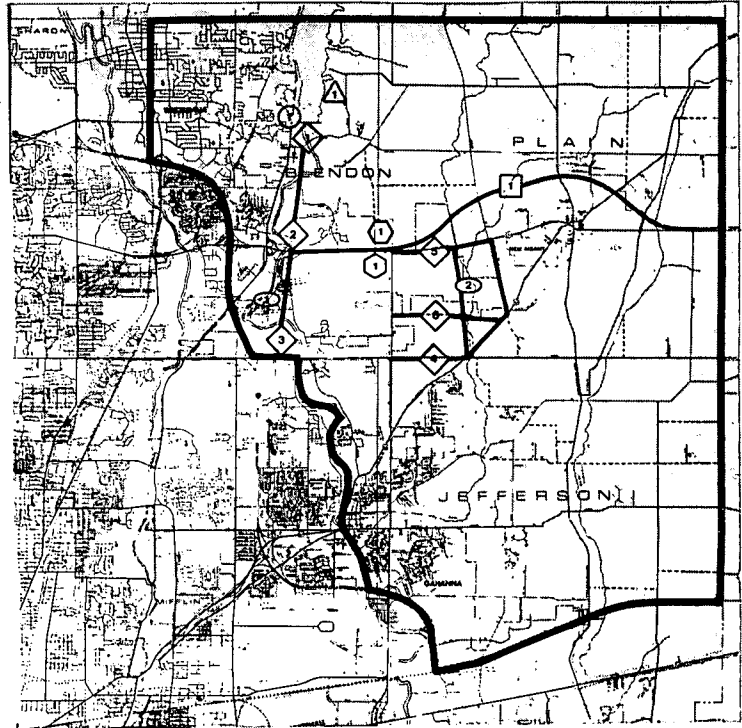


-  Division of Sewerage & Drainage
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-  City of Columbus
-  County and other municipalities



**Northeast**  
Community Planning Area 4

June 1983



COMMUNITY PLANNING AREA		Project Map Reference Number		Source of Need							Status		June 1983
		Implementing City Agency	Community	Prior/As CIP	Area Plan/Profile	Other (see footnote)	CIP 1983 - 1988	Agency Priority	No Funding Identified	No Funding Identified	Anticipated Total Project Cost (in thousands) if Available		
Proposed Project												Project Description	
Widen S.R. 161 (New Albany by-pass)	1	Engn	●				2					Widen to four lane freeway from Cherry Bottom Road to U.S. 62 east of New Albany.	
New Fire Station	1	Fire	●	●				'83			\$1,006	This Fire Station is in response to current operational needs of the Division of Fire as well as citizens' request (Blendon Woods Area).	
Marine Park Building Renovation	1	Police	●	●				'83	●		\$21,000	Interior, exterior painting, replacement of gutters, remodeling of interior of second floor, replacement of doors, sand blasting of exterior brick, construction of storage room, remodeling of restrooms, repair of damp conditions in basements and installation of central air-conditioning.	
Compsite Improvements	A	Parks	●	●				'83 '84				Roadway, hard surface area and parking lot renovation and improvements to Hoover Reservoir Park and campground.	

COMMUNITY PLANNING AREA		Source of Need										Status	June 1983	
		Project Map Reference Number	Implementing City Agency	Implementing Agency	Community	Previous CIP	Area Plan/Project	Other (See Footnote)	CIP 1983-1988	Agency Priority	No Funding Identified	No Funding Priority	Anti-Corruption Total Project Cost (in \$thous.) if Available	
4 NORTHEAST		Proposed Project											Project Description	
New Street Lighting		①	Elect	●	●									S.R. 161 at Ulry Road.
Hoover Erosion Control		①	Water	●				'83-'84				\$ 4,700	For the purchase of land and the construction of erosion control facilities at Hoover Reservoir.	
Dam Renovations, Hoover Reservoir		①	Water	●				'83					Will provide for needed renovation of spillways and abutments at Hoover.	
Morse Road Raw Water Line		②	Water	●				'83-'84				\$17,900	To construct 20,000 feet of an 84 inch raw water line from Hoover Dam to the Morse Road Water Plant.	
Morse Road Water Plant Automation		③	Water	●				'83-'86				\$ 3,015	This project funds the necessary engineering studies and equipment to automate the treatment process.	
Morse Road Water Plant Energy Savings		③	Water	●				'84-'88				\$ 500	This project is designed to save energy at the Division's Morse Road Water Plant.	
Morse Road Water Plant Miscellaneous Improvements		③	Water	●				'83-'84				\$ 3,560	To provide for miscellaneous structural and equipment modifications to upgrade the facility and provide more efficient working space.	
Morse Road U.S. 62 Water Line		④	Water	●				'84-'85				\$ 1,125	To construct a 16 inch water line along Morse Road from Hamilton Road to U.S. 62, then along U.S. 62 between Morse Road and S.R. 161.	



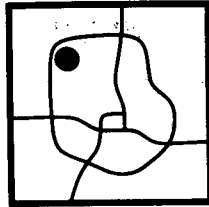
# COMMUNITY PLANNING AREA











4 NORTHEAST

June 1983

Proposed Project	Project App Reference Number	Imp Representing City Agency	Imp Identifying Agency	Community	Previous CIP	Area Plan/Project	Other (see footnote)	CIP 1983-1988	Agency Priority	No Funding Identified	No High-priority Priority	No Funding Identified	Anticipated Total Project Cost (in thousands) if Available	Status	Project Description
S.R. 161 Harlem Road Water Line	5	Water	●										\$ 980		A 16 inch water line to be constructed along S.R. 161, from Hamilton Road to Harlem Road, then along Harlem Road between S.R. 161 and U.S. 62.
Thompson Road Water	6	Water	●										\$ 485		A 12 inch water line along Thompson Road from Hamilton Road to Harlem Road.
Big Walnut Sewer Subtrunk	1	Sewer	●						83				\$ 415		An extension of the existing Big Walnut Trunk Sewer located along the Big Walnut Creek, west of the Creek and south of S.R. 161.
Rocky Fork Interceptor	2	Sewer	●	●					83-84				\$ 1,765		A sanitary subtrunk sewer to serve the Rocky Fork area between Morse Road, S.R. 161 and the New Albany area.

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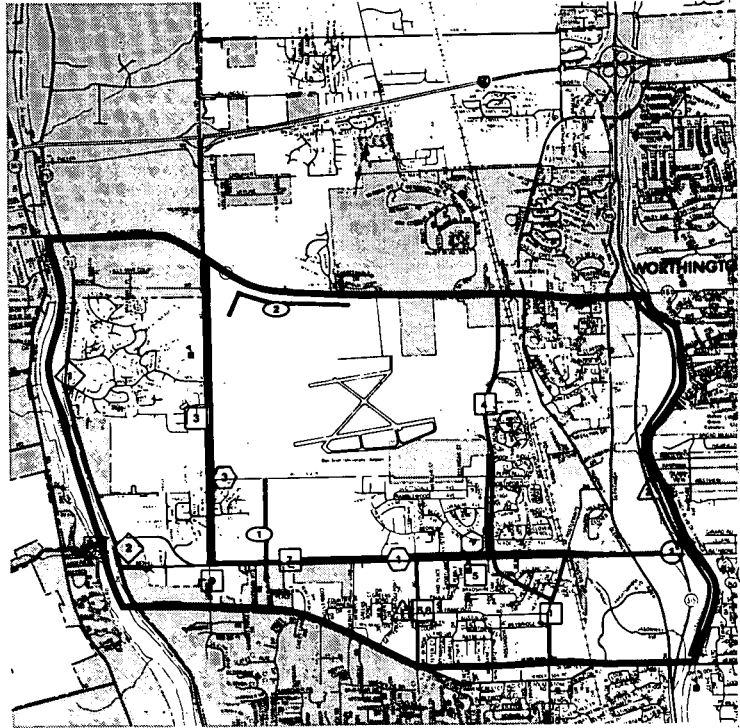


-  Division of Sewerage & Drainage
-  Division of Water
-  Division of Engineering & Construction
-  Division of Traffic Engineering & Parking
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-  Division of Police
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-  City of Columbus
-  County and other municipalities



**Northwest**  
Community Planning Area 5

June 1983



COMMUNITY PLANNING AREA		Source of Need										Status	June 1983	
		Project Map Reference Number	Issuing City Agency		Community		Previous CIP	Area Plan/Profile	Other Uses (Technical)	CIP 1983 - 1988	Agency Priority	Neighborhood Priority	Ne Funding Identified	Anticipated Total Project Cost (in \$thous.) if available
5 NORTHWEST		Proposed Project												
Proposed Project		Project Map Reference Number	Issuing City Agency	Community	Previous CIP	Area Plan/Profile	Other Uses (Technical)	CIP 1983 - 1988	Agency Priority	Neighborhood Priority	Ne Funding Identified	Anticipated Total Project Cost (in \$thous.) if available	Project Description	
Kenny Road Improvement		1	Engr	●	●			1/2					Widen to four lanes between Henderson Road and Godown Road.	
Hayden Road Improvement		2	Engr	●	●	●	P	1/2				\$ 1,500	Connect Hayden Run Road to USR 33.	
Sawmill Road Improvement		3	Engr	●	●	●		1/2 '85-'87				\$ 3,220	Sawmill Road, Bethel to 1-270 will be widened to four and six lanes, with turning lanes as required.	
Extend Godown Road		4	Engr		●		A P	1					Extend Godown Road to Route 161 before it turns northeast toward Linworth Road and improve with a connection to Kenny Road.	
Widen Bethel Road at Godown Road		5	Tr Engr	●	●					●			Widen Bethel Road for turn lanes. This constitutes part of Project 7.	
Widen Reed Road at Francisco		6	Tr Engr	●	●					●			Widen Reed Road for turn lanes. This constitutes part of Project 8.	
Improve Bethel Road		7	Engr	●	●			1/2					Widen Bethel Road to four lanes from Sawmill Road to Olentangy River Road.	
Improve Reed Road		8	Engr	●	●			2					Widen two full lanes Henderson to Bethel Road.	
Sawmill Road Improvement		9	Engr	●				2					Minor Widening and Intersection Improvements, Henderson to Bethel.	

1. Thoroughfare Plan  
2. Regional Transportation Plan

COMMUNITY PLANNING AREA		Source of Need										Status	June 1983	
		Project Map Reference Number	Imp. Representing City Agency	Imp. Representing Agency	Community	Previous CIP	Area Plan/Profile	Other (See Footnote)	CIP 1983 - 1988	Agency P1 or P1Y	No Funding Identified	No Funding Identified		Participated Total Project Cost (in thous.) if Available
Proposed Project														Project Description
New Street Lighting	①	Elec	●	●				83-85						2.1 miles - Bethel, Godown Road Area.
New Street Lighting	②	Elec	●	●					●	●				.2 miles - LeAnne Marie Circle - Godown Road to end.
New Street Lighting	③	Elec	●	●					●	●				Sawmill Road, Bethel to SR 161.
Northcrest Park Improvement	△	Parks		●						●				Construct bike and jogging path around periphery of park.
Northcrest Park Improvements	△	Parks	●	●				83-84						Roadway, hard surface and parking lot renovations and improvements.
Large Park Needed	△	Parks		●		P			●					North of Bethel Road.
Watercourse Development	△	Parks	●	●	●				●		\$ 150			Along Olentangy; Portage Area and Pedestrian Bikeway connectors.

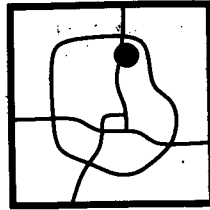
COMMUNITY PLANNING AREA		Project Map Reference Number		Imp Implementing City Agency		Imp Implementing Agency		Community		Previous CIP		Area Plans/Profile		Other (See footnote)		Source of Need		Status		June 1983	
																CIP 1982 - 1988	Agency PR (a-11)	No Funding Identified	No Funding Identified		Anticipated Total Project Cost (in thousands) if Available
Proposed Project																					Project Description
Police Substation Northwest	①	Police	●	●				P	'84										\$ 114		To construct a substation in the area of Bethel and Olentangy River Roads. This project will provide quicker service to a rapidly growing area.
New Fire Station	①	Fire	●																\$ 1,700		Fire Station in vicinity of Bethel and Godown Roads. This would serve a rapidly developing need in this area.
Riverside Drive Water Line	①	Water	●	●	●				'83- '84										\$ 540		This project would construct a 12 inch water line along the Scioto River from Case Road to Martin Road.
Bethel-Riverside Drive Water Line	②	Water	●	●	●				'83- '84										\$ 255		This 12 inch water line would run along Bethel Road, from Bennington Court to Scioto River Road, then along Scioto River Road between Bethel and Case Roads.
Upper Scioto Area East Branch Subtrunk	①	Sewer	●	●	●				'83										\$ 675		This project will construct a sanitary sewer in the Slate Run Area from Henderson Road north to Case Road.
Olentangy Area Subtrunk	②	Sewer	●	●					'83- '84										\$ 260		This project consists of a sanitary subtrunk sewer to serve the south side of S.R. 161 and east of Sawmill Road Area.











# COMMUNITY PLANNING AREA

5 NORTHWEST

June 1983

Proposed Project	Project Map Reference Number	Implementing City Agency	Implementing Agency Community	Previous CIP	Area Plan/Profile	Other (see footnote)	Source of Need		Status		Project Description
							CIP 1983/1988	Agency Priority No Funding Identified	Neighborhood Priority No Funding Identified	Anticipated Total Project Cost (1/6 phase) if Available	
Sewall Road Storm Culvert	①	Sewer	● ●				'83		\$ 155		South of Hard Road. The Division of Sewerage and Drainage is unable to supply exact geographical location at this time.

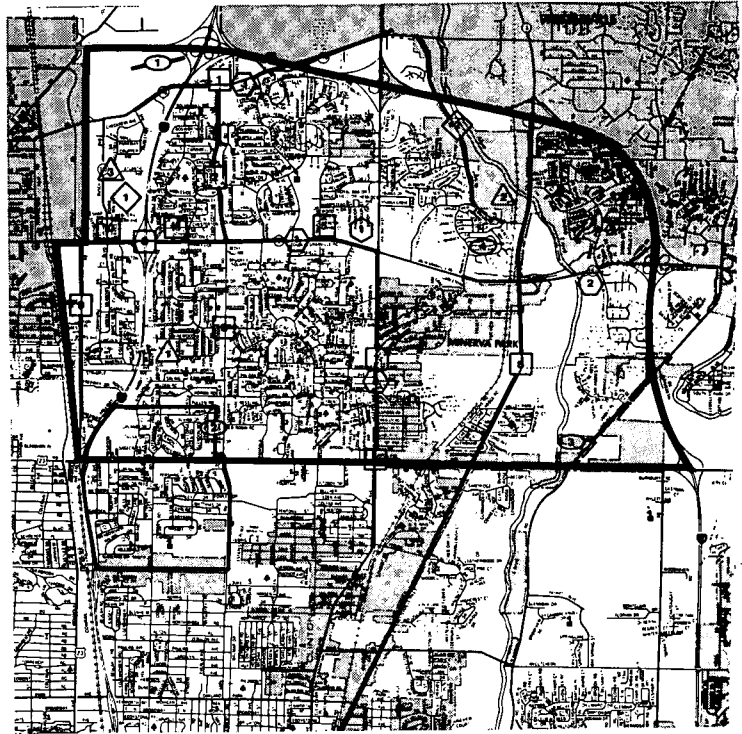


-  Division of Sewerage & Drainage
-  Division of Water
-  Division of Engineering & Construction
-  Division of Traffic Engineering & Parking
-  Division of Electricity
-  Division of Fire
-  Division of Police
-  Recreation & Parks
-  City of Columbus
-  County and other municipalities



**Northland**  
Community Planning Area 6

June 1983



COMMUNITY PLANNING AREA		Source of Need										Status		June 1983
		Project Map Reference Number	Implementing City Agency	Implementing Agency	Community	Previous CIP	Area Plan/Prop. Title	Other (See footnote)	CIP 1983 - 1988	Agency Priority	No Funding Identified	Agency Priority	No Funding Identified	
Proposed Project														Project Description
Schrock Road Improvements	1	Engr	●	●	●	P		1 2	*84- *85				\$10,000	Schrock Road, I-71 to Cleveland Avenue, would be widened to a four lane arterial. Project length is approximately 1.9 miles, with 75% funding from Federal revenue.
Improve Karl Road	2	Engr				P		1						Widen to four lanes from S.R. 161 to Schrock Road.
Improve Karl and Sandalwood Intersection	3	Tr Engr & Engr	●	●	●					●	●			Widen intersection.
Improve Cleveland Avenue and Morse Road Intersection	4	Tr Engr & Engr	●	●						●				Widen intersection.
Improve S.R. 161 and Maple Canyon Road Intersection	5	Tr Engr & Engr	●							●				Reconstruct median turn lanes.
S.R. 161 and I-71 Interchange Improvement	6	Tr Engr & Engr	●	●				2		●				Reconstruct to improve capacity.
Improve Cleveland Avenue	7	Engr	●	●				1 2						Widen to four lanes from Ferris Road to S.R. 161.
Improve Westerville Road	8	Engr	●					1 2						Widen to four lanes from Weber Road to I-270.
Improve Sinclair Road	9	Engr	●	●				1 2						Widen to two full lanes from Freeway Drive South to East Dublin-Granville Road.

1. Thoroughfare Plan  
2. Regional Transportation Plan



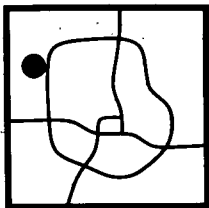
COMMUNITY PLANNING AREA		Project Map Reference Number		Implementing City Agency		Implementing Agency		Source of Need		Status		June 1983
6 NORTHLAND												
Proposed Project												
Proposed Project	Project Map Reference Number	Implementing City Agency	Implementing Agency	Previous CIP	Area Plan/Profile	Other (See Footnote)	CIP 1983 - 1988	Agency Priority	No Funding Identified	No Agency Priority	Anticipated Total Project Cost (in thousands), if Available	Project Description
S.R. 161 - Bush Boulevard & North Meadows Boulevard Intersection Improvement	10	Engr	●									As reported by the Northland Community Council this intersection is badly congested and needs improvements.
S.R. 161 - Satinwood Drive, and Ambleside Drive Intersection Improvement	11	Tr Engr Engr	●							●		As reported by the Northland Community Council this intersection, due to a high accident rate requires new signals and/or widening.
Woodward Park Improvements	1	Parks	●				'83-'84					Renovation and energy improvements.
Cooper Park Improvements	2	Parks	●				'84					Athletic field improvements.
Regional Recreation Center	3	Parks	●							●		As reported by the Northland Community Council there is a need for a regional recreation center north of 161, west of I-71, south of Schrock Road and west of Cleveland Avenue.
New Street Lighting	1	Elec	●	●			'83-'85					2.5 miles - S.R. 161, Sinclair Road to Cleveland Avenue.
New Street Lighting	2	Elec	●	●					●	●		.1 mile - S.R. 161 and Strawberry Farms Subdivision.











1. Thoroughfare Plan  
2. Regional Transportation Plan

Proposed Project		Project Ref. Number	Implementing City Agency	Implementing Agency	Community	Previous CIP	Area Plan/Project	Other (see footnote)	CIP 1983-1988	Source of Need			Status		Project Description
										Agency Priority	No Funding Identified	No Funding Identified	Anticipated Total Project Cost (in thousands) if Available		
New Street Lighting	3	Elec	●									●		The Northland Community Council recommends that Schrock Road have lighting installed at the time it is widened.	
New Street Lighting	4	Elec	●									●		The Northland Community Council recommends that Cleveland Avenue have lighting installed at the time it is widened.	
Fire Station Improvements	1	Fire	●					'83-'84						Energy conservation measures at Station #6.	
State Route 710 Water Tank	1	Water	●	●					'85				\$ 2,878	To construct a second two million gallon elevated storage tank on the east side of S.R. 710 next to the present tank.	
Schrock Road Cooper Road Water Line	2	Water	●	●					'83-'84				\$ 400	To construct approximately 6,000 feet of 12 inch line from Schrock Road at Cleveland Avenue along Schrock and Cooper Roads to Forest Hills Boulevard.	
Storm Sewer Improvements	-	Sewer	●		P							●		A community-wide need as reported by the Northland Community Council.	

June 1983

COMMUNITY PLANNING AREA		Source of Need										Status	June 1983
		Project Rep. Reference Number	Implementing City Agency	Community	Previous CIP	Area Plans/Prop. Title	Other (see footnote)	CIP 1983 - 1988	Agency Priority	No Funding Identified	No Funding Identified	Anticipated Total Project Cost (in thousands) if Available	
Proposed Project												Project Description	
Nobel Run Retention Basin	①	Sewer	●	●								\$ 530	To provide a means for the regulation and retention of storm flows. Upstream flows dependent on development characteristics, have determined the need for the basin.
Maize Road Area Storm Sewer	②	Sewer	●					'84-'85				\$ 300	This project is for engineering and design work for storm sewer construction in the areas north and south of Morse Road in the vicinity of Maize Road.
Alum Creek Subtrunk	③	Sewer	●					'84-'85				\$ 72	This project involves the construction of a sanitary subtrunk sewer from the Alum Creek trunk to Sunbury Road.
Alum Creek Sanitary Subtrunk-Minerva Park	④	Sewer	●					'83				\$ 504	This project is the construction of a sanitary subtrunk sewer from the Alum Creek trunk to the waste water treatment plant of the Village of Minerva Park.
Parkville Ditch Enclosure	⑤	Sewer	●									\$ 86	The Division of Sewerage and Drainage is unable to supply specific geographical location at this time.
Park Lane Ditch Enclosure	⑥	Sewer	●									\$ 100	The Division of Sewerage and Drainage is unable to supply specific geographical location at this time.

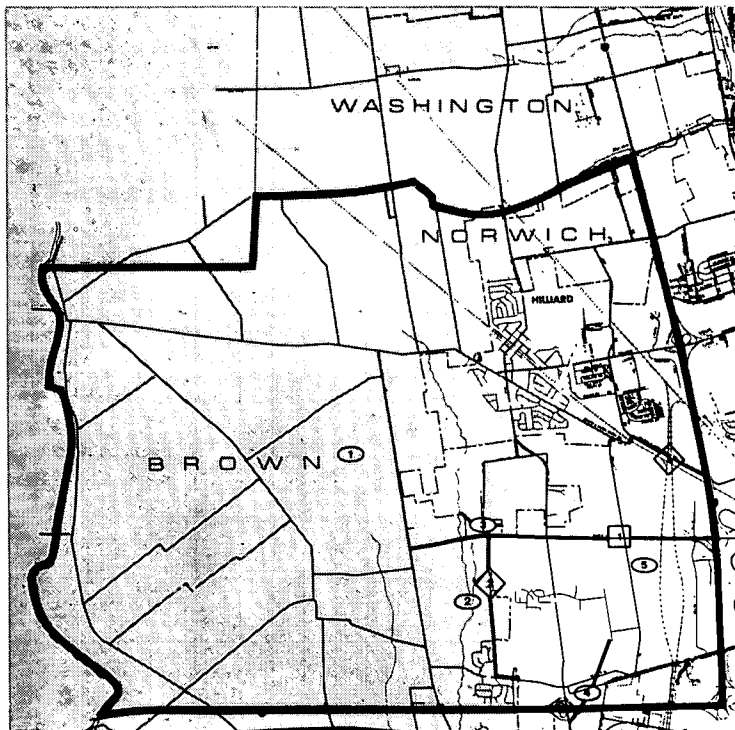


-  Division of Sewerage & Drainage
-  Division of Water
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-  City of Columbus
-  County and other municipalities



**Hilliard**  
Community Planning Area 7

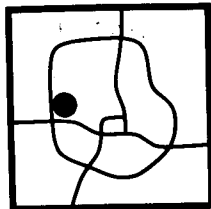
June 1983













COMMUNITY PLANNING AREA		Source of Need										Status	June 1983
		Project Map Reference Number	Implementing City Agency	Implementing Agency	Community	Previous CIP	Area Plan/Profile	Other (see footnote)	CIP 1983 - 1988	Agency Priority	No Funding Identified	Anticipated Total Project Cost (in thousands) if available	
7 HILLIARD		Proposed Project											Project Description
	1	Improve Roberts Road	Engr	●	●	P	1					\$ 500	Widen to four lanes from I-270 to Alton Darby Creek Road.
	1	Scioto Darby Water Line	Water	●		P		'84				\$ 355	6,900 feet of 12 inch line along Scioto-Darby Road, from Walcutt Road to I-270, under the Penn Central Railroad connecting to an existing line at Westbelt Drive.
	2	Spindler Road Water Line	Water	●		P		'85				\$ 300	8,700 feet of 12 inch line along Spindler Road from Renner to Roberts Road and along Renner from Spindler to Birchwood Roads.
	1	Hamilton Ditch Sewer Feasibility Study	Sewer	●	●			'88				\$ 420	A feasibility study to investigate the possibility of a trunk line north of Feder Road.
	2	Clover-Croff Ditch Area Feasibility Study	Sewer	●				'88				\$ 1,830	A feasibility study to investigate the possibility of a sanitary line along the Clover-Croff Ditch.
	3	Upper Scioto Area N.W. Sanitary Trunk	Sewer	●				'85-'86				\$290	This project consists of a sanitary subtrunk sewer to serve the Frazell Road Area.
	4	Storm Drainage Improvements	Sewer			P							Along Rome-Hilliard Road, Hilliard-Cometary Road and Scioto Darby Creek Road.

1. Thoroughfare Plan

COMMUNITY PLANNING AREA		Source of Need										Status	June 1983	
		Project Map Reference Number	Implementing City Agency	Implementing Agency	Community	Previous CIP	Area Plan/Profile	Other (Use Footnote)	CIP 1982 - 1988	Agency PR (or 11)	Neighborhood Identified	Ne Funding Identified		Anticipated Total Project Cost (in thousands) if Available
Proposed Project														Project Description
Culvert and Ditch Improvements		5	Sewer	●	●								\$ 314	This involves the cleaning and reshaping of existing drainage ditches east of Walcutt Road to the Penn Central R.R. yard north of Trabue Road.

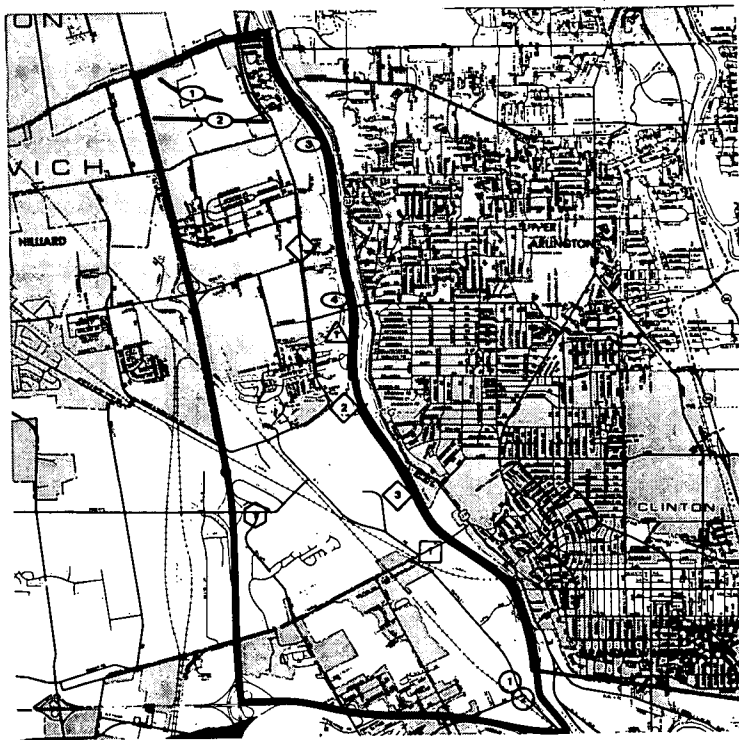


-  Division of Sewerage & Drainage
-  Division of Water
-  Division of Engineering & Construction
-  Division of Traffic, Engineering & Parking
-  Division of Electricity
-  Division of Fire
-  Division of Police
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-  City of Columbus
-  County and other municipalities



**West Scioto**  
Community Planning Area 8

June 1983



COMMUNITY PLANNING AREA		Project No.	Map Reference Number	Implementing City Agency	Source of Need							Status	June 1983
					Community	Previous CIP	Area Plan/Profile	Other (see footnote)	CIP 1983 - 1988	Agency Priority	No Funding Identified		
Proposed Project												Project Description	
Trabue Road Improvement	1	Engr	●		1 2							Widen to four lanes from Dublin Road to Scioto River.	
Training Academy Expansion	1	Police	●						●	\$5,580		Construction of a two-story 42,000 square foot building with classroom and open offices. A gymnasium and other physical training classes would also be provided.	
Police Academy Renovations	1	Police	●				'83			\$ 1,395		A new building to cover outdoor firing range.	
Police Academy Renovations	1	Police	●				'84			\$ 30		Remodeling of training Academy Barn.	
Police Academy Renovations	1	Police	●				'84			\$ 60		Renovation of Training Academy rifle range and installation of a trap for shotgun training.	
Police Academy Renovations	1	Police	●				'85					Energy conservation measures at the Training Academy.	
New Police Substation	2	Police	●							\$ 417		An 1800 square foot concrete and steel building to house a police precinct, in the area of Fisher and McKinley.	

1. Thoroughfare Plan
2. Regional Transportation Plan



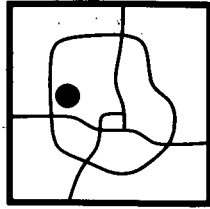
# COMMUNITY PLANNING AREA











8 WEST SCIOTO

June 1983

Proposed Project	Project Map Reference Number	Implementing City Agency	Implementing Agency	Community	Previous CIP	Area Plan/Profile	Other (See footnote)	CIP 1983 - 1988	Agency Priority	No Funding Identified	No Funding Identified	Anticipated Total Project Cost (in thousands, if available)	Project Description	Source of Need		Status		
New Fire Station	①	Fire	●					P					\$ 1,760	In the vicinity of Roberts and Wilson Roads.				
Boat Dock Renovation at Griggs Dam	①	Parks	●						'83				\$ 100	Replacement and renovations of boat docks and finger docks.				
Griggs Dam General Park Renovations	①	Parks	●						'83-'84					Roadway, hardsurface area and parking lot resurfacing.				
Griggs Dam Campsite Improvements	①	Parks	●						'83-'84				\$ 50	This provides for continued renovation, improvement and upgrading of facilities.				
Dublin Road Water Line	①	Water	●						'86				\$ 850	8,500 feet of 16 inch water line along Dublin Road from Darbyshire Road to Thoburn Road.				
Griggs Dam Renovation	②	Water	●						'83-'84				\$ 700	For needed renovation of spillways and abutments.				
Griggs Dam Hydroelectric Project	②	Water	●						'84-'85				\$ 6,310	To provide for generating equipment and transmission lines necessary for the development of electric power capabilities.				

COMMUNITY PLANNING AREA		Source of Need										Status	June 1983	
		Project Map Reference Number	Implementing City Agency	Implementing Agency	Community	Previous CIP	Area Plan/Profile	Other (see footnote)	CIP 1983 - 1988	Agency Priority	No Funding Identified	Neighborhood Priority	No Funding Identified	Anticipated Total Project Cost (in thousands) if Available
8 WEST SCIOTO		Proposed Project												Project Description
		Dublin Road Water Plant Raw Water Line	②	Water	●					'84-'85			\$19,190	The construction of 24,000 feet of 66 inch raw water line from Griggs Dam to the Dublin Road Water Plant.
		Darbyshire Road	①	Sewer	●									Darbyshire Road to Tuttle Road.
		Upper Scioto West Subtrunk	②	Sewer	●					'85-'86			\$ 1,280	A sanitary subtrunk sewer beginning at Hayden Run Road and Dublin Road and going south and west to serve the Davidson Road Area.
		Upper Scioto Area West Branch Trunk Part B-2	③	Sewer	●					'85			\$ 5,091	This second phase of the Upper Scioto West trunk will extend this sanitary trunk north to Hayden Run Road.
		Upper Scioto Area West Branch Trunk Part B-1	④	Sewer	●					'84			\$4,068	To construct a trunk sewer along the west bank of the Scioto River from Griggs Dam to a point north of Schirtzinger Road.

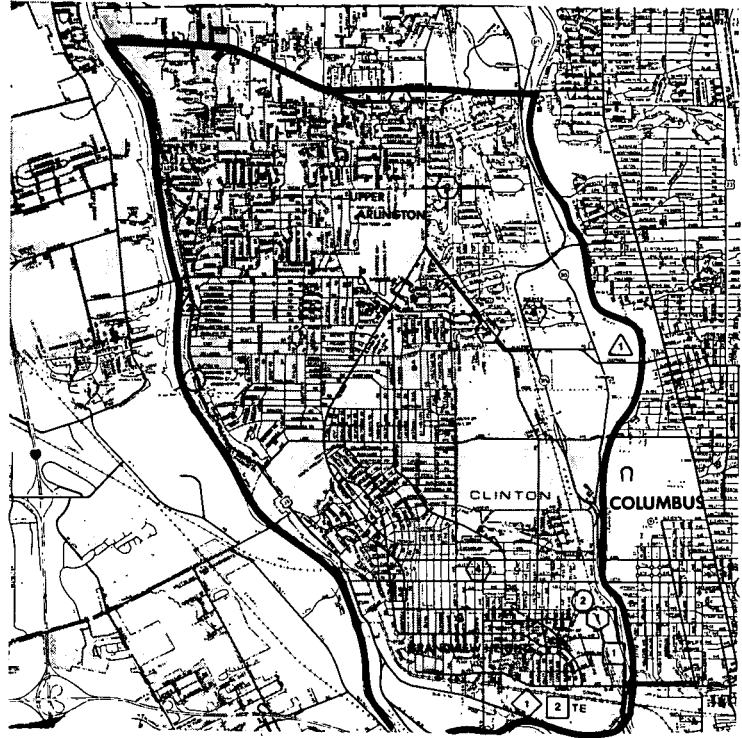


-  Division of Sovereign & Drainage
-  Division of Water
-  Division of Engineering & Construction
-  Division of Traffic Engineering & Parking
-  Division of Electricity
-  Division of Fire
-  Division of Police
-  Recreation & Parks
-  City of Columbus
-  County and other municipalities



**West Olentangy**  
Community Planning Area 9

June 1983



# COMMUNITY PLANNING AREA

## 9 WEST OLENTANGY

June 1983

Proposed Project	Project Map Reference Number	Implementing City Agency	Implementing Agency Community	Previous CIP	Was Plan/Profile	Source of Need			Status			Project Description
						Other (see footnote)	Agency Priority CIP 1983-1988	No Funding Identified	Neighborhood Priority	No Funding Identified	Anticipated Total Project Cost (In Phases) If Available	
Spring-Sandusky Interchange	1	Engr	●	●			1 2	183- 186			\$112,000	The reconstruction of the Spring Sandusky Interchange, the north Innerbelt and the west Innerbelt.
Traffic Division Maintenance Facilities	2	Tr Engr	●								\$6,000	Construction of the Division's Field Maintenance facilities on a site adjacent to the Dublin Road Water Plant.
New Street Lighting	1	Elec	●	●					●	●		.5 miles - Old Henderson Road from Reed Road to Kenny Road.
New Street Lighting	2	Elec	●	●					●	●		.3 miles - Highland Drive from Upper Arlington Corp. to Pag Avenue.
New Street Lighting	3	Elec	●	●					●	●		Kenny Road and Ackerman.
New Street Lighting	4	Elec	●	●					●	●		1 mile - Primrose Place from N.W. Boulevard to Meadow Road.
New Street Lighting	5	Elec	●	●					●	●		2 miles - Wilce Avenue from Harely Drive to Riverview Drive.

- 1. Thoroughfare Plan
- 2. Regional Transportation Plan

# COMMUNITY PLANNING AREA

## 9 WEST OLENTANGY

June 1983

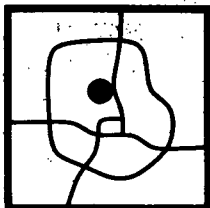
Proposed Project	Project Map Reference Number	Implementing City Agency	Implementing Agency	Community	Previous CIP	Area Plan/Priorities	Other (see footnote)	CIP 1983-1988	Agency Priority	No Funding Identified	No Neighborhood Priority	Anti-Corrupt Total Project Cost (in thousands) if Available	Status	Project Description
Bicycle Trail Development	1	Parke	●					'85					\$ 100	Extension of Olentangy Bike Trail.
Bikeway System	2	Parke			P									Within Griggs Reservoir, east bank.
Fire Facility Renovation	1	Fire	●					'83-'85						Renovation and repair of Station #9.
Fire Facility Energy Conservation	1	Fire	●					'83-'85						For energy conservation construction elements in Station #9.
Marine-Park Police Boat Storage Building	1	Police	●										\$ 400	Heated 2800 square foot metal and steel fabricated building for storage and maintenance of boats, motorcycles and rescue trailer.
Heliport Renovation	2	Police	●										\$ 131	Renovate existing structure including roof, heating and cooling system, resurfacing, new fuel tanks and security fencing.
Helicopter Technological Advancement Program	2	Police	●										\$ 3,425	Modernization of Helicopter Program by expansion of existing Heliport building. Structure would be enlarged to 10,000 square feet and five turbine helicopters would be purchased.











# COMMUNITY PLANNING AREA

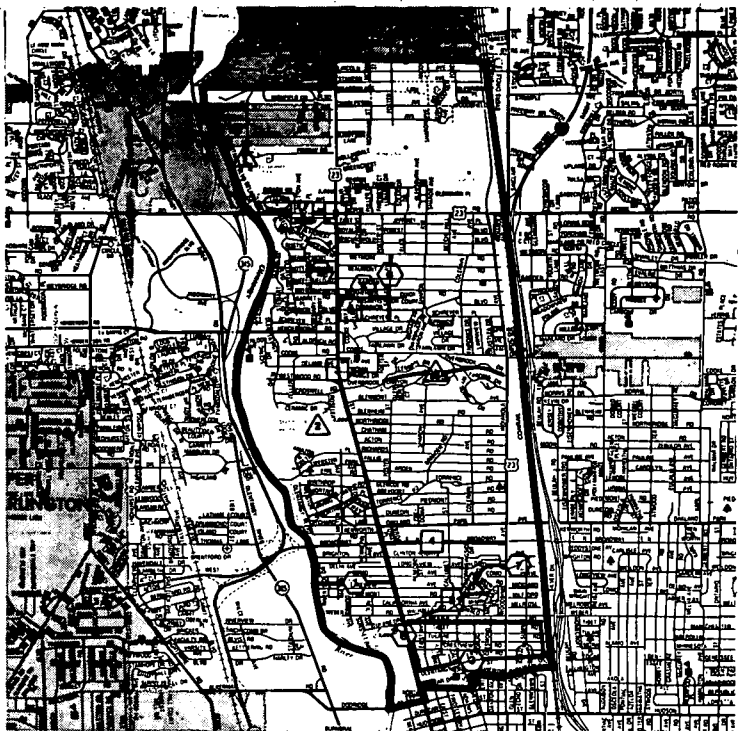
9 WEST OLENTANGY

June 1983

Proposed Project	Project No.	Reference Number	Implementing City Agency	Implementing Agency	Community	Previous CIP	Area Plan/Profile	Other (see footnotes)	Source of Need			Status			Project Description
									CIP 1983 - 1988	Agency Priority	No Funding Identified	No Funding Identified	Anticipated Total Project Cost (in thousands) if available		
Dublin Road Meter Plant Automation	2		Meter	●	●				183-84				\$ 1,325	To fund the necessary engineering studies and equipment to automate the treatment process.	
Grandview Avenue Sanitary Relief	0		Sewer	●									\$ 35	The Division of Sewerage and Drainage is unable to supply specific geographical location at this time.	



-  Division of Sewerage & Drainage
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-  County and other municipalities



**Clintonville**  
Community Planning Area 10

June 1983

# COMMUNITY PLANNING AREA

10 CLINTONVILLE

June 1983

Proposed Project	Project Map Reference Number	Implementing City Agency	Implementing Agency Community	Previous CIP	Area Plan/Project	Other (See footnote)	Source of Need		Status		Project Description
							CIP 1983 - 1988	Agency Priority	No Funding Identified	No Funding Priority	
Morse-Bethel Connector	1	Engn	●	*	●		1				New Street connecting Morse Road at High Street to Bethel Road at S.R. 315.
Improve Morse Road and High Street Intersection	2	Engn & Tr Engn	●	●				●		\$ 100	Widen, plus traffic and bus improvements. This constitutes a part of Project 1.
High Street Development Corridor Public Improvements	3	Engn	●	●		2		●		\$ 1,000	As part of the total High Street corridor project, public improvement portion: street trees, signage and lighting.
Improve East-North Broadway	4	Engn	●	*	●	1	3				Improve Capacity, High Street to Indianola. Disapproved by Clintonville Area Commission on July 1, 1982. Clintonville Area Commission further recommends deletion of this project.
Calumet Bridge Replacement	5	Engn		●					●		Over Walhalla Ravine.
Street Resurfacing	6	Engn		●							In front of school on Dominion Avenue from High Street to Shields.
New Street Lighting	1	Elec	●	●				'83-'85			.4 miles - W. Lakeview Avenue from Riverside to High Street.
New Street Lighting	2	Elec	●	●				'83-'85			.3 miles-Nottingham Road.

1. Thoroughfare Plan
2. Negotiated Investment Strategy Report, 1980
3. Regional Transportation Plan

\*Disapproved by Clintonville Area Commission 7/1/82



Proposed Project		Project Map Reference Number		Implementing City Agency		Community		Priority CUP		Area Plan/Project		Other (See comments)		Source of Need		Status		Project Description	
		Project Map	Reference Number	Implementing City Agency	Community	Priority CUP	Area Plan/Project	Other (See comments)	CUP 1983-1988	Agency Priority	No Funding Identified	No Funding Identified	Articulated Total Project Cost (in thousands) if available	Source of Need	Status				
New Street Lighting	3	Elec	●	●									'83-'85					5 miles-Clintonville District: North to Weber Road, South by Glen Echo Ravine, west by High Street and east by the Penn Central Railroad.	
New Street Lighting	4	Elec	●	●										●	●			.02 miles: DeSantis Drive.	
Neighborhood Commercial Lighting	5	Elec	●	●									'85			\$ 50		North High Street, Arcadia to Weber.	
New Street Lighting	6	Elec	●	●										●	●			.4 miles - Sellers Avenue from Wetmore to Schreyer Place.	
New Street Lighting	7	Elec	●	●										●	●			.2 miles - Walhalla Road from Summit to Indianole.	
Bicycle Trail Development	1	Parks	●	***														'84-'85	Oientangy Bikeway.
General Park Renovations	2	Parks	●	***														'83-'84	Roadway, hard surface area and parking lot renovation and improvements at Whetstone Park.
General Park Energy Improvements	2	Parks	●	***														'83-'84	Energy improvements at Whetstone Park.

\*\*Approved by Clintonville Area Commission 7-1-82.

# COMMUNITY PLANNING AREA

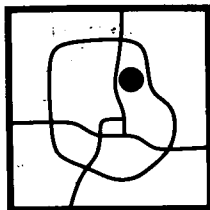
10 CLINTONVILLE











June 1983

Proposed Project	Project Map Reference Number	Map Issuing City Agency	Source of Need							Status	Project Description
			Issuing Agency	Previous CIP	Area Plans/Profile	Other (see footnote)	CIP 1983 - 1988	Agency P1 or P11	No Funding Identified		
Wahalla Ravine Improvements	3	Parks	●		P					●	General ravine improvements and clean-up.
Overbrook Ravine Improvements	4	Parks	●		P					●	General ravine improvements and clean-up.
Renovate Recreation Center	2	Parks	●		P					●	Whetstone Recreation Center and Shelter House.
Fire Facility General Renovation	1	Fire	●	**				'83-'85			At Station 19.
Fire Facility Energy Conservation	1	Fire	●	**				'83-'85	1		At Station 19.
Leland Ditch Erosion Control	1	Sewer	●	●				'83		\$ 20	To stop the open stream erosion which is threatening a residence on Leland Avenue.
Storm and Sanitary Sewer Improvements	-	Sewer	●							●	Alleviation of general problems and renovation.

1. Energy and Telecommunication Department

\*\*Approved by Clintonville Area Commission 7-1-82.

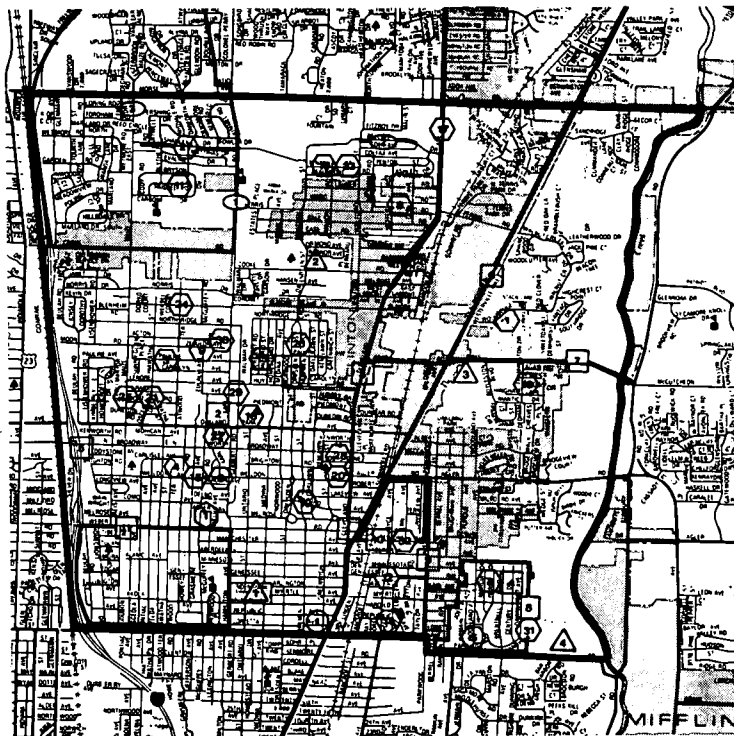


-  Division of Sewerage & Drainage
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**North Linden  
Community Planning Area 11**

June 1983



# COMMUNITY PLANNING AREA

11 NORTH LINDEN

June 1983

Proposed Project	Project Map Reference Number	Implementing City Agency	Implementing Agency	Community	Previous CIP	Area Plans/Profile	Source of Need				Status	Project Description
							Other	Local (outside)	CIP (1983 - 1988)	Agency Priority		
							Agency Priority	No Funding Identified	No Funding Identified	Anticipated Total Project Cost (in thousands if available)		
Cleveland-Weber Intersection Improvements	1	Tr Engr Engr	●	●	●		1	82			\$ 200	This project consists of widening the Cleveland Avenue approaches to the intersection to provide room for turning lanes.
Karl Road Relocation	2	Tr Engr				A	1					North of East North Broadway to connect McGuffey with Karl.
Cleveland Avenue Improvements	3	Tr Engr	●	●								From 11th to Ferris Parking restrictions and signal timing.
Street Resurfacing	4	Engr		●								Century from Myrtle to Minnesota.
E.N. Broadway and I-71 Intersection Widening	5	Tr Engr Engr	●									Modify bridge to install turn lanes.
Street Resurfacing	4	Engr		●								Dawnlight from Myrtle to Minnesota.
Westerville Road Improvement	6	Engr	●					1 2				Widen to four lanes from Weber Road to I-270.
Innis Road Improvement	7	Engr	●					1 2				Widen to four lanes from Westerville Road to Sunbury Road.
Repair Curbs	4	Engr		●								Myrtle to Minnesota on Dawnlight and Century Drive.

1. Thoroughfare Plan  
2. Regional Transportation Plan

# COMMUNITY PLANNING AREA

11 NORTH LINDEN

June 1983

Proposed Project	Project Map Reference Number	Implementing City Agency	Implementing Agency	Community	Previous CIP	Source of Need						Status	Project Description
						Area Plans/Profile	Other (See Footnotes)	CIP 1983 - 1988	Agency Priority	No Funding Identified	No Funding Potential		
New Sidewalks	8	Engn	●										Sidewalks needed in entire area as mapped.
Street Repair	9	Engn				1							Potholes in most of the streets except Republic Avenue. See Area as mapped.
New Sidewalks	9	Engn				1							Existing sidewalks are crumbling.
Curbs and Gutters	10	Engn				1							No curbs and gutters north of Denure Avenue, standing water in area.
New Sidewalks	11	Engn				1							Sidewalks are generally non-existent in area as mapped.
New Street Lighting	1	Elec	●	●				'83-'85					.5 miles - Woodedge Road
New Street Lighting	2	Elec	●	●				'83-'85					.8 miles - Dredden Avenue from Huy to Northridge and Huy Road from Karl east to Corporate Line.
New Street Lighting	3	Elec	●	●				'83-'85					.3 miles - Pauline Avenue and Audubon Road.

1. D.O.D. Windshield Survey

# COMMUNITY PLANNING AREA

## 11 NORTH LINDEN

June 1983

Proposed Project	Project No. Reference Number	App Issuing City Agency	App Issuing Agency	Community	Previous CIP	Area Plan/Profile	Source of Need				Status		Project Description
							Other (See Formosa)	CIP 1983 - 1988	Agency P1 or P1Y	Neighborhood Priority	Ne Funding Identified	Ne Funding Identified	
New Street Lighting	4	Elec	●	●					'83-'85				.2 miles - Hiawatha Street from East North Broadway to Malden Avenue.
New Street Lighting	3	Elec	●	●					'83-'85				.7 miles - Arlington Park west of Woodland North of Mock Road.
New Street Lighting	6	Elec	●	●					'83-'85				.1 miles - Sandlin Avenue, McGuffey Road to Hamilton Avenue.
New Street Lighting	7	Elec	●	●					'83-'85				3.7 miles - Arlington Park East section.
New Street Lighting	8	Elec	●	●					'83-'85				.8 miles - Ward Avenue from Cleveland Avenue west to City limits.
New Street Lighting	9	Elec	●	●					'83-'85				.5 miles - Zebulon Avenue.
New Street Lighting	10	Elec	●	●				●		●			.3 miles - Breven Street from Malden Avenue to Weber Road.
New Street Lighting	11	Elec	●	●				●		●			.7 miles - Bryden Road and Carbon Drive.
New Street Lighting	12	Elec	●	●				●		●			.4 miles - Genessee Avenue from the railroad to Parkwood.

COMMUNITY PLANNING AREA		Source of Need										Status	June 1983
		Project Map Reference Number	Map Issuing City Agency	Map Issuing Agency	Community	Provision CIP	Area Prioritized	Other (see comments)	CIP 1983-1989	Area Priority No Funding Identified	No Funding Identified	Anti-Corruption Total Project Cost (1/3 Bonus) if Available	Project Description
11 NORTH LINDEN		Proposed Project											
		New Street Lighting	1 <sup>1</sup>	Elec	●	●				●	●		.5 miles - Ontario Street from E. N. Broadway.
		New Street Lighting	1 <sup>2</sup>	Elec	●	●				●	●		.1 miles - Joan Place.
		New Street Lighting	1 <sup>3</sup>	Elec	●	●				●	●		.2 miles - Weldon Avenue-McCuffey Avenue to Hamilton Avenue.
		New Street Lighting	1 <sup>4</sup>	Elec	●	●				●	●		.3 miles - Ontario Street-Carolyn Avenue to Northridge Road.
		New Street Lighting	1 <sup>5</sup>	Elec	●	●		P		●	●		Cleveland Avenue, Cook Road to S.R. 161.
		New Street Lighting	1 <sup>6</sup>	Elec	●	●				●	●		.8 miles - Framington Subdivision - South of Innis, north of Framington.
		New Street Lighting	1 <sup>7</sup>	Elec	●	●				●	●		Shanley Drive - Fenton Street, Karl Road to Walford.
		New Street Lighting	2 <sup>1</sup>	Elec	●	●				●	●		2900 Block Greenwich.
		New Street Lighting	2 <sup>2</sup>	Elec	●	●				●	●		.1 mile - Intersection Hiawatha and Dunedin.

# COMMUNITY PLANNING AREA

11 NORTH LINDEN

June 1983

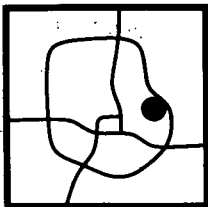
Proposed Project	Project Map Reference Number	Implementing City Agency	Implementing Agency	Source of Need							Status	Project Description	
				Previous CIP	New Plans/Profile	Other (see footnotes)	CIP 1983 - 1988	Agency Priority	No Funding Priority	Anticipated Total Project Cost (in thousands) if Available			
New Street Lighting	23	Elec	●	●						●	●	✓	.2 miles - E. N. Broadway, McGuffey to Hamilton.
New Street Lighting	23	Elec	●	●						●	●	✓	.6 miles - Fenton Street and Besumont Road from Dresden to Walford Avenue.
New Street Lighting	23	Elec	●	●						●	●		1.4 miles - Edgemont Garden Area; Northridge, Carolyn and Pauline from Maize to Karl.
New Street Lighting	23	Elec	●	●						●	●		.3 miles - Vrene Avenue from Maize Road to Atwood Terrace.
New Street Lighting	23	Elec	●	●						●	●		.4 miles - Bremen Street from Northridge Road to Huy Road.
New Street Lighting	23	Elec	●	●						●	●		.6 miles - Shanley Drive from Karl Road to Maize Road.
New Street Lighting	23	Elec	●	●						●	●		.2 miles - Eddystone from Cleveland to Keniwa.
New Street Lighting	23	Elec	●	●						●	●		.3 miles - Melmar Drive from Huy to Northridge.
New Street Lighting	30	Elec	●	●						●	●		.3 miles - Zebulon Avenue from Atwood Terrace to Karl Road.













COMMUNITY PLANNING AREA		Source of Need										Status	June 1983
		Project Map Reference Number	Implementing City Agency	Implementing Agency	Community	Previous CIP	Area Plan/Profile	Other (use code)	CIP 1983 - 1988	Agency Priority	No Agency/No Identified	No Funding Identified	Anticipated Total Project Cost (in thousands) if Available
11 NORTH LINDEN		Proposed Project											Project Description
	3b	New Street Lighting	Elec					1					See map for area.
	3c	New Street Lighting	Elec					1					Lighting need north of Danene Avenue.
	△	General Renovation and Energy Improvements	Parks	●				'83-'84					Renovation and energy improvements at the Linden Park Recreation Center.
	△	General Renovation and Energy Improvements	Parks	●				'83-'84					Renovation and energy improvements to the Cook Road Recreation Center.
	△	Innie Park-Nature Center/Day Camp	Parks	●	●	●					\$ 400		Development of a 92-acre site, including modification and renovation for site grading, landscaping, and walkway and path construction.
	△	Parkland Acquisition	Parks	●			P						Northeastern portion of community.
	△	Mock Road Park Improvements	Parks	●									The Arlington Park Community Organization requests the following: New playground equipment, tot lot, shelter house, paving, lights, water fountains and bathroom facilities.

1. D.O.D. Windshield Survey

COMMUNITY PLANNING AREA		Source of Need										Status	June 1983			
11 NORTH LINDEN		Project No.	Reference Number	Implementing City Agency	Implementing Agency	Community	Previous CIP	New Plan/Profile	Other (see comments)	CIP 1983-1988	Agency Priority	No Funding Identified	Neighborhood Priority	No Funding Identified	Anticipated Total Project Cost (in \$thous.) if Available	Project Description
Proposed Project																
General Fire Facility Renovation	①	Fire	●							'83-'85						At Station #16.
Fire Facility Energy Conservation	①	Fire	●							'83-'85						At Station #16.
New Police Substation	①	Police	●											\$ 417		Construction of an 1800 square foot police precinct structure in the area of Hudson and Cleveland.
Maize Road Area Storm Sewer	①	Sewer	●	●						'84-'85-'87				\$ 1,449		Engineering and design work for storm sewer construction to provide additional outlet in the area north and south of Morse Road.
Belcher Ditch Erosion Control (Phase 1)	②	Sewer	●							'83-'84				\$ 470		To control the erosion which is taking place in the ditch between the railroad just east of Cleveland Avenue and Alum Creek.
Belcher Ditch Enclosure	②	Sewer	●	●						'83-'84				\$ 151		Enclose an open section of the ditch north of Belcher Drive in the vicinity of Eden Avenue.
Bankcroft Ditch Improvements	③	Sewer	●	●					●		●			\$ 4,315		In the vicinity of Morse and Maize Roads.

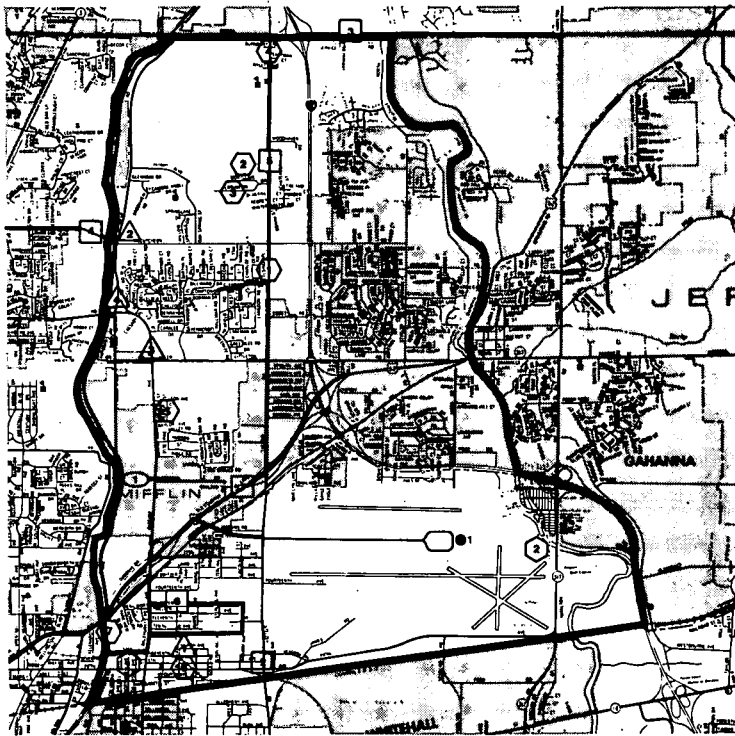


-  Division of Sewerage & Drainage
-  Division of Water
-  Division of Engineering & Construction
-  Division of Traffic Engineering & Parking
-  Division of Electricity
-  Division of Fire
-  Division of Police
-  Recreation & Parks
-  City of Columbus
-  County and other municipalities



**Agler/Cassady**  
Community Planning Area 12

June 1983



# COMMUNITY PLANNING AREA

12 AGLER CASSADY

Aug 1983

Proposed Project	Project Map Reference Number	Implementing City Agency	Implementing Agency	Community	Source of Need					Status	Project Description		
					Previous CIP	Area Plan/Profile	Other: Lane (concrete)	CIP 1983 - 1988	Agency Priority			No Funding Identified	No Workshop Priority
I.R. 670	1	Engn	●	●	A	1 2 3 4 5				183- 85		\$164,000	To construct six miles of six lane interstate highway linking the Downtown to I-270 with a connector to Port Columbus.
Stelzer Road/9th Avenue Improvements	2	Tr Engn	●				5		●				Improvements to Fifth Avenue (east bound traffic) and Stelzer Avenue (south bound resp).
Morse Road Improvements	3	Engn	●			1 5							Widen to four lanes from I-270 to Hamilton Road.
Iris Road Improvement	4	Engn	●			1 5							Widen to four lanes from Westerville Road to Sarbury Road.
Stelzer Road Improvement	5	Engn	●				5						Widen to two full lanes from U.S. 62 to Morse Road.
Street Repairs	6	Engn					6						Street are generally in poor shape, many potholes in mapped area.
Curb and Gutter Improvements	6	Engn					6						Curbs and gutters are present in this area but drainage is poor.
New Street Lighting	7	Elec	●	●						83- 85			.9 miles - Stelzer Road from McCutcheon Road to Forsaker Drive, Glenber Drive and Glenber Court.

1. Thoroughfare Plan  
2. Negotiated Investment Strategy Report, 1980

3. Downtown Comprehensive Planning Study, 1976  
4. I-670 Task Force Report, 1981

5. Regional Transportation Plan  
6. D.O.D. Windsheld Survey

# COMMUNITY PLANNING AREA

12 AGLER CASSADY

June 1983

Proposed Project	Project Map Reference Number	Proposing City Agency	Source of Need							Status		Project Description
			Community	Previous CIP	Area Plan/Profile	Other (see footnote)	CIP 1983-1988	Agency Priority No Funding Identified	Neighborhood Priority No Funding Identified	Anticipated Total Project Cost (in thousands) if Available		
New Street Lighting	2	Elec	●	●					●	●		.03 miles - on Montclair Drive.
New Street Lighting	3	Elec	●	●					●	●		.05 miles - on Florian Drive.
New Street Lighting	4	Elec	●	●					●	●		.01 mile - Burnbury Road (off of Stelzer and south of Morse).
New Street Lighting	5	Elec	●	●					●	●		.05 miles - Casady Farm Subdivision, along Cornel, Pepper, Baylor and Leon Roads.
New Street Lighting	6	Elec	●	●					●	●		.01 mile - Access Alley, east of Rarig and south of Eighth Avenue.
New Street Lighting	7	Elec					1					No lighting exists in mapped area.
General Renovation And Energy Improvements	1	Parks	●						'83-'84			At Krum Park.

1. D.O.D. Windshield Survey

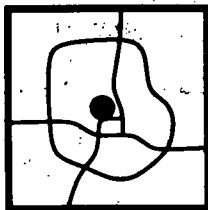
COMMUNITY PLANNING AREA		Source of Need										Status	June 1983
12 AGLER CASSADY		Project Map Reference Number	Implementing City Agency	Community	Previous CIP	Area Plan/Profile	Other (See footnotes)	CIP 1983 - 1988	Agency P/P or T/T	Neighborhood Priority	Neighborhood Priority	Multiphase Total Project Cost (in phase) if Available	Project Description
Proposed Project													
Community Scale Recreation Center	2	Parks	●		A								In the vicinity of McCutcheon and Innis Roads as recommended by the Northeast Area Commission Task Force. The Recreation and Parks Department is currently studying feasibility.
Community Scale Recreation Center	3	Parks	●										In the vicinity of Agler and Cassady Roads as recommended by the Northeast Area Commission Task Force. The Recreation and Parks Department is currently studying feasibility.
Alum Creek Park Development	4	Parks			P								Riverfront park area.
Acquire Park Easements	5	Parks			A								Area wide need.
General Fire Facility Renovation	1	Fire	●					'83-'85					At Station #20.
Fire Facility Energy Improvements	1	Fire	●					'83-'85					At Station #20.
General Fire Facility Renovation	2	Fire	●					'83-'85					At Airport Facility.
Fire Facility Energy Improvements	2	Fire	●					'83-'85					At Airport Facility.











# COMMUNITY PLANNING AREA

12 AGLER CASSADY

June 1983

Proposed Project	Project Map Reference Number	Map Issuing City Agency	Map Issuing Agency	Community	Previous CIP	New Prior Profile	Other Uses (techno)	CIP 1983 - 1988	Agency P/L or T/Y	No Funding Identified	No Funding Identified	Participated Total Project Cost (in thousands) if Available	Project Description	Source of Need		Status	
Alum Creek Subtrunk	1	Sewer	●	●				'84				\$ 365	To construct a sanitary sewer from the Alum Creek Trunk in the vicinity of Alum Creek eastwardly to east of Cassady Avenue.				
Airport Service Building	1	Airport	●					'83				\$ 1,736	Structure to store, repair and maintain snow removal equipment.				
Extension of Runway 10L-28R	1	Airport	●					'86				\$ 7,000	Extend Runway 10L-28R by 1000 feet on both ends.				

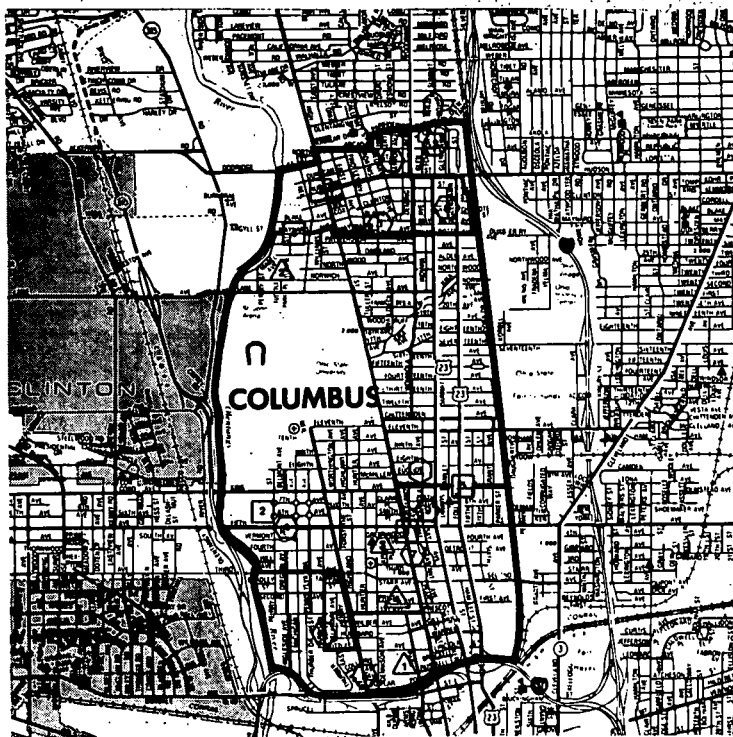


-  Division of Sewerage & Drainage
-  Division of Water
-  Division of Engineering & Construction
-  Division of Traffic Engineering & Parking
-  Division of Electricity
-  Division of Fire
-  Division of Police
-  Recreation & Parks
-  City of Columbus
-  County and other municipalities



**Near North/University  
Community Planning Area 13**

June 1983





# COMMUNITY PLANNING AREA

## 13 NEAR NORTH/UNIVERSITY

June 1983

Proposed Project	Project No.	Reference Number	Source of Need							Status			Project Description
			Implementing City Agency	Community	Private CIP	Area Plan/Profile	Other (See Footnote)	CIP 1982-1988	Agency Priority	No Funding Identified	No Funding Identified	Participating Total Project Cost (in thousands) if available	
Neighborhood Commercial Revitalization	1	Tr Engr Engr	●	●					84-85			\$ 1,950	In North High Street between Goodale Boulevard and 11th Avenue. Improvements shall consist of street resurfacing, new curbs, decorative sidewalks, street trees and off-street parking lots.
Improve 5th Avenue	2	Tr Engr			A								Between Neil and the Olentangy River.
Hudson/High Intersection Improvements	3	Tr Engr Engr	●										Widen corners for bus and truck turns.
Widen Pearl Alley	-	Engr		●							●		Widen Alley (exact location(s) not identified).
Improve Community Alleys	-	Engr		●							●		Improve E. 12th, 13th, and 14th alleys (exact location(s) not identified).
Alley Repair Needed	4	Engr		●									General Poor Alley conditions in mapped area.
Street Resurfacing	5	Engr		●									Seventh Avenue - High Street to Penn Central tracts.
New Street Lighting	1	Elec	●	●	A				83-85				4.0 miles - OSU area Phase VIII Haynard to Hudson, High to Railroad.

COMMUNITY PLANNING AREA		Source of Need										Status	June 1983
		Project Map Reference Number	Implementing City Agency	Community	Previous CIP	Area Plan/Project	Other (see footnotes)	CIP 1983-1988	Needs Prioritized	No Funding Identified	No Response Identified	Anticipated Total Project Cost (in dollars) if available	
13 NEAR NORTH/UNIVERSITY		Proposed Project											Project Description
	2	New Street Lighting	Elec	●	●		A	'83-'85					.2 miles - Medary Avenue from Hudson Street to Arcadia Avenue.
	3	New Street Lighting	Elec	●	●		A	'83-'85					.1 mile - Glen Echo Drive from Hudson Street to Arcadia Avenue.
	4	New Street Lighting	Elec	●	●			'83-'85					3.0 miles - An area bounded by Neil on the east, the Olontangy River on the west, Third Avenue on the south and Fifth Avenue on the North.
	5	New Street Lighting	Elec	●	●			'83-'85					3.0 miles - An area bounded by High Street on the east, Neil on the west, Goodale on the south and First on the north.
	5	New Street Lighting	Elec	●	●			'83-'85					1.5 miles - An area bounded by Neil on the east, Harrison on the west, Buttes on the south and Third on the north.
	7	Neighborhood Commercial Lighting	Elec	●	●			'84			\$ 107		Street lighting improvements on North High Street from Goodale to 11th.
	8	New Street Lighting	Elec	●	●				●	●			.2 miles - Glenmead from Tomkins to Maynard.
	9	New Street Lighting	Elec		●								Between Fourth and High from Fifth to Seventh.

# COMMUNITY PLANNING AREA

13 NEAR NORTH/UNIVERSITY

June 1983

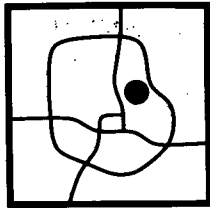
Proposed Project	Project Map Reference Number	Implementing City Agency	Implementing Agency	Community	Previous CIP	Area Plan/Profile	Source of Need				Status		Project Description
							Other (see footnotes)	CIP 1983 - 1988	Agency Priority	No Funding Identified	Neighborhood Priority	No Funding Identified	
New Park Lighting	△	Parks	●									●	Goodale Park Interval Lighting - This project is a high priority of the Victorian Village Society.
Park Needed	△	Parks			A								From five to ten acres.
Recreation Center Expansion	△	Parks	●	●			'85				\$ 225		Expansion of Tuttle Park Recreation Center to include an expanded gymnasium.
Park Renovation and Energy Project	△	Parks	●				'83-'84						Renovation and Energy Improvements at Thompson Recreation Center.
Tuttle Park Improvements	△	Parks	●	●			'83-'84						Roadway, hard-surface area and parking lot renovation and improvements.
Goodale Park Improvements	△	Parks	●				'83-'84						Roadway, hard-surface area and parking lot renovation and improvements.
Price Avenue Park	△	Parks	●									●	Complete park site.
Street Tree Replacement	△		●									●	Victorian Village Area.











# COMMUNITY PLANNING AREA

13 NEAR NORTH/UNIVERSITY

June 1983

Proposed Project	Project Map Reference Number	Implementing City Agency	Implementing Agency	Community	Previous CIP	Area Reauthorized	Source of Need				Status		Project Description	
							Other (see comments)	CIP 1983-1988	Needs Priority	No Funding Identified	No Funding Identified	No Funding Identified		Allocated Total Project Cost (in thousands) if available
Fire Facility Renovation	①	Fire	●						83-85				Renovation of existing Station.	
Fire Facility Energy Conservation	①	Fire	●						83-85				Energy conservation measures at an existing station.	
Sewer Separation	②	Sewers	●	●	●	A P					●	●	\$ 2,294	Complete separation of combined storm and sanitary systems in entire community.

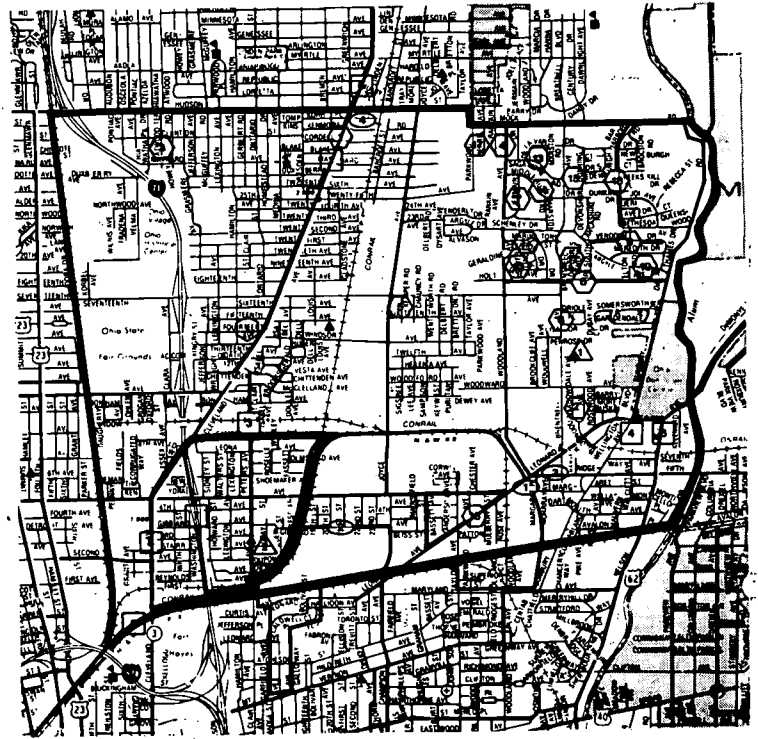


-  Division of Sewerage & Drainage
-  Division of Water
-  Division of Engineering & Construction
-  Division of Traffic Engineering & Parking
-  Division of Electricity
-  Division of Fire
-  Division of Police
-  Recreation & Parks
-  City of Columbus
-  County and other municipalities



**South Linden**  
Community Planning Area 14

June 1983



# COMMUNITY PLANNING AREA

14 SOUTH LINDEN

June 1983

Proposed Project	Project Map Reference Number	Implementing City Agency	Community	Previous CIP	Area Plan/Profile	Other Use	CIP 1983 - 1988	Agency PR (CIP) Identified	No Funding	No Funding Identified	Anticipated Total Project Cost (in millions) if Available	Status	Project Description	
														Source of Need
Neighborhood Commercial Revitalization	1	Engn	●	●									\$ 100	Improvements along Cleveland Avenue, 25th Avenue to Hudson Street. Work will include new curbs, sidewalks and street trees.
I.R. 670	2	Engn	●	●			1 83-85						\$164,000	To construct six miles of six lane interstate highway linking the Downtown to I-270 with a connector to Port Columbus.
Widen St. Clair Avenue	3	Engn		●		A								Widen to four lanes from Railroad to Cleveland Avenue.
Johnstown Road and Sarbury Road Intersection Widening	4	Tr Engn	●					●						Widen to improve capacity. Not required if I-670 is constructed.
Cleveland Avenue Improvements	5	Tr Engn	●	●										From 11th to Ferris: parking restrictions, signal retiming and resurfacing.
Johnstown Road and Nelson Road Intersection Widening	6	Tr Engn	●					●						Widen to improve capacity. Not required if I-670 is constructed.
Curbs and Sidewalks	7	Engn		●										A general need in the area east of I-71 as mapped.
Street Resurfacing	8	Engn		●										A general need in the area as mapped.

1. Regional Transportation Plan

# COMMUNITY PLANNING AREA

14 SOUTH LINDEN

June 1983

Proposed Project	Project Map Reference Number	Imp Implementing City Agency	Community	Previous CIP	Free Planning Title	Other (See footnote)	CIP 1983 - 1988	Source of Need			Status			Project Description
								Agency Priority	No Funding Identified	No General Priority	No Funding Identified	Anticipated Total Project Cost (in phase.) if feasible		
Neighborhood Commercial Street Lighting	1	Elec	●	●								\$ 16	Provide street lighting improvements on Cleveland Avenue, 25th to Hudson.	
New Street Lighting	2	Elec	●	●									.4 miles - Wildwood and Meadowdale Avenue from Leonard Avenue to Woodland Avenue.	
New Street Lighting	3	Elec	●	●						●	●		.1 miles - Atwood Terrace from Clinton to Maynard Avenue.	
New Street Lighting	4	Elec	●	●						●	●		.1 miles - Woodland Avenue from Mock Road to Sagamore.	
New Street Lighting	5	Elec	●	●						●	●		1.8 miles - Lindale Addition east of Joyce south of 17th.	
New Street Lighting	6	Elec	●	●						●	●		.8 miles - Holt Avenue from Woodland Avenue to Sunbury Road.	
New Street Lighting	7	Elec	●	●						●	●		.5 miles - Shanley Drive and Jermain Drive.	
New Street Lighting	8	Elec	●	●						●	●		.5 miles - Brentnell Avenue - 17th to Woodward.	
New Street Lighting	9	Elec	●	●						●	●		.7 miles - Vandome, Deporree - Avoet Village	

# COMMUNITY PLANNING AREA

14 SOUTH LINDEN

June 1983

Proposed Project	Project Map Reference Number	Implementing City Agency	Implementing Agency	Community	Previous CIP	Area Plan/Profile	Other (see footnote)	Source of Need		Status		Project Description
								CIP 1983-1988	Agency Priority	No Funding Identified	No Neighborhood Priority	
New Street Lighting	10	Elec	●	●				●	●			1 mile - Jane, Werling, Meredith, Thames, Geraldine, Marina and Devonshire.
New Street Lighting	11	Elec	●	●				●	●			9 miles - Argyle Drive - Amvet Village.
New Street Lighting	12	Elec	●	●				●	●			.2 miles - Karon Drive - Amvet Village.
New Street Lighting	13	Elec	●	●				●	●			.2 miles - Marston Road north of Schenley - Amvet Village.
New Street Lighting	14	Elec	●	●				●	●			.5 miles - Middlehurst Drive - Amvet Village.
New Street Lighting	15	Elec	●	●				●	●			.6 miles - Brentnell Avenue and Sagmore - Amvet Village.
New Street Lighting	16	Elec	●	●				●	●			1.1 miles - Devon Park Triangle - north of Leonard, south of East Fifth Avenue, east of Bassett.
New Street Lighting	17	Elec	●	●				●	●			.1 mile - Berrell Avenue, south of Mock Road.
New Street Lighting	18	Elec	●	●				●	●			.5 miles - Bar Harbor from Mock to Bethesda.



# COMMUNITY PLANNING AREA

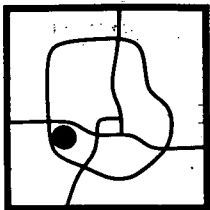
14 SOUTH LINDEN











June 1983

Proposed Project	Project Map Reference Number	Implementing City Agency	Implementing Agency	Community	Previous CIP	Area Plan/Profile	Source of Need				Status		Project Description
							Other (see footnotes)	CIP 1983 - 1988	Agency P1 (2/7/77)	No Funding Identified	No Fictitious Priority	No Funding Identified	
Fire Facility Renovation	①	Fire	●						'83-'85				At Station #18.
Fire Facility Energy Conservation Project	①	Fire	●						'83-'85				At Station #18.
Park Renovation and Energy Improvements	①	Parks	●						'83-'84				Brentnell Park.
Recreation Area Development	②	Parks	●						'85		\$ 100		Milo Grogan Park.
Recreation Area Expansion	②	Parks	●	●							\$ 250		Milo Grogan Recreation Center.
Right-of-Way Landscaping	③	Undetermined					1				\$ 347		On West side of Joyce Avenue (5th to 17th) 150 deciduous and 650 evergreen trees as well as shrubs and ground cover.
East Central Relief Store and Sanitary	①	Sewer	●	●	●				'83		\$ 1,250		Separation of the existing combined system at Gibbard Avenue and the Penn Central Railroad on the south, I-71 on the west and the Norfolk and Western Railroad on the north and east.

1. Development Department Staff

COMMUNITY PLANNING AREA		Source of Need										Status		June 1983	
		Project Map Reference Number	Implementing City Agency	Implementing Agency	Community	Previous CIP	Area Plan/Profile	Other (see footnotes)	CIP 1983 - 1988	Agency Priority	No Funding Identified	Neighborhood Priority	No Funding Identified		Multipurpose Total Project Cost (in thousands) if Available
Proposed Project															Project Description
East Central Relief Storm and Sanitary		2	Sewer	●	●	●				183		○	\$ 235	Separation of the existing combined system at Gibbard Avenue on the north, Mt. Vernon on the south, Monroe Avenue on the west and Bolivar and Joyce Avenue on the east.	
Improve Storm Drainage to Poorly Drained Area		3	Sewer		●		A					●		Between Penn Central Railroad and 5th Avenue near Leonard Avenue.	
Bancroft Ditch Improvements		4	Sewer	●	●						●	●	\$ 70	Cleaning and reshaping of the existing ditch in the vicinity of Bancroft Street and Penn Central tracts.	
Community Health Center			Health		●		P							Needed in the Milo-Grogan Area.	

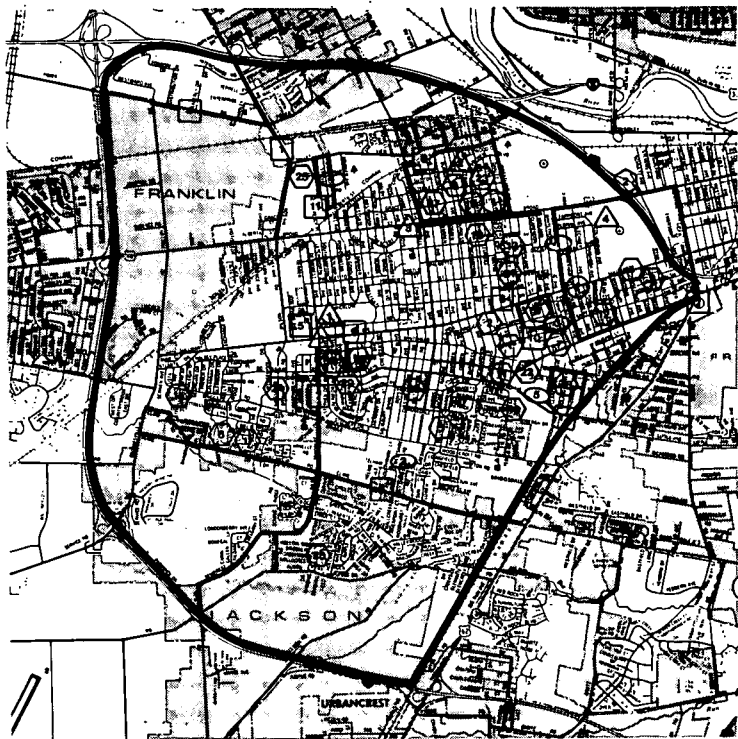


-  Division of Sewerage & Drainage
-  Division of Water
-  Division of Engineering & Construction
-  Division of Traffic, Engineering & Parking
-  Division of Electricity
-  Division of Fire
-  Division of Police
-  Recreation & Parks
-  City of Columbus
-  County and other municipalities



**Hilltop**  
Community Planning Area 15

June 1983



# COMMUNITY PLANNING AREA

15 HILLTOP

June 1983

Proposed Project	Project No.	No. References Number	Proposing City Agency	Proposing Agency Community	Previous CIP	Source of Need				Status	Project Description	
						Area Plan/Project	Other (see footnote)	CIP 1982 - 1988	Agency Priority			Neighborhood Identified
Wilson Road Improvement	1	Engn	●	●	●	1 2	18A-85				\$10,000	Reconstruction of Wilson Road from Broad Street to I.R. 70. Would provide four lanes plus turning lanes and grade separation from Conestee.
Mound and Central Intersection Reconstruction	2	Tr Engn Engn	●		●	2			●		\$ 1,500	Reconstruction of intersection approaches to permit the installation of turning lanes.
Improve Clime Road	3	Engn	●	●	●	1 2					\$ 4,500	This project would upgrade Clime Road to a four lane road with turning lanes from Harriburg Pike to Georgesville Road. Franklin County is the lead agency for this project.
Improve Fisher Road	4	Engn	●			1 2						Widen to four lanes from Wilson Road to Phillipi Road.
Demorest and Sullivant Intersection Improvement	5	Tr Engn	●						●			Widen and improve south leg.
Neighborhood Commercial Revitalization	6	Engn & Traffic				3					\$ 400	New curbs, sidewalks, street and alley resurfacing, off-street parking, trees, and street furniture on West Broad Street between Westland and Terrace Avenues.
Demorest Road Improvement	7	Engn		●								Widen and construct curbs on Demorest. Requested by the Greater Hilltop Area Commission.
Replace Deteriorated Curbs	8	Engn		●								Replacement of deteriorated curbs north of Broad between Westland and Hague. Requested by the Greater Hilltop Area Commission.
New Curbs	9	Engn		●		3						New curbs required, Burnside area.

1. Thoroughfare Plan  
2. Regional Transportation Plan

3. Development Department Staff

COMMUNITY PLANNING AREA		Source of Need										Status	June 1983	
		Project Map Reference Number	Iss. Issuing City Agency	Iss. Issuing Agency	Community	Previous CIP	Area Plan/Profile	Other (See Footnote)	CIP 1983 - 1988	Agency Priority	No Funding Identified	No Funding Identified	Not Included Total Project Cost (in thousands) if Available	
15 HILLTOP		Proposed Project												Project Description
	10	New Curbs	Engn						3					Clarendon area.
	11	New Curbs	Engn						3					Valley View Heights.
	12	New Curbs	Engn						3					Rainbow Addition.
	1	New Street Lighting	Elec	●	●				'83-'85					.1 mile - South Oakley Avenue south of Safford.
	2	New Street Lighting	Elec	●	●				'83-'85					.5 miles - Terrace Avenue from Sullivant Avenue to Eakin Road.
	3	New Street Lighting	Elec	●	●				'83-'85					.3 miles - Catherine Street.
	4	New Street Lighting	Elec	●	●				'83-'85					.1 miles - Union Avenue from Helen Street to Townsend Avenue.
	5	New Street Lighting	Elec	●	●				'83-'85					.5 miles - Bellflower and Racine Avenue from Rosedale to Briggs.

3. Development Department Staff

# COMMUNITY PLANNING AREA

15 HILLTOP

June 1983

Proposed Project	Project Map Reference Number	Implementing City Agency	Implementing Agency	Community	Previous CIP	Area Plan/Profile	Source of Need				Status			Project Description
							Other	CIP 1983 - 1988	Agency Plan/Profile	Agency Priority	Neighborhood Identified	Neighborhood Priority	Neighborhood Identified	
New Street Lighting	6	Elec	●	●				83-85						.1 mile - North Torry Hill Drive from Holly Hill to Merdwood Drive.
New Street Lighting	7	Elec	●	●				83-85						.4 miles - Safford and Homewood from Whitthorn to Highland.
New Street Lighting	8	Elec	●	●				83-85						.1 mile - South Highland Avenue from Sullivant Avenue to Springmont.
New Street Lighting	9	Elec	●	●				83-85						.2 miles - Sutton Avenue from Terrace to Richardson and Terrace from Steel to Ridge.
New Street Lighting	10	Elec	●	●				83-85						.7 miles - South Brinker Avenue from Sullivant to Eakin Road.
New Street Lighting	11	Elec	●	●				83-85						.5 miles - Eureka Avenue from Sullivant to Eakin Road.
New Street Lighting	12	Elec	●	●					●	●				.1 miles - Elnor Street and Reed Street.
New Street Lighting	13	Elec	●	●					●	●				.1 miles - Clarendon Lane.
New Street Lighting	14	Elec	●	●					●	●				.8 miles - Athens, Dexter and Desoret from Sullivant to Eakin.

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COMMUNITY PLANNING AREA		Source of Need										Status	June 1983		
		Project No.	Reference Number	Implementing City Agency	Implementing Agency	Community	Previous CIP	Area Plan/Profile	Other Local (non-CIP)	CIP 1980 - 1988	Agency Priority	No Funding Identified	No Funding Identified	Anticipated Total Project Cost (in thousands if available)	
15 HILLTOP		Proposed Project													
Proposed Project															Project Description
New Street Lighting	19	Elec	●	●					●	●					1.8 miles - Georgian Heights - bounded by Sullivent, Salem, Savannah and Georgesville.
New Street Lighting	19	Elec	●	●					●	●					2.6 miles - Asheret, Claredon, Homewood, Safford, Union, Wheatland, Suncrest, Highland and Whitethorne.
New Street Lighting	19	Elec	●	●					●	●					2.1 miles - Brookshire South Subdivision of Briggs west of Bronwyn.
New Street Lighting	19	Elec	●	●					●	●					.2 miles - North Eureka Avenue - Broed to Steele.
New Street Lighting	19	Elec	●	●					●	●					North of Broed - Wheatland to Hauge.
New Street Lighting	20	Elec	●	●					●	●					.3 miles - Vanderberg from Hauge to Richardson.
New Street Lighting	21	Elec	●	●					●	●					.1 miles - North Wheatland.
New Street Lighting	22	Elec	●	●					●	●					.3 miles - South Eureka from Eakin to Spaatz.
New Street Lighting	23	Elec	●	●					●	●					.5 miles - North Wayne Avenue from West Broed to Glenview.

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# COMMUNITY PLANNING AREA

15 HILLTOP

June 1983

Proposed Project	Project Map Reference Number	Implementing Agency	Implementing City Agency	Community	Previous CUP	Area Plan/Project	Other (see comments)	Source of Need		Status		Project Description
								City 1983-1988	Agency Priority	No Funding Identified	No Funding Identified	
New Street Lighting	24	Elec	●	●					●	●		.3 miles - Brixham Road from Eakin.
New Street Lighting	25	Elec	●	●					●	●		.3 miles - North South Hampton Road from Valley View Drive to Joan Road.
New Street Lighting	26	Elec	●	●					●	●		.1 mile - Intersection of Winding Hollow and Alkire Road.
New Street Lighting	27	Elec	●	●					●	●		.5 miles - North Warren from West Broad Street to railroad.
New Street Lighting	28	Elec	●	●					●	●		.3 miles - Butler Avenue from Union to West Mound.
New Street Lighting	29	Elec					1					Burnside Area.
Fire Station Renovation	1	Fire	●						'83-'85			Station #17.
Fire Station Energy Conservation Project	1	Fire	●						'83-'85			Station #17.

1. Development Department Staff



# COMMUNITY PLANNING AREA

15 HILLTOP

June 1983

Proposed Project	Project No.	Reference Number	Source of Need							Status			Project Description
			Implementing City Agency	Community	Previous CIP	Area Plan/Profile	Other (See Footnote)	CIP 1983-1988	Agency Priority	No Funding Identified	No Funding Identified	Anticipated Total Project Cost (in thousands) if available	
New Fire Station	①	Fire	●									\$ 1,150	A relocation from older facilities.
Police Substation Energy Conservation Project	①	Police	●					'84					At existing station.
Park Renovation and Energy Improvement Project	①	Parks	●					'83-'84					Westgate Park.
Recreation Center Expansion	②	Parks	●	●	●			'85				\$ 225	Holton Park Recreation Center.
Roadway Hard-Surface Area Improvements	①	Parks	●					'83-'84					Westgate Park.
Street Tree Improvement Program	①	Parks		●						●			Community Wide.
Renovate Recreation Center	①	Parks	●				1			●			Major Renovation and Improvements in accessibility for the handicapped at Westgate Park.

1. Development Department Staff

# COMMUNITY PLANNING AREA

15 HILLTOP

June 1983

Proposed Project	Project Map Reference Number	Implementing City Agency	Source of Need							Status			Project Description
			Implementing Agency Community	Previous CIP	New Plan/Profile	Other (See Footnote)	CIP 1983 - 1988	Agency Priority	No Funding Identified	No Funding Identified	Anticipated Total Project Cost (in thousands) if Available		
Revitalization of West Broad Street	3	Parks	●								●		Landscaping from Whitethorne to Roys.
Light Tennis Courts	4	Parks	●								●		Glenwood Recreation Center.
New Street Trees	5	Parks				1							Burnside Area.
Light Tennis Courts	7	Parks	●								●		At Holton Park.
Lower West Side Storm and Sanitary Relief	1	Sewer	●				183					\$ 996	To separate sanitary flows from storm water flows. The boundaries of this area are as follows: Broad Street on the north, Mound Street on the south, Central Avenue on the east and Belvidere on the west.
Rundell Ditch Enclosure	2	Sewer	●							●		\$ 100	Enclose existing ditch.
Storm and Sanitary Sewer Study	0	Sewer	●										Area wide. According to residents there are problems which have resulted in property losses and could possibly lead to health problems.
Erosion Control	0	Sewer	●										Between Hagan Avenue and Wilson Road caused by the Dry Run Creek. Specific location not submitted.

1. Development Department Staff

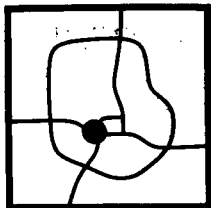
**COMMUNITY PLANNING  
AREA**











15 HILLTOP

June 1983

Proposed Project	Project Map Reference Number	Implementing City Agency	Source of Need							Status	Project Description		
			Implementing Agency	Community	Previous CIP	New Plan/Profile	Other (see footnote)	CIP 1982 - 1988	Agency Priority			Neighborhood Priority	No Funding Identified
Storm Drainage Improvements	3	Sewer					1						Claredon area.
Storm Drainage Improvements	4	Sewer					1						Valley View Heights.
Storm Drainage Improvements	3	Sewer					1						Rainbow Addition.

1. Development Department Staff

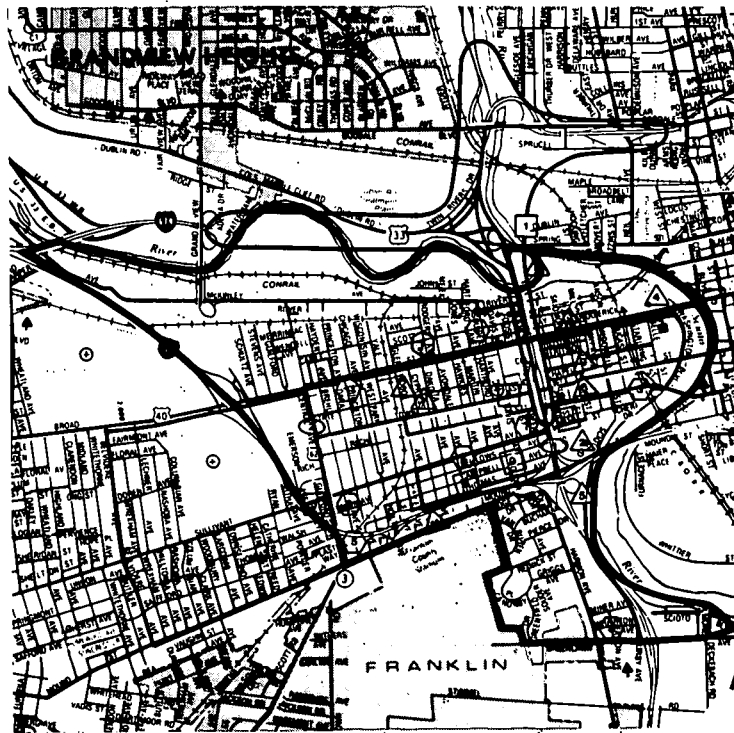


-  Division of Sewerage & Drainage
-  Division of Water
-  Division of Engineering & Construction
-  Division of Traffic Engineering & Parking
-  Division of Electricity
-  Division of Fire
-  Division of Police
-  Recreation & Parks
-  City of Columbus
-  County and other municipalities



**Franklinton**  
Community Planning Area 16

June 1963



# COMMUNITY PLANNING AREA

16 FRANKLINTON

June 1983

Proposed Project	Project Map Reference Number	Implementing City Agency	Implementing Agency	Community	Previous CIP	New Plan Profile	Source of Need				Status				Project Description
							Other (see footnote)	CIP 1983 - 1988	Agency Priority	No Funding Identified	No Funding Identified	No Funding Identified	Multiple Total Project Cost (in thousands) if available		
Spring-Sandusky Interchange	1	Engn	●	●	A P	1 2 3 4 6	193- '86						\$112,000	Reconstruction of portions of the innerbelt loop connector. It will include a Section of I-670 from Grandview Avenue to the interchange.	
Neighborhood Commercial Revitalization	2	Engn	●	●		5	'85						\$ 100	West Broad Street between Central and Souder. New sidewalk, curb and street furnishings.	
Central and Sullivent Intersection Improvement	3	Tx Engn Engn	●								●			As reported by residents, freeway exit backs up on Central. Turn lanes onto Sullivent would alleviate problem.	
Improve Town Street 315 On Ramp	4	Engn	●								●			Ramp needs widening.	
Replace Broad Street Bridge	5	Engn	●											Over the Scioto River.	
Replace Town Street Bridge	6	Engn	●											Over the Scioto River.	
Neighborhood Commercial Revitalization	7	Engn				5							\$ 400	New curbs, sidewalks, street and alley resurfacing; street trees and furniture on West Broad Street between the Scioto River and I-70.	
Freeway Landscaping	8	Engn				5								Landscaping Freeway access from Thomas.	
Street Resurfacing and Curbs	9	Engn				5								Bellows Area.	

1. Thoroughfare Plan  
2. Negotiated Investment Strategy Report, 1980

3. Downtown Comprehensive Planning Study, 1976  
4. I-670 Task Force Report, 1981

5. Development Department Staff  
6. Regional Transportation Plan  
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# COMMUNITY PLANNING AREA

16 FRANKLINTON

June 1983

Proposed Project	Project Map Reference Number	Proposing City Agency	Community	Fayetteville CIP	Area Plan/Profile	Other (see footnote)	CIP 1983 - 1988	Agency Priorities	Neighborhood Priority	Neighborhood Priority	Participating Total Project Cost (in thousands) if Available	Source of Need	Status	Project Description
Underpass Improvement	14	Engr					1							Main Street Bridge needs new deck and general cleaning.
Neighborhood Commercial Lighting	1	Elec	●	●			'85				\$ 45			Street lighting improvements on West Broad Street, I-70 to the Scioto River.
New Street Lighting	2	Elec	●	●			'83-'85							3.0 miles - bordered by Sullivant to the north, the Innerbelt to the east, I-70 on the south and Glenwood on the west.
New Street Lighting	3	Elec	●	●			'83-'85							3.4 miles - Bordered by Broad Street to the north, the Scioto River to the east, the Innerbelt to the west and Sullivant to the south.
New Street Lighting	4	Elec	●	●				●	●					.1 miles - Hartford Avenue from Scott Street to Gay Street.
New Street Lighting	5	Elec	●	●				●	●					.1 miles - Brehl Avenue north of Mound Street.
New Street Lighting	6	Elec	●	●				●	●					.1 mile - Brehl Avenue from Sullivant to Union.
Light Bridge	7	Elec	●				1		●					At Main Street Bridge.

1. Consultant Department Staff

# COMMUNITY PLANNING AREA

16 FRANKLINTON

June 1983

Proposed Project	Project No. Reference Number	Implementing City Agency	Implementing Agency	Community	Previous CIP	New Plan Profile	Other (Use Footnote)	Source of Need		Status		Project Description
								CIP 1983 - 1988	Agency PR (CIP 11)	No. (Auto Req. Identified)	No. (Approved PR (CIP 11))	
New Street Lighting	8	Elec	●	●					●	●		.1 mile - Eaton Avenue from Greenlawn to Minor.
Fire Station Energy Conservation Project	1	Fire	●				'83-'85					At Station #10.
Fire Station General Renovation Project	1	Fire	●				'83-'85					At Station #10.
Renovation and Energy Improvements	△	Parks	●				'83-'84					At Glenwood Recreation Center.
Renovation and Energy Improvements	△	Parks	●				'83-'84					At Sunshine Recreation Center.
Renovate and Improve Swimming Facility	△	Parks	●				'84-'85					At Sunshine Pool.
Historic Park Renovation	△	Parks	●	●			'85					The Harrison House Complex.

COMMUNITY PLANNING AREA		Source of Need										Status	June 1963	
		Project Ref. Reference Number	Imp. (Existing) City Agency	Imp. (Existing) Agency	Community	Private CIP	Area Plan/Profile	Other (Local, Technical)	CIP 1960 - 1966	Agency Plan/Profile	No Funding Identified	No Funding Identified	Anticipated Total Project Cost (in thousands) if Available	Project Description
Proposed Project														
Veterans Memorial Riverbank Redevelopment		1	Parke	●	●			1					\$ 2,200	Improvement of riverbank down to river to include: lighting, landscaping and terracing.
Sunshine Park Riverfront Redevelopment		2	Parke	●		●		1					\$ 976	Improve access to riverbank, fishing dock and bikeway.
Bike Path		3	Parke	●				1					\$ 250	To provide a Soloto River west shorelink between Green-Lawn and the west bank walk located north of I-70 at Sunshine Park.
Rickenbacher Park Riverfront Redevelopment		4	Parke	●	●			1					\$ 2,000	Involving demolition of the old Naval Reserve Center, for an educational, information and restaurant complex.
Street Tree Planting		5	Parke		●				●	●				Community organization request on Dakota Street.
Street Tree Planting		6	Parke					2						On Gift Street to obscure utility poles.
Median Trees		9	Parke					2						On State Street in East Franklinton from S.R. 315 east.
Lucas Sullivant House		10	Parke		●			5						Move to Harrison House site and renovate.
Neighborhood Park		11	Parke		●			5						Park or tot lot in Bullows area.

1. Negotiated Investment Strategy Report, 1960
2. Bohn - (683) plan of East Franklinton
3. Department of Development Staff



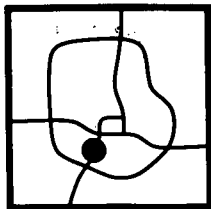
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









16 FRANKLINTON

June 1983

Proposed Project	Project Map Reference Number	Map Issuing City Agency	Source of Need							Status		Project Description
			Community	Previous CIP	Area Plan Profile	Other (see footnote)	CIP 1983 - 1988	Agency Priority	Not Funded / Identified	Not Funded / Identified	Anticipated Total Project Cost (in thousands) if available	
Lower West Side Storm and Sanitary Relief	①	Sewers	●	●				'82-'83			\$ 3,104	To separate storm and sanitary flows in an existing system: I-71 on the west, the Scioto River on the east, Mound Street on the south and the Scioto River on the north.
Lower West Side Storm and Sanitary Relief	②	Sewers	●	●				'82			\$ 974	To separate storm and sanitary flows in an existing system: Broad Street on the north, Mound Street on the south, Central Avenue on the east and Belvidere on the west.

1. Negotiated Investment Strategy Report, 1980

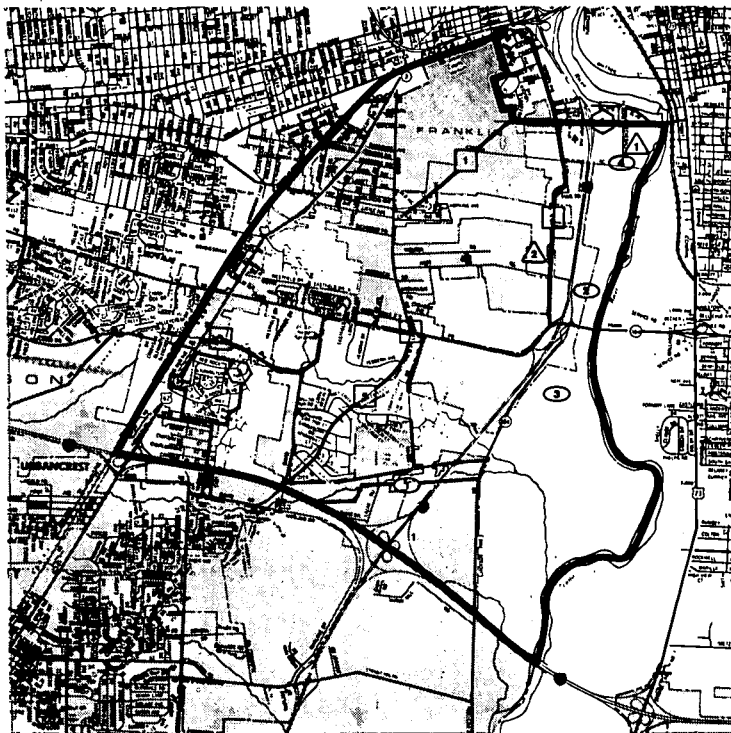


-  Division of Sewerage & Drainage
-  Division of Water
-  Division of Engineering & Construction
-  Division of Traffic Engineering & Parking
-  Division of Electricity
-  Division of Fire
-  Division of Police
-  Recreation & Parks
-  City of Columbus
-  County and other municipalities



**Greenlawn/Frank Rd.**  
Community Planning Area 17

June 1983



# COMMUNITY PLANNING AREA

17 GREENLAWN/FRANK ROAD

June 1983

Proposed Project	Project Map Reference Number	Implementing City Agency	Implementing Agency	Community	Previous CIP	Area Plan/Profile	Source of Need				Status		Project Description
							Other (See Footnote)	CIP 1982 - 1988	Agency Priority	No Funding Identified	Neighborhood Priority	No Funding Identified	
Eakin Road/Hopkins-Stimmel Road Improvements	1	Engn				A							Should be connected to Greenlawn Avenue.
Improve Harson Avenue	2	Engn				A	1						Widen to four lanes throughout area.
Big Run Avenue Improvements	3	Engn				A							New Curbs.
Intersection Realignment	4	Engn				A							Frank Road, Brown Road, Hardy Parkway.
Extend Hardy Parkway	5	Tr Engn Engn	●				1	●					Extend South and connect to Gantz Road.
New Street Lighting	1	Elec	●	●				'83-'85					2.6 miles - Stoneridge Addition.
Fire Station Energy Conservation Project	1	Fire	●					'83-'85					At an existing station.

1. Thoroughfare Plan

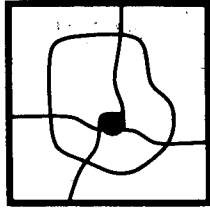
# COMMUNITY PLANNING AREA











17 GREENLAWN/FRANK ROAD

June 1983

Proposed Project	Project Map Reference Number	Map Issuing City Agency	Source of Need							Status	Project Description	
			Map Issuing Agency	Community	Previous CIP	Area Plan/Priority	Other Law (Common)	CIP 1983 - 1988	Agency Priority			No Funding Identified
Roadway and Hard Surface Improvements	1	Parks	●						'83-'84			At Southview Park.
Improve Tree Improvement Program	△	Parks			P							Community Wide.
Development of Quarries	2	Undetermined				1						West of Harmon.
Marsh Run Sanitary Subtrunk	1	Sewers	●						'85-'86	\$ 1,547		Construction of a sanitary subtrunk from the Big Run trunk - 7,000 feet along Marsh Run Creek to I-270.
Sewer Maintenance Yard Improvements	2	Sewers	●						'83	\$ 711		Equipment Pole Building, Security Fencing, Vehicular Storage Building and Employee Parking lot.
Jackson Pike Sewage Treatment Plant Improvements	3	Sewers	●	●					'83-'88	\$223,022		Solids Handling Facilities, Immediate Design, New Incineration, General Plant Rehabilitation, Plant Expansion, Miscellaneous Modifications and Wet Stream Facilities, Air Diffuser and Metering.
Grit Tank Improvements	4	Sewers	●						'83	\$350,000		Install new crane type grit removal system for Jackson Pike Treatment Plant.

1. Development Department Staff



-  Division of Sewerage & Drainage
-  Division of Water
-  Division of Engineering & Construction
-  Division of Traffic Engineering & Parking
-  Division of Electricity
-  Division of Fire
-  Division of Police
-  Recreation & Parks
-  City of Columbus
-  County and other municipalities



**Downtown**  
Community Planning Area 18

June 1983



# COMMUNITY PLANNING AREA

## 18 DOWNTOWN

June 1983

Proposed Project	Project No. Reference Number	Imp. Issuing City Agency	Imp. Issuing Agency	Community	Previous CIP	New Road Profile	Source of Need				Status	Project Description
							Other (see footnote)	CIP 1983 - 1988	Agency Priority	Neighborhood Priority		
Spring-Sensduky Interchange	1	Engr	●		●	A	1 2 3 4	8A- 6786			\$112,000	Reconstruction of the Spring-Sensduky Interchange, the North and West Innerbelts. Will bring the Interchange up to current standards. In addition the I-670 gap from Grandview Avenue to S.R. 313 will be built.
Straighten Civic Center Drive	2	Engr	●				3			●		Remove sharp curve at Bicentennial Park and rebuild Rich Street intersection to allow one way operation of Rich Street if Town Street is closed.
Ramp Improvements I-70	3	Engr Tr Engr	●	●			3			●		Remove sharp curve at Bicentennial Park and rebuild Rich Street intersection to allow one way operation of Rich Street if Town Street is closed.
High Street Development Public Improvements	4	Engr	●	●		P	2 3			●	\$ 3,000	Part of the total High St. Transit corridor project, public improvement portion: street trees, lighting, signage and furnishings. Project boundaries are the Innerbelt to the north and south.
High Street Transit Mall	5	Tr Engr Engr		●		P	5			●	\$17,000	A proposal to narrow High Street from six lanes to four lanes between Spring and Main Streets. The curb lanes would be converted to exclusive bus lanes.
Rickenbacker Park Access	6	Engr				P						Street access into the Rickenbacker Park Site. This project is part of the Spring-Sensduky Interchange project.
Mound Boulevard Conversion	7	Engr					3					Convert Mound Street into a full boulevard, with limited turns and landscaping. Its emphasis would be that of the "front door of the County Complex."
Broad Street Median	8	Tr Engr Engr		●			3					Develop a landscaped center median on East Broad Street between the Scioto River and the Innerbelt.
Close Gay Street	9	Engr					3					Between Front Street and Marconi Boulevard as part of the Civic Center Complex.

1. Throughfare Plan
2. Negotiated Investment Strategy Report, 1980.
3. Downtown Comprehensive Planning Study, 1976

3. Downtown Comprehensive Planning Study, 1976
4. I-670 Task Force Report, 1981

5. C.O.T.A.
6. Regional Transportation Plan

# COMMUNITY PLANNING AREA

## 18 DOWNTOWN

June 1983

Proposed Project	Project No. Reference Number	Type of Project	Sponsor/Agency	Priority	Previous CIP	New Plan/Project	Source of Need				Status	Project Description
							Agency (See Footnote)	CIP 1983 - 1988	Agency Prior to 1973	No. of Projects Identified		
Improve Town/Main Ramp Connections to Innerbelt	10	Tr Engr Engr	●			1						Main/I-71 Ramp to Town Street.
Nationwide Boulevard	11	Engr	●			1 2	●					Extend Nationwide Boulevard to the 315 connector at Neil Avenue to be built with the Spring-Sandusky Interchange as a four lane divided roadway.
I-670 and I-71 Connectors	12	Engr	●	●	A P	1 2 3 4 6					\$164,000	To construct six miles of six lane interstate highway linking the Downtown to I-270 with a connector to Port Columbus.
Extend the Town/Main One-Way Pair Street System	13	Tr Engr	●	●		1 3						Extend east of Fourth Street to include Grant and Washington Avenues.
Completion of Handicapped Curb Ramp System	14	Engr	●			1						In the area bounded on the north by Spring Street, east by Fourth Street, south by Livingston Avenue and on the west by Civic Center Drive (4 per intersection).
Close Town Street	15	Engr				5						Proposed retail development in Capitol South will close Town Street between High and Third.
Main/Rich Connector	16	Engr				5						Because of Capitol South and the South Innerbelt improvements, a new three lane street is proposed connecting Main to Rich just east of Washington.
Rich Street One-Way	17	Tr Engr	●			5	●					Convert Rich Street to one-way west bound between Washington and Civic Center Drive to replace Town Street if closed.
Rich/Ludlow/Town Connection	18	Tr Engr Engr	●					●				Modify operation of Rich, Ludlow and Town Streets to provide connection from one-way Rich to Town and Civic Center Drive.

1. Downtown Comprehensive Planning Study, 1976  
2. Thoroughfare Plan

3. Negotiated Investment Strategy Report, 1980.  
4. I-670 Task Force Report, 1981

5. Capitol South Redevelopment  
6. Regional Transportation Plan

# COMMUNITY PLANNING AREA

18 DOWNTOWN

June 1983

Proposed Project	Project No.	Reference Number	Source of Need								Status	Project Description		
			Implementing City Agency	Implementing Agency	Community	Previous CIP	Area Plan/Possible	Other (see footnote)	CIP 1983 - 1988	Agency Priority			No Funding Identified	Neighborhood Priority
Replace Broad Street Bridge	19		Engr	●										Over the Scioto River.
Replace Town Street Bridge	20		Engr	●										Over the Scioto River.
Neighborhood Commercial Revitalization	21		Engr				1					\$ 1,000		New curbs, sidewalks, repave streets and alleys, off-street parking, street trees and furniture in the North Market Historic District.
New Parking Garage	-		Traffic Engr	●						●		\$ 3,000		Provide additional public parking in C.B.D.
Downtown Street Lighting Conversion	6		Elec	●	●				'83-'85			\$ 669		To eliminate 50 year old 2,400 volt circuits.
Municipal Light Plant Improvements	7		Elec	●					'83			\$ 14		Energy Conservation construction elements in the existing Municipal Light Plant at 589 Dublin Road.
New Street Lighting	8		Elec		●					●				East Chapel from Washington to Franklin.
New Street Lighting	9		Elec		●					●				Elliot Alley from Everett Alley to Lester Drive.

1. Development Department Staff



# COMMUNITY PLANNING AREA

18 DOWNTOWN

June 1983

Proposed Project	Project Map Reference Number	Implementing City Agency	Source of Need								Status		Project Description
			Implementing Agency	Community	Previous CIP	New Plan/Profile	Other (see footnote)	CIP 1983 - 1988	Agency Priority	Neighborhood Priority	Neighborhood Priority	Anticipated Total Project Cost (if needs) if available	
New Street Lighting	4	Elec	●								●		Walnut Street.
New Street Lighting	5	Elec	●								●		Chapel Street from Lester.
Energy Conservation Project	1	Police	●					'83			\$ 38		At Central Station.
Central Police Station Renovation	1	Police	●						●		\$ 7,830		Total renovation to modernize and make energy efficient. Work includes: electrical, plumbing, removal of jail cells, open office concept, new exterior windows and doors etc.
Central Police Station Garage	1	Police	●								\$ 2,448		306 vehicle parking garage for cruisers, unmarked vehicles and visitors. Would also contain facilities for manual washing of vehicles.
Fire Station Energy Conservation Project	27	Fire	●					'83 '85					At Station #2.

COMMUNITY PLANNING AREA		Source of Need										Status	June 1983	
18 DOWNTOWN		Project Map Reference Number	Imp/Identifying City Agency	Imp/Identifying Agency	Community	Previous CIP	Area Plan/Profile	Other Use (Lochmache)	CIP 1983 - 1988	Agency Plan/Profile	Imp/Identifying City Agency	Imp/Identifying City Agency	Multi-phase Total Project Cost (in thousands) if available	Project Description
Proposed Project														
Riverfront Park Development	1	Parks	●	●	●	A P	1	●					\$ 2,000	Both banks of the Scioto River as it courses through the Downtown.
Area Wide Street Furnishing System	-	Undetermined					1							Area Wide.
Rickelbacher Park Development	2	Parks				P	2						\$ 2,050	Involving the demolition of the Old Naval Reserve Center to make way for an educational/information restaurant complex.
Bicentennial Park River Access	3	Parks	●				1	●					\$ 1,950	To provide access down to water level by means of stairs and car ramp which will also include lighting and landscaping.
Civic Center Plaza	4	Parks	●			P	1 2	●					\$ 5,000	A series of grass and paved terraces with walkways, multi-level connected pools, fountain, river overlook, boat docks and landscaping.
Bikeway Development	5	Parks	●			A P		●					\$ 250	North of Broad Street along east side of the Scioto River.
Landscape Major Pedestrian Pathways	-	Parks					1							Along State Street and Long Street.
Gay Street Landscaping	6	Parks					1							From Front Street to Third Street.
East Broad Street Portal Park	7	Parks	●			P	1	●						Broad and Cleveland.

1. Downtown Comprehensive Planning Study, 1976

2. Negotiated Investment Strategy Report, 1980

# COMMUNITY PLANNING AREA

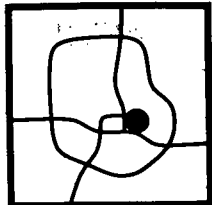
18 DOWNTOWN











June 1983

Proposed Project	Project Map Reference Number		Source of Need							Status		Project Description	
	Map Identifying City Agency	Map Identifying City Agency	Community	Previous CIP	New Plan/Profile	Other (see footnote)	CIP 1983 - 1988	Agency Priority	Neighborhood Identified	Neighborhood Priority	Participates Total Project Cost (in %/share) if available		
Civic Center Complex	1	Bldg Serv	●				A P	1 2	●			\$48,000	A complex of centralized and integrated City government buildings and open space focused around the existing City Hall.
Marconi Building Improvements	2	Bldg Serv	●	●					●			\$ 220	Waterproof the northerly exposure and the installation of a transformer to increase electrical capacity.
General Building Renovation	-	Bldg Serv	●									\$ 120	This project is a contingency fund for unanticipated repairs in equipment in City Buildings.
Energy Conservation	-	Bldg Serv	●									\$ 295	Energy conservation measures in the Marconi Building, City Hall, and former gas company buildings, as identified in the Energy and Telecommunication "Tech. Assist. Energy Audits."

1. Downtown Comprehensive Planning Study, 1976

2. Negotiated Investment Strategy Report, 1980

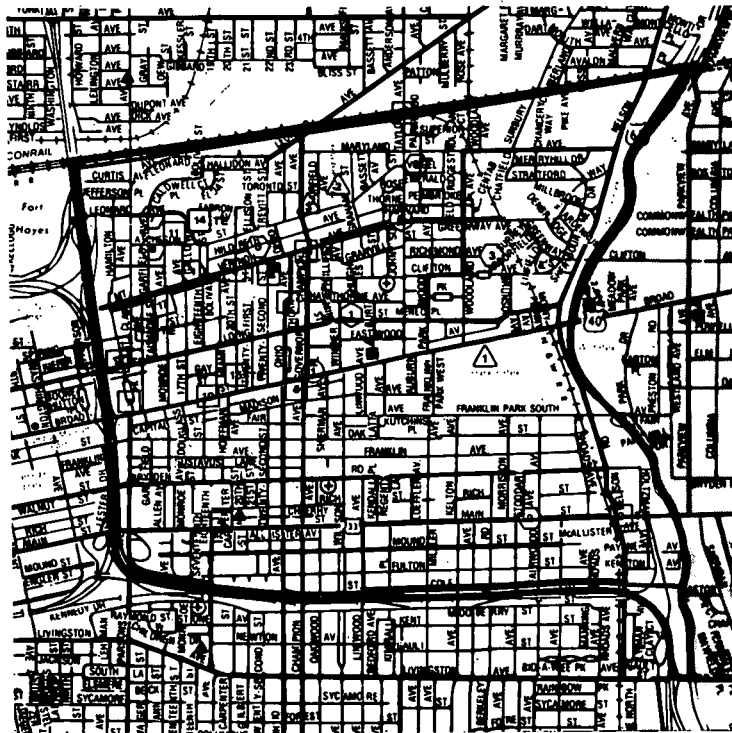


-  Division of Sewerage & Drainage
-  Division of Water
-  Division of Engineering & Construction
-  Division of Traffic, Engineering & Parking
-  Division of Electricity
-  Division of Fire
-  Division of Police
-  Recreation & Parks
-  City of Columbus
-  County and other municipalities



**Near East**  
Community Planning Area 19

June 1980



# COMMUNITY PLANNING AREA

19' NEAR EAST

Proposed Project	Source of Need										Status	Project Description		
	Project Init. by Developer/Owner	Init. by Council/By City Agency	Community	Private Citizen	Area Plan/Study/Plan	Other (See Footnote)	City/State/Other	Agency Priority	Neighborhood Priority	No Funding Available			Unfunded Total Project Cost	
Neighborhood Commercial Revitalization	1	Engn	●	●							1 2	83	\$ 150	Elde Young Quarter Improvements consisting of new curb installation, new decorative sidewalks, street trees and off-street parking between Oak and Bryden.
Neighborhood Commercial Revitalization	2	Engn	●	●							1 2		\$ 100	Mt. Vernon Avenue - Improvements consisting of street trees and other improvements between Hamilton and Ohio.
Main and Nelson Intersection Improvements	3	Tr Engn	●	●					●	●				Widen the Nelson Road approaches to Main Street.
Village East Proposal	4	Engn		●			2			●				Cherry Al. on the north, Parsons Ave. on the west, I-70 on the south and 150' east of 18th St. on the east. Public improvements to include tree planting, lighting, open space, the realignment of Monroe St. and the narrowing of Mount St. for increased amenities and pedestrian space.
Realignment of Champion	5	Engn		●				2 3 4 5		●				At Broad Street to provide direct north-south movement.
Improve Ohio Avenue	6	Engn		●				2 3 4 5		●				Straightening of the existing curve on Ohio Avenue at Peindexter Village.
Realign Hamilton and Parsons at Broad Street	7	Tr Engn Engn	●	●				1 3 4 5		●	●			To provide, if possible, a full signalized intersection that permits left turns on to Hamilton from eastbound traffic on Broad Street.
Mt. Vernon Avenue Off Street Parking	8	Tr Engn	●	●				2 4 5		●	●			Along the commercial sections of Mt. Vernon Avenue to improve circulation with the concurrent provision of scattered off-street parking lots to meet business needs.

1. Negotiated Investment Strategy Report, 1980  
2. Development Department Staff

3. Throughways Plan  
4. I-70 Land Force Report, 1981  
5. Mt. Vernon Plaza Traffic Study, 1982

COMMUNITY PLANNING AREA		Project Ref. Reference Number		Implementing City Agency		Source of Need		Status		June 1983				
19 NEAR EAST		Project Ref.	Reference Number	Implementing City Agency	Community	Private CIP	Area Plan/Private	Other (see footnotes)	CIP 1983-1988	Needs PI or I/T	No Funding Identified	No Funding Identified	Multi-year Total Project Cost (in thousands if available)	Project Description
Proposed Project														
Modify the Long Street and Spring Street Access Ramps	9	Tr Engr Engr							1 2 3					Widen both ramps to permit access to and from the east, on Long Street and Spring Street to Hamilton Avenue.
Broad Street Left Turn Lanes	10	Tr Engr							1 2					At signalized intersections to permit access north of Broad Street for westbound traffic between Hamilton and Champion along Broad Street.
Improve Intersections	11	Engr							1 2					Improve the turning radius at old Leonard and Monroe while maintaining bus loading capability for the school. In addition, improve the intersection of Monroe and Atchison by considering signalization.
Taylor Avenue Bridge	12	Engr												Replacement of deteriorated bridge over Railroad (bridge to be removed by I-670).
Mr. Vernon-Spring Connector Street	13	Engr Te							3					Construct new street directly connecting Mr. Vernon at Garfield with Spring and Hamilton.
Atchison - Old Leonard Connector	14	Engr Te							3					Construct a new street directly connecting Atchison north of Mr. Vernon Plaza with Old Leonard at Monroe.
East Broad at 20th Intersection Improvement	15	Engr Te							3					Widen 20th just north of Broad and install traffic signal and signs.
Mr. Vernon at Champion Intersection Improvement	16	Engr Te							3					Reconstruct south approach of Champion to align with north approach.
Neighborhood Commercial Revitalization	17	Engr							2			\$ 500		New curbs, sidewalks, street and alley resurfacing, off-street parking, street trees and furniture and park development on Mr. Vernon Avenue, Hamilton to 20th.

1. I-670 Task Force Report, 1981  
2. Development Department Staff

3. Mr. Vernon Plaza Area Traffic Study, 1982

# COMMUNITY PLANNING AREA

19 NEAR EAST

June 1983

Proposed Project	Project Map Reference Number	Election Agency	City Agency	Community	Previous CIP	Area Plan/Project	Source of Need				Status			Project Description
							Other (see footnote)	CIP 1983-1988	Agency Priority	No Funding Identified	No Funding Identified	Anticipated Total Project Cost (in \$ thousands, if available)		
Neighborhood Commercial Lighting	1	Elec	●	●				'85			\$	7	Mt. Vernon Avenue - between Hamilton and Ohio.	
New Street Lighting	2	Elec	●	●				'83-'85					3.3 miles - bordered by Main Street to the north, the N. & W. Railroad on the east, Linwood on the west and Cole on the south.	
New Street Lighting	3	Elec	●	●				'83-'85					.1 mile - Deary Avenue from Taylor Avenue to Hanley Avenue.	
New Street Lighting	4	Elec	●	●				'83-'85					.5 miles - Atchison Street from Trevett to Taylor.	
New Street Lighting	5	Elec	●	●					●	●			.5 miles - Hildreth between Ohio and 20th.	
New Street Lighting	6	Elec	●	●					●	●			Mt. Vernon Avenue from Ohio Avenue to Freeway.	
New Street Lighting	7	Elec	●	●					●	●			.1 mile - Leonard from Garfield to Monroe.	
New Street Lighting	8	Elec	●	●					●	●			.11 mile - Monroe from Leonard to Atchison.	

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# COMMUNITY PLANNING AREA

19 NEAR EAST

June 1983

Proposed Project	Project Map Reference Number	Map Issued By City Agency	Source of Need:							Status	Project Description	
			Community	Previous CIP	New Plans/Projects	Other (see footnote)	CIP 1983-1988	Agency Prior 177	Map Issued Priority			Map Issued (Identified)
New Police Substation	①	Police	●	●					'84		\$ 214	Located at Champion and Broad (A Relocation of two smaller stations).
Fire Station Energy Conservation Project	①	Fire	●						'83-'85			At an existing station.
Franklin Park Garden Center	①	Parks	●						'84		\$ 350	Continued development of the Garden Complex.
Renovate Swimming Facilities	②	Parks	●						'84-'85			At the Maryland Pool.
Roadway and Hard Surface Renovation	③	Parks	●						'83-'84			At Franklin Park.
New Playground Equipment	③	Parks				P						At Franklin Park and Maryland Park.
Renovate Recreation Center	③	Parks				P						Sawyer Recreation Center.

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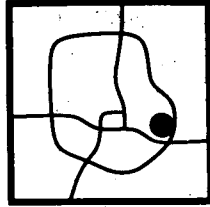












# COMMUNITY PLANNING AREA

19 NEAR EAST

June 1983

Proposed Project	Project No. (Reference Number)	Source of Need							Status			Project Description
		Implementing City Agency	Implementing Agency Community	Previous CIP	Area Plan/Profile	Other (see footnote)	CIP 1983 - 1988	Agency Priority	Neighborhood Identified	No Funding Identified	Participates Total Project Cost (in thousands) if available	
East Central Relief	1	Sewers	●	●	●			*82			\$ 2,091	This project will separate the sanitary flows from the storm flows in the existing combined system (Community Wide).



-  Division of Sewerage & Drainage
-  Division of Water
-  Division of Engineering & Construction
-  Division of Traffic Engineering & Parking
-  Division of Electricity
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-  Recreation & Parks
-  City of Columbus
-  County and other municipalities



### Eastmoor/Walnut Ridge Community Planning Area 20

June 1993



# COMMUNITY PLANNING AREA

## 20 EASTMOOR/WALNUT RIDGE

June 1983

Proposed Project	Project Map Reference Number	Implementing City Agency	Community	Previous CIP	New Plan Profile	Other Lane (Formosa)	CIP 1983 - 1988	Agency Priority	No Funding Identified	No Funding Identified	Multiple Total Project Cost (in thousands) if available	Project Description
Livingston Avenue Improvement	1	Engn	●				1					Widen to four full lanes from Alum Creek to College Avenue.
Broad Street and James Road Improvement	2	Tr Engn	●					●				Widen intersection at Broad Street and James Road.
Main Street and James Road Improvement	3	Tr Engn	●					●				Widen intersection at East Main Street and James Road.
Hamilton and Dundee Improvement	4	Tr Engn	●					●				Widen corners at Hamilton and Dundee.
Neo-Bisby Road and Woodcrest Road Improvement	5	Engn	●				1					Widen to four lanes from Refugee Road to East Main Street.
New Street Lighting	1	Elec	●	●			83-85					1.3 miles - Broadmoor Boulevard from Mayfair Boulevard to Hampton Road.
New Street Lighting	2	Elec	●	●			83-85					1.1 miles - Hampton Road from Broad Street to Main Street.
New Street Lighting	3	Elec	●	●			83-85					1.3 miles - Mayfair Apartments Area.

1. Regional Transportation Plan

COMMUNITY PLANNING AREA		Source of Need										Status	June 1983	
		Project Map Reference Number	Implementing City Agency	Implementing Agency	Community	Previous CIP	Area Plans/Profile	Other (See Comments)	CIP 1983 - 1988	Agency Priority	No Funding Identified	Neighborhood Priority	No Funding Identified	Participated Total Project Cost (in thousands) if Available
Proposed Project														Project Description
New Street Lighting	4	Elec	●	●					'83-'85					.5 miles - Ashburton Road from Mayfair Park Place to Main Street.
New Street Lighting	5	Elec	●	●					'83-'85					.9 miles - Scottwood Road from James Road to Coburg Road, Janwood Drive and Garywood Road south of Scottwood Road.
New Street Lighting	6	Elec	●	●					'83-'85					.4 miles - Bellwood, Ruhl and Roosevelt Avenue.
New Street Lighting	7	Elec	●	●					'83-'85					.3 miles - Gould Road from Broad Street to Maryland Avenue.
New Street Lighting	8	Elec	●	●					'83-'85					.2 miles - Waverly Street from Broad Street to Maryland Avenue.
New Street Lighting	9	Elec	●	●					'83-'85					.7 miles - Eastador Boulevard from Livingston Avenue to Main Street.
New Street Lighting	10	Elec	●	●					'83-'85					.5 miles - Elaine Road from Livingston Avenue to Vineshire Road.
New Street Lighting	11	Elec	●	●					'83-'85					.3 miles - Newfield Road from Lenfield Drive to Kenview Road.
New Street Lighting	12	Elec	●	●					'83-'85					.2 miles - South Weyant from Main Street to Mound Street.

COMMUNITY PLANNING AREA		June 1963										
20 EASTMOOR/WALNUT RIDGE												
Proposed Project	Project No.	Reference Number	Source of Need				Status				Project Description	
			Req. Identified by City Agency	Req. Identified by Agency	Previous CIP	Area Plan/Project	Other (see footnote)	CIP 1963-1968	Agency Priority	Neighborhood Priority		No Funding Identified
New Street Lighting	13	Elec	●	●					●	●		Brownlee Avenue, from James Road to Kenwick Road.
New Street Lighting	14	Elec	●	●					●	●		.1 mile - South Weyant Avenue, Mound Street to WENS.
New Street Lighting	15	Elec	●	●					●	●		.3 miles - Everett Avenue from Main Street to Fair Avenue.
New Street Lighting	16	Elec	●	●					●	●		2.8 miles - Livingston Avenue from Hamilton to Reynoldsburg Corporation Line.
New Street Lighting	17	Elec	●	●					●	●		.3 miles - Bostwick.
New Street Lighting	18	Elec	●	●					●	●		.6 miles - Elizabeth Avenue - Fair to Main and Fair Avenue - James to Weyant.
New Street Lighting	19	Elec	●	●					●	●		.2 miles - Parkland Place from Kenwick to Brownlee.
New Street Lighting	20	Elec	●	●					●	●		.4 miles - East Moreland Drive from Broadleigh Road to Brownlee Avenue.
New Street Lighting	21	Elec	●	●					●	●		.4 miles - North Hampton Road to North Everett.

COMMUNITY PLANNING AREA		Source of Need										Status	June 1983	
		Project Map Reference Number	Implementing City Agency	Implementing Agency	Previous CIP	New Plan/Profile	Other (See Footnote)	CIP 1983 - 1988	Agency Priority	No Funding Identified	Neighborhood Priority	No Funding Identified	Anticipated Total Project Cost (in thousands) if available	
20 EASTMOOR/WALNUT RIDGE		Proposed Project											Project Description	
		New Street Lighting	22	Elec	●	●						●	●	.3 miles - Zettler Road between Penfield and Queens Row Drive. Also Queens Row Drive, Queen Row Place and Queens Row Court.
		New Street Lighting	23	Elec	●	●						●	●	.2 miles - Chesterfield Road, Main to Mound.
		New Street Lighting	24	Elec	●	●						●	●	.1 mile - Kenilworth Place from Livingston to Brownlee.
		New Street Lighting	25	Elec	●	●						●	●	.3 miles - Striabel Road and Crisview Drive. Livingston to Villardo Lanes.
		New Street Lighting	26	Elec	●	●						●	●	.1 mile - Rand Avenue and Court Brookway Road.
		New Street Lighting	27	Elec	●	●						●	●	2.5 miles - Pinecrest I - Birchwood Addition.
		New Street Lighting	28	Elec	●	●						●	●	.2 miles - Hamilton Road and Geyner Drive.
		New Street Lighting	29	Elec	●	●						●	●	.1 mile - Bexley Park Road - Van Heyde to Enfield.
		New Street Lighting	30	Elec	●	●						●	●	.2 miles - Brookside Drive from East Main to East Mound.

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COMMUNITY PLANNING AREA		Source of Need										Status	June 1983
		Project Map Reference Number	Implementing City Agency	Implementing Agency	Community	Previous CIP	Area Plan/Profile	Other (see footnote)	CIP 1983-1988	Agency Priority	No Funding Identified	Neighborhood Priority	No Funding Identified
Proposed Project		Project Description											
New Street Lighting	31	Elec	●	●					●	●			.6 miles - Penfield Road East, and Penfield Court, East and West.
New Street Lighting	32	Elec	●	●					●	●			1.5 miles -New Sixty from East Broad to Main.
New Street Lighting	33	Elec	●	●					●	●			.2 miles - Johnson Park School Area Weyant and Byron Avenue north of Livingston.
New Street Lighting	34	Elec	●	●					●	●			.3 miles - Marble Drive from Shady Lane to Corporation Line.
New Street Lighting	35	Elec	●	●					●	●			.3 miles - Huxley Drive from Shad Lane to Dundee Drive.
New Street Lighting	36	Elec	●	●					●	●			.3 miles - Penfield Court East and West from Birbrook Road to Deshler Avenue.
New Street Lighting	37	Elec	●	●					●	●			.2 miles - Penfield Road from Zettler to Barnett.
New Street Lighting	38	Elec	●	●					●	●			.2 miles - Bennett Court.
New Street Lighting	39	Elec	●	●					●	●			.2 miles - Penfield Road from Bennett to Birbrook.

# COMMUNITY PLANNING AREA

20 EASTMOOR/WALNUT RIDGE

June 1983

Proposed Project	Project Map Reference Number	Implementing City Agency	Implementing Agency Community	Previous CIP	New Plan/Profile	Other (use comments)	Source of Fund			Status			Project Description
							City (83-186)	Agency Priority	No Funding (Agency/Neighborhood Council/Neighborhood Priority)	Neighborhood Priority	Neighborhood Council/Neighborhood Priority	Anticipated Total Project Cost (Use Above, If Available)	
New Street Lighting	40	Elec	●	●					●	●			.3 miles - Brookside Drive from Fair to Main.
Fire Facility Renovation	1	Fire	●					83-85					At an existing station.
Fire Station Energy Conservation Project	1	Fire	●					83-85					At an existing station.
Fire Station Energy Conservation Project	1	Fire	●					83-85					At an existing station.
Fire Facility Renovation	1	Fire	●					83-85					At an existing station.
Park Energy and Renovation Improvements	1	Parks	●					83-84					At Far East Park.
Renovate Recreation Center	2	Parks				P							At Barnett Recreation Center.

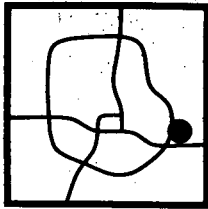












# COMMUNITY PLANNING AREA

20 EASTMOOR/WALNUT RIDGE

June 1983

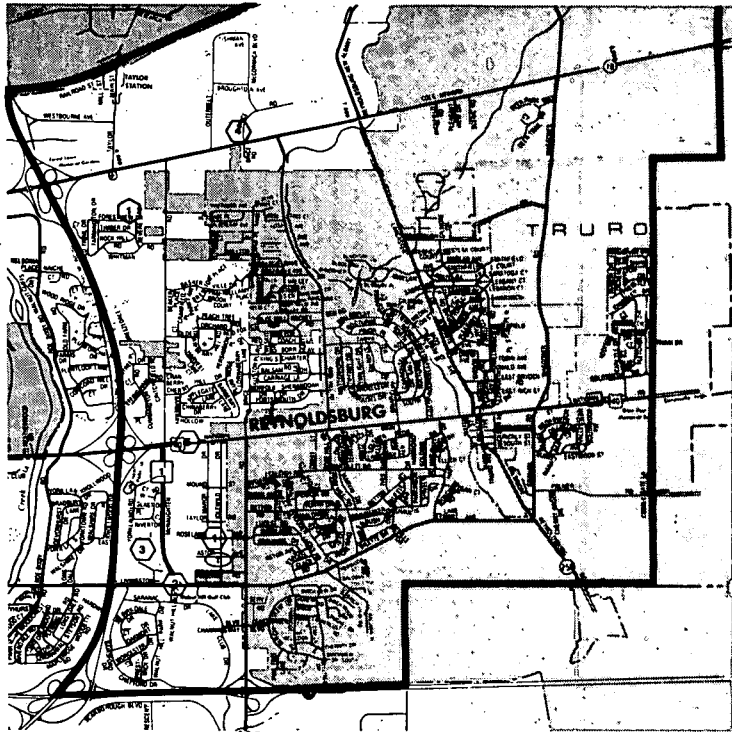
Proposed Project	Source of Need										Status		Project Description
	Project Map Reference Number	Imp Identifying City Agency	Imp Identifying Agency Community	Previous CIP	Area Plan/Profile	Other Use	CIP 1980 - 1988	Agency PR (CIP/1)	No Funding Identified	Anticipated Total Project Cost (1/18 hours) If Available	Agency PR (CIP/1)	No Funding Identified	
Deshler/Zettler Area Storm Sewer	①	Sewer	●					83-84				\$ 500	This project will replace a storm sewer originally installed while the area was country rural residential properties.
Astor Ditch Improvement	②	Sewer	●									\$ 106	Clean and reshape existing ditch.
Storm Culvert.	③	Sewer	●									\$ 60	Along Noe-Dixby Road.



-  Division of Sewerage & Drainage
-  Division of Water
-  Division of Engineering & Construction
-  Division of Traffic, Engineering & Parking
-  Division of Electricity
-  Division of Fire
-  Division of Police
-  Recreation & Parks
-  City of Columbus
-  County and other municipalities



**Far East**  
 Community Planning Area 21  
 June 1983



COMMUNITY PLANNING AREA		Source of Need										Status	June 1983	
		Project No. Reference Number	Implementing City Agency	Implementing Agency	Community	Previous CIP	New Plan/Profile	Other (See footnote)	CIP 1983 - 1988	Agency P/C or T/C	No Funding Identified	No Funding Identified	Participated Total Project Cost (in thousands) if Available	Project Description
21 FAR EAST		Proposed Project												
	1	McNaughton Road Improvement	Engr	●				1 2						Minor widening to two full lanes from Livingston to Main.
	1	New Street Lighting	Elec	●	●				'83- '85					.1 miles - Rosslaw Avenue, west end of street at the Reynoldsburg Corporation Line.
	2	New Street Lighting	Elec	●	●					●	●			2.8 miles - Livingston from Hamilton to Reynoldsburg Corporate Line.
	3	New Street Lighting	Elec	●	●					●	●			.1 mile - Quarry Ridge Road (north of Livingston west of McNaughton).
	4	New Street Lighting	Elec	●	●					●	●			Broad Street and Brice Road.
	5	New Street Lighting	Elec	●	●					●	●			Main Street, I-270 to Corporation Line.
	1	Fire Station Energy Conservation Project	Fire	●										At an existing station.

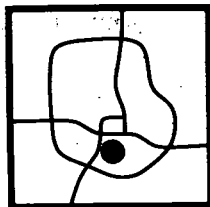
1. Thoroughfare Plan  
2. Regional Transportation Plan











**COMMUNITY PLANNING  
AREA**

21 FAR EAST

June 1983

Proposed Project	Project Map Reference Number	Implementing City Agency	Source of Need							Status	Project Description	
			Implementing Agency	Community	Previous CIP	Area Plan/Profile	Other (see footnote)	CIP 1983 - 1989	Agency Priority			Neighborhood Priority
Astor Ditch Improvement	1	Sewer									\$ 106	Clear and reshape existing ditch along Astor Avenue between Livingston and Broad.

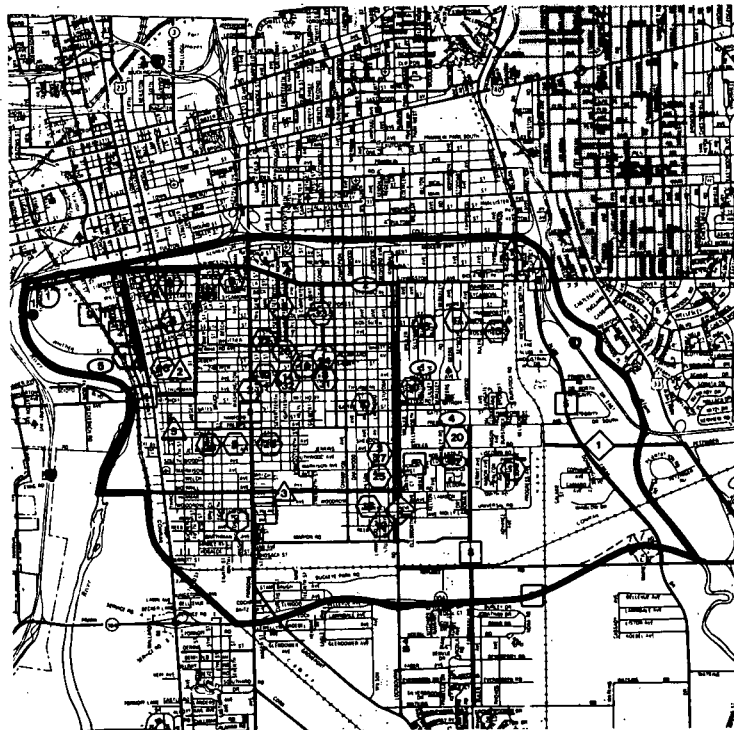


-  Division of Sewerage & Drainage
-  Division of Water
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-  Division of Electricity
-  Division of Fire
-  Division of Police
-  Recreation & Parks
-  City of Columbus
-  County and other municipalities



**Near South**  
Community Planning Area 22

June 1963



# COMMUNITY PLANNING AREA

22 NEAR SOUTH

June 1983

Proposed Project	Project Map Reference Number	Implementing City, Agency	Implementing Agency	Priority	Area Plan/Profile	Other (See comments)	Source of Need		Status		Project Description	
							City, 1983 - 1988	Agency Priority	No Funding Identified	No Funding Identified		
Neighborhood Commercial Revitalization	1	Tr Engr Engr	●	●			83-84				\$ 500	South Parsons Avenue - Between Hiram Avenue and Barchan Avenue. Improvements shall consist of new curbs, sidewalks, resurfacing street trees and waste receptacles.
Neighborhood Commercial Revitalization	2	Tr Engr Engr	●	●				85			\$ 100	South High Street - Livingston Avenue to Stewart Avenue. These improvements shall consist of street improvements and street furnishings.
Parsons Avenue/Southside Commercial Revitalization	3	Tr Engr Engr				1					\$ 500	Public improvements, Livingston Avenue to Frank Road consisting of infrastructure and landscaping needs to stimulate and support private commercial revitalization efforts.
Brick Street Repair	4	Engr		●	A P	2						Replacement and/or rehabilitation of old bricks in the entire German Village District.
Improve Alum Creek Drive	5	Engr	●				3 4			●		Widen to four lanes from Frank/Refugee to Livingston Avenue.
Widen Intersection	6	Tr Engr	●		P				●			Alum Creek and Livingston Avenue.
Frank-Refugee Expressway (SR104)	7	Engr	●	●	●	A	3 4	83		●	\$26,000	Complete remaining 2.5 mile section from Lockbourne Road to U.S. 33.
New Sidewalks and Storm Sewers	8	Engr & Sewers		●						●		New sidewalks and storm sewers at two locations. Along Lockbourne between Frebis and Marion and Fairwood between Frebis and Watkins. These projects are a high priority of the Council of South Side Organizations.
Energy Conservation Measures	9	Tr Engr	●					83			\$ 10	At the Traffic Engineering and Parking Division's Maintenance Shop.

1. Development Department Staff  
2. Negotiated Investment Strategy Report, 1980

3. Thoroughfare Plan  
4. Regional Transportation Plan

COMMUNITY PLANNING AREA		Project No. Reference Number		Implementing City Agency		Implementing Agency		Community		Previous CIP		Source of Need		Status		June 1983
												Age Plus Profile	Other (see footnotes)	CIP 1981-1985	Agency Priority	
Proposed Project																Project Description
Neighborhood Commercial Lighting	①	Elec.	●	●						85					\$ 66	South High Street - Livingston Avenue to Stewart Avenue.
Neighborhood Commercial Lighting	②	Elec.	●	●						85					\$ A9	South Parsons Avenue - Livingston Avenue to Frank Road.
New Street Lighting	③	Elec.	●	●						83-85						.3 miles - Lincoln Avenue from Fabis Avenue to Markham Avenue.
New Street Lighting	④	Elec.	●	●						83-85						.1 mile - Barth Alley and Frankfort Street.
New Street Lighting	⑤	Elec.	●	●						83-85						.1 mile - Moler Street and Goethe Alley (single light).
New Street Lighting	⑥	Elec.	●	●						83-85						.1 mile - East Back first pole west of Parsons Avenue (single light).
New Street Lighting	⑦	Elec.	●	●						83-85						.2 miles - Reinhard Avenue from Mayl Avenue to 28rd Street.
New Street Lighting	⑧	Elec.	●	●						83-85						.1 mile - Deabler from Truck to Box Alley.
New Street Lighting	⑨	Elec.	●	●						85-85						.1 mile - Concord Place, Lassalle to Newark.

# COMMUNITY PLANNING AREA

22 NEAR SOUTH

June 1983

Proposed Project	Project Map Reference Number	Election Year	Requesting City Agency	Community	Previous CIP	Source of Need				Status		Project Description
						Area Plan/Profile	Other (see footnote)	CIP 1983 - 1988	Agreed Prior to CIP	No Funding Identified	No Funding Identified	
New Street Lighting	10	Elec	●	●				'83-'85				.3 miles - Wilson Avenue, Frabis to Markleon.
New Street Lighting	11	Elec	●	●					●	●		.3 miles - Holburn Avenue from Moler Road to Smith Road.
New Street Lighting	12	Elec	●	●					●	●		.1 mile - Cline Street, Parsons Avenue to Ann Street.
New Street Lighting	13	Elec	●	●					●	●		.1 mile - Reinhard from Bulen to Rhoads.
New Street Lighting	14	Elec	●	●					●	●		.1 mile - Wager Street at alley south of Siebert (one light).
New Street Lighting	15	Elec	●	●					●	●		.2 miles - Kelton Avenue.
New Street Lighting	16	Elec	●	●					●	●		.3 miles - Lawrence Drive from Lockbourne to Champion.
New Street Lighting	17	Elec	●	●					●	●		.4 miles - Seymour, between Livingston and Whittier.
New Street Lighting	18	Elec	●	●					●	●		.4 miles - Stewart and Gilbert Street.



# COMMUNITY PLANNING AREA

22 NEAR SOUTH

June 1983

Proposed Project	Project Map Reference Number	Map Issuing City Agency	Map Issuing Agency	Community	Previous CIP	New Plans/Profile	Other (See Footnote)	Source of Need		Status		Project Description
								CIP 1983 - 1988	Agency Priority	Agency Priority	Agency Priority	
New Street Lighting	19	Elec	●	●				●	●			.5 miles - Linwood from Marion Road to Lawrence Drive.
New Street Lighting	20	Elec	●	●				●	●			.2 miles - Berkeley Road from Moier to Frebis.
New Street Lighting	21	Elec	●	●				●	●			.3 miles - Sheldon Avenue from Parsons to Bruck Street.
New Street Lighting	22	Elec	●	●				●	●			.9 miles - Whittier, Stebert, Clime and Wagner Streets.
New Street Lighting	23	Elec		●						●		Schiller Park along Mohawk, Jaeger and Reinhard Streets.
New Street Lighting	24	Elec	●	●				●	●			.4 miles - South 22nd from Whittier to Thurman.
New Street Lighting	25	Elec	●	●				●	●			.4 miles - Smith Road from Champion to Lockbourne.
New Street Lighting	26	Elec	●	●				●	●			.4 miles - Reinhard Avenue from Parsons to Carpenter.
New Street Lighting	27	Elec	●	●				●	●			.1 mile - Studer Avenue south of Sheldon.

COMMUNITY PLANNING AREA		Project Map Reference Number	Implementing City Agency	Implementing Agency Community	Previous CIP	Area Plan/Profile	Other (see footnotes)	Source of Need		Status		June 1983
								Agency Priority No Funding	Neighborhood Priority No Funding	Identified	Identified	
Proposed Project			Project Description									
New Street Lighting	28	Elec	●	●				●	●			.3 miles - Jenkins Avenue from Parsons to Heyl.
New Street Lighting	29	Elec	●	●				●	●			.2 miles - Moler Street from Buck to South Fourth Street.
New Street Lighting	30	Elec	●	●				●	●			.1 mile - Ellsworth Avenue from Deshler to McCloud.
New Street Lighting	33	Elec	●	●				●	●			.3 miles - Deshler Avenue from 18th to Ohio.
New Street Lighting	32	Elec	●	●				●	●			.2 miles - Heyl Avenue from Stewart to Thurman.
New Street Lighting	33	Elec		●								17th, 18th and 22nd Streets.
Fire Facility Renovation	1	Fire	●				'83-'85					At Station #15.
Fire Facility Energy Conservation Project	1	Fire	●	●			'83-'85					At Station #15.

# COMMUNITY PLANNING AREA

22 NEAR SOUTH

June 1983

Proposed Project	Project Map Reference Number	Imp. Issued by City Agency	Imp. Issued by Agency	Community	Previous CIP	Area Plan/Project	Other (See Footnote)	CIP 1983-1988	Agency Priority	No Funding Identified	No Funding Priority	Anti-Confused Total Project Cost (in thousands) if Available	Project Description	Source of Need		Status	
New Fire Station	⑤	Fire	●	●					●			\$ 1,330	This project would be a relocation of Station #14 located at Parsons and Hirman. A new site has not been determined.				
Police Traffic Bureau and Impounding Lot	①	Police	●									\$ 4,726	Renovation and expansion of existing impounding lot with consolidation of all Traffic Bureau units in one location.				
Renovation and Energy Improvements	①	Parks	●					'83-'84					At the Driving Park Recreation Center.				
Renovation and Energy Improvements	②	Parks	●	●				'83-'84					At the Schiller Park Recreation Center.				
Roadway and Hard Surface Improvements	②	Parks	●					'83-'84					At Schiller Park.				
Renovation of Swimming Facilities	③	Parks	●					'84-'85					At the Lincoln Pool.				
Historic Park Renovation	④	Parks	●					'85					At the Third Street School.				

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COMMUNITY PLANNING AREA		Source of Need										Status	Date		
		Project Rep Reference Number	Imp Issuing City Agency	Imp Issuing Agency	Community	Previous CIP	Area Plan Profile	Other (see footnote)	CIP 1983 - 1988	Agency PP or FY	Neighborhood Identified	No Funding Identified	Multipurpose Total Project	Over (in thousands) if Available	1983
22 NEAR SOUTH		Proposed Project													Project Description
		Tot Lot	2	Parks	●							●			At Schiller Park.
		New Street Trees	3	Parks	●										Rueb Hoesack Area.
		Recreation Center Major Renovation	2	Parks	●										Schiller Park Recreation Center.
		New Pathways and Lighting	5	Parks	●										At Schiller Park.
		Freble Avenue - Petzinger Road Connector	1	Water	●				'83-'84				\$ 775		Will make a connection from Progress Avenue, east along Moler Road to College Road and Petzinger Road, then run southeast.
		Lockbourne Road Water Line	2	Water	●				'83	●			\$ 1,200		Will construct approximately 10,000 feet of 16 inch line along Lockbourne Road from Refugee Road to Livingston Avenue.
		Storm Drainage Improvements	1	Sewer	●	●	P								In vicinity of Dasher Elementary School.

COMMUNITY PLANNING AREA		Source of Need										Status	June 1983		
		Project Map Reference Number	Imp Issuing City Agency	Imp Issuing Agency	Community	Previous CUP	Area Plan/Profile	Other (see footnote)	CUP 1983 - 1988	Agency Priority	No Funding Identified	Neighborhood Priority	No Funding Identified	Anticipated Total Project Cost (in thousands) if available	
22 NEAR SOUTH		Proposed Project											Project Description		
Sewer Separation	2	Sewer	●			P									Area bounded by: the Scioto River to the west; Lockbourne Road on the east; Livingston Avenue on the north and Morrill on the south.
Enclose Open Ditch	3	Sewer	●								●				Enclose open ditch between Moler & Frebis. Starting at approx 1290 Moler running approx 400' to Frebis. This and a mosquito problem (because of ditch) are a high priority of the Council of South Side Organizations.
Enclose Open Ditch	4	Sewer	●								●				Enclose open ditch between Frebis and Gates, North of Eldsworth to a approx 1460 Frebis. Standing water in backyards. This is a high priority of the Council of South Side Organizations.
Whittier Street Tank Improvements	5	Sewer	●										\$ 650	Replace Flights in Whittier Street Storm Standby Tanks.	
Municipal Garage Improvement	1	Mun Garage	●								●		\$ 212	Ventilation System Improvements.	
Municipal Garage Improvement	1	Mun Garage	●								●		\$ 100	Garage Roof Renovation.	
Municipal Garage Improvement	1	Mun Garage	●								●		\$ 64	New truck shop vehicle lifts.	
Municipal Garage Improvement	1	Mun Garage	●								●		\$ 12	Energy Conservation.	

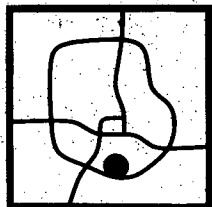
# COMMUNITY PLANNING AREA











22 NEAR SOUTH

June 1983

Proposed Project	Project Map Reference Number	Implementing City Agency	Source of Need										Status		Project Description		
			Implementing Agency	Community	Previous CIP	New Plans/Profile	Other (See Footnote)	CIP 1983 - 1988	Agency Priority	No Funding Identified	No Funding Identified	Participated Total Project Cost (in thousands) if Available	Participated Total Project Cost (in thousands) if Available				
Municipal Garage Improvement	1 ●	Mun Garage	●												●	\$ 70	New Drum Storage Building.
Municipal Garage Improvement	1 ●	Mun Garage	●												●	\$ 10	Remodeling of Car and Van Wash.
Municipal Garage Improvement	1 ●	Mun Garage	●												●	\$ 36	Automated fuel dispensers.
Municipal Garage Improvement	1 ●	Mun Garage	●												●	\$ 100	New Machine Shop Facility.
Municipal Garage Improvement	1 ●	Mun Garage	●												●	\$ 150	Municipal Garage Service Station Remodeling.
Municipal Garage Improvement	1 ●	Mun Garage	●												●	\$ 20	New Truck Shop Lighting System.
Municipal Garage Improvement	1 ●	Mun Garage	●												●	\$ 20	Fire Hydrants.

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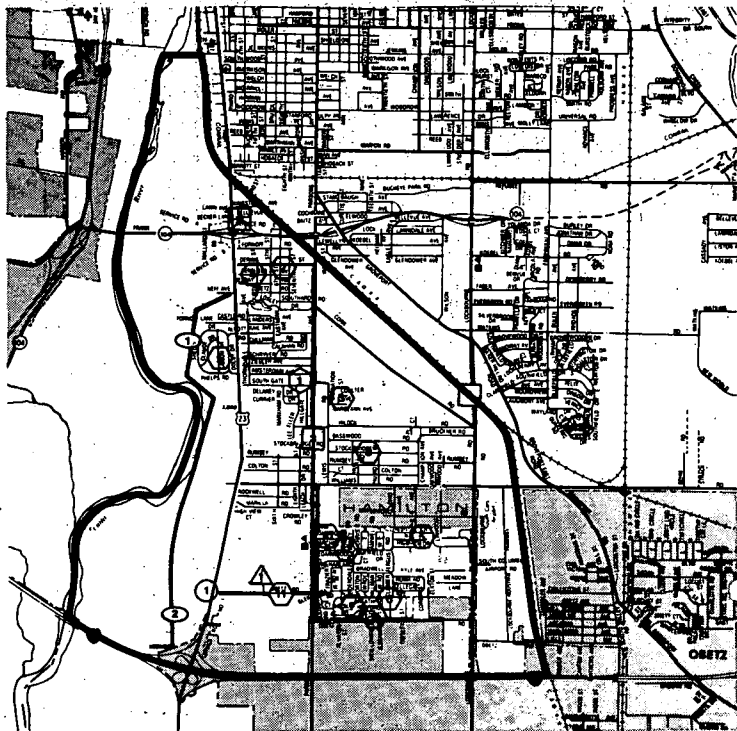


-  Division of Sewerage & Drainage
-  Division of Water
-  Division of Engineering & Construction
-  Division of Traffic Engineering & Parking
-  Division of Electricity
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**Buckeye  
Community Planning Area 23**

June 1983



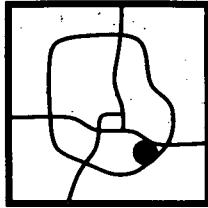
COMMUNITY PLANNING AREA		Source of Need										Status		June 1983		
		Project Rep Reference Number	Implementing City Agency	Implementing Agency	Community	Previous CIP	Area Plan/Propriable	Other (see footnote)	CIP 1983-1988	Agency Priority	No Funding Identified	No Funding Identified	Anticipated Total Project Cost (in thousands) if Available			
23 BUCKEYE		Proposed Project													Project Description	
Trestle Over C & O Railroad	1	Engr				P										To connect segments of Lockbourne Road.
Curb Replacement	2	Engr				P										On High Street at Route 104.
New Sidewalks and Storm Sewer	3	Engr & Sewer	●									●				New sidewalks and storm sewers on Parsons Avenue from Dearing Road to Oberz. This project is a high priority of the Council of the South Side Organizations.
New Paving	-	Engr					1									Pave dirt roads area wide.
New Street Lighting	1	Elec	●	●					'83-'85							1.5 miles - Scioto Village.
New Street Lighting	2	Elec	●	●					'83-'85							3.3 miles - Oklahoma Addition.
New Street Lighting	3	Elec	●	●					'83-'85							.5 miles - Lewis Road, Carolann Avenue and Carnation.
New Street Lighting	4	Elec	●	●						●	●					.4 miles - Benfield Avenue.











1. D.O.D. Windshield Survey



COMMUNITY PLANNING AREA		Source of Need										Status		June 1983
		Project Map Reference Number	Proposing City Agency	Proposing Agency	Community	Previous CIP	Area Plan/Profile	Other Use (Technical)	CIP 1983 - 1988	Agency Priority	Neighborhood Identified	Neighborhood Priority	Neighborhood Identified	
Proposed Project														Project Description
New Street Lighting	5	Elec	●	●						●	●			.1 mile - Tobl Drive (Southern Pines) west of Lockbourne.
New Street Lighting	6	Elec	●	●						●	●			.1 mile - Breathhill Avenue from Clabber to Owsley.
New Street Lighting	7	Elec	●	●						●	●			.5 miles - Redford Avenue from Owsley to Alvison (Southern Pines)
New Street Lighting	8	Elec	●	●						●	●			.2 miles - Stockbridge Road from Parsons to West.
New Street Lighting	9	Elec	●	●						●	●			.1 mile - Jasmine Place (Southern Pines).
New Street Lighting	10	Elec	●											Parsons Avenue from Williams Road to Corporation Line.
New Street Lighting	11	Elec	●											Obez Road from High Street to Parsons Avenue.
New Street Lighting	12	Elec	●	●						●	●			.2 miles - Ashwood Road.
New Street Lighting	13	Elec	●	●						●	●			.1 mile - Zenner Drive.

COMMUNITY PLANNING AREA		Source of Need										Status	June 1983	
		Project Map Reference Number	Implementing City Agency	Implementing Agency	Community	Previous CIP	Area Plan/Profile	Other Lease (to phone)	CIP 1983 - 1988	Agency Priority	No Funding Identified	No Funding Identified	Multiphase Total Project Cost (in phase) if available	Project Description
Proposed Project														
Fire Facility Renovation	①	Fire	●					'83-'85						At Station #22.
Fire Facility Energy Conservation Project	①	Fire	●					'83-'85						At Station #22
New Police Substation	①	Police	●									\$ 417		Construction of a one story 1800 square foot police precinct substation and paved parking area in the area of South High Street and Obetz Road.
Renovation and Energy Improvements	△	Parks	●					'83-'84						At Indian Mound Park.
Williams Road Sanitary Interceptor Phase I	①	Sewer	●					'83				\$ 3,115		This project will provide for the abandonment of the Williams Road sanitary pumping station.
Williams Road Sanitary Interceptor Phase II	②	Sewer	●					'83				\$ 1,225		This project will provide for the abandonment of the Neff Avenue sanitary pumping station.

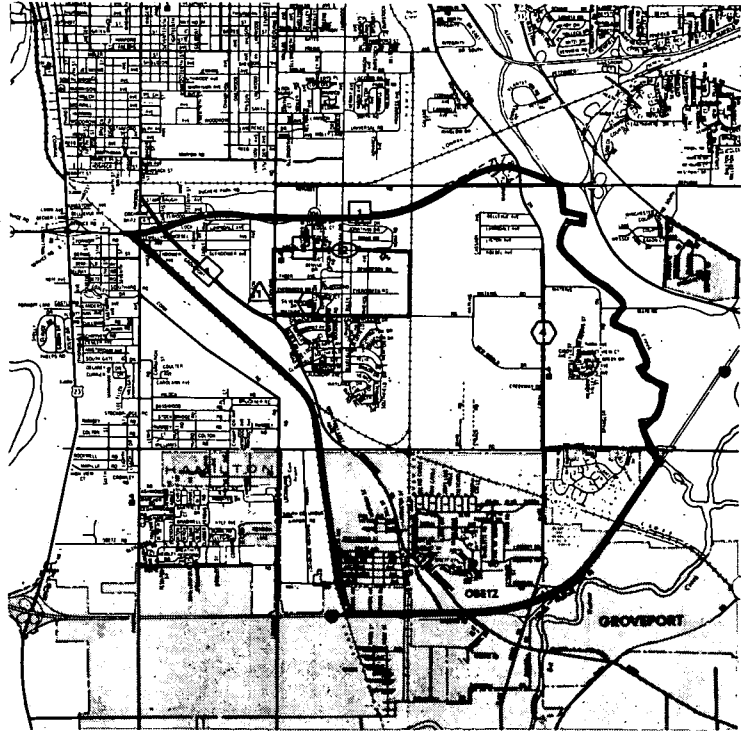


-  Division of Sewerage & Drainage
-  Division of Water
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-  Division of Electricity
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-  Division of Police
-  Recreation & Parks
-  City of Columbus
-  County and other municipalities



**Marion-Franklin**  
Community Planning Area 24

June 1963



COMMUNITY PLANNING AREA		Source of Need										Status	June 1983	
		Project Rep	Refugees/Asylm	City Agency	Community	Private C/UP	Area Plan/Project	Other	See (Commons)	City 1983 - 1988	Agency Prior. 1983 - 1988	No Funding Identified	No Funding Identified	Anticipated Total Project Cost (in thousands) if available
24 MARION-FRANKLIN		Proposed Project												Project Description
Frank-Refugee Expressway (SR 104)	1	Engr	●	●	●	P A	1 2	'83					\$26,000	Construction of a new 4/6 lane freeway extension of SR 104 from Lockbourne Road to USR 33.
Street Repairs	2	Engr							3					Generally poor conditions and lack of curbs and gutters from Watkins to Koebel, Lockbourne to Railroad Tracks.
Curbs and Gutters	3	Engr							3					Clarfield Avenue, Moundview Avenue and Augmont Avenue.
New Street Lighting	1	Elec	●	●						●	●			1.0 mile Valley Green Subdivision.
New Street Lighting	2	Elec	●	●						●	●			.1 mile - Silverbrook Drive (Single Light).
New Street Lighting	3	Elec	●	●						●	●			Alum Creek Drive, Williams Road to Koebel Avenue.
Renovation and Energy Improvements	1	Parks	●										'83-'84	At Marion-Franklin Recreation Center.

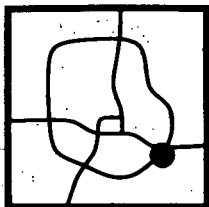
1. Thoroughfare Plan  
 2. Regional Transportation Plan  
 3. D.O.D. Minnehield Survey











# COMMUNITY PLANNING AREA

24 MARION-FRANKLIN

June 1983

Proposed Project	Project Map Reference Number	Implementing City Agency	Community	Previous CIP	Area Plan Profile	Other (See footnote)	CIP 1983 - 1988	Agency Priority	Neighborhood Identified	No Funding Identified	Multi-phase Total Project Cost (in thousands) if available	Project Description
Groveport Pike Water Line	2	Water	●	●	P		85				\$ 61A	To construct 10,000 feet of 12 inch line along Groveport Pike between Augmont and Parsons Avenues.
Obetz Ditch Improvements	1	Sewer	●						●		\$ 60	South of Williams Road between Groveport Road and I-270.
Drainage Improvements	7	Sewer				1						Watkins to Koebe, Lockborne to Railroad Tracks.

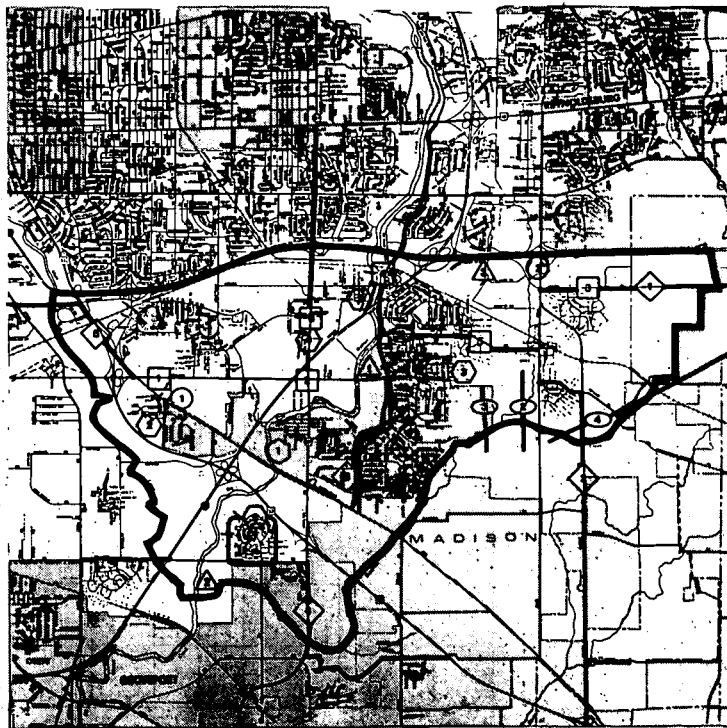


-  Division of Sewerage & Drainage
-  Division of Water
-  Division of Engineering & Construction
-  Division of Traffic Engineering & Planning
-  Division of Electricity
-  Division of Fire
-  Division of Police
-  Recreation & Parks
-  City of Columbus
-  County and other municipalities



**Eastland/Brice**  
Community Planning Area 25

June 1983



# COMMUNITY PLANNING AREA

25 EASTLAND/BRICE

June 1983

Proposed Project	Project Map Reference Number	Implementing City Agency	Implementing Agency	Community	Previous CIP	Area Plan/Profile	Other (see footnote)	CIP 1983 - 1988	Agency Ref. for CIP	No Funding Identified	No Funding Identified	Anticipated Total Project Cost (in thousands) if Available	Project Description
College/Refugee Intersection Improvement	1	Engr Tr Engr	●	●								\$ 500	To handle traffic volume and reduce accidents.
Refugee and Hamilton Intersection Widening	2	Tr Engr	●						●				To improve the southbound left turns and westbound right turns.
Tussing Road Improvement	3	Engr	●			1 2							Widen to four lanes from Brice Road to S.R. 256.
Now-Sixty Road and Woodcrest Road Improvement	4	Engr	●			1 2							Widen to four lanes from Refugee Road to East Main Street.
Refugee Road Improvement	5	Engr	●			1 2							Widen to two full lanes from Now-Sixty to Brice as land development occurs.
Hamilton Road Improvement	6	Engr	●			2							Upgrading of I-70 interchange and intersections from I-70 to Refugee Road, including I-70 interchange improvements.
New Street Lighting	1	Elec	●	●				83-85					1.2 miles - Catalpa Park.
New Street Lighting	2	Elec	●	●				83-85					1.1 miles - Winchester Addition.

1. Thoroughfare Plan  
2. Regional transportation Plan

COMMUNITY PLANNING AREA 25 EASTLAND/BRICE		Project Ref. Reference Number	Map (containing City Agency)	Map (containing Agency)	Community	Previous CIP	Area Plan/Profile	Source of Need				Status		Project Description
								Other (see footnotes)	Agency PPT (or) FY	No Funding Identified	No Funding Identified	Anticipated Total Project Cost (in thousands) if Available		
New Street Lighting	3	Elec	●	●				'83-'85					.7 miles - Chatterton Area.	
New Street Lighting	4	Elec	●	●				'83-'85					2.5 miles - Hamilton Road - Whitehall to Refugee.	
New Street Lighting	5	Elec	●	●					●	●			3.3 miles - Three Rivers Subdivision, north of Williams Road and west of Hamilton Road.	
Fire Station Energy Conservation Project	1	Fire	●					'83-'85					At an existing station.	
New Fire Station	-	Fire	●	●	A	P					\$ 1,530		Site not yet determined.	
Police Station Energy Conservation Project	1	Police	●					'84					At an existing Station.	
New Police Substation	2	Police	●								\$ 417		Construction of a one story 1800 square foot police precinct substation with paved parking area in the area of I-70 and Brice Road.	



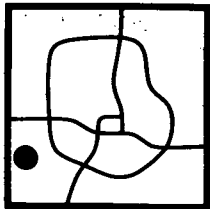
# COMMUNITY PLANNING AREA











25 EASTLAND/BRICE

June 1983

Proposed Project	Project Map Reference Number	Impresenting City Agency	Source of Need							Status	Project Description	
			Community	Previous CIP	Area Plan/Profile	Other (see footnote)	CIP 1983 - 1988	Agency Priority	No Funding Identified			Neighborhood Priority
Athletic Field Improvements	1	Parks	●						'84			At Nafzger Park.
Three Rivers Park Development	2	Parks	●	●	P						\$ 1,000	Continued development of a 400-acre site.
Renovate Recreation Center	3	Parks			P							Far East Recreation Center.
Tussing-Hines Road Water Line	1	Water	●						'84-'85		\$ 805	8,500 feet of 12 inch pipe and 3,500 feet of 16 inch pipe will extend an existing line east along Tussing Road to Hines Road, then south along Hines to Refugee Road.
Refugee-Gender-Shannon Road Water Line	2	Water	●	●					'84-'85		\$ 750	8,800 feet of 12 inch pipe and 2,500 feet of 16 inch pipe will be needed to extend a water line from Brice Road east along Refugee, south along Gender and west along Shannon Road.
Noe-Bixby Road Water Line - Winchester Pike to Refugee (Part 1)	3	Water	●						'85		\$ 632	8,700 feet of 16 inch line along Noe-Bixby between Winchester Pike and Refugee Road.
Hamilton Road Transmission Main	4	Water	●						'83		\$ 600	To lay a water transmission main along Hamilton Road from Bixby Road to Williams Road.
Freble Avenue - Petzinger Road Connector.	4	Water	●						'83-'84		\$ 775	This will make a connection from Progress Avenue, east along Moier Avenue to College Road and Petzinger Road, then run southeast along Winchester Pike to Refugee Road.

COMMUNITY PLANNING AREA		Source of Need											Status	June 1983	
		Project Map Reference Number	Implementing City Agency	Implementing Agency	Community	Previous CIP	Area Plan/Priority	Other (see footnote)	CIP 1983-1988	Agency Priority	No Funding Identified	Neighborhood Priority	No Funding Identified	Anticipated Total Project Cost (in thousands) if Available	Project Description
25 EASTLAND/BRICE		Proposed Project													
		Noe-Bixby Road Storm Culvert	①	Sewer	●									\$ 60	Along Noe-Bixby Road from Winchester Pike to I-70.
		Blacklick Creek Subtrunk Part I	②	Sewer	●					'84				\$ 240	To construct a sanitary subtrunk sewer from Blacklick Creek main trunk to west of Brice Road in the vicinity of Refuge Road.
		Blacklick Creek Subtrunk Part II	③	Sewer	●					'83				\$ 350	To construct a sanitary subtrunk from the Blacklick Creek Main Trunk to the vicinity of Chatterton Road.
		Blacklick Creek Interceptor Sections 3 and 4	④	Sewer	●									\$12,034	To install sewer pipe in an open trench along Blacklick Creek from Brice Road to north of Broad Street.
		Refuge Ditch Enclosure	⑤	Sewer	●					'83-'84				\$ 1,010	To enclose the ditch on the north side of Refuge Road Noe-Bixby to Dellworth Street.



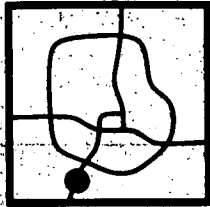
-  Division of Sewerage & Drainage
-  Division of Water
-  Division of Engineering & Construction
-  Division of Traffic Engineering & Parking
-  Division of Electricity
-  Division of Fire
-  Division of Police
-  Recreation & Parks
-  City of Columbus
-  County and other municipalities













**Southwest**  
Community Planning Area 26A

June 1983



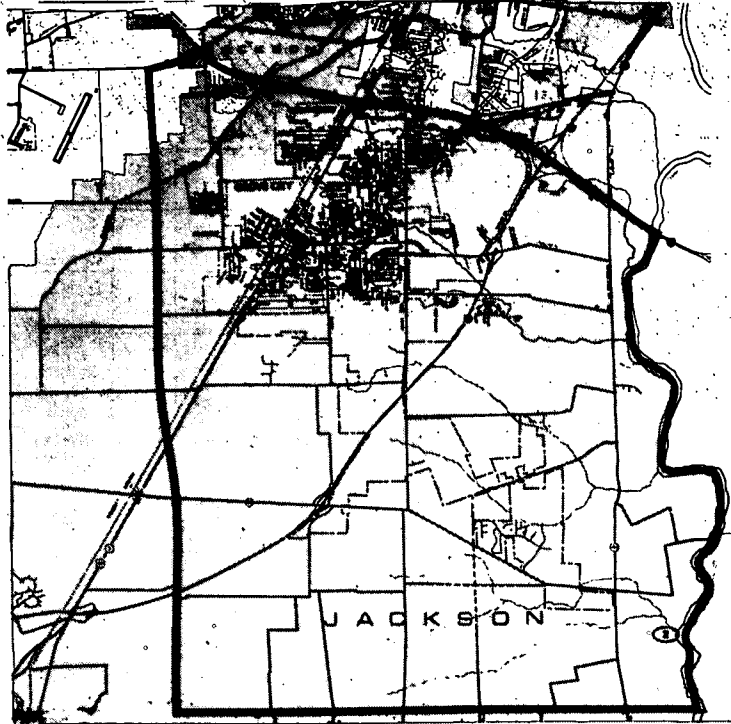


-  Division of Sewerage & Drainage
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-  County and other municipalities



**Southwest  
Community Planning Area 26B**

June 1983



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COMMUNITY PLANNING AREA		Source of Need										Status	June 1983			
		Project Ref	Reference Number	Implementing City Agency	Implementing Agency	Community	Previous CIP	Area Plan/Profile	Other (see footnote)	CIP 1983-1988	Agency Priority	No Funding Identified	Neighborhood Priority	No Funding Identified	Anticipated Total Project Cost (in thousands, if available)	
26 SOUTHWEST		Proposed Project													Project Description	
New Street Lighting		①	Elec	●	●					'83-'84						.2 miles - Norton Court and Georgesville Road.
New Street Lighting		②	Elec	●	●						●	●				Hall Road at West Haven.
New Street Lighting		③	Elec	●	●						●	●				Sullivant Avenue-Georgesville to Norton Road.
New Fire Station		①	Fire	●	●									\$ 1,000		The Bolton Airfield is a tentative location for this facility.
Fire Station Energy Conservation Project		②	Fire	●						'83-'85						At an existing station.
Bolton Field Area Substation		①	Police	●						'85				\$ 114		For the construction of a one story steel and concrete building. This will replace the present station which is inadequate.

COMMUNITY PLANNING AREA		Source of Need										Status	June 1983			
		Project Rep Reference Number	Implementing City Agency	Implementing Agency	Community	Previous CIP	New Plan/Profile	Other (see footnote)	CIP 1983 - 1988	Agency Priority	No Funding Identified	Neighborhood Priority	No Funding Identified	Anticipated Total Project Cost (in thousands) if Available		
26 SOUTHWEST		Proposed Project											Project Description			
Doherty Road - Feder Road Water Line	1	Water	●										'84		\$ 390	This 12 inch water line would run along Doherty Road between the Conrail tracks and Feder Road, then along Feder Road between Doherty and Hilliard-New Rome Roads.
Doherty Road Water Line - Broad Street and Conrail R.R.	2	Water	●										'84		\$ 250	1,000 feet of 16 inch water line along Broad Street and 4,000 feet of 12 inch line along Doherty Road from Broad Street to the Conrail Railroad.
Galloway Road Water Line	3	Water	●										'85		\$ 314	Construction of 4,500 feet of 16 inch line along Galloway and Alkire Roads, north to the City limits.
Alkire Road Water Line (Part I)	4	Water	●										'84		\$ 135	5,000 feet of 16 inch line along Alkire Road from Norton Road to a point approximately 2,500 feet west.
Alkire Road Water Line (Part II)	5	Water	●	●									'85		\$ 211	A 16 inch water line along Alkire Road from Galloway Road, approximately 3,000 feet eastward.
Hilliard-Rome Road Water Tank	6	Water	●	●									'83		\$ 1,800	Construct a second two million gallon elevated steel storage tank at the Hilliard-Rome Road tank yard.
Marsh Run Sanitary Sewer	1	Sewer	●												\$ 890	At Marsh Run between S.R. 104 and Gantz Road.
Southwesterly Sludge Composting	2	Sewer	●										'83-'85		\$ 1,165	Miscellaneous modifications and improvements of the Southwesterly Sludge Composting facility

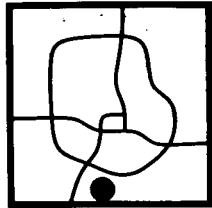
# COMMUNITY PLANNING AREA











26 SOUTHWEST

June 1983

Proposed Project	Project Ref. Number	Implementing City Agency	Implementing Agency	Community	Previous CIP	Area Plan/Profile	Source of Need			Status			Project Description
							Other (See Appendix)	CIP 1983 - 1988	Agency Priorities	Neighborhood Priorities	No Funding Identified	Participated Total Project Cost (in thousands) if Available	
Big Run South Road Sanitary Subtrunk	3	Sewer	●					'87-'88				\$ 1,140	A sanitary subtrunk sewer originating at the Big Run Trunk and continuing southwest to serve the area in the vicinity of Holt Road and I-270.
Big Run Sanitary Trunk Feasibility Study	4	Sewer	●					'86-'87				\$ 5,215	To investigate the possibility of construction of a 54 inch trunk from west of Galloway Road to a point approximately 1,000 feet of Alton Road, and then along Clover-Groff Ditch.
Big Run Sanitary Subtrunk - North of Broad Street - Part 2	5	Sewer	●					'84-'85				\$ 315	A sanitary subtrunk sewer to serve the area north of Broad Street to the railroad east of Doherty Road.
Bolton Field Crosswind Runway	1	Airport	●					'87				\$ 1,500	A 3,000 foot runway to increase all weather landing conditions, thereby satisfying FAA requirements.

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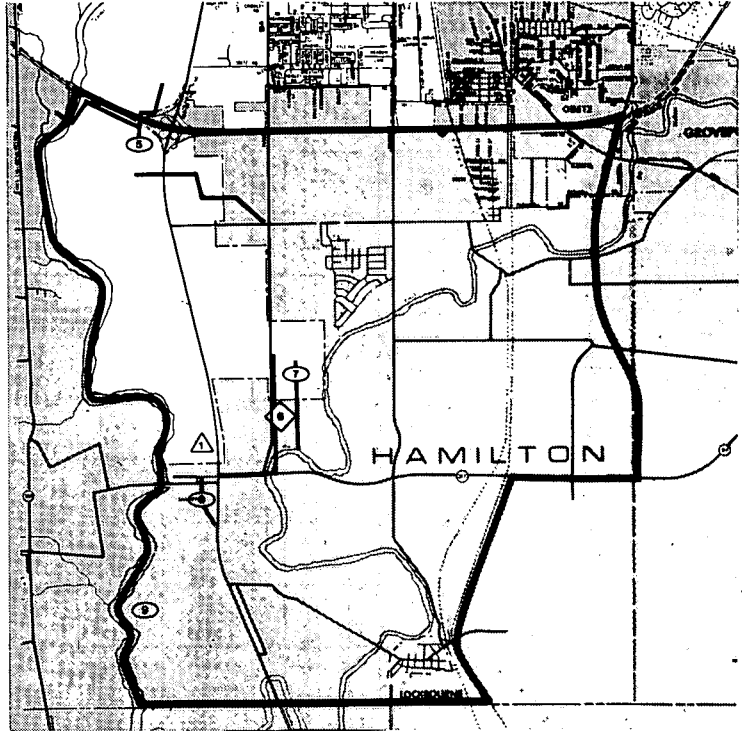


-  Division of Sewerage & Drainage
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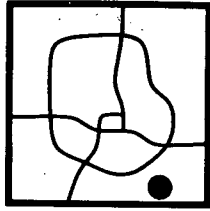
**Southeast**  
Community Planning Area 27A











June 1983

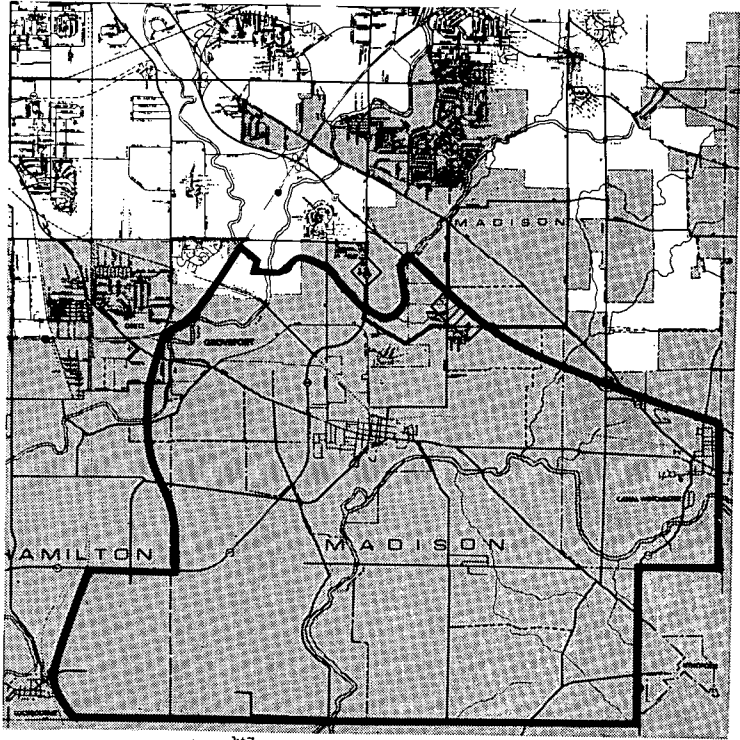


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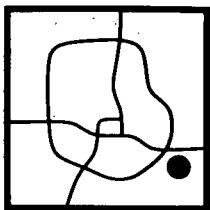












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**Southeast**  
Community Planning Area 27B

June 1983

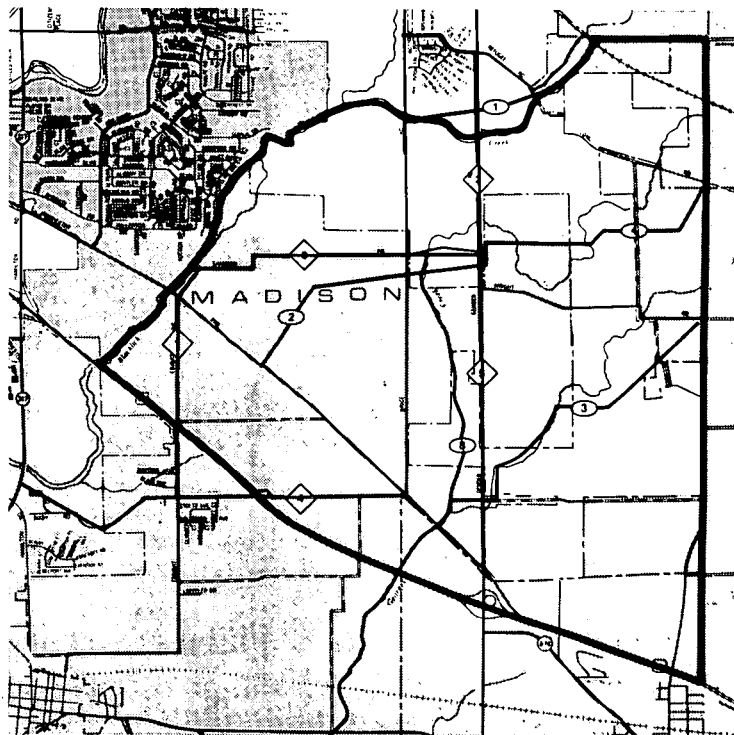


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**Southeast**  
Community Planning Area 27C

June 1983



COMMUNITY PLANNING AREA		Source of Need										Status	June 1983			
		Project Map Reference Number	Map Issuing City Agency	Map Issuing Agency	Community	Previous CIP	Area Plan/Profile	Other (see footnote)	CP 1983 - 1988	Agency Priority	No Funding Identified	Neighborhood Priority	No Funding Identified	Anticipated Total Project Cost (in thousands) if available		
Proposed Project													Project Description			
Nursery and Street Tree Development		1	Parks	●						84-85					\$ 70	The development of the 65 acre Shadeville Nursery site into a tree and shrub nursery to raise materials for use on City streets and in City parks.
New Fire Station		6	Fire	●											\$ 1,500	A site has not been determined at this time.
Ebright Road Water Line		1	Water	●	●					85					\$ 365	4,500 feet of 12 inch line along Ebright Road from Groveport Bixby Road to Winchester Pike.
Refugee-Gender-Shannon Road Water Line		2	Water	●						84-85					\$ 750	8,800 feet of 12 inch pipe and 2,500 feet of 16 inch pipe to extend a water line from Brice Road East along Refugee, south along Gender and west along Shannon Road.
Shannon Road Water Line		3	Water	●	●					85					\$ 471	9,000 feet of 12 inch line along Shannon Road from Winchester Pike to Brice Road.
Groveport-Bixby Transmission Main		4	Water	●	●					84					\$ 1,900	15,000 feet of 36 inch line along Bixby Road from Hamilton Road to Brice Road.
Gender Road-Winchester Pike Water Line		5	Water	●	●					84-85					\$ 890	13,500 feet of 16 inch line along Winchester Pike, from Brice to Gender, and along Gender Road from Winchester Pike to Shannon Road.

# COMMUNITY PLANNING AREA

27 SOUTHEAST

June 1983

Proposed Project	Project Ref. Number	Reference Number	Implementing City Agency	Implementing Agency	Community	Previous CIP	Area Plan/Profile	Source of Need		Status			Project Description
								Other Use (or) Other	CIP 1983 - 1988	Agency Priority	No Funding Available	No Funding Priority	
Parsons Avenue, S.R. 665 Water Line	6		Water	●	●			'84-'85				\$ 289	5,500 feet of 12 inch line from the Parsons Avenue Water Plant to U.S. 23 along Parsons Avenue and S.R.665
Hamilton Road Water Line	7		Water	●	●							\$ 890	Transmission main along Hamilton Road, from Bixby Road to Williams Road.
Brice Road Subtrunk - South from Blacklick Creek	1		Sewer	●				'86-'87				\$ 280	Construction of a sanitary subtrunk sewer from the Blacklick Trunk, south along Brice Road for 1,000 feet.
Blacklick Creek Sanitary Subtrunk - Brice/Wright, Part B-1	2		Sewer	●				'83-'84				\$ 1,613	A subtrunk sewer extension of the Blacklick Creek Trunk beginning at the creek and north of Winchester Pike to the vicinity of Bachman Road and then north-southwardly to Gender and Wright Roads.
Blacklick Creek Sanitary Subtrunk - Brice/Wright, Part A-2	3		Sewer	●				'85				\$ 1,600	Continuation of Part A-1 along and north of Bixby and Lehman Roads to Gender Road and then to the northeast ending in the vicinity of Wright Road and the County line.
Blacklick Creek Sanitary Subtrunk - Brice/Wright, Part B-2	4		Sewer	●				'86				\$ 1,340	Continuation of Part B-1, beginning at Brice/Wright Roads and continuing north to the County line.
Rethnell/Parsons Sanitary Subtrunk Sewer	5		Sewer	●	●			'84-'85				\$ 665	A sanitary subtrunk sewer from the Scioto River southeast to the vicinity of Rethnell Road and Parsons Avenue.
Shadeville Sanitary Interceptor	6		Sewer	●				'86-'88				\$ 285	A sanitary subtrunk sewer from the Big Walnut Outfall north along the Old Feeder Canal from S.R. 665 to the City Boundary.

# COMMUNITY PLANNING AREA

27 SOUTHEAST

June 1983

Proposed Project	Project Ref. Reference Number	Imp. (sanitary) City Agency	Imp. (sanitary) Agency	Community	Previous CIP	Area Plan/Profile	Other (see footnote)	Source of Need		Status		Project Description
								CIP 1983 - 1988	Agency Priority	No Funding Identified	No Funding Identified	
											Anticipated Total Project Cost (in thousands) if available	
Big Walnut Parsons Avenue Sanitary Interceptor	①	Sewer	●				8A			\$ 690		2,000 feet of sanitary subtrunk sewer from the Big Walnut outfall to the vicinity north along the east side Parsons Avenue.
Georges Creek Culvert Improvements	①	Sewer	●							\$ 460		Culvert improvements along Georges Creek.
Improvements and Expansion at the Southerly Treatment Plant	③	Sewer	●				83-88			\$151,808		Southerly Immediate Design, step 3 construction; Solids Handling Facilities; Misc. Modifications and Improvements; New Infiltration; West Street Facilities; Plant Rehabilitation and Plant Expansion Site.

# **IV. City Wide**

## CITY WIDE

The following inventory of community needs is organized by the responsible or implementing City Division. These projects have been arranged in this manner because they generally are not physically located in any one Community Planning Area and/or benefit the entire Columbus Community.

COMMUNITY PLANNING AREA												June 1983		
		Project Ref. Reference Number	Implementing City Agency	Implementing Agency	Community	Previous CIP	This Plan/Project	Other (See Footnote)	CIP 1983-1988	Agency Priority	No Funding Identified	No Funding Identified	Anticipated Total Project Cost (in \$thous.) if Available	Project Description
CITY WIDE ENGINEERING & CONSTRUCTION														
Proposed Project														
Miscellaneous Intersection Improvements	Engn Tr Engn	●	●							'83- '88			\$ 300	Improvements at intersection which are particularly hazardous.
R.R. Crossing Reconstruction	Engn	●	●							'83- '88			\$ 150	Grade crossing improvements city wide.
Computer Design System	Engn Tr Engn	●												A drafting design system required for modernization of maps, records and design efforts. A joint project with Traffic Eng.
Street Resurfacing	Engn	●											\$ 3,250	An annual program to replace 93 miles of arterial and residential streets.
Curb Replacement	Engn	●											\$ 2,100	An annual program to replace 40 miles of curbs along arterial and residential streets.
Vehicle Maintenance Garage At Street Cleaning Headquarters	Engn	●												Replacement of antiquated structure at Dublin Avenue headquarters.
Street Maintenance Outpost in North West	Engn	●												Small outpost (salt shed) similar to existing one on Roberts Road near I-270.
Street Maintenance Outpost in the East	Engn	●												Small outpost (salt shed) similar to existing one on Roberts Road near I-270.
Vehicle Storage Shed	Engn	●												To provide covered vehicle equipment (sowers and Pavers) storage at 25th Avenue yard.

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COMMUNITY PLANNING AREA		Project Reference Number	Implementing City Agency	Source of Need						Status	June 1983	
				Implementing Agency	Community	Previous CIP	Area Plan/Policy	Other (See footnote)	CIP 1983 - 1989			Agency Prior/ity
Proposed Project											Project Description	
	New Traffic Signals	Tr Engr	●	●	●			'83-'85			\$ 2,405	To install new traffic signal systems equipment, and/or installations at various City-wide locations.
	Traffic Sign Upgrading Part I	Tr Engr	●	●	●			'83-'84			\$ 100	To replace and upgrade the worst of the traffic signs on the City's streets.
	Fleet Replacement Part I	Tr Engr	●		●			'83-'85			\$ 605	To periodically replace and update heavy motorized equipment.
	Truck Mounted Thermoplastic applicator	Tr Engr	●					'83			\$ 125	This equipment would apply permanent lane lines and edgelines on freeways and newly resurfaced streets.
	Traffic Counting Equipment	Tr Engr	●								\$ 100	To monitor and analyze traffic flows around the City, the Division will install permanent count locations. Also included will be 15-20 portable counters.
	City Thoroughfare Plan	Tr Engr	●									Future improvement of many segments of arterial streets as per City Thoroughfare Plan, based on year 2000 needs.
	Miscellaneous Intersection Improvements	Tr Engr	●	●				'83-			\$ 50	Minor improvements at various intersections throughout the City to improve traffic flow, reduce accidents and reduce energy consumption.
	Traffic Signal Installations	Tr Engr	●	●				●			\$ 2,470	Installation of complete traffic signal systems including materials, equipment and plans at city-wide locations.
	Traffic Sign Upgrading Part II	Tr Engr	●	●	●			●			\$ 300	Continue to replace and upgrade the worst signage on the City Street System.

Proposed Project	Project Map Reference Number	Source of Need							Status		Project Description		
		Implementing City Agency	Implementing Agency	Community	Previous CIP	New Plans/Profile	Other (use footnote)	CIP 1983 - 1988	Agency Priority	No Funding Identified		No Funding Identified	Participated Total Project Cost (in thousands) if Available
<b>COMMUNITY PLANNING AREA</b>												June 1983	
<b>CITY WIDE TRAFFIC ENGINEERING &amp; PARKING</b>													
Fringe Parking Lots	Tr Engr	●	●					●			\$ 500	Provide additional off-street parking on fringes of C.B.D. to reduce C.B.D. congestion.	
Computer Design System	Engr Tr Engr	●						●				A drafting design system required for modernization of maps, records and design efforts. A joint project with Engineering and Construction.	
Freeway Traffic Management System	Tr Engr	●	●					●			\$ 3,000	Install a freeway ramp control system and mainline traffic information system on most congested portions of freeways.	
Freeway and Arterial Street Delineation	Tr Engr	●						●			\$ 650	Install reflective delineators and/or raised pavement markers on selected ramps, freeways and streets.	
Parking Meters	Tr Engr	●						●			\$ 115	Expand available on-street parking city-wide thru the use of parking meters.	
School Zone Traffic Controls	Tr Engr	●						●			\$ 100	Install or replace school flashers, school cross-walks and school signage at city-wide locations.	
Small Scale Safety Congestion Improvement	Tr Engr	●						●			\$ 1,520	To improve one to five hazardous and/or congested locations per year city-wide by minor widening or reconstruction.	
Fleet Replacement Part II	Tr Engr	●	●					●			\$ 915	To continue periodically to replace and upgrade heavy motorized equipment.	

COMMUNITY PLANNING AREA		Source of Need										Status		June 1983
		Project Map Reference Number	Implementing City Agency	Implementing Agency Community	Previous CIP	Area Plan/Profile	Other (see footnotes)	CIP 1983-1988	Agency Priority	No Funding Identified	Neighborhood Priority	No Funding Identified	Anticipated Total Project Cost (in thousands) if Available	
CITY WIDE FIRE		Proposed Project												Project Description
Fire Apparatus Replacement	Fire	●	●				'83-'85	●					\$ 7,775	The Division would replace apparatus as follows: Engines-three per year; aerial ladder-one per year; crash rescue-one every three years; articulating squirts-one every three years; and hose and tank wagons-one every three years.
Training Facility	Fire	●	●					●					\$ 1,000	This would be a facility, the design and layout to be determined by a planning process begun in the fall of 1980.
Maintenance Facility	Fire	●	●					●					\$ 2,500	This would be a of 35,000 square foot, one story maintenance and repair facility, with office and supply areas.
Specialized and Complementary Equipment	Fire	●					'83-'85						\$ 140	Will allow the Division to take advantage of technological advances.
Relocation and Computerization of Dispatching Facility	Fire	●	●					●					\$ 6,500	Division of Fire unable to supply specific geographic location at this time.

COMMUNITY PLANNING AREA		Source of Need										Status	June 1983			
		Project Ref	Reference Number	Implementing City Agency	Implementing Agency	Community	Previous CIP	Area Plan/Priorities	Other (see footnote)	CIP 1983-1988	Agency Priority	No Funding Identified		No Funding Identified	Multi-phased Total Project Cost (in thousands) if Available	
CITY WIDE POLICE		Proposed Project												Project Description		
Radio Transmitter Equipment Replacement		Police		●											\$ 67	6 solid state General Electric transmitters to replace existing tube-type transmitters.
Hand Held Transceiver (Walkie-Talkies) Replacement		Police		●											\$ 868	Replacement of outdated and aging General Electric hand-held transceiver system.
Investigations Building		Police		●											\$ 2,116	A three story 10,000 square foot building to centralize all investigation units. This would also ease space problems at the Central Station. Location not yet determined.
Substation/Satellite Facility Renovation		Police		●											\$ 513	Repairs and remodeling at 10 substation locations throughout the City involving: roofs, plumbing, air conditioning, resurfacing parking areas, security fencing, etc.

COMMUNITY PLANNING AREA		Source of Need										Status		June 1983	
		Project Map Reference Number	Imp Implementing City Agency	Imp Implementing Agency	Community	Previous CIP	New Plan/Profile	Other (See footnote)	CIP 1983 - 1988	Agency Priority	No Funding Identified	Weighted Priority	No Funding Identified	Participated Total Project Cost (in thousands) if Available	
CITY WIDE WATER		Proposed Project													Project Description
Water Facilities Improvement	Water	●	●					'83-'88					\$ 5,495	Miscellaneous projects are funded, arising from unanticipated circumstances. This project provides the necessary money for contingencies. For example, water main replacement in a street being improved.	
Water Main Rehabilitation	Water	●						'83-'88					\$ 5,300	This project will provide cleaning and cement-mortar lining of various water lines, through Columbus, extending their life.	
Distributing System Automation	Water	●	●					'83-'84					\$ 3,520	This project will provide the engineering studies, flow and pressure sensing equipment and terminal equipment needed to gather the required data to automate the system.	
Remote Program Clean Up	Water	●	●					'84					\$ 600	These funds will be spent on the installation of exterior water meters on those residences which have not yet been done.	
Commercial Meter Change Out	Water	●	●					'83					\$ 860	Installation of remote commercial meters.	
Energy Conservation Program	Water	●	●					'84-'88					\$ 500	This program is designed to conserve energy at the Division's Horse Road and Dublin Road water plants.	
Water Plant Organic Facilities	Water	●						'84					\$ 60	This project will provide the necessary engineering studies to ascertain the most efficient available means of treatment and the cost of meeting expected water quality standards for organic compounds in public water supplies.	
Energy Conservation Measures	Water	●								1	●		\$ 28	Energy conservation measures identified in technical assistance energy audits in existing structures.	

1. Energy and Telecommunications Department

COMMUNITY PLANNING AREA		Source of Need										Status	June 1983	
		Project Not Referenced Number	Map Issued - 1980 City Agency	Map Issued - 1981 City Agency	Community	Previous CIP	Area Plans/Profile	Other (See Footnote)	CIP 1983 - 1988	Agency FY 1983/1984	Neighborhood Priority	No Funding Identified	Multiphase Total Project	Over (In Months) If Available
Proposed Project		Project Description												
Sanitary Sewer Monitoring Stations	Sewer	●						'83					\$ 1,130	To monitor at sites throughout the sewer system.
Manhole Rehabilitation	Sewer	●	●					'83-'88					\$ 450	City Wide.
Miscellaneous Erosion Control	Sewer	●	●										\$ 642	City Wide.
Miscellaneous Storm Sewers And Culverts	Sewer	●						'83					\$ 67	These funds are for unanticipated storm sewer repair and maintenance work, projects are undertaken as needed.
Miscellaneous Sanitary Subtrunk	Sewer	●	●	●				'83-'88					\$ 1,725	This account is for various sanitary sewer projects that may need to be undertaken as well as to provide contingency funding for currently planned projects. Specific projects will be identified as more detailed information becomes available and priorities are established. Funds may be used for engineering or construction on projects with an estimated life span of 100 years.
Sanitary Sewer Contingencies	Sewer	●	●	●				'83-'88					\$ 137	This is a reserve account to fund legal or construction cost overruns for any scheduled capital project, being transferred as needed. Additional funds are deposited in advance to cover any needed expenses.
Storm Sewer Contingencies	Sewer	●		●				'83					\$ 10	This is a project reserve account to pay for any legal or cost overruns for any capital project. Funds for this account are derived from income tax revenue.
Emergency Sewer Replacement	Sewer	●	●	●				'83-'88					\$ 1,320	This project provides funds for the daily replacement of sewers which have failed structurally within the City's 2000 mile sewer system.

COMMUNITY PLANNING AREA		Source of Need										Status		June 1983
		Project Map Reference Number	Implementing City Agency	Implementing Agency	Community	Previous CUP	Area Plan/Profile	Other (See footnote)	CH 1963 - 1988	Agency Priority	No Funding Identified	No Funding Identified	Anticipated Total Project Cost (in thousands) if Available	
Proposed Project														Project Description
Facilities Plan	Sewer	●						'83					\$ 300	This is a basic requirement for receiving all federally funded wastewater treatment grants. The Facilities Plan is the overall 20 year plan.
Pumping Station Telemetry	Sewer	●						'83-'84					\$ 920	This will connect each of the 22 storm and sanitary pumping stations with the Sewer Maintenance Yard in order to monitor each station for malfunctions.
Project Management Office (PMO)	Sewer	●											\$ 850	Required by USEPA to set uniform standards for and coordinate work by the various consultants and contractors of wastewater.
Rain Gauge Telemetry	Sewer	●						'83-'84					\$ 436	Connection of rain gauges located in various part of the City to the Sewer Maintenance Yard in order to relay immediately rainfall information.
Sanitary Sewer Rehabilitation	Sewer	●						'83-'85					\$ 5,840	Minor and major rehabilitation of sanitary sewers to prevent storm water entry.
Various Ditch Renovations	Sewer	●											\$ 700	For major renovation to major open ditches throughout the City.
Pumping Station Rehabilitation	Sewer	●						'83-'88					\$ 180	This work entails the rehabilitation of existing structures and equipment at 23 storm and sanitary pumping stations.
Energy Conservation	Sewer	●											\$ 171	Energy conservation measure for Sewerage and Drainage buildings as identified in the Energy and Telecommunications Department "Technical Assistance Energy Audits."

COMMUNITY PLANNING AREA		Source of Need										Status		June 1983
		Project Map Reference Number	Implementing City Agency	Implementing Agency	Community	Previous CIP	Area Plan/Profile	Other (see footnote)	CIP 1983-1988	Agency Priority	No Funding Identified	Neighborhood Priority	No Funding Identified	
Proposed Project														Project Description
Construction of East Substation	Elec	●											\$ 350	Construct Substation needed for distribution and street lighting system.
Replace 2,400 Volt Distribution System	Elec	●											\$ 1,400	Replace obsolete, inefficient and deteriorated 2,400 volt distribution system in Near West and Hilltop area.
Substation Improvements	Elec	●											\$ 80	Upgrade remote substations and revamp supervisory control and data acquisition system.
Distribution Material Warehouse and Garage Facility	Elec	●												To provide a facility adequate for the maintenance and operation of the street lighting and distribution system.



COMMUNITY PLANNING AREA		Source of Need											Status		June 1983
		Project Map Reference Number	Implementing City Agency	Implementing Agency	Community	Previous CIP	Key Plans/Profile	Other (Use Footnote)	CIP 1983 - 1988	Agency Priority	No Funding Identified	No Funding Identified	Participated Total Project Cost (in hours) if Available		
Proposed Project		Sanitation												Project Description	
Energy Conservation	Sanitation						1						\$ 171	Energy Conservation measures for Sanitation Buildings, as identified in the Energy and Telecommunication Department "Technical Assistance Energy Audits."	
Additional Parking Spaces	Sanitation	●											\$ 10	At Division's Administrative Building.	
Expansion of Truck Storage Facilities	Sanitation	●											\$300 per Station	At all three transfer stations: 1. Alum Creek 2. Morse Road 3. Georgesville Road	
Electronic Operated Gates	Sanitation	●											10 per Gate	At all three transfer stations: 1. Alum Creek 2. Morse Road 3. Georgesville Road	
Paving of Access Roads	Sanitation	●												At all three transfer stations: 1. Alum Creek 2. Morse Road 3. Georgesville Road	
Storage Facility	Sanitation	●												At Alum Creek Transfer Station for the storage of spare pulverizer parts.	
Administration Building Expansion	Sanitation	●												Expansion of Administration Building at the Alum Creek Transfer Station site.	
New Pulverizer Transfer Station	Sanitation	●												To be located in the northwest quadrant of the City. A site has not yet been selected.	

1. Department of Energy and Telecommunication

COMMUNITY PLANNING AREA		Source of Need										Status	June 1983	
		Project No.	Reference Number	Implementing City Agency	Implementing Agency	Community	Previous CIP	Area Plan/Profile	Other (See footnote)	CIP 1983 - 1988	Agency Priority	No Funding Identified	No Funding Identified	Anticipated Total Project Cost (in thousands) if Available
CITY WIDE RECREATION & PARKS		Proposed Project											Project Description	
Recreation Center Lift Vans for the Handicapped				Parks					1			●	10 per Van	Provision of lift equipped vans for use at each of the City's 25 recreation centers.
Playground and Recreation Equipment				Parks	●	●	●			'83-'84			\$ 110	Purchase and installation of equipment, hard surface areas, lighting and tot-lot development at selected sites.
Bicycle Trail Development				Parks	●	●	●				●	●	\$ 250	Development of alternate routes for bicycle and pedestrian usage in conjunction with the Department's master plan and available Federal grants.
School and Neighborhood Park Development				Parks	●	●	●			'84-'85			\$ 165	Development of school and neighborhood parks in conjunction with the Columbus Public School system and neighborhood needs. Work would include grading, surface drainage, walkways, seeding, landscaping, tot-lots, tennis courts, playfields and picnic facilities.
Park Acquisition				Parks	●	●	●			'84-'85			\$ 175	Acquisition of land for open space, neighborhood and community park areas. Purchases are governed by population growth and distribution, proximity of parks or recreational facilities, access and the availability of Federal Open Space funds.
Picnic Area Development				Parks	●	●	●			'84-'85			\$ 20	These funds will purchase tables, park benches, grills, park signage and shelters, and construction materials needed for picnic area at selected sites.
Various Park Improvements				Parks	●	●	●			'84-'85			\$ 120	This involves the rehabilitation and restoration of community and neighborhood parks within Recreation and Parks system.
Replacement of Heavy Motorized Equipment				Parks	●	●	●			'84-'85			\$ 50	Funds will be used to replace heavy equipment used by the construction, park maintenance and building maintenance sections.
Roadway, Parking Lot and Bikeway Renovation				Parks	●	●	●				●	●	\$ 750	Renovation and improvement of roadways, parking areas and bikeways at various sites within the system. Work is coordinated with the Division of Engineering and Construction.

1. Development Department Staff

COMMUNITY PLANNING AREA		Source of Need										Status		June 1983
		Project Map Reference Number	Implementing City Agency	Implementing Agency	Community	Previous CIP	Area Plan/Profile	Other (See footnote)	CIP 1982 - 1988	Agency Plan or FY	Neighborhood Plan or FY	Neighborhood Plan or FY	Anticipated Total Project Cost (in thousands) if Available	
Proposed Project		Parke												Project Description
Athletic Field Development		Parke	●	●	●				●	●			\$ 200	The development of athletic fields at selected sites, for football, softball and soccer. Parking and restrooms will also be provided.
Handball Court Development		Parke	●		●				●				\$ 150	Funds would construct an outdoor, six court, lighted handball facility at a centralized Department.
Benches and Seating Areas		Parke	●					'84-85					12	For the purchase of materials for the construction of park benches.
Ice Skating Rink		Parke	●						●				\$ 1,500	Site not identified at this time.
Golf Course Development		Parke	●		●				●				\$ 1,250	Development of an 18-hole golf course, clubhouse and maintenance area. Site not identified at this time.

**COMMUNITY PLANNING AREA**

CITY WIDE  
ZOO

June 1983

Proposed Project	Project Map Reference Number	Implementing City Agency	Implementing Agency	Community	Previous CIP	Source of Need				Status			Project Description
						Area Plans/Profile	Other (See Footnotes)	CIP 1983 - 1988	Agency FY 1983-84	Agency FY 1984-85	Agency FY 1985-86	Agency FY 1986-87	
Equipment Replacement		Zoo	●	●				'84-'85				\$ 70	Replacement and addition of equipment for maintenance and development.
Zoo Expansion		Zoo	●	●					●			\$ 5,000	Building a zoo amusement park, land acquisition and initial development into a major entertainment attraction.
North American Display		Zoo	●	●				'83-'84				\$ 975	Development of meadow acreage east of Herbivore/Carnivore Giraffe Complex into an open year around display for North American mammals.
Renovation and Improvement of Zoo Facilities		Zoo	●	●				'84-'85				\$ 226	Continued renovation of zoo structures.
Energy Conservation Measures		Zoo	●						●			\$ 30	Energy conservation measures to existing envelope and HVAC building systems.
Perimeter Security Fencing		Zoo	●					'85				\$ 50	Replacement/installation of perimeter security fencing as required by U.S.D.A. guidelines.
Waste Treatment System		Zoo	●					'83				\$ 600	As required by the OEPA.

# COMMUNITY PLANNING AREA

## CITY WIDE ENERGY & TELECOMMUNICATION

June 1983

Proposed Project	Project Map Reference Number	Implementing City Agency	Community	Previous CIP	Area Plan/Profile	Source of Need			Status		Project Description
						Other (see footnote)	CIP 1983 - 1988	Agency Priority	No Funding Identified	No Funding Identified	
Telecommunication Devices In City Divisions For Deaf Citizens	Tel Cos Bid Ser					1		●	●	1.0 Per Unit	Devices installed in City Divisions for the Cities deaf population so they may contact such emergency services as police and fire as well as City Administrative Divisions and Civil Service.

1. Development Department Staff

COMMUNITY PLANNING AREA		Project Map Reference Number	Implementing City Agency	Source of Need							Status	Project Description	
				Implementing Agency	Community	Previous CUP	Key Plan/Project	Other (see footnote)	CIP 1983 - 1988	Agency Priority			Neighborhood Priority
CITY WIDE COMMUNICATIONS		Proposed Project											
		Microwave Communication System Phase I	Comm	●							●	\$ 2,287	To replace existing underground lease lines between transmission towers at various city-wide locations with more efficient microwave transmitters eliminating interference and lowering maintenance costs. These towers transmit radio calls from police vehicles to main radio room.
		Microwave Communication System Phase II	Comm	●							●	\$ 2,314	To replace existing underground lease lines between transmission towers at various city-wide locations with more efficient microwave transmitters eliminating interference and lowering maintenance costs. These towers transmit radio calls from fire vehicles to main radio room.
		City-Wide Siren Alert System	Comm	●	●					●	●	\$ 800	A city-wide disaster siren alert system which could be activated by quadrants. Approximately 50 new siren locations have been identified.

June 1983

# COMMUNITY PLANNING AREA

## CITY WIDE HEALTH

June 1983

Proposed Project	Project Ref. Space Number	Imp. Identifying City Agency	Imp. Identifying Agency	Community	Previous CIP	Area Plans/Profile	Other (See footnote)	CIP 1983 - 1988	Agency Priority	No Funding Identified	No Priorities Identified	Anticipated Total Project Cost (in thousands) if Available	Status	Project Description
Building Renovation	Health	●							●				\$ 740	Major renovation to the Health Department Building to include: Renovation of existing auditorium into Clinic and meeting space, renovation of former building regulation space into Environmental Health space and upgrading of the heating and cooling system.
Energy Conservation	Health	●							●				\$ 25	This project is for energy conservation construction elements in the Health Department Building as identified in the Energy and Telecommunication Department "Technical Assistance Energy Audits."

City of Columbus

July, 1983

Columbus Physical Improvements Needs Survey

City of Columbus

Mayor Tom Moody

Department of Development

Director Ralph W. Smithers

Division of Planning

Lin Carver, Planning Administrator

Comprehensive Planning Section

Bill Hoyt, Ph. D., Supervisor

Prepared By

Ken Ferrell, Capital Improvements Program Coordinator



Representative HAMILTON. We will conclude the formal part of the testimony with Mr. John Nelson, director of planning and budgeting for the city of Louisville, Ky.

Please proceed, Mr. Nelson.

**STATEMENT OF JOHN NELSON, DIRECTOR, PLANNING AND BUDGETING, CITY OF LOUISVILLE, KY.**

Mr. NELSON. Thank you, Mr. Vice Chairman.

The city of Louisville is located on the south bank of the Ohio River some 600 miles below Pittsburgh and 380 miles above Cairo, Ill., where the Ohio empties into the Mississippi River. Since its founding in 1778, Louisville has grown to become the country's 49th largest city, with a population of nearly 299,000 and a land area of 61.2 square miles. Its metropolitan area covers seven counties and contains approximately 960,000 people.

The status of Louisville's public works system brings to mind the analogy of an established golf course after a long, hot summer: from a distance it looks pretty green, but upon closer inspection one can find more than a few brown burned out patches on the fairways and greens.

Our bridges, streets, waterlines, and sewer system—the so-called infrastructure—and our public transit system are in similar condition. The elements are getting worn, and there is barely enough money available to maintain them.

Several local jurisdictions share responsibilities for portions of the public works network, among them the city of Louisville, the Jefferson County government, the Louisville Water Co., the Metropolitan Sewer District [MSD], and the Transit Authority of River City [TARC]. Together, these agencies spend more than \$20 million annually for maintenance. It is unclear and of great concern to us how much longer such patch-up funding will suffice.

What follows is a brief sketch of the major trouble spots in each area of the system.

**WATER SERVICE**

The Louisville Water Co. operates about 2,600 miles of waterlines in and around the city. The company processes 123 million gallons of water each day, but about 15 percent of that never reaches the faucets of the 210,000 customers in the community. Some of the loss is accounted for by firefighting activities, but the company estimates that 1 of every 10 gallons literally leaks out of the system.

Many of the breaks are due to stretches of unlined cast-iron pipe which were originally installed in the late 1920's. Although the water company administers a \$30 million operation budget, only about \$4 million was available last year to replace mains at locations where conditions are the worst.

**SEWER SYSTEM**

Storm water and raw sewage flow through the same pipes in much of Louisville's century-old, 1,370-mile sewer system. Under normal conditions this does not present any problems. During heavy rains, however, the foaming mixture of water, residential and commercial sewage, and industrial pollutants pours directly

into the river untreated. This situation arises about 25 times a year, creating major concerns about water quality in the area.

MSD spends about one-fifth of its annual operating budget, or about \$7 million for sewerline and plant maintenance. Federal EPA estimates place the cost of separating the storm and sewage lines at nearly \$500 million.

#### BRIDGES

None of Louisville's major bridges are in danger of collapsing, but State inspectors do keep a close eye on the George Rogers Clark Memorial Bridge at 2d Street. Built in the 1920's, the bridge has a 74,000-pound weight limit, which means that many common carriers and load vehicles cannot use it. Last summer, some fairly extensive repairs were made to the pavement, deck, and sidewalks. The bridge was also repainted at that time.

Several small bridges in rural Jefferson County are in much worse condition. State-imposed weight limits bar trucks and school-buses from bridges on Old Taylorsville Road in the Fisherville area, while two other bridges nearby are closed to all traffic. At least 10 other bridges in Louisville and Jefferson County have received low safety ratings from State officials. The State has approved funds to replace five rural bridges over the next few years.

#### ROADS, STREETS, AND HIGHWAYS

The expressways and major highways in Louisville are in good shape, generally speaking. This can be directly attributed to the financial commitment given them by the Kentucky General Assembly. The legislature has made highway maintenance a high priority by adopting statutory provisions to insure that revenues from the State motor fuels tax are used for such projects. The fact that only about 2 percent of the State-maintained roads in Jefferson County fall below acceptable standards, according to recent inspections is an indication of this commitment. The State plans to spend approximately \$3 million in Jefferson County during the fiscal year for resurfacing and other repairs.

Jefferson County officials have placed emphasis on the major roads under their jurisdiction vis-a-vis a rotational repaving program that involves 15 to 20 percent of the system each year. Approximately \$2.1 million was spend last year on through roads and suburban arteries. Officials believe they are keeping up with their paving needs with this program, but they consider it unlikely that any significant progress can be made on rural road improvements—such as widening and straightening—given the present resources.

The segment of the city's infrastructure that commands the most attention from city government is the city's 1,000 miles of streets. The city of Louisville has an approximate \$93 million operating budget for the current fiscal year. By comparison, \$1.1 million has been appropriated for street maintenance while \$31.2 million has been appropriated for street resurfacing.

The city of Louisville uses its entire share of the State motor fuels tax collections (municipal aid) for street maintenance, street resurfacing, and other street-related expenditures. In addition to

State municipal aid, the city also relies upon Federal funds via the Federal aid to urban systems fund to pay for resurfacing of certain designated-eligible streets.

The city of Louisville has been largely dependent upon State municipal aid funds to pay for its street maintenance and resurfacing needs since the inception of the municipal aid program during the early 1970's. In fact, State municipal aid is the city's only large share of State revenue received annually. The city's share of the State motor fuels tax collection is projected to be \$1,970,000 during the current fiscal year.

Total State motor fuels tax collections have not registered any sustained growth over the past 5 years despite a revision in the law which changed the tax from 9 cents per gallon to 9 percent of the average wholesale price of a gallon with a floor of 10 cents per gallon. In fiscal year 1978-79 total State motor fuels tax collections equaled \$198 million while total motor fuels tax collections only equaled \$188 million during the last fiscal year.

Coupled with this lack of growth in total tax receipts is an allocation formula which penalizes cities with declining populations. Cities and urbanized areas in Kentucky compete for 6.7 percent of the State motor fuels tax collections. The allocation formula is based strictly upon the decennial census population counts. During the 1970's, the city of Louisville experienced a 17-percent decline in population while the entire State registered an increase. Thus, the city of Louisville saw its share of the motor fuels tax collections actually decline in absolute terms. Prior to the switchover to the 1980 census figures, the city's share of municipal aid was approximately \$3 million annually. Last year, the city received only \$1.9 million.

This decline in the city's primary funding source for street-related expenditures has placed a greater pressure on using the city's general fund tax revenues to supplement State municipal aid for funding street maintenance and resurfacing requests. The city's approximate \$2 million allocation has been just enough to repave about 33 miles per year. As a result, the average street is repaved only once every 35 to 40 years—almost three times longer than the 15-year lifetime after which engineers claim serious road deterioration begins. In fact, to give priority to streets that get heavy traffic, the city no longer repaves deadend streets.

With the decline in available State municipal aid funds, the city has already been forced to turn to the general fund to pay for street sweeping. City budget officials are now concerned that the continuation of the city's current municipal aid allocation will not be sufficient to cover the noninflation-proof street-maintenance and street-resurfacing needs. This revenue shortfall places street infrastructure needs in direct competition with the basic services—police, fire, and garbage services—which have been receiving the highest spending priority by the mayors and aldermen for nearly a decade. The planning staff has argued the case for spending proportionately more of the city's total revenue resources for infrastructure repairs and improvements, but thus far with only limited success. Maintaining spending levels on police, fire, and garbage services is the easier route for elected officials since voters complain more loudly about reductions in police and fire budgets.

Because street resurfacing needs are now in direct competition for available city revenues, and total city revenues have been decreasing in real terms, it is difficult to foresee any increase in the allocation of available funds for street infrastructure needs. The law restricting the State motor fuel taxes to street-related expenditures—maintenance, resurfacing, traffic signalization, and street-lighting costs—does help satisfy street infrastructure needs in the annual allocation battle of the budget. While Louisville and Jefferson County have done a pretty good job of maintaining their infrastructure needs, it is difficult to foresee infrastructure needs obtaining a larger share of the available pot of money in the future.

Ideally the Federal involvement might assume a form of infrastructure revenue sharing program—associated with the Federal gasoline tax—whereby funds were distributed to local units of government for infrastructure repairs and improvements only. Such a program could include a matching element in the distribution formula so that local governments would not be discouraged from using their own resources to maintain the infrastructure. The grants could be made directly to the local governments much in the same fashion as with the Federal revenue-sharing program.

Thank you for your attention to this important problem.

Representative HAMILTON. Thank you very much, Mr. Nelson. Let us spend some time discussing some of the things you have gone over. I must say the direct and immediate nature of your testimony is helpful and good for us to hear. I did not know whether you would be able to match the quality of the testimony of the panel that preceded you—I thought it was really very good—but I think you have matched it and with some very good testimony.

When you are dealing with infrastructure problems, where do you look for financing? Also, how sensitive is the State to your needs?

Let us say you have a tough infrastructure problem in front of you. Where do you look? You city officials might tackle that first because I know that you deal with that all the time. How important do you think the Federal role is?

Mr. NELSON. I am going to answer the question very honestly. As far as the city of Louisville is concerned, we look first and foremost at what are my one-time revenues that I am going to be able to generate here.

I have tried to assess what our needs are in regards to what our assets were and what is the minimum acceptable figure for maintenance of keeping our assets up, and then I try to assess our revenues from a recurring basis versus our nonrecurring revenues.

I try to take a very strong position that anything of a one-time nature should go into the capital, should go into the infrastructure, and at least maintain what we have.

As I pointed out, the city of Louisville is older than most cities.

Representative HAMILTON. How sensitive do you find the State of Kentucky to your infrastructure needs?

Mr. NELSON. Well quite honestly, the State has enough problems of its own in regards to its deteriorating revenue base, and when you look at the city of Louisville relative to the rest of the State, the tax base is one in which the city is proportionately putting

more out into the city than it is getting back, because of the nature of the population and the nature of our taxes.

Representative HAMILTON. The first sources that you look to are the local sources?

Mr. NELSON. Absolutely.

Representative HAMILTON. What is your second source?

Mr. NELSON. Our second source would be municipal aid, which is at the moment about \$2 million a year, and that is the only source that we have from the State of Kentucky.

Representative HAMILTON. Do you think the Federal Government is more or less important in meeting your infrastructure needs than the State?

Mr. NELSON. In the long term, it will be more important. At the moment we are using some federal urban systems money, which amounts to about \$600,000 or \$700,000 a year.

My expectation for the long term is that we will have to turn to the Federal Government.

Representative HAMILTON. Mayor, I would like you to tackle those same questions, if you would, sir.

Mayor MOODY. Yes, sir, I can do so briefly. If we take the highway question and set it aside, I think that is more generally the same and more uniform across the country.

One of the things that I started to mention and did not was the reason why the Columbus infrastructure is in better shape than that of most cities. And that has solely to do with financing.

We have had an income tax since January 1948, and from the beginning the excess overprojection, which went into general fund, was always committed to capital expenditure.

In January 1957, the policy was adopted when that tax went to one-fourth of 1 percent, or 25 percent of it would be set aside for the retention of voter-approved bonds to finance capital projects.

That has been held inviolate since 1957. The tax sometime later in 1962, I think, went up to 1½ percent but they did not increase the percentage, it remained still at one-fourth of 1 percent, and there was a sixth of the tax collections.

Our citizens approved, last November, an increase to 2 percent of earnings—it is an earnings tax, not an income tax and our council committed to restore the 25-percent level.

So we effectively doubled our capital set-aside beginning January 1, 1983. And this has been a solid of history for all of those years. Actually we looked very few other places. If I looked other places I would run into the same kinds of things that he talked about—I do not mean that we ignore them, they are just not relevant in terms of size. We pick up every dime that we can from those sources. But I imagine that would be a total of perhaps \$3 or \$4 million a year and it is a target of opportunity more than anything else.

Representative HAMILTON. \$3 or \$4 million refers to State and Federal assistance?

Mayor MOODY. Yes, for the most part. Now we also have to deal with wastewater treatment because there the Federal Government has picked up a much larger share, but, of course, the Federal Government has also demanded that we expend greater sums, and in those cases we have to put up a substantial part of the match

which, as I recall it, runs between 10 percent and about 25 percent on certain projects and we have to build that into the sewer rates.

On the other hand, let me suggest that we have just completed and not quite in full operation, a \$180 million expenditure for a trash-burning electrical generating plant. It conducts electrical energy from the trash. Its principal purpose, in my view, is to get rid of the trash, and drawing on the commissioner's testimony earlier, there is not one Federal dollar or one State dollar in that and there was no way to get any State or Federal money into those, because neither is on the cutting edge of technology in any way.

And by the way I failed to mention that real crisis is in solid waste and most of us at the local level do not know it yet and will not know it until the landfill closes.

That is where I look for the money, is this tax. Our people have borne it and they have borne it willingly and they voted an increase in it.

Representative HAMILTON. Mr. Hillenburg, do you want to tackle that at all. Or Mr. MacGregor.

Mr. MACGREGOR. I might just make a comment. What you are really talking about is a balanced approach—we try to take advantage of what we can do locally, and I think we have to do a better job, as I mentioned we passed a sales tax recently, and our real estate taxes in Kansas City are relatively low, I think we can increase our real estate taxes, we have an earnings tax.

And now we are depending upon the State for this \$600 million bond issue we talked about. But that is in jeopardy right now because the Federal judge has mandated cross-district bussing in St. Louis, which we are—it may come to Kansas City also—and will cost \$100 million, and is mandated that that come out of our State revenues, the Federal Government is not going to fund that.

So that is going to affect our capital improvements. We are dependent upon your Corps of Engineers money, your street, highway and bridge money, and especially the UDAG money. When we put a package together to renew an innercity area we have to move the utilities and we rebuild our infrastructure at that time. So the UDAG money places heavy emphasis on private funding—you have to have your private funding in place to where you can get your UDAG money and that is very, very important.

Mr. HILLENBURG. I think the question you asked a while ago: How important is Federal help in some of the funding for local government?

I for one believe the revenue sharing is a very important thing right now. If it was not for the revenue sharing of the Federal Government, what they are handing down to the local governments, some counties would almost have to close their doors, you might say, because they just wouldn't have the revenues to operate on.

As you know we have our tax rate frozen right now which gives you limited amount to operate in the general fund. As you also know each and every year it goes on there is different departments, there is different things that you need to add to your yearly budget for the next year, and you have to take some of it out of revenue sharing and try to take the capital expenditures out of the revenue sharing and work it that way.

We also try to use some of it to help us in the highway department where our gas tax revenue is also down.

Representative HAMILTON. Has your experience been the people will support increases and tax levies of various kinds provided they can see the benefit in infrastructure.

In Missouri, for instance, you have had a lot of difficulty in approval of bond issues. Is that right? The mayor however, has had success at getting people to approve these extra tax hikes, and I am presuming they are willing to do that if they can see the results.

Mayor MOODY. We have been very fortunate in that regard, but I would point out that there are only three increases in 36 years. And the school system has a record of failure—six losses before they received an increase after some 13 years. It was a mixed bag.

The city of Columbus, as a governmental entity, has been both lucky and skillful which accounts for our record. And one other thing, a heavy degree of civic involvement from major business concerns and from the chamber of commerce. And no effort is made unless the news media and the chamber of commerce and the financial establishment are in favor of it.

Mr. MACGREGOR. That is true. We just raised \$200,000 from the private sector for the campaign to get the sales tax passed. We had excellent help from the news media at that time as well.

But our situation in terms of bond issues is rather unique because there are only five States that require two-thirds vote, which is ridiculous.

Representative HAMILTON. Gentlemen, thank you very, very much for your participation and cooperation. It was a pleasure to have you before the Joint Economic Committee. The committee stands adjourned.

[Whereupon, at 1 p.m., the committee adjourned, subject to the call of the Chair.]

# OUR NATION'S INFRASTRUCTURE

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WEDNESDAY, AUGUST 31, 1983

CONGRESS OF THE UNITED STATES,  
JOINT ECONOMIC COMMITTEE,  
*Washington, D.C.*

The committee met, pursuant to notice, at 1:30 p.m., in rooms 1 and 2, Mercer Farm, Seattle Center, Seattle, Wash., Hon. Lee H. Hamilton (vice chairman of the committee) presiding.

Present: Representative Hamilton.

Also present: Deborah Matz, professional staff member.

## OPENING STATEMENT OF REPRESENTATIVE HAMILTON, VICE CHAIRMAN

Representative HAMILTON. The meeting of the Joint Economic Committee will come to order.

I am delighted to be here among our distinguished guests, the Governor of the State of Washington, Governor Spellman, and Mayor Royer of Seattle. I deeply appreciate your gracious hospitality today. It has been a great thrill for me to have the opportunity to visit Seattle and to learn a little bit about your community and State.

It is very hard to believe that until only a year or two ago very few people had ever heard of or cared about the condition of the Nation's infrastructure—its roads, bridges, sewers, ports, and waste water treatment plants. However, this past year alone has witnessed a number of infrastructure calamities across the Nation: In Iowa a State highway collapsed; in New Jersey a water main broke leaving 200,000 people without water for days; in Colorado an 80-year-old dam burst, sending 250 million gallons of water through Estes Park. Two months ago a bridge over an interstate highway in Connecticut collapsed; within weeks of that the rupture of a 68-year-old water main triggered a massive electrical failure and blackout in one of the busiest part of New York City. Only 2 days earlier a suspended ceiling collapsed in a relatively new transportation center across the Hudson River in New Jersey, killing two people and injuring others. Incidents like these, in addition to scores of less dramatic ones, seem to occur almost daily.

In fact, we know so little about the condition of our public facilities that we were unable to predict or prevent these life-threatening events. What is more disturbing, we are not capable of preventing future crises from occurring.

While anecdotes abound about the deteriorated condition of the Nation's infrastructure, we on the Joint Economic Committee have found that there exists little specific information about actual con-



ditions or needs. That is why, over a year ago, the Joint Economic Committee initiated a State-by-State infrastructure study. Presently, 21 States are being evaluated. Each participating State has contributed funds which are being channeled to researchers at State universities. These researchers are evaluating the present condition of the State's infrastructure and projecting State infrastructure needs and financing capacity for the next two decades. This study will also evaluate the various options for Federal assistance, if Federal assistance is deemed appropriate.

Governor Spellman, I should certainly say to you that we on the Joint Economic Committee are deeply appreciative of the cooperation that you and your fine staff have given to that study. As a result of the concern and leadership of Governor Spellman, Washington was one of the first States to be included in the study and to have a final draft completed.

While the number seems staggering, the required infrastructure investment needs to the year 2000 is \$22 billion; the estimated capital outlay is only \$12 billion. This information provides, at least, an important first step in tackling this enormous problem.

I am particularly gratified to learn that in Washington State a study has served as the focal point and foundation for a widespread public works inventory project to be conducted in this State. The political leaders of this State are to be commended for their remarkably broad bipartisan support for this effort. Indeed, at the local level as well, the State's public officials have shown remarkable leadership in coming to grips with their infrastructure problems.

Mayor Royer, in recognizing the serious ramifications of deteriorating public facilities left unattended, took what I believe to be an unprecedented action in appointing an 18-member citizen committee to prepare recommendations on priorities for infrastructure improvements. Mayor Royer is also to be commended for his foresight in tackling this difficult problem and for his innovative approach in developing an agenda.

Members of Congress are also concerned about the condition of the Nation's infrastructure. Although the immediate effect of infrastructure problems is local in nature, ultimately our entire Nation suffers when our transportation and communication facilities are in disrepair.

We hope that the Joint Economic Committee study and the testimony from our hearings across the country will go a long way toward providing Members of Congress with information about the extent of deterioration of our public facilities, as well as the effect on national productivity, costs, and human health.

Many bills have been introduced in the Congress which in one way or another would address our infrastructure problems. Bills to establish a Federal capital budget and national infrastructure banks are pending before the House and Senate Public Works Committees. The House has already passed H.R. 10, which provides \$500 million per year for 3 years of economic development investment. This bill is now pending in the Senate Committee on Environment and Public Works, which recently reported out legislation which would, among other things, provide public works assistance to distressed small communities and would establish a program to

provide jobs for young adults in community improvement projects. It is anticipated that this bill will be considered in conjunction with the EDA bill by a conference committee and that, ultimately, the legislation will reach the President's desk.

The legislation pending before the Congress is modest, relative to the vast needs for public improvements. Quite frankly, there is nothing pending which could be considered comprehensive in nature or a serious effort to alleviate the manifold problems that we confront.

For too long in this Nation we have followed a policy of "build it and forget it." We can no longer afford to do so. The longer we delay the restoration of public infrastructure, the harder and more expensive the task will be. America's powerful economy is nourished by public infrastructure. Starving the infrastructure will surely keep the economy from growing.

Your testimony today will be extremely useful to the Members of Congress. It will shed light on State and local infrastructure problems. It may help to persuade the voters of Seattle of the importance of supporting the bond issue before them next month. It will certainly provide the Joint Economic Committee with detailed information about another important part of the country. In addition, it will also assist Members of Congress in trying to develop policies to maintain the Nation's lifeline: its public facilities.

Gentlemen, we welcome you before this session of the Joint Economic Committee. And we understand you both have statements. Those statements will be entered into the record in full. And we look forward to your comments.

Governor Spellman, we are happy to have you with us. You may proceed.

#### STATEMENT OF HON. JOHN SPELLMAN, GOVERNOR, STATE OF WASHINGTON

Governor SPELLMAN. It is a pleasure to welcome you to the State of Washington. Mayor Royer and I extended an invitation to this committee in May to come out and have a hearing and we are delighted that you were able to do so.

It is a most important issue that you are considering. I think that, looking at your agenda, and knowing that my remarks will be followed by a number of individuals who have put a great deal of time into the consideration of the infrastructure of the State of Washington—for example, Karen Rahm, director of our planning and community affairs agency, and Mayor Tom Trulove, of Cheney, who is the head of the advisory committee we have set up statewide on the infrastructure, and Phil Bouque of the University of Washington, who has done that preliminary study of the infrastructure needs.

I am not going to take a great deal of time going into any great detail, except to say that, together with you, we know that the infrastructure, which is really the sewers, the bridges, the streets and so forth, is critical to the long-term health of this area and to the country. It is something that is easily ignored, unless we have those calamities of which you have spoken.

We are fortunate in the West—and one thing we like to say is that we are not the East, in that we do not have 100-year-old sewers or streets or water lines that are in a serious state of decay. That is not to say that we have no problems; indeed, we do. We are not isolated from this nationwide trend and problem. We have been inordinately hard hit in the last few years by a deep recession in this area and a lack of Federal funds to address some of these problems.

I think, however, our approach to dealing with the problems is unique, if not most unusual. And it has been an attempt to develop strategies from the grassroots and devise a statewide program from it. We are currently working the issue from the bottom up. The planning and community affairs agency is surveying every local government in the State of Washington in order to determine the condition of its infrastructure, its future needs and its fiscal ability and the State's fiscal ability to deal with those problems.

As of the last time I looked, which was at a meeting of the ACIR within the State last week, 100 percent of the counties had replied in full to that request for data. All of the major cities of the State of Washington had; 95 percent of the next tier of cities—a phenomenal response. And that information, having been brought together, the question will be finding ways, together with local governments, with the State government—and certainly with Federal assistance—to come up with solutions to those problems.

I mentioned Federal aid and you have heard a good deal about that during lunch and elsewhere. I would point to two areas of obvious need for cooperation. Certainly we here have a history of cooperation between the private sector and the public sector, and a history of working with the Federal Government.

Those moves that are perennial and exist now, to do away with or hamper municipal bonding and the tax-exempt bonding, certainly would deal a deathblow to the ability of this State or its municipalities to deal with these infrastructure problems. I urge eternal vigilance to make sure we do not lose that capacity.

Second, of course, it is important—even though we have historically solved most of the problems within the confines of our own region—that we recognize a national investment that exists in major waterways and highways and the health of our major metropolitan areas.

As I see the national attention, quite appropriately, turning more and more to world trade, and for infrastructure which is necessary to support the jobs in this country which come from successful world trade, it seems even more apparent to me that the Federal role in foreign and interstate commerce necessitates Federal cooperation in terms of dealing with the infrastructure that makes that trade possible.

What we need, and need to plan upon, and what has been hard to do during this period of recession and massive Federal debt, is a stable source of funding. And to the extent that we can deal with the Federal budget deficit, of course, we are also making it possible to provide that stability.

Mr. Congressman, my report to you is that we have a team working very diligently here. We have assembled almost all of the data. We will come up with a local/State program. We hope to have your

assistance in providing both the atmosphere at the Federal level which will allow us, to the maximum extent possible, to finance these projects in our own manner, and in those areas where there is clearly a Federal interest, to provide Federal matching funds, will make it possible for us to keep out on the cutting edge here in the Pacific Northwest.

[The prepared statement of Governor Spellman follows:]

## PREPARED STATEMENT OF HON. JOHN SPELLMAN

As Governor, it is my pleasure to welcome the Joint Economic Committee of Congress and its vice-chairman, the Honorable Lee Hamilton of Indiana, to America's "other Washington."

I appreciate the Committee's having accepted my May 23 invitation to come to Seattle for the purpose of ascertaining how the Western United States are dealing with the problems and opportunities of maintaining and developing an adequate infrastructure.

The state of Washington has been a national leader in developing and focusing the infrastructure issue. My remarks this afternoon will be followed by detailed testimony on Washington State initiatives that will be presented to the Committee by Karen Rahm, Director of the state Planning and Community Affairs Agency and by Cheney Mayor Tom Trulove. I will, therefore, keep my remarks brief and general.

Resolving the problems facing America's aging "infrastructure" -- the popular, contemporary codeword for streets, sewers, bridges and the like -- are critical to the long-term health and economic growth of the nation. The infrastructure rarely gains much public attention or understanding, even though its condition is of vital importance to virtually every citizen. And certainly the provision and maintenance of infrastructures is a fundamental role of government.

When we speak of "infrastructure," we are referring, if you will, to the circulation system of the body politic. Breakdowns in that system have a direct impact on public health and economic vitality.

The primary perspective of the West is that we are not the East -- which is to say, we are younger and they are older. We don't have 100-year-old sewers. Our streets and water lines are not in an advanced state of decay. In Washington State, we have generally taken care of our systems and we respect the fact that maintenance is a great deal more cost-effective than reconstruction of those systems because they have fallen apart due to neglect.

This is not to say that Washington State is isolated from national factors that impact all the 50 states and their political subdivisions in meeting their infrastructure responsibilities. We have been hard-hit -- inordinately hard-hit -- by the recession that is now waning. A recent history of soaring interest rates -- driven by awesome inflation rates -- has posed serious problems for all of us in meeting these long-term responsibilities. The economy has hampered governments' necessary maintenance, repair and replacement work. In many cases, we have just been getting by.

Washington State is perhaps unique in its approach to developing strategies for solving the infrastructure challenges facing the state and its counties and cities. We are currently working the issue from

the bottom up. The Planning and Community Affairs Agency is surveying every local government in the state, in order to determine: the condition of its infrastructure, its future needs, and its current fiscal ability to meet those needs. That information will be brought together and used to fashion a program aimed at helping local governments find ways to finance their infrastructure needs. Other states have taken the approach of initially creating an umbrella organization which then attempts to devise strategies and plans. The Washington approach is to have the input from local governments as the driving factor in determining our priorities and strategies because they know their specific needs better than we do.

We want to be able to have a good handle on our combined resources, so that we can invest them in the most strategic ways. We don't expect that the Federal government is going to bail us out of these problems, but we are concerned about Federal actions that could negatively impact the interest rates that will be required to pay for the work we undertake.

Our desire is to develop a stable -- and I stress "stable" -- source of funding. We believe that what is required is an on-going capital-project planning process, wherein the state can offer its expertise to smaller, local jurisdictions without the means to pay for sophisticated capital planning. And, as I said initially, it is our desire to have adequate maintenance programs that can delay the necessity for the far-greater capital outlays required for major infrastructure reconstruction. We will also seek to encourage the most cost-effective approaches, ensuring that we neither over-build or under-build, that we thoroughly examine new technologies and construction techniques, and that the rules and regulations governing infrastructure construction are germane to contemporary conditions.

The infrastructure problems of America are clearly of nationwide scope. But those problems will have to be dealt with on a community-by-community basis. The Washington State approach is to meet the challenge through a close, working partnership with local governments. And, of course, the state of Washington seeks to maintain a working partnership with the Federal government as well.

In closing, let me thank the Committee and its vice chairman for coming here today to hear our Western perspectives on the issues. I am sure that you will discover through the following presentations that your effort to be with us have been worth while. We certainly appreciate your being here.

Thank you.

Representative HAMILTON. Thank you very much, Governor. What I would like to do is have Mayor Royer give his testimony as well. Then I will address questions to both of you, if I may. Mayor Royer.

**STATEMENT OF HON. CHARLES ROYER, MAYOR, CITY OF SEATTLE, WASH.**

Mayor ROYER. Thank you, Mr. Vice Chairman. I, too, would like to thank you for coming, especially at this time, when our nerve ends are especially sensitive to discussions about public works and about the needs of the city of Seattle and the State of Washington, and our decision to go to the voters again, as we have done so many times in the past, to ask for their participation in, hopefully, a partnership that will allow us to keep our good city in good shape for the future.

I first must apologize to you for showing you a Seattle that I have never shown a visitor of such eminence before. We have crawled around in rotting piers and timbers and under bridges and inside the mechanisms of the drawbridges and you have been inflicted with termites and marine boring worms. I hope you go out of here with your good health and your stomach in shape. [Laughter.]

We wanted to show you the practical side of what this rhetorical debate is sometimes all about on the streets of the city, as you know from your own district so well.

Next month Seattle voters will be asked to decide whether to move forward with a package of bond issue initiatives to preserve a major portion of this community's public facilities. Three separate issues will be on the ballot: \$40.8 million for streets, bridges and retaining walls; \$32.1 million for renovations to park facilities; \$25.1 million for renovation of libraries, Seattle Center facilities, fire stations, maintenance facilities. Our message is really quite simple: "It's our home, and let's keep it up." Like those of us who are homeowners and trying to maintain those investments, you just cannot put off fixing the roof or paving the drive. That is what we are trying to do.

Councilman Norm Rice, who chaired our committee in the city, the finance chairman of the city council, and Dave Cortelyou, one of our business leaders who was on the citizen's committee, will speak more directly to you later about the need for the bond issues and the process we went through to get where we are.

Let me tell you, though, in my position, Mr. Vice Chairman, both as mayor and as president of the National League of Cities—where we have also done a major survey of America's cities and their public works needs—let me tell you what steps we are taking to plan for the future and how the Federal Government might be a more vigorous and a more effective part of that future.

Historically, the city has financed its capital programs primarily with local revenues. In 1977, 75 percent of the city of Seattle's capital improvement program was financed with local dollars. In 1983, 71 percent of our CIP was financed with local revenues. Over this same period of time, State revenues supporting our CIP dropped from 19 percent to 6 percent. Support from the Federal Govern-

ment has increased and then decreased, from 2.9 percent in 1970, to 31 percent in 1981, and then back down to 23 percent in 1983.

The upshot of all those numbers, Mr. Vice Chairman, is that the city's commitment and its injection of local revenue into this problem has been steady. It has been in the majority, and it will continue to be, no matter what happens. But our Federal partner, who in particular jumped to a sizable amount of support, now has declined in its support, specifically at a time when the impact on the economy and new investment in cities across the country is just beginning to happen. It is in the Federal interest for that commitment to grow and continue.

The three bond issues on the ballot this next month are, I think, indicative of our long-term local commitment. But, if adopted, they would address only a portion of our identified needs. We have decided to go with a conservative number that we believe is practical for people at this time and that will address our most critical capital needs.

I would like to mention a couple of ways in which the Federal Government might be able to assist us in our local efforts. The single most important action, perhaps, that the Federal Government might take would be to provide more positive leadership, stressing that linkage between infrastructure or the physical environment in which activities occur in cities, and the economy and the economic health of cities and States and, therefore, the Nation. The Joint Economic Committee's leadership is a positive example of what I am talking about.

I must say that so much of what our voters have heard out of Washington, D.C., is counterproductive to that partnership, that linkage, and it is really misleading in terms of what happens practically on the streets of cities. That drumbeat of antigovernment, antitax, antieverything rhetoric supposedly directed at the Federal level is spilling over onto us in State and local governments. Consequently, our local efforts are being compromised.

As you saw, the First Avenue South Bridge today, and its vital function as a link as an artery between the transportation system of the State of Washington and that port and industrial complex which is Harbor Island, and that whole industrial area—clearly the transportation system is directly linked to the health of our industrial base here in Seattle and in the State.

We have shown, as citizens of the city of Seattle, in the past that if we make a good case, a practical case, then political support will be there. When Lake Washington was unswimmable, people came together and cleaned it up. We put 13 bond issues on the ballot to fix up parks and to deal with housing and transportation needs and 12 of them passed. In 1981, we went to the people of this city with a bond issue request for \$50 million—at a time when people were saying, "You cannot raise taxes"—to build 1,000 units of low-income and elderly housing; because the need was there, our people came through.

Again we are taking our case to the people to deal with another critical problem and we believe that our people will respond positively. We do need to know, however, that our other partners will be there to protect us from failing to meet that enormous invest-



ment that is required, which will surely put a burden on our children in the future—a burden that they just cannot carry.

The National League of Cities, very much along the lines of what Governor Spellman and the State have done, asked cities across the country—more than 1,400 of them—to tell us what their critical infrastructure needs were and to tell us how they could be dealt with through a reasonably modest investment by the Federal Government. What we found is that the problem across the country is fairly common. Even new cities are facing aging infrastructure and difficult problems in finding the capacity locally to deal with those problems.

The other item which came out, which may be of interest to you as you have to look at the broad national problem, is that, while infrastructure cost estimates have ranged up into the trillions of dollars and have just turned everybody's lights out as they look at that enormous number, the real fact is that around the country most of these problems can be handled in increments of \$4 to \$5 million. They are projects that are practical, doable—like the sea wall in the vicinity of \$3 to \$6 million; the areaways in Pioneer Square; the First South Bridge—those kinds of things are doable, if you look at them individually.

Taken in the aggregate they represent the rebuilding of America. But we have to look at them, in my view, as bits and pieces of practical, doable projects that we can get started on today.

Again I submit that it is in the national interest that the Federal Government is there. Because while more than 70 percent of our capital improvement program is financed with local dollars, the city collects only 10 cents out of every dollar of locally generated tax revenue. Ten cents out of every dollar of local tax revenue goes to the city. The rest of it goes off to Washington, D.C., the bulk of it, and to the State government.

Now, we believe that some of that money that goes to Washington, D.C., about 60 percent of the locally generated tax dollars, ought to come back in the form of partnership support for this national concern, which is maintenance and improvement of our basic systems.

Let me conclude, Mr. Vice Chairman, with just a couple of thoughts on ways, specifically, in which the Congress could help the Federal Government to be a more effective partner.

A Federal public works bill which utilizes, wherever possible, the existing State and local government systems which are in place, is one action that the Federal Government could take to assist cities. The program should be sensitive to local constraints, which we have talked about today, bid limits, local wage rates, the constraints and parameters imposed by constitutions which were written in the 19th century. Such a Federal initiative in the short term would have a direct effect on the construction industry and on the critically unemployed, many of whom are skilled laborers. The days are gone when the local government goes out and builds a bridge. These are the days when one hires consultants, one hires from the private sector to get those kinds of public works jobs completed.

The \$6 billion local public works impact program in 1976-77 I think is a good example of the kind of public works program that

we need today. However, such a program should provide continuing Federal support for a number of years, rather than just over a 2 to 3 year period.

A second initiative out of the Congress which could help the cities is to provide cities with additional manpower to perform some routine preventive maintenance and minor repairs. Many of these maintenance and repair tasks could be performed by lower skilled and lower salaried workers. Some new jobs would be created by various jobs bills proposed during this Congress. If we can use our existing job classifications in cities, and if the Federal legislation can be sensitive to local wage scales, such a program could be put into effect quickly and effectively, as we did with the last round of the jobs bill that came out in 1983.

Another element of the Federal program could be a reconstituted 701 planning program. There is just not the capacity in many cities around the country, large and small, for efficient, effective, state-of-the-art local capital budgeting. That kind of effort would insure a more effective and efficient use both of Federal and local capital dollars. The Federal Government could then require each recipient of funds to have a capital budgeting program that meets the individual jurisdictions's needs.

While you are fixing all of this, Mr. Vice Chairman, it would be nice to see the Federal Government have a capital budget, too, so we could plan for the future right along with you.

Let me just close, Mr. Vice Chairman, by saying again, thank you for not only coming out here and listening to us, but getting down under the bridges with us. That kind of knowledge back in Washington, D.C., can only help to make the point that it is in the Federal interest, the national interest, for the Federal Government to become a partner with local government, State and local government, in the interest of reinvestment in cities which cannot tolerate more industry or more development because they cannot deal with the utilities problems or the street problems or the transportation problems and that are not cities that are going to be healthy in the long run—and, therefore, not cities which can contribute to a national economic recovery.

Thank you, Mr. Vice Chairman.

[The prepared statement of Mayor Royer follows:]

## PREPARED STATEMENT OF HON. CHARLES ROYER

Mr. Chairman, thank you for coming to Seattle to hear from us about infrastructure needs and problems. The Joint Economic Committee's leadership has contributed substantially to the emerging national consensus calling for a concerted effort to address the nation's infrastructure problems. It is important that you have taken the time to tour the City to see firsthand some of the problems we face. You will hear testimony today from several key officials who will build upon much of what you have seen this morning on the tour.

As you know, next month Seattle voters will decide whether the City will move forward with a package of initiatives to preserve a major portion of this community's public facilities. Three separate bond issues will be on the ballot: \$40.8 million for streets, bridges and retaining walls; \$31.2 million for renovations to park facilities; and \$25.1 million for renovations of libraries, Seattle Center facilities, fire stations and maintenance facilities. Our message is quite simple: "It's Our Home." Like our home, the time comes when you just can't put off fixing the roof or paving the drive. The projects in the bond issues can't wait. If we ignore them or postpone these repairs, they will only cost us more down the road. Councilman Norm Rice and Dave Cortelyou will speak more directly to the need for the bond issues and the process we used

locally to develop an inventory of our needs.

From your tour, you know that Seattle is a relatively new city, compared to New York, Boston, and other older cities in the east and midwest. Even so, our infrastructure problems are severe. Over the last two years we have documented over \$200 million in existing deficiencies in our roads, bridges, traffic signals, fire stations, office buildings, parks and libraries. These are problems that should have been corrected yesterday, despite our own best local efforts to address these immediate needs. And, we confront an additional demand for more than \$200 million dollars in improvements to our roads and bridges to make our existing systems work better and to provide new service for our changing economic base. In our utilities - water, sewer, light, and solid waste - our needs are even greater. The Port of Seattle and Metro -- our regional transit and sewer agency -- have enormous needs. The Port must deal with their capital needs to remain competitive and grow in an increasingly complex international market. Metro, among many demands, must work to relieve the transit pains of our downtown. Fortunately, we are at least able to issue revenue bonds backed by rates to keep our utility systems in reasonable condition.

We view our infrastructure problem as consisting of three

parts:

1. A severe backlog of repair and replacement needs which should be corrected immediately;
2. A host of improvements to our existing systems in order to increase efficiency and meet new service demands; and
3. A program to keep our plant in good working order on an annual basis as a means of preventing a backlog of deficiencies from occurring - a common practice in many utilities.

The first and second areas require a large infusion of capital now and in the future. The third problem requires a commitment by elected officials at all levels of government to dedicate funds to capital maintenance, repair and replacement on an ongoing basis. In summary, our existing inventory of needs far outpaces our available revenues.

In Seattle, like every other city, we are guardians of a massive investment of public capital. It is a responsibility that transcends the immediate needs of our regions. The nation's economy, particularly its recovery, is contingent upon how we manage these assets. Such a task, without question, requires the direct involvement and assistance of our states and the federal government.

Let me talk about what the City of Seattle has done and what steps we are taking to plan for the future. Historically the City has financed its capital programs primarily with local revenues. In 1970, 75 percent of the City of Seattle's capital improvement program was financed locally. In 1983, 71 percent of our CIP was financed with local revenue. Over this same period, state revenue supporting our CIP has dropped from 19 percent to six percent. Support from the federal government has increased and then decreased from 2.9 percent for 1970, to 31 percent in 1981 and back down to 23 percent in 1983. As you can see in Seattle, both in the past and today, we continue to support directly a substantial share of our capital renovation and capital improvement needs. The three bond issues on the ballot next month are evidence of the City's longstanding commitment to deal with our needs through local initiative. However, as I noted earlier, the bond issues, if adopted, only address a substantial portion of our most immediate needs. There are additional requirements that our infrastructure needs assessment identified which necessitates an ongoing federal and state commitment.

How effectively we deal with infrastructure needs will depend, in large part, on forces and decisions outside our control. I would like to discuss what steps the federal government can take to assist our efforts. Perhaps,

the single most important action the federal government can take is to provide more positive leadership stressing the critical linkage between infrastructure and the economy. While the JEC's leadership is a positive example of the type of leadership I am talking about, so much of what our voters have heard from Washington, D.C. is counter-productive and grossly misleading. The drumbeat of anti-government, anti-tax, anti-everything rhetoric supposedly directed at the federal level is spilling over onto state and local governments, and consequently our local efforts are being compromised.

In past years, Seattle's citizens have consistently shown that if a good case is made, then the political support will be there. We have many examples of how our voters respond to a problem: Metro was created to help clean up Lake Washington; we built needed parks and other public facilities under a program called "Forward Thrust;" and recently we approved a bond issue to construct 1000 units of senior housing. Again, we are taking our case to the voters to deal with another problem. We could hope for a better political climate, but our problems are real, and they must be dealt with now to protect us from unnecessary future expenditures.

The way we approach the financing of infrastructure improve-

ments is an important question, but it should not overshadow the key issue: communities do not have the resources to meet their needs without help. The National League of Cities' recent study on infrastructure needs made this point very clearly. The study also pointed out that a broad range of critical infrastructure needs could be dealt with immediately through a reasonably modest investment by the federal government. In Seattle, I think the necessity of continued federal and state funding support is apparent when you consider how our tax dollars are divided among each level of government. While over 70 percent of our CIP is supported by locally-generated revenue, the City collects only ten cents of every dollar of taxes levied by all levels of government within the City. The federal government receives approximately 60 cents, the state 30 cents.

Clearly, some needs far outpace a community's ability to deal with them, despite a strong local commitment. Consider the financing of the West Seattle Bridge project without outside help. To complete all phases of the project as planned at a total cost approaching \$200 million, the per capita cost for each citizen in Seattle would have been approximately \$400 in capital costs alone. For a family of four, \$1600 in capital costs for one project, for one problem. In every community, you will find special



needs of this type. In addition to these special cases, you will find a range of needs that are present in every community. For the types of needs common to every community, I would like to suggest some ways the federal government can help.

I would like to suggest some ways the federal government could deal with their basic infrastructure needs.

A federal public works bill, which utilizes, where possible, existing local and state governmental systems, is one action the federal government can take to assist cities. Such a program should be sensitive to local constraints, such as bid limits, and local wage rates. Additionally, local governments should be allowed the flexibility to spend public works funds on their highest priority needs. Such a federal initiative in the short term, would have a direct effect on the construction industry and on the cyclicly unemployed, many of whom are skilled laborers. The \$6 billion Local Public Works Impact Program in 1976-1977 is a good example of the type of public works program needed today. However, such a program should provide continuing federal support for a number of fiscal years, rather than over a two or three year period.

A second legislative initiative which would assist the

cities in dealing with their infrastructure problems is to provide the cities with additional manpower to perform routine preventive maintenance and minor repairs. Many of these maintenance and repair tasks can be performed by lower skilled and lower salaried workers, similar to jobs that would be created by various jobs bills proposed during this Congress. If we can utilize our existing job classifications and if the federal legislation can be sensitive to local wage scales, then such a program can be implemented quickly and effectively. This would give us some immediate unemployment relief.

Another element of the federal program could be a reconstituted "701" planning program for local capital budgeting. This would ensure more effective and efficient use of federal capital dollars. The federal government could then require each recipient of funds to have a capital budgeting program that meets the individual jurisdictions' needs. Such a plan would provide you the oversight and involvement necessary to guarantee that these funds are spent wisely and ensure that basic national objectives are considered. In Seattle, we could probably beef up our capital and maintenance planning systems, and conduct some specific research and development projects aimed at identifying low cost solutions to traditionally expensive problems. For example, we recently paved a dozen alleys

in a low-moderate income neighborhood (Georgetown) located in the middle of an industrial area for the cost of what our engineers originally thought it would cost to pave just two alleys.

While I agree with the dual objectives of improving our nation's infrastructure and providing employment opportunities, we should not lose sight of the fact that our discussion today is necessary regardless of the unemployment situation. However, a series of federal initiatives would be particularly timely since they will provide jobs now, both for skilled and unskilled workers.

Mr. Chairman, my testimony today highlights only a limited number of issues associated with the infrastructure debate and the needs of this community. You will hear more from other witnesses this afternoon. I appreciate your interest in our concerns and thank you for this opportunity to present my views.

Representative HAMILTON. Thank you very much, Mayor and Governor, as well.

I want to say the only thing that really bothers me about the tour this morning is that when I go back to Indiana tomorrow and tell them that I have both mucked around in the subterranean depths of Seattle and reached the heavenly heights of Seattle as well, in the Space Needle, I am bound to get the question: "What have you been doing for Indiana?" I am not too sure I am going to be able to answer that too well. [Laughter.]

That is why I am going there tomorrow, as a matter of fact. But it has been a great tour and I commend, not criticize, you for taking me to some of the areas that obviously need repair.

The State of Washington and the city of Seattle have a marvelous reputation across the country as a place where the quality of life is cherished and it is a great thrill for me to experience it.

I want to say that I have been impressed by the manner in which you both have gone about this business of studying your infrastructure problems. I have looked at the Washington State infrastructure study and at the executive summary or the recommendations of the Mayor's Citizen's Commission other things prepared for the city of Seattle and it is clear to me that you have set a pattern that is good for the rest of the country in assessing their needs and going about tackling them.

Let me just say a word about what is happening in Congress, for your information. Although I mentioned in my opening statement that we are not passing legislation of a scope or dimension that would suggest a comprehensive attack on the problem, it is, nonetheless, interesting to note what is happening on the budget with regard to infrastructure.

If you compare 1983 versus 1982 and look at the public works infrastructure programs—and I am referring now to highways, public transit, airports, wastewater treatments and water resources—the Federal budget, despite the constraints that we are under, has moved up in total expenditures from \$19.3 to \$25.4 billion. Likewise, if you take a look at the community and economic development items in the Federal budget, that has moved up from \$4.1 to \$5.2 billion.

Now, the significance of that is that while we are not, perhaps, passing new, grander comprehensive pieces of legislation, even at a time when we are faced with terrible fiscal problems—which you both have alluded to—the budget is moving up with regard to infrastructure problems. I take that as an encouraging sign, and I trust you do, too. Because it does reflect, I think, a sensitivity in the Congress to some of the problems that you are calling to our attention today.

Now, let me ask a question of a very broad nature to both of you. How do you assess the infrastructure problem? Is it a crisis, as we read about in some of our news media, or is it really kind of a routine problem that State and local government officials have faced for many, many years? I am trying to get a sense of your urgency of the problem. Since you are leading executives in the State and deal with all kinds of problems. How do you sense the urgency of the infrastructure problem in the State of Washington, Governor, and in the city of Seattle, Mr. Mayor?

Governor.

Governor SPELLMAN. It is an ongoing problem and it is not the current crisis. It is a crisis abuilding. It has been apparent for a number of years, with the increased cost of capital projects and capital maintenance—that finding of sufficient billions of dollars within this State or within the Nation to deal with both maintenance and upgrading and restoration. It will be a major problem in the future.

It is, in some instances, of critical nature, where there is danger to a major system or to safety. I would say that it is—I guess I would put it back in the context I had it in earlier. It is not of such proportion that it would justify attempting to deal with the fundamental fiscal integrity of the United States, with a massive program throwing the Federal budget out of balance in order to do it. It would be more important to get the interest rates down and restore the stability of financing in the short term. If we cannot do that, we are going to have a very critical long-term crisis in the area of the infrastructure.

Representative HAMILTON. That is helpful.

Mr. Mayor.

Mayor ROYER. Mr. Vice Chairman, I would say that it is more an opportunity. We make decisions in this country, it seems, on the basis of what is “hot” and what is moving as an issue. This is one of the fastest-moving issues I have ever seen in a national context, in terms of raising the public’s visibility and the policymakers’ sensitivity to a major problem—the “American ruins” kind of literature, the attention the media is paying to it. You hear people saying, “infrastructure,” who did not know the word a couple of months ago or 6 months ago. There is a sensitivity and a readiness in the political process to deal with it. That is the practical, I think, political reality. Which means, to me, “strike while the iron is hot.”

Second, though, I see it as one of those responsibility issues that force politicians to make very difficult choices. Politicians get rewards in our system for doing something today, for building the theater or for creating the edifice—usually constructing something or coming up with a new idea or becoming one of those “hot,” moving political issues themselves.

They do not get credit for guarding against the future. Because the people we are trying to protect are people, in many cases, who have not been born yet but who will be paying taxes out in the 21st century, who will bear the cost of replacing these systems, if we do not fix them up and keep them moving.

You saw a 70-year-old drawbridge mechanism today; 70 years old and it still works and it is efficient. What if our maintenance 35 years ago had just stopped? Well, we would be replacing that mechanism today at a much greater cost than we are talking about doing. Putting that unfair tax on the future is something that is very easy to do, if you are only thinking—as our political forces sometimes make us do—in the present.

So I see it as a crisis, Mr. Vice Chairman, but one that has not quite arrived at the taxpayers’ door. The taxpayers are your son and daughter. What we do today will, in a cost-avoidance kind of way, protect against a future that our children cannot afford.

Governor SPELLMAN. May I add a footnote?

It seems to me that, looking at the crises that exist, certainly education is right up front, ahead of this. Certainly health and medical care, as a time bomb, is a bigger crisis. It would be unfortunate if we let this sidetrack us from those other, major budgetary items.

Also it would be unfortunate if we allowed it to become an excuse for failure to maintain and turn to the Federal Government for maintenance funds. I think that is why this study is so important—a link to delineate the exact needs that have come about, despite a very active maintenance program.

Representative HAMILTON. Another question relating to the role of the Federal Government.

Mr. Mayor, you gave us some specific suggestions as to what we can do, but I would like to get a feel from both of you of how important a role you think the Federal Government should play in this meeting of infrastructure needs. I might just say to you that in the hearing we had a couple of weeks ago, most of the State officials were pushing the idea of block grants for infrastructure, rather than other kinds of financing. I would appreciate your comments on that.

But, in addition to that, how big a role do you see for the Federal Government in dealing with this problem?

Mr. Mayor, would you like to start on this? We will give the Governor an opportunity to reflect first.

Mayor ROYER. All right. It seems to me that the Federal Government ought first to define the national interest. I mean, as a taxpayer, that is what I would like you to do. What is the national interest in an investment of this magnitude on the part of the Federal Government? The Federal Government has not defined a policy for economic development for meeting changing economic imperatives, industrial policy kinds of things, which other countries have managed to do through their Federal policy process.

So, define the national interest.

That would seem to me to indicate the need for several specific programs. If the national interest is in meeting the opportunities for international trade which exist to a greater degree, now, in our country than ever before, then perhaps that might move the Federal Government to make a decision on ports and waterways. A program to deal—as we dealt in the 1950's—with the Interstate Highway System—maybe the interstate system of the future is a waterborne system; maybe it is the Pacific Ocean. So, therefore, the Federal Government program to address that Federal policy would be a program aimed at helping ports like Oakland and San Francisco and Seattle and Los Angeles and Long Beach to respond in the national interest with some new investment. Some sharing—in the national interest again—of responsibility up and down the west coast. Where does the coal port go if, in fact, the country is going to ship coal? Where does the break-bulk facility fit best? Those kinds of decisions need to be guided by some Federal policy. That in turn creates, not a block grant, not a pork barrel; but rather, a definite, categorical program that has behind it some Federal policy.

I would say the best thing the Federal Government could do, aside from getting a jobs bill passed would be to step back and do some thinking about a national policy.

Representative HAMILTON. Governor.

Governor SPELLMAN. I think Mayor has paraphrased what I said at the beginning: there are some areas within the national interest. They, obviously, involve foreign and interstate commerce, and we ought to look to those in particular.

I, of course, favor a block grant, which is not a pork barrel. It is the farthest thing from it. It is allowing the people in the regions to determine their own priorities. And I think you will find that a much more efficient use of the dollars, if we have such a program, rather than the intense competition that exists in a lobbying sense with governmental entities all fighting over the same dollars.

Representative HAMILTON. Are either of you willing to say that the Federal Government ought to contribute a blanket percentage of infrastructure needs? Do you analyze the problem that way at all?

Governor SPELLMAN. I think it is much too early for me to comfortably say that. I think that the study you are doing and that the academic communities are doing and that we are doing in this State, I think that will give us a pretty good idea of our ability to finance locally, on a statewide level. And hopefully, in sorting out those national priorities, we will be able to say what the remaining factor is. And I think it is a little early to say.

Representative HAMILTON. I was interested in your observation a moment ago about how you surveyed the local communities, asking them for input as to what they need. And I take it, then, you have to make judgments on the basis of that input, as to what the State's priorities are.

Governor SPELLMAN. That is right. I think it is useful to look at the capacities of the local entities and the State, as well as the Federal Government, as partners in solving this problem.

Representative HAMILTON. I wonder, Mr. Mayor, if you would tell me what the implication would be for Seattle if the voters rejected this bond issue? I know that does not happen around here very much apparently.

Mayor ROYER. It never has entered my mind. [Laughter.]

Representative HAMILTON. Could you spell out for me the consequences if the unexpected were to happen?

Mayor ROYER. We identified in our process, as Councilman Rice and Dave Cortelyou will get into, about 200 million dollars' worth of critical needs. The committee recommended to me about a \$100 million bond issue. I did not think a \$100 million bond issue sounded as good politically as a \$97 million bond issue: \$97.4 million, to be exact. The city council felt that a \$97.1 million bond issue sounded even better.

We have gone, in short, with our most critical, urgent needs. It is not a wish list or a shopping list of something we just want because it is available. If we do not pass the three elements of our bond issue, we will do what you saw being done under the First South Bridge: we will go out and put in a new piece of wood at great cost and it will not last very long and the whole structure will not be

improved, but at least we will go out and protect the public health and safety.

That is what cities all around the country have told the National League of Cities. The first priority always is in public health and safety. It is not providing a bridge to a vacation island, necessarily; it is providing structural integrity to those systems that, if they are allowed to deteriorate, will kill people—as they have done in other parts of the country.

So we will do patchwork. We will put off the inevitable and when the inevitable comes, it will be more expensive than it is today.

Representative HAMILTON. Governor, is the National Association of Governors focusing on the infrastructure problem at all?

Governor SPELLMAN. It is. And more particularly in the area of transportation. But there are studies going on that I assume will bear fruit.

I have a feeling, however, that as the individual States, in cooperation with you, do the work we will see a little more thorough a job than those kind of macrostudies. I like it from the bottom up.

Representative HAMILTON. You just came from the Governors' meeting in Maine. Was it on the agenda, for example, in Maine?

Governor SPELLMAN. It was, with particular reference to bridges and roads and the transportation system.

Representative HAMILTON. And the National League of Cities, of which you are president, Mr. Mayor—where does infrastructure stand?

Mayor ROYER. We have an infrastructure task force chaired by Mayor Bradley of Los Angeles and Council President Bellamy from New York, with a cross-section of people from across the country really working off the data base that we collected in our survey of cities in 1982. Both Mayor Bradley and Councilmember Bellamy have testified in the Congress and they will report—make a final report—to the membership of the League of Cities at our meeting in November.

The other thing that fits with the infrastructure study we are doing is a study of financing mechanisms. You cannot just talk about the structural problems we have; you also have to talk about structural problems in financing these improvements.

And at the Governors' conference in Maine and at our meetings of the National League of Cities there was real attention and heightened concern over the maintenance of available tax-exempt money and those instruments that are used to finance these big projects.

Representative HAMILTON. I just wanted to ask you, Mr. Mayor, about your recommendation on additional manpower. You were thinking of something like CETA?

Mayor ROYER. I certainly would not use that word in going to the Congress.

Representative HAMILTON. You are being very diplomatic, I can see.

Mayor ROYER. There were some good things that came out of the CETA program, vastly overshadowed by the abuses of it. And it is tarnished, and we may as well talk about what is next.

The jobs bill that came out of this last Congress is a pretty good example. Using existing systems, like the community development



block grant system, we were able to put that money on the street, make commitments, in a matter of 3 weeks, with council approval. And that is moving fast. That is going to the block grant recipients we already had, who were already qualified—we knew what they could do—putting the capacity into them to create jobs, and then to tie those new jobs created to the private sector by saying, “Well, you subsidize the job in the second year.” We found that 30 percent of the jobs we created were 2-year jobs, not 1-year jobs, because the private sector will pick up the job in the second year. It was a sales job, and doing it very quickly and not talking about long-term publicly supported jobs, but inviting that private sector in early and getting their commitments early. That is the kind of thing we are talking about.

Representative HAMILTON. Gentlemen, I want to keep our schedule this afternoon. And you have been very generous with your time; I have appreciated it very much. Let me just thank you again for your participation. I know that others who follow you will amplify on the remarks that you have made, which have certainly given my spirits a boost on infrastructure problems generally. And I appreciate that very much. It has been good having you both with us. Thank you very much.

Now, let me call forward the next panel.

David Cortelyou, senior vice president, UNICO Properties, Seattle, Wash.; Barbara Dingfield, project manager, Wright Runstad & Co., Seattle, Wash.; Carol Doherty, general counsel, Port of Seattle, Wash.; Norman Rice, city councilman, city of Seattle, Wash.

Let me thank you for your participation this afternoon. I am pleased that you are willing to take a little time to be with us to give us your comments.

Being unfamiliar with some of the titles around here, Mr. Cortelyou, I am not sure how you say that. Is that UNICO?

Mr. CORTELYOU. UNICO is correct.

Representative HAMILTON. We are glad to have you all with us and we look forward to your comments. I presume we will just start left to right, if that is all right.

Mr. Cortelyou, would you begin?

**STATEMENT OF DAVID CORTELYOU, SENIOR VICE PRESIDENT,  
UNICO PROPERTIES, SEATTLE, WASH.**

Mr. CORTELYOU. Thank you, Congressman Hamilton.

My name, as you mentioned, is David Cortelyou and I am with UNICO Properties, which is a development and office-building firm in downtown Seattle.

I recently had an opportunity to serve on the Capital Preservation and Improvement Citizens' Committee, which considered major infrastructure needs of the city of Seattle. The maintenance and preservation of the capital plan of cities has become a very popular national focus in recent months, and I think very logically and appropriately; it is long overdue.

There are really no strong building constituencies for repair and maintenance. I think that this is sort of one of the issues that you have to deal with here. There are not people that are there to let you know that you are not doing a good job, and therefore it is

much easier to overlook. There are much stronger constituencies in other areas of city, county, State, and Federal Government in budgeting. And I think this is an area where the involvement of local professional, business, and community leaders is very appropriate, along with that of our elected officials.

Many of the major capital projects in this area, such as the 1968 Forward Thrust bond issue which supported a wide variety of neighborhood and park improvements, sanitary sewer, low-income housing, fire stations and equipment and maintenance needs—and also the establishment of Metro, which we heard about at lunch time from Dick Page, as a regional water quality and transit agency—were initiated and strongly supported by the private sector.

These kinds of issues also receive careful scrutiny by public interest groups, such as the League of Women Voters, the chambers of commerce, Municipal League, and so on, where many of their members devote time, energy, and financial resources to the affairs of government.

Business must be involved, and it must be involved in the trenches, where they can become familiar with the real specific problems of the city and understand the issues that are confronting the public officials, and provide counsel, advice and influence for proper and sound planning.

The Capital Preservation and Improvement Citizens' Committee, which looked at the facilities, transportation, and park needs for the Seattle area, included representatives of many of the groups that I have mentioned and, in addition, included labor leaders, representatives from the State legislature and the city of Seattle, the Seattle School District, county government, the regional Puget Sound Council of Governments, and specialist in the fields of architecture, construction, and building management.

Over a number of months this committee looked at the facilities of the city, including its buildings, parks and community centers, fire stations, libraries, the zoo, museums, along with transportation facilities, such as streets, bridges, and our monorail system, and evaluated these requirements that had been identified by staff, in light of good maintenance practice and also in light of various funding mechanisms which are available to deal with these kinds of issues.

The committee found significant examples of deferred maintenance and aging capital plant, ranging from the seven early-1900 era Carnegie Libraries to the fire stations that in some cases were too small to house current day fire equipment, due to their size—to the Lake Union Police Harbor Patrol station that is slowly sinking into Lake Union—major sea wall renovations which you may have discussed earlier this morning and, I understand, maybe did not get to see as well as you might have—to the replacement of electro-mechanical traffic controllers, which in Seattle about 30 percent—37 percent of those—are long past their expected life expectancy and very expensive to maintain—to significant bridge and roadway work, including the three bridges over the Ship Canal and deterioration on roadways, such as expansion joints, worn out decks, and high-priority railings, which pose a potential safety hazard.

So even in a city like Seattle, which you alluded to earlier as commonly recognized as a most liveable city and one which people look at with admiration for its natural beauty—even Seattle has been faced with budget constraints, which has encouraged deferred maintenance. And along with its aging plant we are clearly seeing the results of that in the visits that our group made to the various facilities and areas that we inspected over the last few months.

Our group made a detailed report to the mayor, who in turn made his recommendations to the city council. These recommendations are now taking the shape of a bond issue, which as we discussed earlier, is on the September ballot, called "People for Seattle, One, Two, Three," which is cochaired by Warren Magnusson and Eddie Carlson, two of our most respected local government, community, and business leaders.

One of the major concerns that our committee had, as well as many of the groups that subsequently reviewed that bond proposal, was that if we are asking the voters for approval of major capital expenditures and the resultant higher taxes that that entails, we should guarantee a process in local government to deal with the ongoing maintenance planning, so that we do not find ourselves in these same straits 4 or 5 years from now.

The city of Seattle staff, in their background report covering 22 major cities around the country, which was provided to our group, found—and I will quote:

It appears that Seattle's current posture is reflective of the national trend toward keeping what it has, rather than building something new, as evidenced by the theme guiding the general purpose bond issue study. Seattle is wrestling with the same problem encountered by other cities of comparable size: finding a recurring, stable source of revenue for maintenance of its infrastructure and State restrictions of the level and source of taxation available to generate local revenue.

In this regard, Seattle did establish—reestablish—its cumulative reserve fund in 1978, which provides funds for basic improvements, including repairs to municipally owned facilities. However, the commitment to that fund has been somewhat intermittent, and there was recognition by our committee, as well as others, that the infrastructure requirement needed a long-term commitment for funding by elected officials to address maintenance and repair. And a very important part of our recommendation has been a requirement to develop a form of guaranteed ongoing funding, so that there is an annual contribution made to capital repair and maintenance.

I think this, coupled with quality maintenance, identification and planning process, are very important parts of our committee's recommendation, as well as those received from the other groups—municipal league and chamber of commerce—that looked at the proposal.

Also, the concept of when looking at new construction not only looking at it as its first cost, but evaluating the ongoing maintenance cost, as the private sector investor would do, I think is an important consideration for almost any public-type investment. There ought to be future considerations for ongoing maintenance and repair and the quality of the materials that are being put in and how that is going to be funded—upfront.

Much of the funding for infrastructure needs can and should be borne by the Federal Government, particularly in those areas related to transportation, street and water quality requirements, where some level of Federal regulation is probably involved.

Much of the deferred maintenance and aging capital plant, however, is reflected in municipally owned buildings and facilities, as well as parks. And in these cases, I think it is most appropriate that the local community determine the level of funding that they feel they are comfortable with, and provide that on a local basis.

This requires the involvement of local officials, the local community—and I think Seattle, as you mentioned earlier, is taking it seriously in seeing to it that these kinds of issues are addressed and taken care of. And I feel very comfortable and confident that Seattle has that spirit to, in cooperation with the Federal and State governments, take care of the needs that it has here in its own house.

And that would conclude my statement.

Representative HAMILTON. Thank you, Mr. Cortelyou.

I will ask each of you to give your statement and then I will address some questions to each of you afterwards.

Ms. Dingfield.

**STATEMENT OF BARBARA DINGFIELD, PROJECT MANAGER,  
WRIGHT, RUNSTAD & CO., SEATTLE, WASH.**

Ms. DINGFIELD. I would like to thank you, Congressman Hamilton, for the opportunity to speak to you this afternoon.

I am with a company called Wright, Runstad & Co., which develops office buildings and has about 4 million square feet of office space in the Western United States. Prior to that I was with the city of Seattle for 6 years and the last 2 years was director of the office of policy planning and was directly responsible for the city's capital improvement program. So I think I have a perspective, from both the public and private sides, about infrastructure needs.

What I want to address today—and I will try not to repeat things that have been said previously—is to talk about infrastructure needs in particular in downtown Seattle, and where I believe the Federal Government should have a role in addressing infrastructure problems.

You have had an opportunity to see the city—and I hope not just the grubbier parts, but also our downtown. It is obvious, I think, to most visitors that Seattle's downtown is healthy, it is growing. We have about 23 million square feet of office space. We continue to build office buildings. We have added about 3,000 hotel rooms in the past 18 months. We have new luxury housing being built downtown. We have the Kingdome and Seattle Center—a healthy and growing downtown.

And we expect that growth to continue. Our projections are that by the year 2000 there will be more office space and more hotel rooms—and with that, more employees. We estimate that presently there are about 120,000 people working downtown, and we expect that by the year 2000 there will be an additional 60,000 people.

All that comes very directly to infrastructure needs. Both Mayor Royer and David Cortelyou have alluded to transportation needs.

We have a real transportation problem downtown. Right now only about 40 percent of our commuters come to work using public transit. As our population grows and the number of commuters grows, we simply cannot accommodate all of these people in single-occupancy vehicles. We do not have the roads and we do not have the bridges—in our case—and we do not have the parking structures downtown.

Representative HAMILTON. Do you have busses? You do not have a subway system.

Ms. DINGFIELD. We do not have a subway system.

Representative HAMILTON. Are you planning one?

Ms. DINGFIELD. We are talking about one option which would take some of the busses through a tunnel downtown, with a potential of converting that to light rail in the future.

But, frankly, we have tried to come up with a low-capital solution and a bus system is the low-capital solution.

But what happens right now is that as you come into the downtown you essentially have the entire region feeding through the downtown. And what is happening is a couple of things. We are getting increasing delays as the busses go through downtown; we are getting more and more congestion on city streets, because the busses are taking the space. And as the timing increases and the congestion increases the costs of operation of our transit system are increasing, too, simply because of the time delays.

There are proposals. The Metro transit system, which Dick Page spoke about at lunch today, and the city and the county are looking at transit solutions. The downtown solutions are costly. They include something comparable to the Denver solution, of putting two terminals at either side of town where all the busses feed into the terminals, and then having a shuttle system downtown. Or having a tunnel which would run through downtown.

They are costly solutions. The estimates range from \$180 to \$200 million. I frankly feel we do not have the local tax base—and I think everyone here would agree—to accommodate that kind of a solution, without Federal assistance.

And I think it comes to the heart of really preserving our downtown. Because if, in fact, people cannot get to the downtown, I think people will choose to go elsewhere. And that leads to all the problems—infrastructure problems—over the long term with suburban sprawl and urban sprawl.

In addition, although we do not have as old a water and sewer system as some cities do, it was built in the 19th century and we are continuing to have to repair it. And one area in particular, where we are seeing new housing developments right adjacent to downtown, they still have 8-inch water pipes. And as the density increases there is no doubt that we are going to have to significantly upgrade that water system.

I think several other people spoke to the chauvinism, I think, that is true for Seattle and the State of Washington. We do try to take care of ourselves, and we are proud of the Northwest and proud of Seattle. The city, the State, and the private sector have contributed to infrastructure needs. The bond issues that were alluded to, even before the words, "New Federalism," were ever heard, in 1968 we passed the forward thrust bond issue, which Mr.

Cortelyou alluded to, which financed parks, roads, bridges, and even water treatment—water quality. We have had a \$50 million bond issue for low-income housing on the local level. We now have another \$90 million bond issue before us.

There is no need to say that we are not contributing. The State has increased its gasoline taxes to pay for improvements in the streets and roads and even the private sector—downtown, specifically—they have taxed themselves, forming local improvement districts, to repair some of the streets, put in new paving, put in new street lighting. And even with respect to transit along the waterfront there is a trolley that runs along the waterfront. And the business community is supporting the maintenance of that trolley through a local improvement district, a local assessment district.

I think, however, both the committees that Councilman Rice and Mr. Cortelyou have been on leave us with no doubt that we do not locally have the resources to address all our infrastructure needs. Our local resources will not pay for new, improved transit systems; it will not pay for totally revamping our water and sewer system in the long run, and it will not pay for the treatment of our water. I understand that the Federal standards will require about a \$4.5 million investment just in water treatment over the next few years.

I think the Federal Government does and should continue to have a role in infrastructure. The Federal funds—at least we are sensitive that they have been reduced. I heard your comments earlier on that. And, in fact, the budget has gone up slightly. But I think in terms of purchasing power—and at least in our experience in the Northwest—they have held their own or have been reduced.

In addition, I think another form of Federal funding, an indirect one, has gone down. And that is tax-exempt financing. As the Federal Government borrows more and as there are more tax-exempt entities, what essentially has happened is that the interest rates have gone up for tax-exempt bonds, and therefore our municipalities have to pay more to borrow. And that makes financing our infrastructure more expensive.

Finally—well, not finally, but a couple more points: I think, while cities and States are willing to take on more responsibilities, the tax systems of almost all the cities and States are far more regressive than the tax system of the Federal Government. Obviously, this is true for a variety of reasons. But if it becomes a local responsibility to foot the bill, it is those that are least able to pay that will end up paying most of the bill. And that is the result of the more regressive tax structures locally and on the State basis.

I would also add two more points: Simply that, as the cities and States compete for business and industry, we all try to keep our tax rates down. And our legislators and the Governor, and the mayor are put in an awkward position, trying to attract industry and business, and having to raise rates to maintain that infrastructure, while competing to get new industries to move in.

Finally, I guess, the final reason I think the Federal Government has a role is that cities and States that have the greatest infrastructure needs do not necessarily have the largest tax base. And I

think that the Federal Government has a role in creating more equity and spreading the—spreading the resources on a national basis.

Thank you.

[The prepared statement of Ms. Dingfield follows:]

## PREPARED STATEMENT OF BARBARA DINGFIELD

My name is Barbara Dingfield. I would like to thank Congressman Hamilton for the opportunity to speak to you this afternoon. I am a project manager with Wright Runstad & Company, a development company which has developed and owns over 4,000,000 square feet of office space in the western United States. I have been with the firm for four years. Prior to that, I worked for the City of Seattle for six years. During my last few years with City government, I was Director of the Office of Policy Planning which, among other things, had the responsibility for the City's capital improvement program. I therefore feel I have had both a public and private prospective on infra-structure needs in Seattle.

I would like to address two general topics: Infra-structure needs in downtown Seattle and the federal government's role in financing such improvements.

This morning you had the opportunity to tour Seattle and perhaps have had the opportunity on your own to stroll around our city. Seattle is extremely fortunate in having a very healthy central business district. In contrast to many other cities around the country, we have never had a mass exodus from



the city nor have we seen the deterioration which has occurred on a large scale in other cities across the country, particularly in the northeast.

Seattle's downtown is attractive and has enjoyed considerable growth. Within the downtown area between the Kingdome and Seattle Center, there is over 23,000,000 square feet of office space with more than 1,000,000 being added annually. Our retail core is healthy with several large department stores considering their downtown location their flagship store. In recent years there has been new housing built downtown as well, both luxury housing as well as lower income subsidized housing. There are 6,000 hotel rooms in Seattle with three new hotels having opened in the past 18 months. The current estimate is that there are over 120,000 employees who work in our downtown everyday.

We are healthy today and we expect to continue our growth. By the year 2,000, we expect 10,000,000-15,000,000 square feet of additional office space, 3,000 new hotel rooms, and over 60,000 new employees working in downtown.

In addition we have major cultural and entertainment facilities in the downtown. Our Kingdome is at the southern edge of downtown and the Seattle Center, where we are today, is at the northern most edge. The waterfront has an aquarium as well as other entertainment facilities. We have a nationally renowned

farmer's market right in downtown and plans are underway for both a new art museum and a major convention center, both in the heart of downtown.

The Seattle metropolitan area has been extremely fortunate; through concerted planning efforts we have concentrated our urban growth to a number of regional centers, the largest of which is Seattle. Bellevue, which is across Lake Washington, is also growing as an urban center as is Tacoma and Everett. We have avoided the inefficiencies and costly demands of urban sprawl. However, we have become increasingly aware of a need to maintain and support this growth with the basic systems and services which are essential. Our central business district can only be maintained and grow if it is adequately served by transportation and by all the basic utilities systems.

First of all, with regard to transit, about 40% or 45% of the 120,000 employees currently working in the central business district commute to work using transit. We know that mass transit provides the most efficient and cost effective way of getting workers downtown. Without even considering the environmental effects of everyone driving in their own car, it is obvious to us that we could not accommodate a large increase in single occupancy vehicles commuting to downtown on our present road system nor could we accommodate them in our downtown garages.

Presently, our Metro bus system is at capacity downtown but as the demand for transit has grown we see increases in the time transit takes to get to and through downtown, we see the costs of operation for Metro increasing, and we see our streets which are needed for private vehicles and service vehicles being increasingly used up by the demands of our bus system. It has been obvious to us for several years that we need to improve our transit system, particularly in the congested downtown area.

Several alternatives are presently being considered including bus terminals with a mall as well as a tunnel through downtown. What all of them have in common is an increase in the efficiency and a reduction in the cost of operations of our transit system. They would enable the transit system to carry far greater numbers of people to our downtown. If we do not improve our transit system in downtown, it is questionable whether we will indeed be able to accommodate more office, retail and hotel development in our CBD. However, the sobering fact is that the cost of a transit solution in downtown ranges from \$180 million to \$250 million.

In addition to transit needs, we also require modernization of all our signaling systems on our downtown city streets as well as a solution to a major area of traffic congestion called the Mercer corridor which is the area between Seattle Center, which is where we are today, and our major north-south freeway, I-5. These two improvements will cost over \$10,000,000.

While transit is probably the most costly infra-structure requirement in our downtown, we also have an old sewer and water system. The current sewer system was constructed in the late 19th century. Much of it is old and has never been repaired. While we do not have estimates of the costs of maintaining and repairing our sewer system, it is clearly going to be an expenditure in the future. In addition, the City is estimating that it will cost \$4,500,000 to meet federal water quality standards within the next few years.

With regard to our water system, while it is adequate in the CBD, an area where we are intending to have greater density of housing right adjacent to our office core, we still have a water system with very small 8" pipes. We are concerned that if indeed we build more housing downtown, we will not have the capacity in our water system to handle the increased density.

As you know, the western edge of downtown is Elliott Bay. The seawall that was built to contain the landside streets and buildings is rapidly deteriorating; it too needs repairs which will cost over \$7,000,000. Finally, to keep the downtown vibrant and alive and attractive, one must continue to build and maintain open space including parks and other recreational areas. While I am not implying that this is necessarily a federal responsibility, it is clear to me that it adds to our infra-structure costs in maintaining our downtown.

The City of Seattle, the State of Washington, and the private sector are contributing to meeting the infra-structure needs of our region. I think it is fair to say that local and state government as well as our citizenry are chauvinistic about our city and are willing to spend money to maintain and improve it. We have made major commitments in the past and are prepared to do so again.

In 1968, before the words "new federalism" were even heard from Washington, this county passed a major bond issue called the "Forward Thrust Bond Issue" which funded not only improvements to parks, streets and roads but a major expenditure for water quality treatment as well. Additional local bond issues have been passed over the years for things such as the improvement of Seattle Center, for the construction of new police and fire stations and the like.

Last year a \$50,000,000 bond issue was passed to provide low-income elderly housing in the city.

In a few weeks we will have another bond issue on the ballot which Mr. Cortelyou described to you. The state as well has been contributing to the infra-structure needs of its cities and towns. One example is an increase in state gasoline taxes are revenues which are being used for the maintenance and repair of the state's transportation system.

The private sector has not only been supportive of all these bond issues but has also done things on its own to improve the infra-structure. Specifically, in the downtown area, property owners and businesses have formed local improvement districts to improve streets, put in new paving, new streetlights, and new sidewalks. This has been done on a number of the major downtown shopping streets as well as along the waterfront where businesses are supporting a new trolley system which began operation last summer. The business sector is also paying for the capital requirements of all the utilities systems in the form of increased rates. User fees have also been increased annually by the City to cover the maintenance and repair of our infra-structure.

But it is increasingly clear to us that these resources are not adequate. They will not pay for a new and improved transit system in our downtown. They will not pay for major improvements to our roadway system. They will not pay for the treatment of our water. They will not pay for extensive repairs to our water and sewer system.

The federal government, in my opinion, does and should continue to have a role in funding the needs of cities and towns. Over the past 15 or 20 years, the federal government has taken on the role of funding what we now call infra-structure needs in local communities.

In the past few years grant funds have been substantially reduced. In addition, the indirect subsidy of tax exempt financing for local government bonds has been impacted by the federal government. With more and more entities gaining tax exempt status and issuing bonds and with the federal government borrowing as heavily as it presently does, the rates of tax exempt bonds have increased substantially making it increasingly expensive for states and cities and towns to finance their own improvements. So not only have grant funds decreased but our indirect subsidy of tax exempt financing no longer gives communities financial advantages.

Furthermore, while cities and states are willing to take on some of the responsibilities locally, the tax systems which virtually all cities and states have is far more regressive than the tax system of the federal government. This is true for many reasons, both historical and political, but suffice it to say that if it becomes a local responsibility to foot the infra-structure bill, it is those who are least able to afford it that will end up paying most of the bill.

Cities and states also find themselves in an awkward position of trying to compete for new business industries and in so doing trying to offer them an attractive tax rate. As long as this competition exists, it is difficult to convince the legislators or the citizenry that tax increases are beneficial.

My conclusion is that local government, state government, and the private sector should certainly contribute to maintaining and improving a region's infra-structure but federal assistance will continue to be necessary in the form of targeted grants, block grant funding, and tax incentives.

Thank you.

Representative HAMILTON. Thank you, Ms. Dingfield.  
Ms. Doherty.

**STATEMENT OF CAROL DOHERTY, GENERAL COUNSEL, PORT OF SEATTLE, WASH.**

Ms. DOHERTY. Thank you, Congressman Hamilton. I appreciate the opportunity to be on this panel and to discuss with you some of the particular issues which are confronting the Port of Seattle with regard to its infrastructure needs.

First, I would like to provide a little background on the Port of Seattle. The port is a political subdivision of the State of Washington. It is a municipal corporation directed by five elected commissioners. The geographic boundaries of the port are coextensive with King County.

The port owns the major marine terminals in the Seattle harbor, as well as Fishermen's Terminal and Shilshole Bay Marina. The port also owns and operates Sea-Tac International Airport. The port's land, facilities, and equipment, if valued at cost, exceed \$600 million. In 1982, the port's revenues from operations exceeded \$94 million, which rendered an excess over expenses of approximately \$8.5 million. In 1982, the port also received over \$16 million from the ad valorem property tax levy.

On the maritime side, the port's activities are dominated by trade in containerizable cargoes with the transpacific area. In 1981, almost 90 percent of Seattle harbor's foreign trade, by value, was with Japan, Taiwan, Hong Kong, South Korea, and Singapore. Between 1974 and 1982 Seattle's annual growth rate in these cargoes, both imports and exports, exceeded 10 percent. While this growth is expected to level off over the next several years, our transpacific trade is still anticipated to grow at a steady rate. However, the competition for this trade, from other west coast ports, both United States and Canadian, is severe—necessitating continuous upgrading and expansion of our facilities.

Included in the port's planned capital expenditures for the next 5 years are the first, upgrading and redevelopment of terminal 91 as a general cargo facility, primarily handling autos, chill and neobulk cargoes; second, the expansion and modernization of terminal 5—the present Sea-Land Terminal—so as to create a more efficient container facility; and third, the creation of a new container facility between piers 27 and 32. These improvements include constructing a new roadway, relocating utilities, building or remodeling aprons and other fundamental infrastructure activities.

To accomplish these and other important capital projects, the port will need considerably more dollars than it can generate through its currently anticipated cash flow. If additional funds cannot be reasonably obtained through borrowing or other sources, then priorities will have to be reexamined. Difficult choices between maintaining existing facilities and expanding to meet new trade demands will have to be made.

It must be borne in mind that development of the port's facilities is not merely an issue of local concern to Seattle area residents. The majority of cargoes transiting Seattle's docks either originate in, or are bound for, the U.S. hinterlands. Thus, the proper mainte-



nance and development of the port's facilities are of vital concern to producers, shippers, and others engaged in international trade throughout the country. In this regard, it also should be recognized that almost 20 percent of Seattle's Asian containerized import cargo is destined for Canada. With growing efforts by the Canadians to modernize their own ports, this traffic is particularly vulnerable to diversion if our port facilities and services deteriorate.

A key way in which the Federal Government has traditionally assisted in maintaining and developing ports as part of the Nation's infrastructure is through the funding of navigation and harbor improvement projects. This funding system, I believe, was referenced by Mayor Royer in his remarks. However, the administration continues to question whether this is an appropriate role for the Federal Government and has, indeed, advocated a user fee system to replace a large portion of the Federal dollars currently being expended.

While congressional debate ranges over what, if any, user fee system should be enacted, money continues to be appropriated for the operation and maintenance of existing navigation projects. Unfortunately, appropriations for new projects have come to a virtual halt over the past several years—and there seems little prospect of reversing that trend until the user fee issue is resolved. Increased cost sharing may be appropriate, particularly on new projects, to insure their economic viability. However, more important than the specifics of a cost-sharing formula, is the need to get a funding system in place so that vital new projects can proceed to construction. The ramifications of the existing lull in new project activity will have adverse impacts for many years to come.

I think this is really the point that Mayor Royer was making: We need to identify whether there is a national interest in maintaining the waterways of this country and harbor improvements, and then trying to establish a formula based on what that national interest is.

In the Port of Seattle, a critical navigation project involves the widening and deepening of the Duwamish Waterway. Completion of this project, along with the new west Seattle high-level bridge and a low-level bridge, could open up areas on the river to new and expanded shipping activities. The Corps of Engineers has recently completed the feasibility report and final EIS on the project. Total project costs are estimated at over \$50 million. Unless a funding system is enacted, a Federal appropriation for this important project is unlikely. The large scope and cost of the project make total local funding entirely infeasible. Therefore, certainly, we see the reasonable compromise on the user fee question is in everybody's interest, so that we can get on with constructing projects such as that one.

With the advent of containerization and the growth of transportation intermodalism, a premium has been placed on the rapid, efficient movement of cargo. Ports, as much as the railroads and highways, are a vital link in this transportation chain. A weak link at any point in the chain—whether due to inadequate facilities or poor service—undercuts the technological advances which characterize today's transportation system.

Turning to the airport, infrastructure funding traditionally has been more predictable. Between revenue bonds paid off through long-term leases with the airlines and Federal grants via the ADAP (now AIP) program, funds to meet basic infrastructure needs have been available. However, with deregulation of the aviation industry and the ensuing radical restructuring of that industry, changes in the means of financing airport improvements may be inevitable.

Between 1978 and the present, the number of airline carriers serving Sea-Tac more than doubled. The airlines continue to demand more terminal space, although some of the exclusively leased areas—that is, ticket counters and gates—are under-utilized. To preserve maximum control over the development of the airport and to insure its efficient utilization, the airport operator may look to shorter term agreements with the airlines as well as other fees and charges to generate the capital which will be necessary to complete the improvements. Major airport projects, either underway or planned at Sea-Tac, include the construction of additional access roads, construction of improved runway safety areas, and replacement of apron paving. In 1984 alone, expenditures totalling more than \$28 million are projected.

An essential aspect of maintaining the airport's viability is insuring compatible land uses in the areas impacted by aircraft noise. To this end, the port has engaged in an extensive land acquisition program. To date, with FAA participation approximating \$25 million, the port has acquired about 650 land parcels. Over the next several years, the port anticipates acquiring an additional 150 to 300 parcels. Without adequate Federal participation through the AIP program or the enactment of legislation allowing airports to impose a substitute passenger facility charge, it is unlikely that the port will be able to complete, in a timely way, this noise abatement project.

An important Federal Government activity which impacts port infrastructure—both on the air and marine side—are the border inspection services, those provided by Customs and Immigration. Budget cutbacks over the past several years have reduced manpower in these functions, causing unacceptable delays in the processing of passengers and cargoes at the port's facilities. New programs are being developed to expedite facilitation. However, unacceptable delays still occur which undermine the investment in efficient, modern port facilities. Where adequate infrastructure facilities are in place, it is the Federal Government's obligation to insure that its activities do not interfere with the successful operation of those facilities.

The day-to-day business of the port is building, maintaining, and operating facilities for the movement of passengers and cargo through Seattle. Maintaining and developing this infrastructure and accumulating the funds to perform these activities are issues that we constantly grapple with.

On behalf of the Port of Seattle, I want to thank you for the opportunity to present comments on this very important subject.

Representative HAMILTON. Thank you very much.

And the final witness on this panel will be Councilman Norman Rice.

Mr. Rice.

**STATEMENT OF HON. NORMAN RICE, COUNCILMAN, CITY OF  
SEATTLE, WASH.**

Mr. RICE. Thank you Mr. Vice Chairman. It is a pleasure to come before your committee to talk about infrastructure.

I recall the remarks of Eubie Blake on his 100th birthday, who said, "If I knew I'd live so long I would have taken better care of myself." [Laughter.]

When you look at Seattle, I would say that Seattle has lived long enough to be called a middle-aged city. We are not so old that we cannot take care of ourselves, and the infrastructure problems that confront us.

Clearly, you have heard it outlined from several speakers about what Seattle has done and about how proud we are of the legacy of Forward Thrust and other innovations. There is a down-side, always, to each one of those great innovations, such as the legacy of dollars for maintenance of all of those facilities, buildings, and grounds.

We also have the down-side from a tax revolt, where we put a 106 percent levy lid on our property tax, which constrains the growth—the revenue growth—in the city. I believe that the city council of this city looked at this problem and began to recognize that we needed to get a handle on it—and get a handle on it early.

Through our personnel and property management committee in the city, we conducted and undertook a major survey—a renovation and maintenance survey—to expose what we call the invisible problem of deferred maintenance. From that \$200,000 study we began to identify, within our municipal facilities, those buildings that we felt needed to have some repair and to make those estimates and consider what our innovation needs would be.

The finance committee, which I chair, then undertook two other projects that I think were equally as important, as developing the bond issue. We developed strong fiscal policies to insure the fiscal integrity of the city. We analyzed our debt capacity and we developed investment policies and debt policies, as far as how we handled debt, to make sure that we could look at this whole issue and make sure that we could pay for it, and argue—on the fiscal side—why it was appropriate and how we could maintain it.

That led to the creation of the Capital Preservation Committee, of which Mr. Cortelyou chaired the facilities committee. We divided up that committee into three basic components: One component was the facilities committee; the transportation committee and the finance committee. Each one of those took all that expertise that you have heard delineated in their backgrounds to make sure that we were really looking at the problem inside, and not just on the outside. We found that we did have a need, and that committee began to narrow down that \$200 million packet that we had to a \$100 million focus.

We looked at the financial policies and the financial mechanisms that we had available, and we found that a bond issue was still the best way to go. We analyzed levies, we looked at present dollar

value, we looked at all the alternatives and felt that we should look at a general obligation bond issue to move us out.

We had a dual strategy, and that strategy was that the bond issue would serve as the catch-up; that the underpinning of the whole infrastructure effort for the city of Seattle would depend on a long-range plan for financing and carrying out preservation and maintenance on an ongoing basis.

We have undertaken the efforts to begin to move to build up what we call our cumulative reserve fund, to allow that kind of maintenance. The State Legislature gave us the authority for a real estate transfer tax, which we have dedicated for maintenance and repair. When I took over the finance chair, we had \$40,000 in that cumulative reserve fund. We project that by the end of 1984 we will have \$10.4 million.

We are looking at taking general fund revenues and making sure that we are applying it to ongoing maintenance. But we have to look at the backlog and then look at ongoing maintenance. You cannot do both, and there is not enough revenue to do both. But we can begin to make the input and move into that whole area.

So that long-range plan called for the dedication of revenues and finding a permanent funding source. It calls for the executive to present to the council annual maintenance plans that deal with the level and what is the projected planning stage that is going to go with these capital rehabilitation and preservation programs.

We hope to have those plans ready by 1985, and we hope to have a citizens' committee review those plans, for their expertise and their advice, and from the people who work with complex capital projects and construction, to review that and make sure that we have that analysis.

That is where I think we go back to that partnership between business and government: if we can rely on their expertise to help us assess our capital plan, we will be able to go to the voters with whatever funding mechanism we have, with the background—and the solid background—from those people's expertise putting us forward in that area.

The Federal Government does have a role. I think that one of the things we need to look at also, though, is to continue the tax benefits from municipal bonds. Since the majority of capital dollars are local and are largely in municipal bonds, this financial subsidy is crucial.

I believe that we need to review federally adopted imposed standards and their impact on capital costs. Secondary treatment is an example, but so is the Association of State Highway and Transportation Officials' standards—for example, for one signal per lane. It is an expensive standard. Most of those standards are imposed with Federal grant programs. One problem is that they become ad hoc standards for use of local funds, as well as bond funds, and State tax moneys. Therefore, their impact far exceeds the funds available. We need to talk about what those standards do and how they move through the whole governmental structure to the local level, and what are the long-term costs of those efforts, even though the standards are good—as they appear.

I think the need for Federal support of urban America has to be maintained. Fiscal and tax policies historically have favored subur-

ban development over inner city and urban development, and Federal infrastructure subsidies help lead the way to suburbanization. Building new highways, sewer systems and housing subsidies do cause a problem for the city, if we are not getting those revenues to maintain the facilities that we have.

All in all, I really believe that the one thing that we came out of the Capital Preservation Committee with, and what we tried to project as an attitude, was that we were investing in our own home. What we have told the voters of Seattle is that:

If you took your own home and you looked at whether you had a rotting foundation or if you were looking at wiring or complex plumbing, you could not pay for all those repairs out of current expenses. You would have to, from time to time, look at some kind of outside subsidy or additional loan to pay for those repairs.

The bond issue that we have before our voters is one such example. We believe that it is an investment in our home; it is taking care of Seattle, and it is our home, and it is in the best interests of the citizens of Seattle.

So I would like to thank you for coming out, and for your taking the testimony today. I hope that we can play some role in the development of a Federal infrastructure policy.

Representative HAMILTON. I thank each one of you for your excellent statements. Let me begin with a few questions to the private sector people here.

Can you identify problems for private businesses in Seattle that have occurred because of a deteriorated infrastructure, or do you know of businesses that have decided to relocate or not to come into Seattle because of infrastructure problems? Are infrastructure problems that serious locally?

Mr. CORTELYOU. I think one obvious problem comes to mind, and that is transportation. We touched on that earlier. There are just limiting accesses to the city, to the downtown.

Representative HAMILTON. Is that beginning to choke the growth in downtown Seattle?

Mr. CORTELYOU. Critically. And it is a very important element of the long-range planning that is ongoing today, in what is going to happen downtown, as how you deal with the limited highway and transportation access that we have to our city. And that, if it is not addressed properly, is going to create—and has already—this urban sprawl that is in the ultimate going to compound the infrastructure costs. There is absolutely no question about it.

Representative HAMILTON. But you say you have had a lot of development of new office and hotel space, so the choking off of growth is not too critical at this point, apparently.

Mr. CORTELYOU. It is a relative thing. It is going on in both places: both in the core as well as in the suburbs. What we see happening, however, is a slowing down of the growth potential as we are unable to develop good alternatives for access to the core. That future development is taking place outside.

So I think it is an evolution kind of process, and one that fortunately we would like to think we have looked at and tried to address in anticipation of a future problem. But it very clearly is a trend that we can see developing, if we do not deal with it. That is one obvious answerer.

Ms. DINGFIELD. A smaller one—but in our industrial area, which is south of downtown, there are a lot of streets which are still unpaved, actually—no sidewalks and very gravelly. Some industries simply will not locate there because of the poor roads and streets. That is in the south part of Seattle.

You know, it is hard to point to an industry that has made that decision because it is never quite that clear. But I would say it is not the most attractive industrial area, and part of it is the streets and roads in that sector of the city.

Representative HAMILTON. We saw some fairly dramatic examples of deteriorated infrastructure this morning. Do you think the citizenry is aware of that? I am not just talking now about the commission to study the problem and the people on the city council, but do you find the community aware of infrastructure problems? Is it something people talk about over their coffee in the morning?

Ms. DINGFIELD. They do talk about the potholes—and we are getting more and more of them—but nothing compared to New York.

Mr. RICE. They do not see the sea wall in the same way that we did. I think that is our job and is the city's role in trying to explain it.

Buildings do not scream and libraries do not cry out. They do not have natural constituencies for repairs to their roofs and like. But I think that the underpinning of the whole effort is that the experts that we have had—no one has challenged the need to fix these things up, that I have seen so far, once you explain it. But it is not something that—if you do not see it crumble or you do not have the water main break where the fire engines cannot hook up, no one really sees it until it becomes a catastrophe.

So I think we are at the cutting edge at the front end of dealing with the problem.

Representative HAMILTON. I do not want to put anybody on the spot here, but do you predict approval of these bond referendums?

Mr. RICE. I think we will be approving them. Our polls and our sampling show some positive support for it.

Representative HAMILTON. You have, as I understand it, a remarkable string of successes. At lunch today Mr. Page mentioned, I think, 12 of 13 bond issues approved. I wish we could match that in Indiana. We cannot. But that seems to me to be quite a track record.

How do you explain that? What is the secret to your success there?

Mr. RICE. Well, I think it was predicated on the idea of the partnership when we created the citizens' committee. We have a very active community. Our municipal league, our league of women voters, our chamber of commerce really do tackle these issues and have been talking about infrastructure long before we heard about it on the national scene. So they are keeping an ongoing relationship with government and making sure that they understand what are the new trends. And I think that that has helped in taking the citizens' effort or selling the citizens' program to the broader citizenship of Seattle.

Representative HAMILTON. When you talk about a permanent funding source, what are the options?

Mr. RICE. Essentially what we would be talking about is a percentage of our general fund for ongoing maintenance, or looking at—primarily that would be the option and how we would pay for it. We think that we can start to increase it, but we need those capital plans to begin to detail a precise amount or percentage of general funds due.

Representative HAMILTON. You are in the process of making recommendations, are you not? Did I understand your report to say that by 1985 you will be submitting to the council and the mayor permanent sources of funding for repair and maintenance of infrastructure?

Mr. RICE. Yes; we will be increasing what our appropriation will be in this year, in the 1984 budget. But we will not have the precise number at that point.

Representative HAMILTON. You all spoke in terms of Federal participation and I got the point. I understand that. This is not the first time I have heard that. But I was impressed by the unanimity of your view on it.

When you think of Federal participation, what does it mean to you? Are you thinking that the Federal Government is going to pay 50 percent, 25 percent, 75 percent? What is on your mind here when you talk about "partnership" and "Federal participation"? What kinds of Federal programs are you talking about that look good to you?

Ms. DINGFIELD. When I spoke about it—I think it varies, by what you are financing. Obviously, UMTA, the urban mass transit authority, has funded about 80 percent of transit projects in the past.

Representative HAMILTON. Should we continue to finance operating costs?

Ms. DINGFIELD. Personally, I believe that in large cities the Federal Government should continue to finance operating costs, because I do not think that the local transit authorities can continue to pay the operating costs and still provide what I consider a basic need in most of the large cities. I know that there is a move to try to cut that back. But, personally, I believe that in large cities there may be an alternative.

Representative HAMILTON. How do the other 60 percent of the people get into downtown Seattle to work? You said that 40 percent come in on busses, I presume.

Ms. DINGFIELD. That is right. A very small percentage come in on ferries and then probably over 50 percent come in private vehicles at this point.

Representative HAMILTON. Do you discourage parking in some way, or is that a critical problem in downtown Seattle?

Ms. DINGFIELD. Yes.

Representative HAMILTON. How do you do that?

Ms. DINGFIELD. There is a maximum number of spaces you can build with any new development. You cannot exceed a maximum.

Representative HAMILTON. And parking spaces, I suppose, are pretty expensive downtown?

Ms. DINGFIELD. They are about \$90 a month.

Representative HAMILTON. I would say that would discourage it a little bit. [Laughter.]

Ms. DINGFIELD. But if you look at the streets coming into downtown and the roads, all the major roads—in terms of traffic analysis—are at capacity D, E and F, with A being the best. Even if we had the parking structures, we do not have the roads to continue to carry massive numbers of people into this city via our streets and bridges.

Mr. RICE. I think there is only one thing I would add: It is not so much a brand new program, but I think an assessment of the programs that you have—I tried to allude to the idea of regulation, which also has an effect. Some inventory of just what those regulations and those additional requirements have on local jurisdictions has to be undertaken to look at that additional cost.

Representative HAMILTON. Do you have any estimates on that, by the way? I agree with your observation about that. I know that Federal standards often drive up the cost of bridges and the like.

Mr. RICE. I do not have the data at my fingertips, but we can supply your committee with some of the additional ones on just signal light replacements and the like, for your looking at that.

Some of the FAUS funds have stayed the same. One of the things is: It is not necessarily a new program, but how much you put into the present ones, given what inflation has done with roads and given what deterioration may cost you additionally.

Representative HAMILTON. I do not want to put any extra burdens on you, but this question of Federal standards driving up costs is one that interests me and other Members of Congress. I get that complaint very often in my home communities.

It would be very helpful if you could identify Federal standards that cause you particular problems by driving up the cost of projects. I would appreciate it very much if you would contact me by letter with this information.

Mr. RICE. We would be glad to do that.

Representative HAMILTON. I didn't mean to exclude you from this discussion, Ms. Doherty, but you are in a little different category than the others.

How do you finance port developments, anyway?

Ms. DOHERTY. Well, there is a variety of means. As I mentioned, the port has its operating revenues and in 1982 we had a surplus of revenue which was approximately \$8.5 million, which would be available for new investment.

Representative HAMILTON. Operating revenues come to you through user charges, basically?

Ms. DOHERTY. Tariff, leases—our basic operations. In addition, we do receive a portion of the real estate property tax levy, which amounts to—last year it was about \$16 million.

Representative HAMILTON. That is through State law?

Ms. DOHERTY. Right. In addition, we have borrowing capability and in recent years most of our borrowing has been done through revenue bonds. But, as I was mentioning, what we are looking at in terms of available cash flow is—from operations and the tax levy—about \$25 million a year.

Our needs, our capital needs, as we forecast it, are about double that—which is going to necessitate some extensive borrowing to meet that. And given—as Barbara Dingfield was talking about the rising interest rates for municipal bonds—it makes it very difficult,



especially if you look at the relatively low rate of return that ports earn on their investment as a business, per se.

Representative HAMILTON. Why should the good people of the State of Indiana pay to improve Seattle's harbor?

Ms. DOHERTY. Well, one point is that much of the cargoes that are coming across these docks are going to the Midwest. We are a major point of entry for Midwest cargoes. And I think that is true up and down the west coast.

Representative HAMILTON. You ship a lot of grain out of here, too, do you not?

Ms. DOHERTY. Yes.

Representative HAMILTON. Does that come from the Midwest or the Northwest?

Ms. DOHERTY. Some does; some of it is more locally based. But I think that is a primary reason that we are really serving the entire Nation. And the whole trade structure is based on that.

Representative HAMILTON. What are your particular infrastructure problems in the port now? I mean, specifically, what kinds of things need to be repaired?

Ms. DOHERTY. Well, one of the major facilities that we have—that we still have—is terminal 91, which we did acquire from the Navy. And we have been looking over the last 7 years as to how to develop that terminal. It is very old; it was built somewhere between 1915 and 1920. The aprons need major work. Now, regardless of the use the property is put to, there is serious work that needs to be done just to maintain the existing structures.

We are seeing that at other terminals as well. Now that we have been in the container business for at least 20 years, looking at terminal 5, which is one of our premium facilities, in order to meet the demands of the 1980's we have to modernize that facility and make it more efficient. One of the things that we are having to do is relocate a road that runs right through the terminal. The city has agreed to vacate that road if we build a substitute roadway. That whole project is necessitated by changes in the container industry and new demands that are being put on us.

So it is both maintaining the existing structure as well as building facilities which are really state-of-the-art.

Representative HAMILTON. Those are most of the questions I wanted to ask.

Do any of you want to make any concluding comments? I want to give you an opportunity to do that, if you would like to, for the benefit of my colleagues in the Congress and myself.

Your direct experience with these matters is important to us. It always impresses me how much more of a sense of urgency Members of Congress have once they have seen the projects and have talked to people who deal with them on a day-to-day basis. So it is terribly important for us to have your direct input.

Thank you very much for your participation this afternoon.

The next panel relates to the State of Washington. Joseph E. King, State legislator, Vancouver, Wash.; Jerry Overton, State transportation commission, Spokane, Wash.; Karen Rahm, director, community affairs agency, Olympia, Wash., and Tom Trulove, mayor, city of Cheney, Wash.

We are pleased to have you before us this afternoon. And I will ask you to begin with your statements, if you will.

We will begin with you, Mr. King. I am very pleased to have you.

**STATEMENT OF HON. JOSEPH E. KING, WASHINGTON STATE  
LEGISLATOR, VANCOUVER**

Mr. KING. It is very nice to be here and I appreciate both your taking the time to come out here and your patience this afternoon. I am surprised that you have not called for at least a slight break there for yourself.

It has been suggested by a lot of us speaking here, yourself, other members of this audience that are in public life, that we are there because we feel a need to grapple with tough problems. If that is the case, then we all should certainly love this problem, because it certainly does not have any simple faces.

As chairman of the house commerce and economic development committee, and also as a member of our State ways and means committee, I think I would like to talk a little bit about the policies of infrastructure financing.

We have all heard the litany of the tight fiscal resources we are under, constraints, the burden and turbulence of financial markets, the no more tax attitude on the part of the public.

I have served in the legislature for 3 years, under both Republican and Democratic control. I was elected in 1980, started serving in 1981, and I think I voted for 6 or 7 or 8 major tax increases under both political parties. Our State's fiscal constraints know no partisan boundaries.

So I guess the thrust of my testimony is not going to be to suggest to you any kind of pat solution to this problem, but simply to try to frame the debate, to look at two or three key questions that we are going to have to address.

How do we define the problem? Where do we put the money we spend? How do we share the cost of it? There is no way that any of these questions is going to be answered in any but a political setting. It is not going to be done by planners or engineers or consultants. We will call on the help of all those people, but ultimately it is going to be politicians, business leaders, that are willing to exercise political courage and try to educate the public to deal with the problems.

The way we define the problem is often, I suppose, the key to the solution. I want to share a few comments on problem definitions because their implications concern me. We have all heard all day about the severity of the problems, what Newsweek magazine calls an urban apocalypse.

The estimates in this State—and Karen Rahm will talk more about that, because she is specifically doing a study on it—might run as much as \$7 or \$8 billion. How do I, as a State policymaker, try to pick up that funding?

But first I have to decide what problems we are trying to fix. I guess our initial concern with this was that we have heard so many different descriptions that when we tried legislation for Karen Rahm to conduct the infrastructure study that we would better focus our concern there. Incidentally, the politics of even

getting money to study the problem—we had about \$65 or \$70 million, I guess, of economic development bills. Karen Rahm's study—I think we appropriated, ultimately, what—\$75,000?

Ms. RAHM. \$100,000.

Mr. KING. \$100,000, ultimately. I think we had more trouble with that \$100,000 study than we did with the rest of the program. And there was a real skepticism there. I am not sure whether it was a stick-your-head-in-the-sand kind of attitude, that we did not want to try to deal with it. I think there was also an attitude on the part of the elected officials down there, that we do not want a State government official trying to prioritize our needs. But, at any rate, it was very difficult to get this relatively minor appropriation.

And I want to compliment Karen Rahm on the good job she has done and I think it is an absolutely essential step. I am pleased to hear your remarks, that the Federal Government is undergoing this same kind of exercise.

At the same time I want to admit and realize that when we drafted our instructions, the legislation for planning and community affairs, that we have really only addressed a part of the problem. There is a bigger picture we do not want to lose sight of.

We have asked Karen Rahm to survey directly productive elements of our infrastructure: the roads, the bridges, the sewers, and stuff. We deliberately did not include delivery of other services that the attending growth is going to demand—what has been sometimes called the social overhead capital: law and order, human services, these kinds of things that will also attend this growth.

I throw in this concept of social overhead capital not to confuse the issue but simply to make us aware that as we repair the roads and bridges, as we get people back to work, there are problems—social overhead-type problems—that are going to have to be dealt with.

But back to the bricks and mortar, to the stuff that we have to put in place here. How do the infrastructure needs relate to the economic development—that is, where do we put these bricks and mortar?

I will talk a little bit about the way we tackled the problem in the State legislature. With the guesstimates ranging to an \$8 billion problem, scarce budgets, as we have outlined, we came up with the idea that maybe we could afford \$20 million outside the transportation budget to deal with this problem. The vehicle we used was something called CERB, the community economic revitalization board. But we knew that we could not fix the entire problem. We knew that we wanted to spend the money we had and try to leverage it as much as we could. The program works like this: a local government will interest a business in locating, say, in my town of Vancouver. They are working to put the deal together, they have arranged different kinds of financing, the private-sector business has done their part, but there is going to be one key to the puzzle missing sometimes. It might be that the local government cannot finance 1,000 feet of waterline. We put this \$20 million into a revolving fund in order to address exactly those kinds of problems. We do not want to build a road that is not going to be used. So the program is working; we have identified businesses that

would not or could not locate in a particular area because of a particular infrastructure problem.

I am thinking of an example in Thurston County. A high-tech industry that I think needed just 1,000 feet of waterline—all the other pieces of the puzzle were there. They came before the CERB and were granted a below-market long-term loan.

The attempt, obviously, is to leverage very scarce resources. We did not tie the hands of the CERB; it is made up of private and public people. We asked them—the local government—to demonstrate convincing evidence that, yes, there will be a private-sector development which will follow.

And I think it is working. Sometimes the application will say: "We'll grant simply on a conditional basis. Yes, if you go out and get that private investor to sign on the dotted line that, yes, he is going to put that plant in Vancouver, and we will go ahead and make the grant—be the facilitator, the final piece of the puzzle there."

And I like that, of course. The infrastructure problem—let us make sure that we are going to spend those very scarce dollars as effectively as we can.

Another thing, from a political point of view, it makes it easy to campaign on, because I can go back and say: "Here is exactly how many jobs we were successful in creating. These were jobs that would not have been there if the State had not been involved."

I think another advantage of this is: there is a lot of talk about a public/private partnership, and I think that makes a lot of people from industry nervous. They say: "What do you mean, this 'public/private partnership?' We are not sure we want to be partners with the Government." So rather than taking a social engineer's or a planner's approach to this, we have said: "Let the market determine where these applications are going to come from." It is a market approach; we think we have created a partnership there, but it is not one that we forced on the private sector. The private sector has gone to the local government, the local government has come to the State, and we have effectively worked together, I think.

I wish I had a pat answer to how these costs should be shared. I was thinking when you were asking the question earlier: what should the Federal role be? How much should you pick up? I can not give you a direct answer. I suppose partly it would be: "How much have you got and how much are you willing to share here?" [Laughter.]

I appreciated Barbara Dingfield's comments about what happens, though, when that debt shifts to State and local government. The State of Washington, I am sorry to say, does have a very regressive tax structure. When that burden does shift you have a disproportionate share of the poor that will be paying for those basic building blocks that benefit all of us.

I think part of the problem, in general, with the Federal shifts of some of the responsibility to State governments is that it has not been done in a planned and orderly enough fashion. And we are simply not used to dealing with some of these problems. Because of the economy and because of some of the Federal shifts, as I have said, six or seven times I have voted for major tax increases in the

State in 3 years. I do not know how many more times I can go back to the well there.

In deference to people who will follow me and your long patience here, I think I will wrap it up. I think we have to address those questions. I think it has to be done in a political setting. And to vote to do nothing is a vote to allow our roads and jobs to continue to crumble.

Thank you very much.

Representative HAMILTON. Thank you very much, Mr. King.

Mr. Overton, you might tell me a little bit about the State transportation commission and it's responsibilities and then go on with your comments.

**STATEMENT OF JERRY OVERTON, COMMISSIONER, WASHINGTON  
STATE TRANSPORTATION COMMISSION, SPOKANE**

Mr. OVERTON. Thank you.

The State transportation commission is a board of seven members that are private citizens, that are not paid, appointed by the Governor, and we act as—I guess the easiest way is the board of directors for the department of transportation. As I said, we are private citizens. We come from all parts of the State.

And the department of transportation includes, of course, highways, railroads, bridges, and division of aeronautics, and our fabulous ferry system.

I was a recent past chairman of the commission. We act on policy, as well as getting down to some of the very nitty-gritty issues of limited access, speed limits, and weight limits, et cetera.

I have, as a private citizen, 20 years of experience as a business executive. I am a graduate engineer and have been in the manufacturing business. I believe this provides me with a good perspective on the importance of the infrastructure to economic development.

I am going to limit my discussion today regarding transportation and economic development.

The State of Washington has a very diverse economy, and it is pretty much based on a mixture of industrial production, agriculture, tourism, fishing, and forest products. We have several high-tech firms, but not as many as we would like. And we are trying, of course, to attract these firms.

Because of our geographical location, we are keenly aware of the relationship between an efficient transportation system and economic vitality. To a large degree, our economic well-being is dependent on sending our products to other States and to our Pacific rim trading partners. The vehicle, of course, that accomplishes that is the transportation system. Consequently, we have worked hard to develop our highways, ports, waterways, and air facilities.

I might mention that we in Washington are very proud of our systems. We have worked hard on them.

I would like to take a moment to give you a view of the State's economic activity and how it interfaces with the transportation system.

One hundred million tons of processed or manufactured commodities valued at \$21 billion are shipped from Washington annually. The choice among shippers varied, with 40 percent utilizing high-

ways, 25 percent rail, 16 percent water, and the 19 percent remaining utilizing air and pipeline.

More importantly, over 12 million tons of raw agricultural commodities, valued at over \$3 billion, are shipped from Washington farms annually. The modal choice is usually truck or rail. I would like to speak to that a little later.

Tourism also contributes significantly to the economy of the State; \$600 million was spent on tourism by Washington residents and \$700 million by out-of-State visitors. This is primarily—93 percent of all tourist travel is by highway.

The investment, both public and private, in our transportation system is significant. We estimate the value of the State's highway and ferry system exceeds \$10 billion. We do not take the value of this contribution lightly. In fact, a recent theme which I have heard today several times in a different manner, but a recent theme of the State department of transportation has been, "We built it, let's preserve it."

Themes and slogans alone will not preserve the system. But recently Washingtonians put their money where their mouth was and increased our gas tax from 12 to 16 cents a gallon this year. That was at the same time that the Federal Government increased theirs. Our gas tax will also increase another 2 cents next year.

This, of course, is a great help in our short-range maintenance problems with regard to our transportation system. We still have medium- and long-range funding problems and I think these problems will have been brought to your attention in the Washington State infrastructure study.

The long-range funding problem of our infrastructure is certainly not unique to Washington, and it is a national problem. Obviously, it has attracted your interest in Congress. In the long run, what is at stake is the national economy and social well-being.

The relationship between an efficient system of transportation and economic and social well-being is not coincidental. Transportation provides the basic infrastructure that accommodates economic vitality, personal mobility, and, more importantly, freedom.

There is certainly—and it has been expressed earlier here today—a great deal of concern over our ability to remain competitive in international trade. There is an equal concern about the ability of the economy to generate the future jobs that will be needed. I submit that an improved transportation system will reduce the cost of domestically produced goods and make us more competitive and create the needed jobs.

We in Washington, with our close proximity to the Pacific rim, understand and value the relationship between trade, transportation, and jobs. It is estimated that one-fourth of the income in the State, and one in six jobs, is dependent on international trade alone. I am of the opinion that, if we let our existing transportation system deteriorate, or indeed, if we do not improve it, the aforementioned percentages will decline.

The Federal Government has long played an active role in developing the Nation's transportation system. The results have been the Interstate Highway System, the inland waterways, and the airports. This is certainly not the time to deemphasize that effort. The Surface Transportation Assistance Act of 1982 has been a step in

the right direction and will help—and is helping—in revitalizing our highway and transit system. We hope the Congress will continue this support and will also address other transportation issues.

There is one issue of particular consequence I would like to point out, and it may answer a question you asked earlier about a specific instance. The Staggers Rail Act of 1980 has hastened the process of rail abandonment. Since 1980 nearly 800 miles of trackage in Washington has been approved for abandonment by the Interstate Commerce Commission. An additional 500 miles are listed for abandonment within the next 3 years. As a result of this abandonment, voluminous quantities of agricultural products in eastern Washington must travel to market by truck instead of by rail. This, in turn, is severely impacting many of the rural roads in our agricultural areas. At the same time the Federal Government is cutting back on the local rail service assistance program funding, which can be used to mitigate the adverse impacts of rail abandonment. It appears to me that it would be in the best interest of all concerned if funding to this and similar programs would be increased.

As I drove past Ridgefield, Wash., yesterday—the day before yesterday—they are piling up tons and tons and tons of wheat under a tarpaulin. It is four or five stories high. And the reason they are doing that is because they cannot get their wheat to market. There is not one single answer to that, but I point that out as just one of the problems that this is causing.

Transportation in the United States has long been a Federal/State partnership. This relationship has worked well and has developed a system that is envied by many nations of the world. The economic benefits of this are too numerous to quote today.

To a large degree, our Interstate System is built, but our work is not finished. We are entering a period when it becomes paramount to maintain and improve what we have. It presents a genuine challenge. Our forecasts tell us that we can anticipate significant increases in all types of traffic and the same forecasts tell us we will be hard-pressed to dedicate the financial resources necessary to the work.

As in the private sector, part of the answer is to work better and smarter. We can do this by better developing techniques through research and planning that will allow us to ascertain the right priorities and develop the proper procedures.

I would like to stop there and say an example of what I am talking about is that the State of Washington, in our research and planning department, several years ago developed a pavement monitoring program. It is now the envy of the United States. This pavement monitoring program—and I am talking about highway pavement—has allowed us to save many hundreds of thousands of dollars in properly maintaining the highways at the proper time.

The Federal Government has and is supporting transportation research and planning. This effort has paid dividends, as I just mentioned. I suggest a greater effort in this area. I am talking about solving the long-range problems.

We are all familiar with the various segments of American industry that can no longer compete in the international marketplace. This is because the levels of research and development and

investment needed to keep pace were inadequate. We cannot allow this to happen to our transportation infrastructure.

In closing, I would recommend that the Federal Government adopt the slogan that we have used in Washington State: "We built it, let's preserve it."

Thank you.

Representative HAMILTON. Thank you very much.

Ms. Rahm.

#### STATEMENT OF KAREN RAHM, DIRECTOR, WASHINGTON STATE COMMUNITY AFFAIRS AGENCY, OLYMPIA

Ms. RAHM. Thank you very much, Congressman Hamilton. I am very pleased to be able to appear before you today.

I would like to talk briefly about our examination of public works needs across the State and how we are attempting to shape an adequate and appropriate response by State government.

As you know, Washington is a young State, still 5 years short of its centennial. But I think that you have seen today, despite very diligent efforts over the history of our State, we have within our communities the incipient problems that have come home to roost with such national attention in the Eastern States.

I know that you have seen a great many examples in the city of Seattle today, but the same kinds of problems exist all across the State of Washington. For example, in the city of Prosser, which is the seat of Benton County, there is a posted bridge that forces commercial and emergency vehicles to make a 20-minute detour out of the way to get from one side of town to the other. In the Spokane area there is a major aquifer which is severely threatened with pollution from septic tank systems. And in the city of Yacolt, in southeastern Washington, we have a situation in which an entire community is relying very precariously on a water system supplied by one well, with no backup system and no reserves.

If we seem to have, in some ways, problems that are less severe than our eastern neighbors as a State, I think that perhaps the reason is simply that we are younger, less populated, and therefore have put less pressure upon the systems that we do have. But they are ultimately no less vulnerable to deterioration and decay than those anyplace else in the country.

We became involved in this issue about a year ago. The University of Colorado at Denver sent us a questionnaire; they wanted to know about our public works need and so on. And it actually followed a number of others that we had received. All of them wound up in the round file, I will tell you honestly, because we could not answer the questions.

When we received the questionnaire from the university at Denver, we realized that really we should not be putting them in the round file, that it was important to know the kinds of things they were asking us, and that as a State we ought to know the things that they were asking about. So we called Marshall Kaplan at the University of Colorado, and I guess we discovered that a number of other States had been having similar problems responding to this interest in what the needs really were and how they were going to be handled, and so on.



We discovered, in fact, that the university had decided to look at the problem from another point of view, and adopted a series of State case studies. Governor Spellman's request to include Washington among those case studies signaled for us a major increase and a more active role in examining the State's public works needs. With the support of the University of Colorado, then, and with the able assistance of Prof. Phil Bourque at the University of Washington, we produced and published "The Washington State Infrastructure Survey," which I know you are familiar with.

I think that one of the most significant findings of that study, aside from the \$22 billion figure and so on and so forth, was that we now spend significantly less on basic public facilities, relative to personal income and on a per capita basis, than we have at any point in the last 20 years, and that many of these facilities are either noticeably deteriorating or are no longer functioning to the level of public expectation.

If this trend were to continue, and the State's population were to grow—which we all expect that it will—capital deterioration and declining service levels would become increasingly evident.

After our beginning this initial study, the legislative leadership, as Joe King mentioned, actively followed the work that we were undertaking with the University of Washington, and asked us to make a more detailed analysis of local—as well as State—public works needs. Substitute Senate bill 3035 asked us to produce, by December 31, 1983, a report with the following information in it:

First, an inventory of State and local roads, bridges, dams, sewer and water systems and park and recreation facilities;

Second, an assessment of their condition, including a listing of the most critical priorities for the next 5 years;

Third, cost estimates for meeting those needs;

Fourth, an analysis of what other States have been doing in this area;

Fifth, a package of financing recommendations;

And, finally, a proposal for updating this information on an on-going basis.

I think the legislation reflected an important policy decision by the legislature and the Governor, to step back and look at the magnitude of State and local public works needs from the bottom up, rather than to rush in and respond to the most recent horror story or the longest constituency group.

In order to gather the information requested in the legislation, we have undertaken a survey of 700 cities, counties, and special districts throughout the State of Washington, all providers of basic public facilities. We are very, very pleased and very rewarded that our overall response rate, to date, has been in excess of 70 percent. As the Governor mentioned, all the counties have responded; virtually all of the State's larger cities have responded; and I am particularly pleased to note that 60 percent of the cities with a population of less than 1,000 people have responded to this survey.

The information in the survey, I think, will give us a basic picture of each jurisdiction's inventories, maintenance efforts, facility condition, critical needs, and funding resources in all the public works categories specified by the legislation.

Our first cut at the data, which clearly needs further analysis, suggests, however, some important and interesting things:

About an average of 26 percent of the streets and roads in individual jurisdictions are rated to be in unacceptable condition; an additional 12 percent will become unacceptable next year if necessary repairs are not made.

Local jurisdictions report about 2,500 street and road repair and reconstruction projects which they view as critically needed in the next 5 years. They expect that their available funding will be about 35 percent short of the total cost of these projects.

Water and sewer systems appear to be in slightly better condition than streets and roads, based on the results of our survey. About 15 percent of these systems are rated as in unacceptable condition. It is interesting to note, in regard to water and sewer systems, that smaller communities appear to be in more difficult shape than the larger ones. The funding shortfall for critically needed projects in this area next year is about 35 percent.

We expect to compile and analyze these data. We have established our ability to do so by size of jurisdiction and type of area in the State. We will be producing more concrete information on the shortfall in capital financing that is developed from the survey. And that becomes very much the focus of our analysis.

We will be looking at the size of that gap in relation to such things as the size of the systems involved, the population trends in the jurisdiction, historical maintenance levels, local financing strategies, and general economic conditions.

We are also going to be looking carefully, with the assistance of the technical and engineering community, at the kinds of costs and technologies proposed to solve the problems, to see, in fact, if we are dealing in the most cost-effective manner with these problems.

We do not have an expectation, as a result of this survey, that any single grand solution exists for the problems of public facilities in our State. We expect, more probably, that our recommendations will be for a series of incremental improvements in some of the following areas:

The first one has been mentioned earlier today, and I think that is very important, and that is the development of more stable sources of capital funding, be they dedicated tax revenues, revolving loan funds, State incentives or mandates for public works depreciation accounts, and so on. There has tended to be, in our State, a "feast or famine" characteristic to Federal and State funding for capital facilities that has made it very difficult for many jurisdictions to get beyond the next grant deadline, in terms of planning for capital facilities. While Seattle, for example, has an extensive experience with capital improvement programming, many smaller communities in our State do not, now, have a capital program.

We need to build, I think, a reliable pool of equity in the State and we think the aid of the Federal Government can be valuable in that regard.

Second, we need to assure adequate maintenance efforts. Although it might seem rather obvious, one of the stronger correlations in our survey is between the quality or the apparent condition of the system and the historical level of maintenance of it. We

hope to find measures to encourage both State agencies and local governments to bind required maintenance schedules into their budgets as they approach the investment of capital in public facilities. Otherwise, I think, we are likely to watch our investment in public facilities erode because there are not adequate levels of maintenance.

Third, we too are interested in looking at the question of more flexible standards and specifications, procurement procedures, reporting requirements and so on, which will protect the public trust and safety, but certainly add no more in cost or complications to public capital investments than are absolutely necessary to that end. I think this is an extremely important area for cooperation between the Federal and State Governments, since we are both involved in regulations in this area. And I think that local governments should be involved as well.

In our State, because of the short time frame that we have had to get involved in this project, we have undertaken a very big job in a very short period of time. However, I think that the effort has had tremendous support from all segments of the community: local governments, the professional engineers and so on, and indicates the very broad range of interest and concern that this problem is beginning to generate in our State.

We are very optimistic that we are just at the beginning of a long-range approach to this problem, and we look forward to working with you and the Congress in this very important task.

Thank you very much for your consideration.

Representative HAMILTON. Thank you.

Mr. Mayor, we will finish up the witnesses with you. Mr. Trulove, please proceed.

#### STATEMENT OF HON. TOM TRULOVE, MAYOR, CITY OF CHENEY, WASH.

Mayor TRULOVE. I would like to preface my remarks with a few disclaimers, ground rules, excuses, and whatever.

If there is one thing that you take away from today's hearing, I hope it is a strong sense of the level of cooperation among the various units of government within this State—local government and the State government. I have never seen a higher level of cooperation. From the standpoint of the State, they are beginning this infrastructure planning process from the ground up. From our position in local governments, we are extremely supportive of the State in this process. I have never seen that kind of support for a higher level of government before, and we have to thank Governor Spellman and Karen Rahm for their leadership in this area. It is just absolutely incredible.

The second point I would like to make is that we have some examples—I will not have time to get into them in my comments today—but in some prepared appendix remarks that I have I give some examples of a half-dozen smaller communities in the State that have successfully used this partnership—State/Federal and their own local participation—to solve some very real problems that they have had. These are examples that show it can work. So I wanted to point those out.

Finally—well, maybe not quite finally, but next I would like to point out that any remarks that I make are nonpartisan. We are nonpartisan in local government in the State of Washington and I have tried to analyze this situation as best I could, from the facts at hand.

Finally, I think that the thrust of my remarks—I hope it comes out this way—is not to the Federal Government just to give us money, but the thrust of the remarks should be considered as: “Let us cooperate. Let us work together. Working together, we can solve problems in these areas.”

Today I want to address the infrastructure situation in cities and towns in our State. Although Washington does have one of the Nation’s largest cities, Seattle, the average population size of our 265 cities and towns is only about 6,500. Only 37 of our cities exceed 10,000 population, and so that means that 86 percent are below that number. And, most of those smaller cities have operating budgets of \$3 million or less per year.

Yet the residents of these smaller cities still require safe drinking water and sewage treatment and the entire complement of public facilities necessary to provide for health and safety and to promote a viable economic environment.

While paying for such facilities may require relatively few dollars from the standpoint of national standards, it does represent a very major capital cost to these smaller cities, which usually have only limited financial resources and face significant disadvantages in bond markets.

Data currently available from the Bourque-Rutledge study that you are familiar with, as well as some Association of Washington Cities sources, reveal that in the various infrastructure areas, between 1983 and the year 2000 we identify some \$7.3 billion in needs.

To put these numbers in some perspective, \$7.3 billion would represent just under 10 times our 1983 municipal operating revenues of \$746.8 million. Now, of course, these numbers will be tightened up on the basis of the study that Karen Rahm referred to, and we are looking forward to having better information.

Under the area of streets and bridges, we estimate that \$1.1 billion is needed in 1983, according to plans filed with the Washington Department of Transportation by our local governments. Over the next 6 years we estimate about \$1.35 billion in needs. Over that same period we can identify, for sure, only \$200 million in available revenues, leaving somewhat of a funding gap. Thus, by 1989, in the absence of new funding sources, in the absence of better planning, cities and towns will be worse off than they were in 1983.

Although cities have historically allocated about a sixth of their total budgets to streets and roads, recent inflation and declining revenues have conspired to force more deferred maintenance, increase deterioration, and increase the urgent need for reconstruction.

Accidents associated with inadequately maintained roads have also been the major area of legal exposure over the past decade. So we feel that resources will fall short in this area of meeting the basic needs.

In the area of water supply, we have identified about \$850 million worth of needs, of which about half are for rehabilitation and expansion of delivery systems and transmission systems, and about half are for water treatment and water storage facilities.

User fees in the water area yield about \$95 million per year, and a number have been increased substantially over the past few years. Traditionally, the primary sources for capital funding in water systems has been State and Federal grants-in-aid and revenue bonds. We have noticed some serious decline in the level of Federal participation and State funding has eroded over the past few years as a result of inflation.

But even if State and Federal assistance could generate half of the needed funding, an across-the-board 50 percent rate hike would be required to meet the debt service cost on the remaining amount.

In the area of sewage, storm water and waste water sewage, we have identified about \$4.8 billion in needs for cities and towns, and the major portion represents those needs that are imposed by EPA under the Clean Water Act, which requires secondary treatment facilities. The majority of our needs in the sewage area are externally imposed requirements.

Representative HAMILTON. Do you oppose those requirements?

Mayor TRULOVE. Well, I would not say that I oppose them; some of them are very well required. Some of them are absolutely necessary for health and safety. In some cases, I suspect that perhaps another type of treatment in a smaller community—a lagoon system or something like that—might accomplish the goal. I think all too often, when we have mandates sent down from higher levels of government, that we in government are used to managing inputs, and so we state our requirements in terms of managing those inputs, rather than in terms of the desired outcome. We all want a safe, healthy environment without raw sewage running around. I think it would be better to state what we want to accomplish in terms of those goals and then engineer to meet those goals, rather than to specify the inputs in those cases.

In the past, with these requirements, we have received a good deal of Federal and State funding, of course—at least three-fourths of the projects have been externally funded; in some cases, 90 percent. It appears that there has been a major shift of policy in this area and the net result of these changes will be that the local share of sewage projects will rise to about 45 percent.

Moreover, because of a shortage of funds, it appears that over the next couple of years, at least, funding is going to be limited primarily to backlog projects, rather than to any new proposals in the sewage area.

The rate base in this area in our State will generate about \$75 million per year. So it is clear that in the absence of continued Federal and State grant-in-aid programs, as well as some rather substantial and perhaps warranted increases in user fees, that local sewer facility needs will simply not be met.

The needs for libraries, parks, police stations, fire stations and other facilities we estimate at about \$550 million. Traditional funding sources for these kinds of facilities have been voter approved bonds. And that is what we are going to rely on in the future, I suspect, here. However, based on current high interest rates, it

would take an increase of approximately 40 percent in city-levied property taxes to finance \$550 million in new debt. Even though these projects often tend to be very popular with voters, it is extremely unlikely that they are going to approve tax increases of the size necessary to meet all these needs.

The source of this growing infrastructure problem in our cities and towns in our State is primarily financial. Local tax structures within Washington have been inadequate to keep up with inflation. Adjusted for price changes, total revenues to municipalities declined between 1977 and 1981 from \$402 million to about \$380 million. During the past decade city revenues in this State have grown at about 80 percent of the rate of growth of the Consumer Price Index—during a period when, obviously, the cost of providing services increased dramatically.

Washington, as well as the rest of the country, has been hard hit by the downturn in the economy. Our lumber and wood products, aircraft, nuclear, and primary metals industries have been hurt. Our tax base has been further eroded by some things we have done to ourselves, such as the 106 percent property tax limitation, and many property and excise tax exemptions granted by the Legislature.

One of the most serious problems faced by our cities has been the growing number of unfunded Federal- and State-mandated programs, which have increased local costs without accompanying revenues. Between 1968 and 1978, over 500 Federal and State mandates impacting Washington cities and town were enacted. Without accompanying revenues, these mandates simply reduced resources available to provide existing services.

Cities have responded to these difficulties and have been trying to avoid falling further behind. Many have responded by increasing tax rates—where permitted to do so by the legislature. Some by dramatically increasing their user fees. We are going to have to do more in that area.

Perhaps the most destructive response, through, has been for many local governments to create current resources by borrowing from the future. They have not consciously issued debt to finance their current expenditures, but rather they have cut current costs by deferring essential capital maintenance expenditures, thereby reducing the useful life of their capital facilities. No city really wants to be in this position, but most have been surviving at the margin, cutting back as inflation increased costs more rapidly than revenues, and trying to maintain basic life and public safety services.

Few could maintain depreciation reserves or sinking funds. Fewer still had the political courage, in terms of elected leaders, to say to the voters, "We have to do this and we are going to have to raise your rates." They simply could not and do not seem able right now to divert significant resources to meet their capital needs. As a result we have seen infrastructure decay more rapidly. Productivity and economic vigor in the future may decline, and costs certainly are shifted to future generations. The only hope for recovery becomes, I think, better local planning and a more business-like approach to many of our services, as well as maintenance of some external funding.

Cities have also responded by cutting labor costs, initiating cooperative ventures, shifting service responsibilities, and simply cutting some services.

So it seems to me that all of us in government, State, Federal, and local, are responsible for finding a solution to the infrastructure problem.

Cities have created obstacles to such solutions by past failure to recognize potential needs and address them incrementally through timely repair, rehabilitation and reconstruction.

Many cities do not have capital improvement plans and have been, in some cases, unable to wisely price some of their utility services to create depreciation reserves. Cities have got to address these problems and recognize that their capital needs are coequal with operating expenditure needs. More attention has to be paid to capital improvement planning—and to citizen education to develop that constituency. This is precisely what we are beginning to do through this cooperative program with the State and the study that Karen Rahm talked about. I think that this infrastructure inventory project is going to be an essential first step that is going to allow us to make a lot of local progress.

At the Federal level we have suffered from inadequate and uncertain funding of grant-in-aid programs many times. The Federal Government must recognize that meeting infrastructure needs is a national priority and provide increased funding for grant-in-aid programs in some cases.

Coupled with this has been a tendency for the Federal Government to impose excessive or sometimes unnecessary standards—perhaps inappropriate standards. By relaxing some of the more restrictive requirements, and providing more flexibility in the administration and use of Federal grant-in-aid programs, not only could a significant fraction of our infrastructure needs gap be reduced, but the part that remained might be something that we could deal with a little bit better.

This can be seen from the data I have presented in the appendixes. Most local governments in Washington are small, with a limited capacity to finance essential needs. In fact, our public capital has been deteriorating, as we have been spending less per capita on it. We do have examples of cities that would not have been able to finance projects needed for basic community health and safety, or to meet Federal mandates, without substantial cooperation among all levels of government.

Clearly, we have to try to come to grips with the problem. Our basic infrastructure is also the key to productivity and health in the American economy. If Congress is interested in domestic policy that provides for economic growth and the ability to meet foreign competition, encouraging investment in America's infrastructure would be a good first place to start.

Most economic growth over the past decade has been in small firms employing fewer than 100 employees—firms that depend on public water, sewers, streets, fire and police protection for their very existence. Without the infrastructure to support them they cannot exist, and without them we cannot generate the funds necessary to provide and maintain our infrastructure.

Current thinking seems to be that by reducing taxes and regulations businesses will be stimulated to invest in all sorts of new private ventures. I think there is a good possibility of that. As a consequence, it is hoped that the economy will expand so dramatically that it will yield the increased revenues necessary to support governmental expenditures. I am a little worried here: Can it work? You can not send a train down a track you have not built, no matter how many tickets you sell in advance of its departure.

But let us assume for a moment that these incentives do stir the private sector to search for new opportunities to grow. Even if one grants that assumption, economic recovery may be rather slow, simply and pervasively because State and local governments will not have built in advance the public facilities necessary to support that growth. Even well-heeled and well-intentioned investors have got to have something to invest in.

The point is important enough to repeat, and that is: For U.S. private investment to payoff, the country must couple it with public investment. The railroad boom, the growth of the great urban industrial centers, the automobile boom and the post-World War II airline boom all began and continued only with substantial prior public investment.

For cities and towns, for the State, for our Nation, few issues are more important to our future than coming to grips with the infrastructure problem, and I think that we can do it in a cooperative effort.

Thank you.

[The appendixes attached to Mayor Trulove's statement follow:]



## APPENDIX A

Without programs of state and/or federal financial assistance, many local governments would find it difficult, if not impossible, to carry out capital improvement projects. In some instances, the rate or tax increase would make local water or sewer improvements prohibitive. As a result, cities and towns have become increasingly dependent on state and federal grant programs. For illustrative purposes, the following is a brief summary of situations where state and/or federal funds were vital to local project implementation.

SEWER SYSTEMSRaymond -

Raymond is a city of 2,970 located in Pacific County. Over the past several years, its sewer system has become increasingly inadequate. Its M & O budget was increasing on the average of \$20,000 per year due primarily to temporary solutions to long term problems. The estimates for reconstructing and improving its system to meet its need was estimated to be \$8-\$10 million, a cost which could not be supported by its ratepayers.

The city after several years of negotiation, was finally awarded a DOE/EPA construction grant of \$7.5 million at a 90% match ratio. Because of its high M & O costs, however, it had not been able to accumulate sufficient funds for the 10% local match. As a result, it still required a loan from DOE to provide short-term local financing. The project, while necessary for health and safety reasons, will result in an increase of \$12 per month to \$24 per month.

Port Orchard -

Current sewer rates in Port Orchard are about \$5 per month--an admittedly low rate. Total project costs for the necessary system improvements are estimated to be \$10 million, with a 50-50 state/local match. The local match will be paid through LID assessments. It is estimated that monthly sewer charges will increase to \$14 for M & O purposes alone. The assessment costs for the necessary system improvements will be approximately \$8 per month bringing the total monthly charge to \$22. Without the availability of state grant funds, the monthly assessment would have doubled to \$16 resulting in a monthly sewer bill of \$30. An increase of from \$5 per month to \$30 per month for sewer charges alone would have been virtually impossible in Port Orchard.

Deer Park -

Located in Spokane County, Deer Park is a city of 2,200. Its phased sewer construction project which is now under construction was estimated at \$2 million. Of this amount, 50% was to be state DOE grant and 50% local money. The local share is being financed by a \$1 million Farmers Home Administration (FmHA) loan for 40 years at 7 3/8%. Current sewer rates are about \$4.50 per month. To finance the local share of the project will require a rate increase to about \$12 per month. Without the state DOE grant monies, local debt service would increase by some \$90,000 per year and would cause an additional \$8-\$9 per month rate increase (assuming that loan money would be available at such favorable rates from FmHA).

WATER SYSTEMSHarrah -

The situation with respect to water system improvements is much the same. A good example is Harrah, a city of 360 located in Yakima County. The existing water

system in Harrah consists of some 90+ individual wells rather than a community-wide system. As a result of the leaking of agricultural chemicals, the majority of the wells had become contaminated and many had been condemned by the county health department. Residents who could afford it were using bottled water; those who could not simply continued to use the well water. The total cost to construct a municipal system is estimated at \$827,000. This represents a per capita cost of almost \$2,300 in a small, low-income community. In short, the construction of a vital water system would have been out of the question without grant assistance. The project which resulted from this situation involved funding from the state Small Cities Community Development Block Grant Program (CDBG) which is administered by the Planning and Community Affairs Agency (PCAA) and Ref. 38 funds from DSHS. The PCAA monies were used both for the well site and for assisting low-income families with their hook-up charges.

#### Yacolt -

A second water system project requiring financial assistance is Yacolt, a town of 560 in Clark County. The sole water source in Yacolt was a well with a storage reservoir containing a one-day back up. The system failed, leaving the city with virtually no water supply. At this point, the town had no water supply system and no incoming revenue to amortize its existing debt. It was awarded an imminent threat grant from PCAA to provide a short-term solution (shallow well) and to design a permanent solution. It is likely that the permanent solution will involve further grant assistance either through PCAA or DSHS or both.

#### South Cle Elum

A final water system example is South Cle Elum, a town of 475 located in Kittitas County. In order to provide a safe supply of water, the town had recently borrowed \$100,000 over 30 years from FmHA. For reasons which have not been determined, the well failed with an obligation of \$100,000 to FmHA, no revenue, and no water supply. Once again, PCAA was able to provide imminent threat funds for the town to construct a new well. Without this assistance, the town would not have been able to finance its existing debt, let alone construct a new water supply.

#### NON-RATE BASED

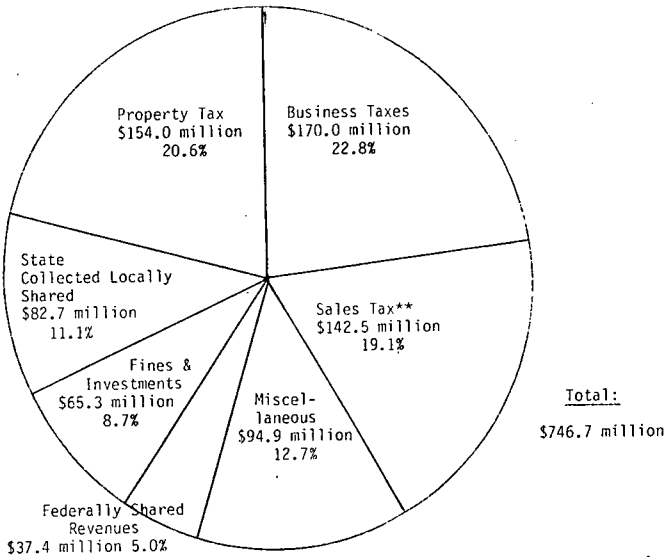
##### Albion

An example of a non-rate based project which was made possible by grant assistance is a storm water project in Albion, Whitman County. Albion is a town of 650 located near Pullman. It is generally a low-income residential community with an unemployment rate of near 20%. Because of its limited tax base, the town is barely able to provide limited maintenance, let alone capital improvements. For example, the town's streets are not paved and it has no storm drainage system. Without the storm drainage system, the roads cannot be properly maintained. The cost for a basic system of drainage was estimated at \$485,000. Through the federal Emergency Jobs Program Albion has been awarded the grant funds necessary to complete its project. The drainage system improvements will enable the town to reduce its street maintenance budget and, therefore, provide the revenue necessary to begin a street paving program.

These examples are all of small cities and towns and are generally representative of communities around the state. While the dollar figures mentioned are relatively small, they represent major capital costs to smaller cities. Additionally, smaller cities have fewer resources to bring to bear on their capital needs and are often at a disadvantage when attempting to borrow through the bond market. Thus the availability of state and federal assistance programs is even more important.

## APPENDIX B

## DISTRIBUTION OF TOTAL MUNICIPAL REVENUES - 1983



## Municipal Revenues - 1983 Estimates

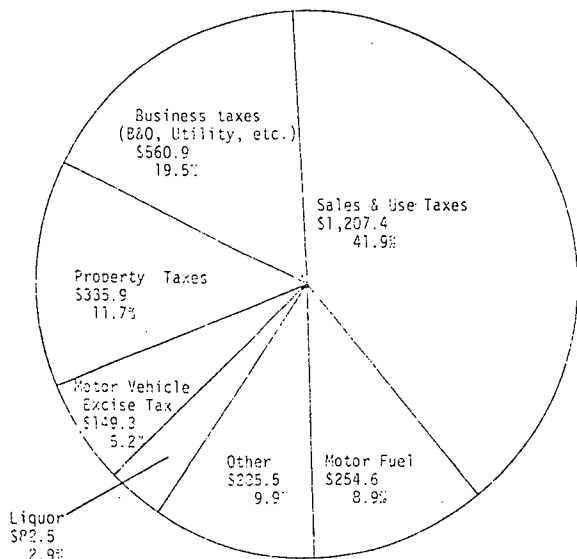
<u>Tax Source</u>	<u>Total Yield</u> (million \$)	<u>Per Capita Yield</u> (\$)
Property Tax	154.0	71.73
Business Taxes	170.0	79.19
Sales Tax	142.5	66.38
Miscellaneous	94.9	44.18
Fines & Investments	65.3	29.00
State Shared Revenues	82.7	38.51
Federal Revenue Sharing	37.4	17.43
<b>Total:</b>	<b>\$746.8 million</b>	<b>\$346.42</b>

\* Estimated - September, 1982

\*\* Assumes a 50% implementation for 1983 of the second half percent sales tax authorized by Chapter 49, Laws of 1982, 1st ex. sess.

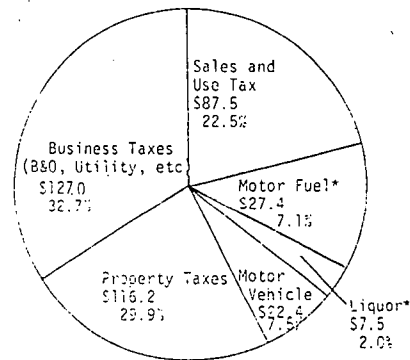
COMPARISON OF STATE AND CITY  
LEVIED TAXES  
1980  
(\$ in Millions)

STATE LEVIED TAXES



State Levied Taxes:  
2,676,100,000

CITY LEVIED TAXES PLUS STATE  
LEVIED LOCALLY SHARED TAXES

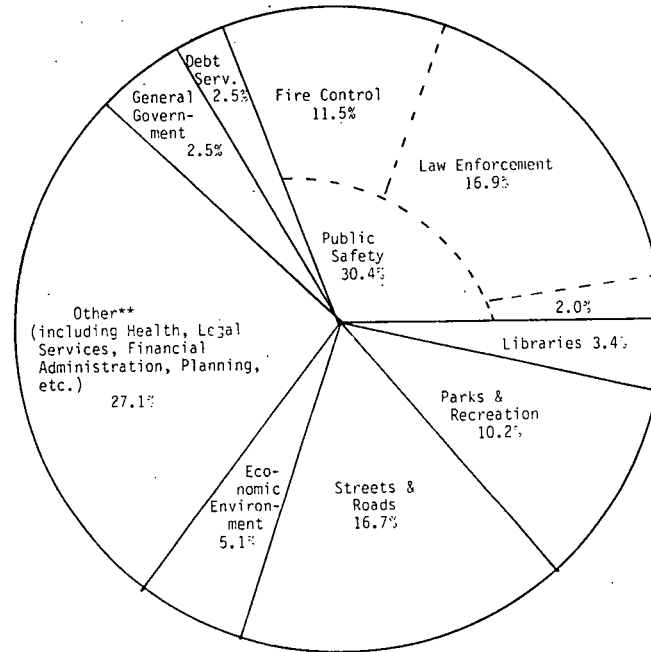


Distribution of Municipal Revenues

City levied plus state  
levied locally shared = 388,500,000 = 70.3%  
Other city operating revenues = 164,000,000 = 29.7%

\* state - levied, locally shared tax

DISTRIBUTION OF MUNICIPAL OPERATING EXPENDITURES  
1980\*



\*\* Included within this category are such expenditures as:

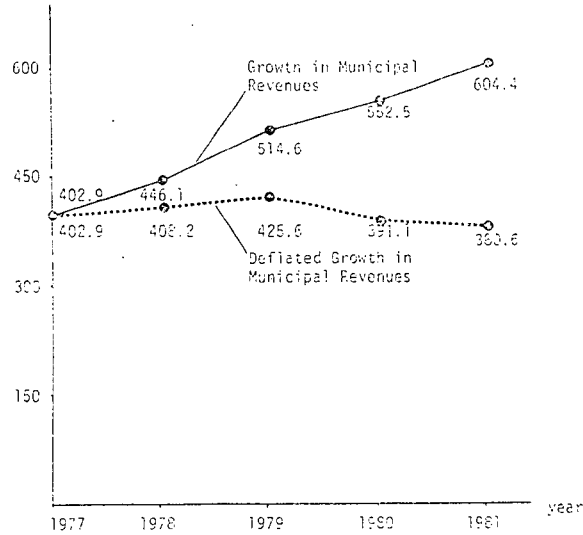
- Public Health
- City Attorney
- Engineering
- Data Processing
- Planning
- Audits
- Economic & Community Development
- Aging
- Personnel Administration
- Facility Maintenance

Other Law Enforcement  
(courts, jails, etc.)

\* - From Local Government Comparative Statistics - 1979

MUNICIPAL REVENUE GROWTH  
1977 - 81

Million \$



1977-81 - Growth = 49.9%

1977-81 Inflation = 55.4%

Real Growth = -5.5%

Incorporated Population Growth 1977-81 = 4.8%

Change in Real Per Capita Revenues = -10.3%

APPENDIX C

C.P.I. Increase<sup>1</sup>

9.2

10.7

16.2

10.0<sup>2</sup>

<sup>1</sup> - Seattle - Bureau of Labor Statistics

<sup>2</sup> - ...

APPENDIX D

STATE CONSTITUTIONAL AND STATUTORY LIMITS ON LOCAL GOVERNMENT POWER TO ISSUE  
 GENERAL OBLIGATION LONG-TERM DEBT  
 (13 Western States)

<u>State</u>	<u>Rate Limit</u>
Alaska	No limitations
Arizona	4% of equalized assessed valuation
California (1)	15% of locally assessed valuation
Colorado	No limitations
Hawaii	15% of market value of property
Idaho	15% of assessed valuation (2)
Montana	5% of equalized valuation
Nevada	30% of equalized valuation
New Mexico	4% of locally assessed valuation
Oregon	3% of market value
Utah	4% of market value (2)
WASHINGTON	3/4 of 1% of locally assessed valuation
Wyoming	2% of equalized valuation

Source: Advisory Commission on Intergovernmental Relations

Notes: (1) Charter cities may establish their own limits

(2) Debt incurred in one year may not exceed that year's revenues

Representative HAMILTON. Some of you mentioned that you felt our spending was less now in infrastructure than it was some time ago, as measured on a per capita basis. Why? What has been your experience—and I think it is fairly common across the country—on that? Has it been the fault of local, State and Federal leadership? Why have we let infrastructure spending lag like we have?

Mayor TRULOVE. My response would be that the major reason has been the rapid rate of inflation that we have suffered over the last decade. What has happened is that local governments have been trying to keep the same number of policemen on the street, keep their fire department afloat, and with 70 or 80 percent of our costs being labor costs and heavily into the personal services sort of thing, we are just at the margin, trying to hold on and maintain that service level. The easiest way to do that is to defer that maintenance. It is the least visible way to do that.

There may also be a lack of political courage sometimes, to come to grips with that issue. I think it might be well placed, because the voters— if they do not see it crumbling they do not really understand. And so we have a tremendous educational job.

Representative HAMILTON. Do any of the others want to comment on that? Ms. Rahm.

Ms. RAHM. I think that is fundamentally true, and I think that the high rate of inflation, first of all, was probably not expected by any of us, to last as long as it did. Strategies that might be appropriate for 1 year, 18 months, 2 years, to defer this and put that off and so on became the strategy of a decade or more. I think that is part of what led us into problems.

I think inflation has had another effect, and that is: It has substantially contributed to what we widely call the tax revolt. Inflation has pushed people into income tax brackets, caused them to feel the bite of property taxes, and that has created—in our State, certainly, and I know elsewhere in the country—a great deal more resistance to higher user charges and new bond issues and new tax levies and so on and so forth—which became, then, necessary to recoup some of the things that resulted from the inflation-induced deferring of maintenance expenditures. So I think inflation has been a villain in more ways than one in this whole process.

Representative HAMILTON. Mr. King, how big an issue is infrastructure in the Washington State Legislature? Your Governor testified that on a scale infrastructure would fall substantially below education and health services. What is your sense of it in the legislature?

Mr. KING. Well, keep in mind that we are a citizen legislature. I am an insurance agent. I think that the trouble we had passing 3035 at that point a year ago suggests that people think it is not the primary priority.

When we developed our economic development plan, our cornerstone piece was this funding for the CERB legislation—the infrastructure problem. I suspect that by this next session the consciousness level will have been raised. Until we have the political courage—especially with the 106 percent property tax lid—we have taken all the other—we have stood up to the problem and raised our gas tax. We have the highest sales tax rate in the States.



Representative HAMILTON. Has this infrastructure inventory study that has been going on caused people in communities to talk to their elected officials more about infrastructure problems?

Mr. KING. I hear it from the business community.

Representative HAMILTON. You do?

Mr. KING. The problem is that people are not anxious to vote for stuff they cannot see. You know, it is not too exciting for a politician to get up and talk about a tax increase for sewers. People cannot see the sewer. It is much easier to sell a new schoolhouse than that. I think that is what has happened.

The business community in my area—we have been successful in attracting high tech—talks to me about these needs. “We need more sewers. We need a cleaner water supply.” I have a high tech industry talking to me about tougher environmental standards they need. They think that our water quality standards are not high enough. They say, “We need clean water. How are we going to deal with it?”

Representative HAMILTON. When you have an infrastructure problem, Mr. Mayor, what sources of funding do you look to?

Mayor TRULOVE. Well, it depends on the particular problem. But typically, we see what we can generate locally, first, and we solve the problem. Oftentimes, if we cannot, then we look to State agencies.

Representative HAMILTON. What kind of problems can you solve locally without help from the State or Federal Government on infrastructure?

Mayor TRULOVE. Well, it depends on the nature of the problem. We have a number of enterprises which are very business like—electric companies that are run by cities, water departments, the sewer department.

Representative HAMILTON. They generate their own revenues?

Mayor TRULOVE. They generate revenues. Not enough revenue to make major investment in new facilities, but if our rates are set correctly, they should provide enough revenue to do repair, replacement, fix lines that break, improve the chlorination process and that sort of thing. So we well look to our own funding in those kinds of areas.

In streets and roads, certain types of roads and streets—we are going to have to look to our own funding on certain types of maintenance activities. But to reconstruct a street or to do any extensive overlay projects, we are going to have to look to the State for help. They do that; they have provided State passthrough funds from the State gas tax and motor vehicle excise taxes that we do have available for that sort of thing.

We have looked to the Federal Government in the past under particular programs, for projects such as park rehabilitation, reconstruction of some major arterials—and this was under the old EDA program.

Representative HAMILTON. Does the State play a major role in setting infrastructure priorities in the State, or are the priorities set locally?

Mr. OVERTON. I think that depends on the particular infrastructure. Now, as far as the highways are concerned, and the roads and

the bridges, the State department of transportation does set out—

Representative HAMILTON. That is where you set the priorities?

Mr. OVERTON. Well, we work with the local communities to set the priorities, depending on who owns the roads and the bridges.

Representative HAMILTON. But the decision is yours, as to where the money goes?

Mr. OVERTON. In general; yes.

Ms. RAHM. The State also has a significant role in establishing priorities for Federal and State funds used for water pollution control facilities.

Representative HAMILTON. Waste water treatment and that sort of thing?

Ms. RAHM. Yes.

Representative HAMILTON. Do you determine the priorities?

Ms. RAHM. The State—yes, the State agency does.

Representative HAMILTON. You do that on a ranking system, I presume?

Ms. RAHM. That is correct.

Representative HAMILTON. Mr. Overton, do you think user fees and tolls are part of the answer to State highway and road needs?

Mr. OVERTON. Yes; user fees, particularly. We do not have—except for one or two bridges in the State—any toll facilities. But I think the—if I can back up a second. We were—the State highway system was in trouble up until a year ago. By law, we have—the first process that we have to do is maintain our highways. We cannot spend any more money doing anything else, like new construction, unless we maintain them. We found out—the department of transportation and the commission determined that we were not going to even maintain our highways according to law. So we just went to the legislature and said, “We have to have a gas tax or we cannot meet the letter of the law. We cannot maintain our highways.” The legislature, together with us, bit the bullet and raised the gas tax. I think it was easy—not easy—but I mean it was available. Like Mr. King said, the public can see the highways. They know that they want to use the highways. So a user tax is something that they can see and it is available to us. And that is what we did. That put the State highway system—and we also passed some along to the counties and the cities—in fairly good shape for the short term.

Representative HAMILTON. I am not sure I am directing this question to the right panel. Perhaps it should have been directed to the previous panel. Can you tell me what kind of role you see for the private sector in dealing with this infrastructure problem? Where does it fit? Can the private sector help us deal with this infrastructure problem in any meaningful way?

Ms. RAHM. That has been a subject of considerable debate in many different communities in the State, particularly in relationship to the question of how much should a new industry bear of the cost of servicing it. The solutions have come down in a variety of different places across the State.

It is often the case that the industry will bear the cost of lines or sewer and water lines and roads that particularly benefit them. The more difficult question is: What about the secondary effects

that the industry generates—the people who move into the community, who need new schools because the industry has been located there? Workers who may need new shopping facilities or recreation facilities because a major new facility has located there and so on down the line.

I am not sure that we have come up with any better solutions to those problems than anybody else in the country. I think it is a continuing debate, and we are finding the solutions as we go.

Representative HAMILTON. OK. Any other comments from the panel that you think would be helpful to us as we consider these problems?

Well, I want to say that I have been very impressed, not only by your observations and comments, but also by those who preceded you this afternoon. I think the infrastructure problems of the State and communities of Washington are in very good hands, indeed. You have put yourselves among the foremost leaders of the country, I think, in analyzing your needs and moving to meet those needs.

It is clear to me from the various communities and States that we have studied that you are very much in the forefront of dealing with these problems.

Thank you very much for your contributions. I think this is the final panel this afternoon, so the committee session will stand adjourned.

[Whereupon, at 4:30 p.m., the committee adjourned, subject to the call of the Chair.]

## OUR NATION'S INFRASTRUCTURE

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WEDNESDAY, SEPTEMBER 7, 1983

CONGRESS OF THE UNITED STATES,  
JOINT ECONOMIC COMMITTEE,  
*Washington, D.C.*

The committee met, pursuant to notice, at 11:13 a.m., in hearing room A, the Legislative Office Building, Albany, N.Y., Hon. Alfonse M. D'Amato (member of the committee) presiding.

Present: Senator D'Amato.

Also present: Robert Solomon, legislative assistant to Senator D'Amato.

### OPENING STATEMENT OF SENATOR D'AMATO, PRESIDING

Senator D'AMATO. The Joint Economic Committee hearing on infrastructure will come to order. This is a hearing to determine the various needs of infrastructure here in the State of New York. I am delighted at the participation that we have.

I am saddened, doubly saddened, that a dear colleague of mine in the Senate has passed away, Senator Scoop Jackson. The funeral is being conducted today.

The funeral will prevent Senator Moynihan from being here. I will read his note. He says:

DEAR SENATOR D'AMATO: I must be in Everett, Wash., this morning where I am to speak at the funeral of Senator Henry M. Jackson. As I had planned to be in Albany, I would ask that my statement prepared for the occasion be placed in the record.

And I am asking that Senator Moynihan's prepared statement be entered into the record in its entirety.

Obviously, we are sorry that the Senator could not be here, particularly since Senator Moynihan also is a member of the important Environment and Public Works Committee of the U.S. Senate. And obviously, his interest and concern and his contributions to capital improvement are something that are well known. He has been the architect and legislative leader of a number of pieces of innovative legislation that deal with infrastructure.

So we are sorry that the Senator could not be here, but obviously it is understandable.

I have a statement for the record. And inasmuch as many witnesses are short of time—Mr. Goldmark and the Governor—I am not going to take the time of this hearing to read the entire opening statement. I will ask that it be accepted into the record in its entirety.

Let me simply say that this is the third in a series of hearings on "Our Nation's Infrastructure," Earlier sessions have been held in Louisville, Ky., and Seattle, Wash.

The Joint Economic Committee is conducting a State-by-State study of the Nation's infrastructure needs, both immediate and for the remainder of the century. And at this time 23 States are participating. It would be my hope that all 50 States would participate, because what we are really doing is attempting to get an inventory of our Nation's needs.

And when we talk about infrastructure, we are talking about the bridges and highways. We are talking about water supply systems. We are talking about the wastewater treatment plants that are necessary to sustain a quality of life that many times we take for granted, in the very practical sense that are necessary to see to it that people can get to and from work, to see to it that commerce does not come to a grinding halt, to protect the public health.

We simply cannot have a situation where people's lives would be endangered as a result of contaminated water or water mains collapsing. The Mianus Bridge gave very, very stark testimony, very realistic testimony to what can take place and what will take place unless we not only take inventory of our needs but do something about them.

I am pleased to have the active participation of the States and the cities and those local officials who will be testifying today.

And I ask that my written opening statement and Senator Moynihan's prepared statement be placed in the record, in their entirety, at this point.

[The statements referred to follow:]

#### WRITTEN OPENING STATEMENT OF SENATOR D'AMATO

This is the third in a series of hearings on "Our Nation's Infrastructure." Earlier sessions have been held in Louisville, Ky. and Seattle, Wash.

The Joint Economic Committee of Congress (JEC) is conducting a State-by-State study of the Nation's infrastructure needs, both immediate and for the remainder of this century. At this time, 23 States are participating. The State studies are scheduled to be finalized later this fall and will form the basis for the national report.

The purpose of the JEC study is to provide data on the Nation's infrastructure needs as a prerequisite to exploring the financing possibilities available. Not until all the infrastructure projects have been inventoried can we realistically discuss national financing alternatives.

The New York State study focuses primarily on three broad infrastructure areas: Water supply; wastewater treatment; and transportation. Preliminary data from the New York study suggests a problem of immense proportions. In terms of water supply, data exists for systems serving approximately 13 million people. The minimum cost estimate for rehabilitating these systems is between \$7 and \$8 billion. Wastewater treatment requirements through 1988 are \$16.1 billion. Over 85 percent of the federally assisted highways in the State are rated as either fair or deteriorated. An estimated \$11.4 billion will be needed for highway reconditioning over the next 5 years. Over 42 percent of New York's bridges were rated deficient. It will cost \$8.9 billion for their repair or replacement.

These figures are of staggering size, yet they do not include tunnels, posts, airports, and hospitals. I am the first to admit that determining needs, as opposed to a "wish list," is a difficult process. Every project or infrastructure system probably could be upgraded. Thus, in this study and at this hearing, we must focus our attention on what we really need, not on what we might just "want."

New York State's and the Nation's infrastructure needs cannot be addressed without a plan. We cannot just plunge into reviving our public works systems without a coherent strategy. I would suggest that the following ordered plan of attack be considered:

- (1) Define the infrastructure problem for the Nation on a State-by-State basis;
  - (2) Prioritize the projects that must be replaced or refurbished; and
  - (3) Develop a comprehensive financial package coordinating Federal, State, and local funding programs.
- Allow me to further develop this strategy.

#### I. DEFINING THE INFRASTRUCTURE PROBLEM

This hearing, and the study on which it focuses, is a first step in solving the infrastructure crisis. It is imperative that the Nation's infrastructure needs be inventoried. I believe that the Federal Government should sponsor such a study which should be conducted on a State-by-State basis. Only after we know what the magnitude of the infrastructure dilemma is, can we begin to solve the problem.

The process of defining the Nation's infrastructure needs has already started. The Joint Economic Committee's study that we are discussing today is that beginning. The study has burgeoned to include 33 States. It must be further broadened to all 50 States. This study is the best means available to defining the Nation's infrastructure needs.

#### II. PRIORITIZING THE INFRASTRUCTURE NEEDS

Of course, simply knowing what the Nation's total needs are is not enough. Clearly, every worthy project cannot be undertaken simultaneously.

The preliminary figures from the New York State JEC study tell us that the infrastructure problem is mammoth. Obviously, this is not secret. But what do these figures represent? I am told that \$16.1 billion needs to be spent in New York State alone on wastewater treatment by 1988. If every penny of this \$16.1 billion is not spent, will there exist a health problem somewhere in the State? Or does the \$16.1 billion include projects that might enhance wastewater treatment facilities, but are not immediately necessary for preservation of the public health.

I am also told that 42 percent of the State's bridges need at least some repair. Does the mean that if all these bridges are not repaired, the safety of the general populace will be threatened? Can part of the problem be solved by just changing traffic patterns.

I do not yet know the answers to these questions. My point here, therefore, is that some parameters must be established to avoid goldplating existing systems. We must finance only those projects that would pose a real health or safety threat if they were not completed. Local municipalities, the State, and the Federal Government can simply not afford to fund projects that do not pose such a threat. Developing a "wish list" of most favored projects is to nobody's benefit. All levels of government must work together to prioritize these projects which need to be financed.

I believe that it is the Federal Government's role to coordinate the prioritizing process. Certainly, State and local input is necessary, but the overall effort should be overseen by the Federal Government.

An appropriate forum for this effort is the Joint Economic Committee. The committee is spearheading the effort to define our nation's potential infrastructure needs. It seems only logical that the JEC could organize a panel that would establish general parameters for prioritizing infrastructure projects. This would be a natural second step for the committee once defining the Nation's infrastructure needs is completed.

#### III. FINANCING OUR INFRASTRUCTURE NEEDS

Defining and prioritizing the Nation's infrastructure needs will not be easy. However, financing these projects will be the most difficult task. There must be close cooperation and coordination between local, State, and Federal programs, if these efforts are to succeed.

Cities and States have been quick to begin addressing the financing dilemma. The Federal Government has much to learn from local government. I am referring specifically to capital budgeting. Over 90 percent of all major cities now utilize a capital budgeting process. Capital budgeting is a process that determines what the needs are over an extended period of time and how these projects will be financed.

The Federal Government has no such capital budgeting process. Programs are administered from a variety of agencies without any coordination. In addition, funds are appropriated only on an annual basis. Consequently, it is difficult for cities and States to make long-term plans based on Federal participation.

It is imperative that the Federal Government's infrastructure programs be centralized and that long-term budgets be established. Otherwise our cities will not be able to fully commit to long-term planning.

Federal grant programs are clearly important to local infrastructure funding. However, according to the National League of Cities, the most widely used avenue of local finance for infrastructure projects is general obligation and revenue bonds. The Federal Government, through the two tax-writing committees of Congress, has already indirectly placed a tax on municipal bonds. If these securities were to be directly taxed, either local and State taxes would have to be increased or essential services would have to be cut. Clearly, the tax-exempt status of municipal bonds is critical to solving the infrastructure crisis. The availability of this financing vehicle must be preserved. Without it, the resources available to State and local governments would be further diminished.

Tax-exempt bonds are the primary source of municipal finance. However, this has not been enough. To broaden their financing alternatives, cities and States have become very active in the sale-leaseback market. This form of financing helps reduce costs to both taxpayers and to State and local governments, while encouraging private investment in municipal activities.

As this market has burgeoned, the two tax-writing committees of Congress have seen an opportunity to raise revenue. Two bills are now before Congress that would severely limit municipal sale-leaseback financing. The Federal budget deficit should not be reduced on the backs of our cities and States. How can we possibly solve the infrastructure crisis if each level of government is working at cross purposes.

In terms of ongoing maintenance and debt service, three broad areas of funding exist: Federal grants; higher State and local taxes; and user fees. In my mind, the solution must be a combination of the three. However, what the relative proportions of Federal, State, and user contributions should be is a more difficult question. Federal grants imply higher Federal taxes, which stifles investment activities. The power of cities and States to raise taxes is almost at its limit. If New York State sharply raised taxes, businesses and families might leave the State, which would only serve to reduce the tax base. Higher user fees may be more equitable. Certainly those who use the system should bear the cost of maintenance. However, user participation is elastic. The higher the fees, the less the usage and the lower the revenue collected.

What should be the level of support from each of the various financing avenues available? No matter what the final determination is, we can be sure that real costs will be incurred by each and every one of us. This is not a happy prospect. The real challenge is to minimize these costs to the greatest possible extent.

We are a nation of infinite potential, but limited resources. Events such as the energy crisis and this past recession have taught us that our financial and physical resources must be used cautiously. It will be difficult for us to determine which projects must be undertaken and to correct declining investment rates. But these difficulties pale next to the political choices which must be made.

This hearing will address each of the questions I have posed. I do not promise, however, that we will reach any final solutions today. In fact, we may only discover that the problem is more difficult than we initially believed. However, interchange between Federal, State, and local officials must begin. We cannot continue to look to the other guy to solve our infrastructure problems. It will take a joint effort from all levels of government.

I would like to thank the Governor and all of our other witnesses for appearing here today. I look forward to our continuing dialog, both today and in the future.

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PREPARED STATEMENT OF HON. DANIEL PATRICK MOYNIHAN, A U.S. SENATOR FROM  
THE STATE OF NEW YORK

Two years ago, even one year ago, infrastructure was not a term likely to arouse much interest or understanding. But with most surprising swiftness, the subject has risen from obscurity. And not just because of this awful new word. (Why can we not revive Jefferson's higher sounding term, "public improvements"?)

Against a background of record unemployment, Americans apparently found it easier to accept the need for us to get to work rebuilding the roads, bridges, mass transit, water supply, and sewer systems on which we depend and which we heretofore took for granted.

In the past several months, New York and its neighbors have unfortunately provided the nation with graphic demonstrations of the price of neglecting our "public improvements." The Mianus River bridge collapse on Interstate 95, at minimum a

maintenance failure, seriously disrupted truck traffic on the Connecticut-New York Border. It imposed not only economic costs, but hardships on the lives of Port Chester residents and a strain in interstate relations reminiscent of experience under the Articles of Confederation.

Twice in August, sixty-eight year old water mains failed in New York City. The first shut down the Garment District in Manhattan for several days at the height of its selling season. The second closed down a life insurance company headquarters, bank offices and at least four entire office buildings around Madison Square.

We should have known these sorts of things were due. Peter Goldmark, testifying before the Senate Public Works Committee this year, reported that sewers in the Port Authority's region are generally on a six hundred to eight hundred year replacement cycle. A life of one hundred-fifty years might be expected, if proper maintenance were being performed. And it is not being performed.

The Albany water system, dating to the mid-nineteenth century, has a leak rate of 47 percent; nearly half the water that enters the water supply system is lost before reaching consumers. The State Assembly infrastructure task force appointed by Stanley Fink recently reported similar leakage for Rochester, Syracuse, Watervliet, and other communities.

These systems, along with our bridges (twenty-one percent of which in our state are officially classified as being in disrepair), and all the rest are falling apart faster than we are repairing them.

In constant dollars, public works spending by all levels of government declined nearly 30 percent over the last decade—but no one seemed to realize this was occurring. Neither the Congress, the U.S. Office of Management of Budget, nor the state and local governments made a conscious decision to spend less to maintain our public improvements. Still, we did. Public works investment by all levels of government declined from 4.1 percent of gross national product in 1965 to 2.3 percent in 1977, a 44 percent decline. I have reason to believe the decline has continued, to the point where we are, at most, spending half what we did two decades ago, and most probably are disinvesting in the public infrastructure.

Let me offer what I think to be an extraordinary illustration of this general trend.

The United States Army Corps of Engineers is now engaged in more construction in Saudi Arabia than in the United States. In response to a request I made at a Committee hearing, the Corps provided me with the following data. All told, there is now some \$21.7 billion of U.S. Government approved construction in the planning, design and actual construction stages in Saudi Arabia. Not all of this has been approved by the Saudi Government, but it is expected that eventually some \$15 billion will be funded. Here is a three year comparison of the Saudi program as against the American program.

[In millions of dollars]

	1982	1983	1984
Saudi Arabia workload: engineering and construction.....	1,695.3	1,911.7	1,628
Civil works construction program: engineering and construction.....	1,609.6	1,602.4	1,101.7

Note that the Saudi program holds steady, while the Civil Works Construction Program here at home declines by a third.

For their part, state and local governments have been hard put for funds of late, and when they borrow are forced to pay vastly higher interest rates in the bond market than ever in the past, while being saddled with increased administrative re-



sponsibilities by the Federal Government. Deferred maintenance or postponed development of essential public works—particularly those below the ground—is a politically expedient, and in the short term, a fiscally attractive solution. Furthermore, Federal grant and loan programs for public works tend to encourage new construction at the expense of maintenance and rehabilitation.

At the Federal level, the decline in investment is a result, in part, of the preoccupation with other domestic issues. It is also a consequence of haphazard and diffuse decision-making. We have failed to organize budgetary information on long-term capital spending projects in any meaningful and useful form. Fully one-half of all public works investment in the United States derives directly or indirectly—through grants-in-aid—from the Federal Government. Yet, the Federal Government lack both the institutional structure and the data to set spending priorities, seek some consistency among the many different programs and agencies, and achieve a measure of fiscal equity among the regions of our nation.

On this matter of regional inequity, I had the Congressional Research Service prepare a chart of Federal water resource expenditures over the twenty-five years from 1956 to 1980. It showed that the northeastern states received only six percent of the \$52.5 billion distributed by the Federal Government; southern states received about 40 percent, western states 36 percent. New York's share was 1.2 percent, less than North Dakota's 1.3 percent, about one-third Arizona's 3.5 percent. California's share was 8.9 percent. With Federal funds, we are building a water supply system for Phoenix, but existing laws and practices bar Federal assistance to construction of New York City's third water tunnel.

What is to be done? I would suggest nothing more complicated than getting organized.

Just one year ago, I introduced in the Senate the "Rebuilding of America Act." I reintroduced the bill this year in company with Senator Dodd of Connecticut. It would provide the institutional structure necessary for public works decision-making at the Federal level. The bill would require the preparation of a Federal capital investment schedule to be submitted by the President as part of the unified budget each fiscal year.

In addition, the bill would establish an independent Commission on Public Improvements composed of thirteen public and private representatives. The commission would conduct an inventory of existing major public improvements by region, state, and metropolitan area, examine various means of public and private financing of such projects, and recommend necessary changes in Federal laws and regulations to reverse the pattern of disinvestment in public works.

The commission and capital investment schedule together will enable us to make some of the difficult decisions that must be made as we rediscover the need for public improvements investment. With limited resources, we must establish priorities for repair and reconstruction. We may need, as well, to decide what is beyond repair. These are difficult, often socially and politically wrenching decisions.

But there is a serious danger that none of the "infrastructure" legislation now pending will be enacted. Estimates that our infrastructure spending needs could be as high as three trillion dollars in the next twenty years, while effective in drawing attention to the problem, can be equally effective in stymieing responses to it. There are some problems seemingly so vast that we simply cannot imagine solutions. Three trillion dollars is that vast.

The greatest value an independent commission may have is in helping us reach a consensus on the dimensions both of the need and of our responses. The gap between social security revenues and outlays was considered unsolvable until the President's Commission on Social Security Reform, on which I sat and to which I devoted most of my time for half a year, established a nonpartisan consensus on the size of the problem and on the range of appropriate responses. After that a political solution became feasible.

The Commission on Public Improvements could have the same effect. In the meantime, studies such as the Joint Economic Committee's survey of selected States, including New York, begin to tell us some of the information we need to know. And I believe we can begin to fashion some concrete responses to the problem.

Within a few weeks of the Senate's return, the Senate Committee on Environment and Public Works, of which I am a member, will meet to consider legislative proposals on the infrastructure problem. And at that time, I hope to propose, in concert with the Chairman of the Committee, Senator Stafford of Vermont, and Senator Domenici of New Mexico, who is also Chairman of the Senate Budget Committee, new legislation. While the details are still to be worked out, the bill will embody as its centerpiece the Commission and capital investment schedule proposed in my

bill. It will also include a substantial new multi-year Federal aid program to help States establish infrastructure revolving loan funds or banks. Water supply projects would be eligible for assistance from these funds; port, airport, sewer, mass transit, street and highway, and park improvements would also be eligible.

Even if accepted by the Committee and the Congress, this program would not solve all of our infrastructure problems. There is much work to be done sorting out the appropriate Federal, State, and local responsibilities. This hearing will, I am certain, make a valuable contribution to that effort.

Senator D'AMATO. I would like to call our first panel: Mr. Peter Goldmark, who is vice chairman, National Infrastructure Advisory Committee to the Joint Economic Committee, and also the Executive Director of our Port Authority. And also Associate Prof. Rae Zimmerman, New York University. Professor Zimmerman has prepared the New York Infrastructure study for the committee, which will be completed by the end of this year.

Mr. Goldmark.

**STATEMENT OF PETER C. GOLDMARK, JR., EXECUTIVE DIRECTOR, THE PORT AUTHORITY OF NEW YORK AND NEW JERSEY**

Mr. GOLDMARK. Thank you very much, Senator.

My remarks will be very short. As you know, but as perhaps some of those here today do not. I am talking today in my capacity as vice chairman of the advisory committee that the Members of Congress on the Joint Economic Committee have established, with the national advisory committee chaired by Henry Reuss, former chairman of the Joint Economic Committee, and Lee White from the State of Colorado and myself as vice chairmen.

I am going to be very short and try to help set the stage for those who follow me, including the Governor and the representatives and legislative leaders and cities of New York.

Over the last decade, we have seen an amazing decline in investment in the five core infrastructure systems: highways; bridges; mass transit; water; and sewer.

I am going to use two charts. The first one—would you put it up, please—shows the drop in spending in these five categories at all levels of government.

If I could just take a minute, Senator, to indicate here the remarkable thing about this line that shows spending on five core infrastructure systems at the three levels of government combined over the past decade dropping from 1.5 percent to now 0.75 percent of gross national product. And nobody knew it was happening. There is no data, no national budget, no congressional forum, no policy framework in which people said, shall we cut our spending like that or shall we not? Well, the decade of the 1970's was over, and that is what had happened to our expenditures on these systems.

So one of the questions before us is, can we arrest this cycle of disinvestment? And second, can we generate political capital required to rebuild our physical capital?

One remarkable sign is the level of participation that the Senator referred to in the Joint Economic Committee infrastructure study.

The second chart I have—would you put that up, Steve—shows the 22 States, including New York, that are taking part in this effort; 22 at this point, Senator. I hope we can enlarge the number.

These States comprise over 60 percent of our country's population. And they are, as Senator D'Amato indicated, doing a very poor task of inventorying each one of them of their own needs in these critical areas.

Now, what is remarkable about this effort is something that I have not seen in the debate on infrastructure among the States in many years: There is a refreshing absence of regional rivalry. Debate over our infrastructure problems has not degenerated into a Sunbelt-Frostbelt shoot-out. It has not degenerated into a funding fight between New Mexico's water systems and New York City's subway system.

When the Joint Economic Committee advisory committee met for the first time in Denver, public officials from the Western States extended an opportunity and an olive branch to their counterparts from the East. They asked, how might the West and the East cooperate in rebuilding the Nation's infrastructure?

I cannot tell you what an electric effect it made when the Governors of Western States and Rocky Mountain States got on their feet and said, we want to find a way to build a political alliance with the Northeast and with the Eastern States on these issues.

Accustomed as we are sometimes to the political warfare in the Northeast, I think we have got to learn to take yes for an answer. They want to build an alliance, and we should meet them halfway. We can work together with our colleagues from the West, Midwest, and the South in a search for a national infrastructure policy.

In constructing that policy, we can build upon the significant steps undertaken in our State of New York. Public officials here have understood the repair bill will be high but that the cost of inaction will be far higher.

Consequently, you have seen in the past several years Governor Cuomo proposing a water finance authority and a \$1.25 billion infrastructure bond issue. You seen an \$8 billion capital program proposed by the MGA and begun.

Buffalo moving forward on its light rail system. New York City making rebuilding of its infrastructure system its top capital priority. The speaker of the assembly making infrastructure systems one of his top priorities. And New York State for the first time preparing a 5-year capital plan.

In our own part of the State and the region, Governor Cuomo, Governor Kean and the Port Authority of New York and New Jersey have proposed a bank for regional development which would harness the capital capacity of the port authority to rebuild these crumbling systems. And the port authorities have purchased half a billion dollars of new buses for the States of New York and New Jersey.

These measures will work better as part of a national commitment to infrastructure renewal. And I would like to share with you an idea that we in the Infrastructure Advisory Committee are discussing to establish a national infrastructure corporation.

This vehicle would provide for the first time at the Federal level a capital solution to a capital problem. It would create a national pool of funding by raising long-term debt in the capital markets. It would undertake capital assistance on a sustained, flexible, mul-

tiyear basis outside the fetters of the normal year-to-year appropriation and regulation processes.

The corporation would fund no projects directly. Through sales of long-term bonds, it would capitalize State infrastructure banks which would then themselves make loans for projects undertaken at the State and local level. State and local governments would prepay those loans with revenues provided by taxes or user charges, and the repaid sums would, in turn, be recycled as additional loans.

Most importantly—and this is the key to the basis on which the Governors and leaders of the Western States have said they would work with us—State and local officials, not the Federal Government, would decide which specific local targets receive funds.

Senator, it is entirely appropriate that following your sessions in Louisville and Seattle—many of the people here I think do not know that this is a part of a set of three hearings conducted around the country as part of this effort—that the Joint Economic Committee conclude in New York, chaired by yourself.

Here we have a State and a region whose economic future and competitiveness depend upon rebuilding the infrastructure. Here we have a Governor who has made capital construction the centerpiece of his economic program and cooperation and coalition building the hallmark of his governmental style. And here we have an opportunity to reach out to other States in a common effort to business, to labor, to citizens, and together to recognize the capital construction crisis and take the steps necessary to solve it.

Thank you very much, Senator. I would be glad to answer any questions if you have any.

[The prepared statement of Mr. Goldmark follows:]

## PREPARED STATEMENT OF PETER C. GOLDMARK, JR.

Good morning. I am Peter C. Goldmark, Jr., Executive Director of the Port Authority of New York and New Jersey. I appear before you today, however, in my role as vice chairman of the National Infrastructure Advisory Committee to the Joint Economic Committee of Congress. The advisory committee has been established to help guide the National Infrastructure Study being conducted by the Joint Economic Committee in conjunction with the Graduate School of Public Affairs at the University of Colorado. Former Congressman Henry Reuss chairs the advisory committee and Lee White, Vice President of Smith Barney, serves as my counterpart from the west.

We are now confronted by major deterioration in our nation's infrastructure -- its systems of highways, bridges, mass transit, water, sewer and other basic capital facilities. The evidence, unfortunately, is all about us in the form of pot-holed streets, closed bridges, subway failures, watermain breaks, and countless other examples. The Federal Highway Administration estimates that one-fifth of the relatively new Interstate System is in need of immediate repair and that nearly half of the nation's 560,000 bridges are structurally deficient or functionally obsolete. The United States Environmental Protection Agency states that nearly half of the nation's communities are precluded from economic development opportunities by virtue of their obsolete and overburdened sewage treatment facilities. Various magazine, newspaper, radio and television pieces have cited these problems and more, and the debate has shifted from whether a problem exists to measuring its true extent and to determining what can and should be done about it.

As to the extent of the problem, estimates are wide ranging, reflecting to a large degree the relative lack of collective data in this area. Depending

on what is included in the estimate and what the time-frame is, dollar-figures can range from a national need of several hundred billion to several trillion. Analysis that we have done at the Port Authority on needs related to the five basic life-support systems I mentioned earlier leads us to conclude that some \$500 billion will have to be spent nationally over the next decade on these systems to maintain our economic well-being.

Obviously, capital spending at all levels of government has not kept pace with the reinvestment levels required. Information that is available shows a flat or declining level of investment over the past decade. This pattern is true whether one looks at all public capital spending or focuses on just the investment in the transportation and environment categories. As a percent of GNP, infrastructure investment has been in steady decline since 1970.

Preliminary data that has been gathered relating to the JEC/University of Colorado study show similar patterns of underinvestment and need. Perhaps it is appropriate, with the foregoing as a backdrop, to tell you about progress on the study and what we hope to accomplish with it.

First, I must say that I am particularly honored to be a part of such an important effort. In addition to our distinguished advisory committee chairman, Henry Reuss, and business leader and fellow vice chairman, Lee White, we have an outstanding committee made up of governors, mayors, corporate leaders and representatives of the academic community. What began last year as a relatively modest effort -- involving just the states of Colorado, Indiana, New Jersey and Texas -- has grown dramatically and now involves twenty-two states representing every section of the continental United States. Academic institutions in each of the 22 states are currently in the process of preparing infrastructure case studies, many of which have now been drafted or completed. The

National Advisory Committee to the Study held an initial policy meeting last spring and has begun to establish the framework for preparing a national infrastructure agenda. As you know, in addition to today's hearing, the study has been a focal point of two other JEC regional hearings -- one held in Louisville, Kentucky, and one in Seattle, Washington. Early this fall, three regional retreats are scheduled across the country involving private and public sector leaders in an attempt to achieve some consensus on this agenda. The advisory committee will then meet again in late October to review the final report. The effort will be capped, we hope, with a final hearing in Washington, probably in November.

Let me share with you some preliminary findings from the study:

- Data on infrastructure conditions and capital needs is fragmentary and difficult to come by. The study has faced many methodological problems in putting this information together. At the same time, the study has served to galvanize many states into more systematic processes of evaluation and and capital planning.
- There is often as much variation in conditions and needs within regions of the country as there is between regions. Contrary to popular belief, rehabilitation of capital assets is a major concern of the West as well as the East. This circumstance may well help diffuse the regional infighting we often experience in the allocation of public works capital program funds and in the establishment of infrastructure policy.
- As to national need in the 17 year time-frame (1983-2000) the study is focusing on, the preliminary results from the state case studies that have been prepared so far indicate a gap of \$300 to \$400 billion

- between what is needed and what is now projected to be available. On an annual basis this gap is approximately \$21 billion -- not insurmountable, but large enough to require new approaches.
- Virtually all states experience a gap between needs and resources; excluding some of the larger urban areas, the state-reported gap ranges between \$4 and \$18 billion. Some 60% of the needs in all states relates to highways.
  - Federal budget cuts have generally had a negative impact on the states' capital programs. The most severe impact has been in the sewer area; capital programs at the smaller airports have also been hit hard.

The National Infrastructure Study, in addition to developing the needs and resource assessment contained in the twenty-two state case studies, will also examine specific institutional alternatives on the national level. One such alternative I and other members of the advisory committee find particularly intriguing is the establishment of a national infrastructure financing corporation. Let me give you some idea of why I think we need such a mechanism and how it might work.

As I have noted, the magnitude of the capital need in the basic areas of transportation, water and sewer for the nation is tremendous; where the money will come from to pay for these major capital improvements presents a significant stumbling block. State and local government, who have historically shouldered the largest share of infrastructure investment, now face severe fiscal pressures. At the federal level, the magnitude of the current and projected budget deficits poses serious practical difficulties for the enlargement, if not the continuation,



of federal public works construction and grant programs. Yet our infrastructure needs must be met if the economic and social vitality of this nation is to be maintained.

To meet this challenge, it may be time to institute a new capital investment vehicle that could spread the infrastructure renewal costs to users and taxpayers alike, that could call upon the collective resources of all levels of government in this effort and that could serve as a national rallying point for meeting this issue head on. Any new financing arrangement must be sustained, long-term and flexible; it must create an effective and enduring federal-state-local partnerships; and, it must assign primary responsibility to state and local officials who are most familiar with infrastructure conditions, needs and overall resources.

As I mentioned a moment ago, one alternative for generating the needed capital within the context of a federal-state-local partnership would be the creation of a federal financing entity -- the national infrastructure corporation -- that could create a pool of capital dedicated to infrastructure renewal. This new federal corporation would fund no projects directly. Its purview would be restricted to the basic core infrastructure systems I have described previously. This corporation could issue long-term bonds and use the proceeds to capitalize state infrastructure banks. The state banks could use their capital to make loans for infrastructure projects being undertaken by state and local governments. If the federal government reimbursed the national infrastructure corporation for the interest costs on these bonds, the loans could be interest-free. State and local government would repay the loans with revenues provided by taxes or user charges levied on the beneficiaries of the infrastructure improvements, and the repaid sums would be recycled as additional loans. Thus, at minimal

cost to the federal government, a sizable and reliable pool of capital would be created that would provide state and local government with a low-cost option for meeting their ever-increasing infrastructure needs.

This option and other proposals need to be considered, and I would hope the agenda produced by the National Infrastructure Study will spur a variety of federal initiatives.

Let me make it quite clear, however, that we here in New York should not rely solely on any new federal financing entity, no matter how attractive, to be an infrastructure panacea. And, in fact, we are not. Several programs relating to infrastructure renewal in the State are in place, and several major proposals are being considered. Let me cite several of these for you.

First, the City of New York, in rebounding from the fiscal crisis of the mid-1970's, now has a capital program that approaches nearly \$2 billion in annual expenditures. A sizable portion of this amount is now being financed with City debt. Moreover, a majority of the budget funds is devoted to the rehabilitation of existing facilities.

Second, with some able cooperation from State, local and federal government leaders, the Metropolitan Transportation Authority has put together an innovative capital renewal program amounting to some \$8 billion and holding the promise for New Yorkers of a new era in mass transportation reliability and quality. This program relies heavily on the resources of State residents.

Third, a proposal has been made to permit the greater use of revenue bond financing for water and sewage facilities in cities throughout the state. Here, increases in water and sewer user rates would pay for the amortization of the authority bonds, and no federal assistance is involved.

Fourth, before the New York State voters this November will be a proposal for a \$1.25 billion infrastructure bond issue that would finance a host of highway, bridge, transit and port projects by both providing for the local share on federal grants and helping to pay for other State and local projects.

Fifth, and closer to home, the Port Authority, through the proposed Bank for Regional Development, stands ready to assist both New York and New Jersey with the financing of vital infrastructure projects. As outlined in the recent agreement between the two state governors, the Bank for Regional Development would be capitalized by revenues generated through rental income associated with the World Trade Center, revenues from increased Hudson River tolls and other sources. I might add that this proposal is in addition to some \$440 million in buses and bus-related equipment that Port Authority has or will be making available to both states and which has been used as a match to federal grant funds.

These proposals illustrate some of the ways that public officials in our State are responding to the infrastructure crisis. These imaginative programs reflect a welcome recognition of the extent of this problem, but, of course, a great deal of work remains to be done -- both in New York State and the nation.

Advocates of infrastructure renewal must make clear that the key question we face is not whether, but when. Either we take a farsighted view and initiate now a sustained program of investment -- as we have begun in New York -- or we delay the day of reckoning, thereby increasing the price tag for eventual renewal, undermining our nation's ability to compete and jeopardizing public health. Breakdowns in our basic life-support systems must be viewed not as isolated events, but as previews of coming and greater disasters unless we launch a comprehensive rebuilding campaign.

Senator D'AMATO. Thank you very much, Mr. Goldmark.

Maybe we will hear from Professor Zimmerman. Professor, if you could summarize your statement, I would be deeply appreciative, and your entire prepared statement will be put into the record in its entirety.

**STATEMENT OF RAE ZIMMERMAN, ASSOCIATE PROFESSOR,  
GRADUATE SCHOOL OF PUBLIC ADMINISTRATION, NEW YORK  
UNIVERSITY**

Ms. ZIMMERMAN. As I am sure you all know, attention has been drawn to the needs of deteriorating infrastructure facilities, and I think the current focus is upon developing estimates of need as a basis for evaluating financing alternatives.

Now, I am going to be summarizing some of the very preliminary results of a 10-week study estimating infrastructure needs in New York State. The New York State study as Mr. Goldmark mentioned, a multi state study for the Joint Economic Committee. A preliminary summary report will be available for the hearing record, and the final report will be available from the Joint Economic Committee.

I would like to make one comment based on some new information that EPA had provided to me late yesterday. Some of the wastewater treatment needs estimates should be moved from the 1983-87 category to the 1988-2000 category. The total over the 1983-2000 period remains unchanged, which is the main point. You do have the corrected version in the report you have now.

I have been concentrating on water supply, wastewater treatment, and transportation. In each area, I have generated new estimates, where I have been able to get good data on inventories, condition, and so forth. In lieu of that detailed information, I have used existing estimates where they have been well backed up.

The preliminary findings of the study are as follows: In the three infrastructure categories, total needs over the next 5 years stand at about \$40 billion. The total to the year 2000, which is the key figure, is about \$84 billion. This \$84 billion is equally divided between the 1983-87 period, and—assuming all those repairs are made—the 1988-2000 period.

Now, in the area of water supply, obviously the most eye-catching project has been the third water tunnel, designed as an alternative route for New York City's two water tunnels. However, this transmission project should not overshadow the considerable problems with the next largest category, which is the distribution system.

There are leakages that I have estimated throughout the State just in the metered systems of 113.5 million gallons a day outside of New York City. In New York City breakage rates for pipes have increased about 60 percent over the last 3 years, according to the Corps of Engineers. To the extent that age is an indicator of distribution system problems, the median years of construction of the pipes in the large urban areas, you know, are quite high: Binghamton, 1915; Albany, older than 1929; Buffalo, 1923—Buffalo has a breakage rate of 250 per 1,000 miles per year—and Rochester, 1873 to 1900.

Then there is a problem with water treatment, that is, treatment of water supplies. An estimated 2.2 million people are served by water supplies that contain organic contaminants. They primarily rely upon ground water; about a third of the State relies upon ground water.

**Wastewater treatment:** There are about 535 systems that are discharging something like 3.4 billion gallons per day into the State's waterways. According to the State, about a quarter of those systems are operating below what is generally required by the Federal Government for secondary wastewater treatment.

The USEPA has made other estimates: Most of the facilities Statewide, a large number of them, have been operating below what is considered to be accepted as secondary treatment.

In the State's construction grant program for wastewater treatment, applications for seven large facilities in the State account for about half of the almost \$1 billion of eligible construction grant costs as they stand right now. These systems are: Rochester; North River; Red Hook; Coney Island; Owls Head—all of those were in New York City—Rockland County; and Glens Falls, in that order.

**Highways:** There are 109,706 miles of roadways in this State owned by State and local jurisdictions; 15 percent are deteriorated and 70 percent are in fair condition. Now, that figure includes local as well as State roads.

**Bridges:** Of the 19,647 bridges in the State, 42 percent are deficient. Non-State bridges have a much higher percentage of deficiency than State bridges, except that the State bridges are becoming deficient at a much faster rate. As one might expect, deficient bridges are largely found in and around older urban areas.

Deficiency has been found by empirical studies conducted by the State to be clearly a function of bridge age. In a sample of over 6,000 bridges inspected in 1980, the median year of construction was about 1956,

And then there are the other categories: Buses and other forms of mass transit, which I think are adequately covered in the preliminary summary report. The buses and commuter rail figures are considered minimum estimates and do not include some of the ancillary facilities associated with the improvements.

[The prepared statement of Professor Zimmerman follows:]

## PREPARED STATEMENT OF RAE ZIMMERMAN

## INTRODUCTION

Recognition of the nation's existing infrastructure problems has focused attention upon estimates of the magnitude of these needs and the ability of existing financial resources to meet them. Infrastructure improvements for New York State are estimated here in the areas of water supply, wastewater treatment, and transportation as part of a multi-state study of nationwide infrastructure needs. Estimates of infrastructure rehabilitation needs for public systems, excluding system expansions, are based upon existing data on the current inventory, its condition relative to currently accepted levels of performance, and unit costs of rehabilitation. A more comprehensive assessment of needs based upon demand, technology and service preferences and tolerance limits is currently precluded by data limitations and uncertainties. Population changes are a critical element of a more comprehensive analysis of the demand for infrastructure. These changes are projected to be very modest in New York State through the Year 2000, according to the U.S. Department of Commerce, and thus, may not be a major factor influencing infrastructure demand statewide. The projected average annual rate of increase in population is less than 2 percent between 1985 and 2010. Table 1 summarizes the estimates of needs and the near-term financial shortfall, and Table 2 gives some selected indicators of inventory characteristics and condition in the infrastructure categories covered.

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Note: For detailed references and citations, see the main report. This is a preliminary report, and the final version will be presented to the Joint Economic Committee.

Table 1

## SUMMARY OF INFRASTRUCTURE NEEDS AND EXPENDITURE GAPS IN NEW YORK STATE

Infrastructure Category	Needs Estimate			1983-1987 Shortfall	
	I. Total	II. 1983-1987	III. 1988-2000(a)	IV. Resources(b)	V.(c) Shortfall
(in billions of 1982 dollars)					
Water Supply (Rehabilitation of systems serving over 75% of the population)	7.2	3.3	1.0-3.9*	0.8-1.1	2.5-2.2
Wastewater Treatment	17.3(d)	7.1	10.2	5.9(e)	1.2
Transportation					
Highways	25.5	14.1	11.4		
Bridges	20.1	8.9	11.2		
Subtotal	45.6	23.0	22.6	20.3(f)	2.7
Mass Transit					(g)
Subways	10.4	5.2	5.2		
Buses	1.6+	0.6	1.0		
Commuter Rail	0.7+	0.7			
Rail	0.3+	0.3	---		
Airports	0.6+	0.6	---		
GRAND TOTAL	83.7	40.8	42.9		

Notes: (a) The 1988-2000 estimates assume that 1983-1987 needs have been met.

(b) These are aggregate resources over the entire five year period, based usually upon projected expenditures.

(c) The shortfall is calculated as the difference between columns IV & V

(d) This total has been increased to \$19.5 billion because of an additional combined sewer overflow correction.

(e) Revenues expected from the construction grants program are of the same order of magnitude as previous expenditures, and are therefore not likely to alter the shortfall.

(f) Expected revenues from the Highway Act and motor vehicle fuel taxes are likely to diminish the estimated shortfall.

(g) Shortfall calculation precluded since resource data only available for a three year period, too short for projection purposes.

\*The higher estimate assumes stages 3 and 4 of the Third Water Tunnel are constructed.

Table 2

SUMMARY OF SELECTED INFRASTRUCTURE INVENTORY AND CONDITION  
CHARACTERISTICS, New York State: 1983

Infrastructure Category	Inventory	Condition
Water Supply	No. of Systems: 12,503 Production Capacity: 3.68 BGD Population Served: 18.05 Million Population Served by Ground-water: 6 Million No. of Dams: 1400	Minimum Population Affected by Organic Contaminants: 2.2 Million No. of Dams in High Hazard Category ("C"): 357 Minimum "unaccounted for water": 113.5 MGD
Wastewater Treatment	No. of Systems: 535 Total Flow: 3.4 BGD Ave. Flow per Plant: 6.3 MGD	Percentage Operating at Less than Secondary: 25.8%
Highways	Miles of Road: 109,706 (1982) Vehicle Miles Traveled: 79.1 billion (1981)	Mileage Deteriorated: 16,249 (15%) Mileage in Fair Condition: 76,813 (70%)
Bridges	Number of Bridges: 19,647	No. of Deficient Bridges: 8,192 (42%)
Subways (NYC)	No. of Cars: 6500-6700 Passengers Daily: 3.5-5 Million Miles of Track: 710-747 Route Miles: 244 Stations: 479-487	Percentage Exceeding 35 years of Age: 10% (1979)
Buses	No. of Buses: 8173 (1982) No. Systems: 31	No. Exceeding 12 years of Age: 4,602 (1982)
Rail	No. of Major Systems: 6 Route Miles: 4160 Tonnage Carried: 36.4 Million	

References:

Water Supply:

NYS Department of Health, "Summary of Public Water Systems" (Albany, N.Y.: 6/8/83 retrieval); NYS Department of Environmental Conservation, Division of Water, "Dam Safety Project" (Albany, N.Y.: 6/29/83 retrieval); NYS Department of Health, "Organic Chemicals and Drinking Water" (Albany, N.Y.: c.1979).



**Wastewater Treatment:**

NYS Department of Environmental Conservation, Division of Water, "Descriptive Data of Sewage Treatment Systems in New York State" (Albany, N.Y.: June 1983).

**Highways:**

U.S. Department of Transportation, Federal Highway Administration, Highway Statistics-1981 (Washington, D.C.: 1982); estimates based on U.S. DOT and NYS DOT data.

**Bridges:**

NYS Department of Transportation, "Bridges in New York State. Condition Rating Trends" (Albany, N.Y.: May 1983).

**Subways:**

New York City, Office of the Comptroller, "Rebuilding During the 1980's" (New York, N.Y.: May 1979); New York City, Department of City Planning, "Capital Needs and Priorities for the City of New York" (New York, N.Y.: January 1983).

**Buses:**

U.S. Department of Transportation, Urban Mass Transportation Administration, "National Urban Mass Transportation Statistics" (Washington, D.C.: November 1982).

**Rail:**

NYS Department of Transportation, Rail Division, "NYS Rail Plan Annual Update" (Albany, N.Y.: January 1983); "NYS Rail Preservation Program Annual Report" (Albany, N.Y.: September 1982).

## INFRASTRUCTURE NEEDS ESTIMATES

Approximately \$40.8 billion will be needed in the near term, between 1983 and 1987, to improve water supply, wastewater treatment, and transportation facilities serving most of the State's population. Assuming that these improvements are implemented, another \$42.9 billion will be needed (exclusive of rail and airports) in the period from 1988-2000. (These needs are not shortfalls.)

- Over the next five years the expenditures of \$3.3 billion for water supply will rehabilitate or replace supply, treatment, distribution and storage facilities. These needs are currently identified in engineering reports for community water systems serving about three-quarters of the State's population. Included in the estimate for water supply, and accounting for the largest share of the total, is the completion of Stage 1 and part of Stage 2 of New York City's Third Water Tunnel, which would allow maintenance of the City's existing tunnels, expansions in the supply, and improvements in water pressure.
- An expenditure of \$7.1 billion is the U.S. EPA's estimate for the investment needed to meet the backlog of needs in New York State for the secondary wastewater treatment (biological degradation) requirements of current water pollution control legislation. Legislation requires these needs to be met by 1987.
- An investment of \$23.0 billion will provide for improvements in highways currently rated as or estimated to be deteriorated or in fair condition, totalling about 85% of the road system, and improvements in about 42% of the bridges currently rated by the State as deficient.
- An investment of \$5.2 billion in the subway system will provide for about 1000 new subway cars, the rehabilitation of others, and track and ancillary facility repairs in New York City.
- \$0.6 billion will provide for the replacement of 4600 buses that will be over 12 years old, the age recommended by the Urban Mass Transportation Administration (UMTA) for replacement. (Excludes ancillary facilities.)
- Additional investments will provide for commuter rail improvements, expansions in the highspeed rail system westward and the construction of a Trailer-on-Flat-Car Facility (TOFC) in New York City to provide a railway to highway linkage for freight, and various capacity and other improvements in the State's airports.

Given the expenditure patterns that have existed in the past, a shortfall or gap is expected to be about \$2.4 billion for water supply, \$ 1.2 billion for wastewater treatment, and \$2.7 billion for highways and bridges during the five year period. Shortfalls in mass transit, rail, and airports are difficult to estimate given the short period of time (3 years) for which expenditure and revenue data exist for these facilities.

#### INFRASTRUCTURE INVENTORY AND CONDITION

##### **Water Supply**

According to New York State's inventory of water supply systems, approximately 12,500 systems exist in the State with a production capacity of 3.68 billion gallons per day for the State's entire population. Approximately ninety percent of the population is served by public water systems that provide 3.2 billion gallons a day.

The components of a water supply system include sources, transmission to a central distribution point, treatment, and storage and distribution to bring water to the ultimate users.

- The supply system in New York State consists of some 1400 dams (not all of which are for water supply), reservoirs, well fields, and surface water intake structures. New York State's Dam Safety Project, an extension of the National Dam Inspection Program, has classified the 1400 dams as to potential hazard (by virtue of location) and structural stability. Some 385 dams are in the high hazard category, potentially

endangering lives in the event of a failure. Of these, a large number have structural problems. Unfortunately, no unified cost estimates are available to estimate the rehabilitation needs for these facilities statewide.

- The largest transmission project currently underway in the State is the Third Water Tunnel. It is designed to augment New York City's two water tunnels that connect reservoirs with the City's distribution system. The Tunnel, currently designed to be completed in four stages, will enable the two existing tunnels to be maintained, water pressure to be improved, and supplies to be expanded.
- The need for large scale expansions in water treatment systems has been underscored by the discovery of potentially toxic organic substances in drinking water. This is exacerbated by the fact that 2.2 million people in the State depend upon groundwater for their water supplies, where many of the organic chemical problems occur. Water treatment requirements are based upon the National Interim Primary Drinking Water Regulations as well as the State's Public Health Code. While a statewide inventory of treatment systems does exist in the State to comply with federal requirements under the Safe Drinking Water Act, no systematic assessment of overall facility deficiencies exists as a basis for a statewide needs estimate.
- Water supply planning, undertaken in New York State for more than a couple of decades under various auspices, has been oriented toward the development of supplies with little comprehensive attention to

distribution systems and related facilities. Concern over the distribution systems stems from breakage rates occurring in excess of rule-of-thumb engineering guidelines and leakages, or "unaccounted for water", indicated by recorded differences in production and consumption figures for metered water systems. Known leakage throughout the State (exclusive of New York City) is estimated at 113.5 MGD, or almost ten percent of the existing non-New York City production capacity. Breakage studies have been conducted under Section 214 of the Flood Control Act of 1965 and Section 22 of the Water Resources Development Act of 1974 for large urban areas. A statewide inventory of breakage is not available, and the urban area studies need to be expanded statewide. The study of the New York City water distribution system for the U.S. Army Corps of Engineers concluded that the breakage rate has increased by sixty percent over the last three years. The study pointed out that age of the pipes was not as significant a factor as stress from construction and use of the streets, implying that management practices are as significant a factor as rehabilitation.

A comprehensive understanding of inventory and condition characteristics of the State's water supply is precluded to a large extent by the decentralization of water supply development. Priority systems and consistent application of performance indicators are needed at the State level.

#### **Wastewater Treatment**

The development and construction of wastewater treatment systems currently

responds to federally approved state water quality and facility standards. A statewide facility inventory by level of treatment is conducted every two years by the New York State Department of Conservation. The current inventory estimates that 535 facilities exist in the state discharging a total of 3.4 billion gallons a day (BGD). Of this total, a quarter was operating at less than secondary treatment (which is a biological degradation process), required by the Federal Water Quality Act. This is only a minimum estimate of the need for facility upgrading, since the number of systems currently designed to operate at secondary treatment but aren't is not known directly. The U.S. Environmental Protection Agency needs survey identifies the largest categories of need (in terms of dollars) as the correction of combined sewers, major sewer system rehabilitation, and secondary treatment in that order.

The largest source of funds for wastewater treatment facility construction is provided under Section 201 of the Clean Water Act. This program has typically provided a 75 percent federal share and a 25% state and local match, but as of October 1, 1983, the federal share will be reduced to 55%. Facility applications under that program currently total \$5 billion in New York State. Between 1972 and May, 1983, New York State had received a total of \$4.1 billion under the program, and is expected to receive \$214 million each year for the next two fiscal years.

### **Transportation**

Highways. In 1981 New York State ranked second nationwide in total population and third in the total number of vehicle miles traveled, which

amounted to 79.1 billion miles. This increased to 80.5 billion miles in 1982. Total highway mileage in the State is 109,706. Town and county owned roads account for the largest share of the total. Over the last six years, the network has expanded an average of about 166 miles a year.

The condition of roads is measured in terms of (1) the pavement surface and road base, and (2) the capacity of the roadway to sustain traffic, measured in terms of the ratio of volume to capacity. Federal ratings for the first measure, pavement condition, are categorized into deteriorated, fair, good or unpaved. Based on Federal, State and other data and analyses, 16,249 miles (15%) of the total road network were actually rated or estimated to be in deteriorated condition and another 76,813 miles (70%) were rated or estimated to be in fair condition. Since condition, and hence, rehabilitation costs, of non-Federal aided roads was not available, it had to be estimated. The estimates for non-Federal aided roads assume that between 1983 and 1987 deteriorated roads will receive an asphalt cover at a unit cost of \$125,000 per mile, roads rated in fair condition will receive a chip seal coating at a cost of \$35,000 per mile, and unpaved roads will require maintenance amounting to \$15,000 per mile. Between 1988 and 2000, all non-Federally aided paved roads are assumed to get two treatments of chip seal, and unpaved roads get two maintenance treatments.

Major revenue sources for both highway and bridge needs are expected to be from the Surface Transportation and Assistance Act of 1982 and from motor vehicle fuel taxes.

Bridges. There are currently 19,647 bridges in New York State of which 36.7 percent are state-owned. An extensive bridge inspection and rating program has been undertaken in the State since 1977. Based on a rating scale of 0 through 7, bridges with scale values less than 5 are considered deficient. The scale is based upon visible deterioration and changes in load bearing capacity, and does not measure certain types of deficiency, such as those related to weaknesses in material or design. In 1983, 8,192 or 42% of the bridges were deficient. About two-thirds of these deficient bridges are at the very top of the deficient category, i.e., have scale values close to 5. Non-state owned bridges have a higher proportion of deficient bridges than state-owned bridges, however the percentage of deficient bridges has been rising faster in the state-owned category than in the non-state owned category. In spite of the State's ongoing bridge repair program, the percentage of deficient bridges continues to rise in both ownership categories. The State estimates that the rate of slippage of a bridge in the rating scale is about 0.122 points per year, which means that by the Year 2000 the bridges not repaired in 1983-7 that have ratings of 5 or above, will require repair.

Subways. The major subway system in New York State is in New York City. The City's two systems operated by the New York City Transit Authority and the Staten Rapid Transit Authority (SIRTOA) have between 6500 and 6700 subway cars serving between 3.5 and 5 million passengers daily, along 710-747 miles of track. There are between 479 and 487 stations as well in the system. The condition of the system is primarily gauged by the age of the cars and tracks. The UMTA threshold age of 35 years for cars and 20-30 years for



track is used as a general guideline, though in the case of cars, performance and usage can considerably affect this, and in the case of track, the shape of the track can alter the lifetime. These age criteria form part of the basis for the needs estimate. Additional trackwork necessitated by recent derailments may exert an additional demand for subway expenditures during the 1983-7 period.

Buses. In 1981 UMTA reported that 8,173 buses were being run in the State by 31 bus systems each operating more than five vehicles per year. About two-thirds of the buses are located in New York City. As in the case of subway cars, age is the major indicator of bus replacement. The UMTA guideline for buses is 12 years. In 1983, 4,602 buses or 56 percent exceeded the 12 year guideline. The replacement cost for a bus is highly variable depending upon its capacity. According to the New York City Transit Authority, the cost of a Grumman Flexi bus is \$103,000 and a GM bus is \$150,000 including the cost of a chair lift for the handicapped.

Rail. The six major rail systems in the State currently cover 4160 route miles, of which Conrail accounts for almost two-thirds of the total. The five carriers, classified by the Interstate Commerce Commission as Class I carriers, since their revenues exceed \$50 million per year, carried 36.4 tons of freight in 1980. Once again Conrail dominated the picture. Rail needs articulated by the State include the expansion of the existing high speed rail network westward, restructuring some of the railroads, and improvements in freight service in the downstate area by constructing a railway - highway freight link or Trailer-on-Flat-Car facility (TOFC) at the Harlem Rail Yard.

Airports. The two airports in New York City, JFK and LaGuardia, account for two-thirds of the estimated needs for airport facilities in the State. Building capacity is a major constraint at JFK, and LaGuardia is also operating at capacity. Needs for other airports in the State have been formulated in terms of anticipated federal allotments rather than in terms of a comprehensive needs assessment. Buffalo and Syracuse airports account for the largest share of the total of upstate airport needs.

Senator D'AMATO. Thank you very much, Professor. Let me indicate to you obviously the chore you have undertaken is a very difficult, complex one, and we expect that you would have some additional movement projections by the time the final report is issued. And we thank you for your undertaking of this massive study.

If I might just address Mr. Goldmark, Pete, I am wondering if you would comment again with some more specificity as to how you envision the long-range capital program that you talked about. If the Federal Government or a Federal bank would become involved in infrastructure, how would this compare to the New Jersey bank that you are working on? Do you think the creation of that type of New Jersey regional development bank would be something that New York should also explore?

Mr. GOLDMARK. Let me respond to that question, Senator.

Senator D'AMATO. Just one other. Do you see the need for the development of additional dollar resources? If so, what would those sources be? How do you think you'd go about funding this bank?

Mr. GOLDMARK. I think we are talking about a modest amount of additional dollars at the Federal level. The key thing, though, as you know, Senator, the Federal Government has never had a capital budget.

Now, in the days when a construction project, or a sewer plant, or a bridge, or rebuilding an existing one took 2 years and there weren't 80 permits, 40 hearings, and 15 reviews and there were relatively few Federal grant programs, that was not a problem.

The average life of most of these capital reconstruction programs now is going to be 6, 8, 10 years; and to have that tied up in the annual appropriation process, changing regulations by the executive branch agencies, really begins to make a mockery of the capital planning process.

The idea that several of the States are talking about and that we've been developing would be very simply this. You would create a long-term funding mechanism at the Federal level. It would generate its capital by selling government bonds, just as the other capital funding mechanisms of the Federal Government do.

They would not fund projects directly. They would use this capital to capitalize, if you wish, by investing in or buying the obligation of a series of State funds. They might call them a bank as New Jersey did. Other States would probably, Senator, just prefer to call them their ongoing capital program.

Senator D'AMATO. So it's not necessary in the plan that you envision for each State to take on its own development bank.

Mr. GOLDMARK. No, sir.

Senator D'AMATO. Just that it have access to the national bank which would be the guarantor of its obligations.

Mr. GOLDMARK. You are correct.

Senator D'AMATO. How do you have long-range planning if you have to appropriate funds every single year? There's no continuity.

One of the problems that we dealt with, in terms of mass transportation and capital funds, was: How could a local entity, whether it be bus authority or the MTA, plan accurately if it didn't have a dedicated source of money that it could count on every year?

So this is what you're talking about as a dedicated source of revenue that would flow to this bank.

Mr. GOLDMARK. True. Identified; limited; and frankly, Senator, not for everything under the sun. The States and we who are talking together are talking about the hardcore systems. We're not talking about rebuilding every hospital, every school building and every government building in this country.

Senator D'AMATO. What systems would you call the hardcore systems?

Mr. GOLDMARK. I would call it the core infrastructure system: roads; bridges; transit; water supply; and sewage.

Senator D'AMATO. Have you had an opportunity to discuss this proposal with the Governor's staff and with his transportation people and others who would be involved intimately on the infrastructure question?

Mr. GOLDMARK. The Governor's staff is familiar with these ideas. Very frankly, Senator, the State of New York, in particular, is more advanced in their thinking on this than some of other States in the Rocky Mountain States and the West that we're working with on this.

The key to the interest—and I cannot tell you what a change this is from 5 years ago when the Western States were saying to the East, "Don't bother us with your falling down subways. We want to do our water projects." The key change is for the Western Governors to be standing up and saying, "We want to build a political alliance with the East in developing national infrastructure capital policy at the time you've just suggested"; and New York State is much more advanced in thinking about capital planning and capital funding.

I would say the major part of our discussions are with the States in the West and the Northwest; and, as you know, your colleagues on this committee held hearings in Seattle and Louisville with representatives of those States.

Senator D'AMATO. Let me thank you so very much, Pete, for your very thoughtful and very stimulating presentation. It may very well channel the way of the future for Federal participation in our long-term project needs.

Thank you, professor.

We have, now, the Governor from the State of New York, Governor Cuomo.

Good morning, Mr. Governor.

Governor CUOMO. Good morning, Senator.

Senator D'AMATO. Where are my glasses? He does have more hair than I do.

Governor, let me welcome you and thank you for your participation, and not only your participation but that of your Commissioners and people who have been most helpful in bringing about these hearings and most cooperative in furnishing to the Joint Economic Committee of the Congress the various facts, et cetera, to help us determine some of those needs and the priorities here in our State of New York.

**STATEMENT OF HON. MARIO M. CUOMO, GOVERNOR, STATE OF  
NEW YORK**

Governor CUOMO. Thank you, Senator; and thank you very much for the opportunity to address you this morning.

Let me, before I give you my remarks, join with you in mourning the passing of your colleague, the great American, Senator Henry Jackson. I want you to know and Senator Moynihan, who I know is not here only because he is with the family of Senator Jackson, that the entire State sends its condolences to Senator Jackson's family. It is a great loss for all of us.

And you, Senator D'Amato, I want to thank personally for holding these hearings. We appreciate in this State the work you've been doing to make sure that this State of New York gets its fair share of Federal revenues. On the issue of infrastructure, for want of a better word, as on many other issues you have been an active and effective advocate for New York State. Along with Senator Moynihan, you've given New York strong and productive representation in Washington, and we are very, very grateful to you.

And whenever, as occurs often, I am mistaken for you, Senator D'Amato, I always regard it as flattery.

I'd like to recognize, as well, Senator Moynihan's effort to focus the Nation's attention on the need to rebuild America. His bill, S. 23, would establish a framework for setting capital priorities and making sure that Federal investments in public works are chosen sensibly and fairly.

I understand that Senator Moynihan along with Senators Bob Stafford and Pete Domenici will soon be introducing a new bill authorizing a new multiyear Federal program to help States establish revolving loan funds of banks for infrastructure finance. These bills, as well as the excellent work now being done by the Joint Economic Committee under your leadership in preparation for additional legislation are evidence, I think of a growing awareness in Washington of the vital role that public works play in strengthening our economy.

I'd also like to pause long enough to acknowledge in a special way the efforts of the National Coalition on Infrastructure Financing that's been created in conjunction with your committee's study. The coalition, for which port authority executive director and my old friend Peter Goldmark has been a particularly effective spokesman, has helped focus attention on the need for any new Federal infrastructure financing program to be carefully integrated with ongoing State efforts.

A few years ago, of course, it would have been hard to imagine this hearing occurring at all. Few people gave much thought to the condition of our roads and bridges, our railroads, ports, and water systems. We simply used the magnificent systems already in place, systems that had taken generations to construct; and when public construction projects were thought about at all it was usually as a device for priming the pump, providing jobs and income during periods of economic recession.

During the last decade this perception has changed dramatically. In 1980 a study by the Council of State Planning Agencies of this Nation's infrastructure was given a title that was at once evocative

and appropriate. It was entitled "America in Ruins." The recent tragedy on I-95 in Connecticut and other structural failures in New Jersey and in our own State of New York only underscore its accuracy.

Obviously, the sheer scale and size of the job of rebuilding America is beyond the resources of either the private sector or the States. That's not to say that the States have no role to play. They do. And here in New York we're putting every available resource into this work.

But only the Federal Government can draw together all the necessary resources, the massive resources to insure that the work is done and done where it is most needed.

The work, I think, is twofold. First is the absolute priority of preserving what is already in place; and, second, the development of new facilities to meet the demands of a rapidly changing economy.

Perhaps one of the Nation's most visible examples of the need for preservation is the mass transit system that serves the New York Metropolitan area. This system grew out of the congestion that in the latter part of the last century threatened to choke the growth of this area's economy.

Using its own resources without Federal help, New York State created an intricate and extensive transportation system that made this region one of the world's great markets. Yet, the system's success was allowed to obscure the need for new investments in the system.

The system worked and people presumed it would continue to work forever. Little time was spent on maintenance of repair or rehabilitation. Until a bridge fell, a bridge needed no repair. Until a train was derailed, a track needed no repair.

In any case, money was desperately needed elsewhere for a host of good and necessary causes—for the poor and for the immigrants who flocked here from abroad and from impoverished regions of our own Nation.

The inadequate spending on maintenance and rehabilitation finally had its inevitable result: the physical plant began to crumble and service to decline. This, in turn, led us back to the simple truth that had caused the construction of the system in the first place: Without reliable affordable mass transportation our economy simply cannot function.

Other cities and regions have learned the same lesson. Many of them are precisely those areas most damaged by the worst economic situation since the Depression and by the decline of our basic industries.

Now, with their physical assets deteriorated, they're faced by a cruel choice of deciding whether to improve education, for example, and assist the growing number of the homeless, the hungry, the unemployed or instead to patch together the infrastructure that is the only hope for long-range economic redevelopment. I think that is a terribly hard choice. I think it is an unfair and unwise choice.

Equally they're confronted by the same reality that the entire country faces: The revolutionary technological changes that are reshaping industries and markets, demanding new investments in education and research and development and new kinds of infrastructure.

Here in New York we've developed a strategy reflecting these realities and I'd briefly like to summarize it for you.

Our highest priority is the preservation of essential systems. The first major steps in this were the passage of the 1979 transportation bond issue and the 5-year capital improvement program undertaken in 1981 by the Metropolitan Transportation Authority.

Just this spring, we expanded the MTA program to a total of \$8.6 billion; and, although the Federal Government is providing an important share of the funding for the program, a much greater share is being borne by State and local government, and by riders.

Governor Kean of New Jersey and I recently have announced another program to advance our efforts at preserving essential systems in this metropolitan area. Under this joint program the Port Authority of New York and New Jersey will finance more than a billion dollars in capital projects over the next decade.

Still another initiative is the proposal—only a proposal—for creation of a Water Finance Authority to assist local governments in financing needed improvements. User fees would be employed to pay off the authority's bonds and to assure adequate maintenance.

The assembly of this State has indicated its interest in this proposal. We're hopeful of being able to move the issue with the Senate this year.

Now, all of these projects are vital; but even taken together they are not nearly enough. We need to make immediately available additional large amounts of money for rehabilitation of State and local roads and bridges, for transit and rail systems, for airports, for ports, and for waterways.

To achieve this we have put together the \$1.25 billion rebuild New York bond issue that won final legislative approval in the last session. I cannot emphasize too strongly how essential this bond issue is for New York.

From the Long Island Expressway and the FDR Drive to town roads in the Adirondacks the need for repair and reconstruction is no less than critical. For every bridge we rehabilitated last year, two became seriously deteriorated. Many roadbeds are crumbling. Others can no longer bear the present volume of traffic. And across the State there exists the potential for disaster.

Anyone in this State who owns a car or rides a train or a bus knows the dimensions of the job the State faces. They know that if there is work that can wait it is not this work. They know, finally, that it is a matter of common sense and public safety that requires our passage of this bond issue.

Of course, some people say that borrowing more money is not the answer; that the State is already too far indebted. But the truth is—and this surprises some people—New York's long-term debt service has decreased as a percentage of tax receipts from 5.2 percent in 1975-76 to a low of 4 percent in 1982-83. Given the schedule at which we are now retiring prior debt, the rebuild New York bond issue will not materially change this percentage, and the State's commitment to long-term debt will be well within our previously demonstrated capacity to finance.

I'm aware, as we all are in this State—those of us who are paying attention to this issue—that there are other reservations as well. These other reservations do not challenge the State's need for

a bond issue. They admit the need for it. They admit that \$1.5 billion probably doesn't go far enough.

They believe that even with the \$1.9 billion in matching Federal funds it probably does not go far enough. But they have reservations anyway, and these reservations arise, I believe, from the instinct of all of us to say, "What's in it for me?" Or, "How come this other town is getting a new bridge while the town where I live is only getting some repaved roads?"

It's a basic and completely understandable reaction. I'm sure you, Senator D'Amato, have seen it on an even grander scale nationally. But, in the end, it's self-defeating, I believe.

The simple truth is that we don't have and never will have the money to do everything at once—to resurface all the roads, to rebuild all the railbeds. We're required to choose. We have no choice. We must decide on priorities. There is no other way to begin for although \$1.25 billion is a great deal of money it is only, as we all know, a small fraction of what we actually need.

The longer we postpone this work, the longer we allow disagreements over specific projects to hold up the greater work of making a start, the more repairs will be needed, the more chance of collapsed bridges and closed roads, the more danger of accidents and lost lives, and the more expensive it gets.

Cornell University in a study indicates that if we were to put off the work we need to do now for 5 years it would become 10 times as expensive as it now is.

There is another principle at stake in this bond issue. If some areas of the State refuse to help others, if we allow the principle of regional self-interest to override the common good of the whole State, then how can New York ask the Federal Government for help? How can we ask the Nation to share its resources with us if we are unwilling to share our own resources among ourselves? How can we preach sharing when we refuse to practice it?

The truth is, we can't. And by passing a bond issue New York can give a clear sign of its determination to reject the politics of selfishness, of factionalism, or regionalism; the politics that favors the strong and punishes the weak.

On the subject of the bond issue let me pause again, Senator D'Amato, to say personally a word of gratitude to you for your endorsement of it. Your immense credibility around this State will make it a good deal easier to persuade the people of this State that they ought to vote "yes" on November 8.

Before our effort is finished, our effort of elaboration of the facts of this bond issue, I expect you, Senator D'Amato, and I will be jointed by public officials on both sides of the aisle from the Canadian border to Montauk Point.

So in this State we begin with restoration, but as I said earlier, the work cannot end there. The second element of our strategy is investing in those public and quasi-public capital facilities that we need to meet the demands of a changing economy. Air cargo, I think, provides a good illustration.

In the next 10 years, the volume of air cargo traffic in New York will double. Although only a small percentage of total tonnage, air cargo represents a larger share of the dollar volume and it is indis-

pensable to the service industries which should provide much of New York's growth in the next decade.

It is, then, essential that New York expand and upgrade its air freight capacity. This had already been identified by us at the port authority as a priority. My staff is now working with the port authority and the Department of Transportation to intensify our efforts.

State capital spending can also help force the new industrial growth in the area of joint industry/university research and development. It is now widely recognized, not just in this State or in this region but across the Nation, that a partnership among industry and the government and the universities is prerequisite for industrial innovation.

New York has committed more than \$30 million to the development of a new center for industrial innovation at Rensselaer Polytechnic Institute in Troy. Other centers for advanced technology are being developed at other universities across the State.

The third element of our capital development strategy is the creation of new employment and new opportunities for those who need them most. It's clear that the recovery that is apparently beginning will not be the traditional postrecession expansion of the entire economy. This recovery, when it occurs fully, will leave many older industries in a state of total collapse. It will leave a record number of workers without jobs, the victims of what is now called structural unemployment.

Temporary programs are helpful. One-shot expenditures, perhaps necessary. Short-range recovery policies aimed at increasing total GNP growth, perhaps useful but certainly will not solve this problem. What is needed is a commitment to changing the structure of opportunity; to creating new business opportunities in minority and low income communities; to providing transitional jobs, jobs that train people as well as employ them. The objective of these efforts shouldn't be made work, but the integration into the mainstream economy of people left outside of it and the reintegration of those—like the steelworkers of Lackawanna—who suddenly find themselves shutout after years of hard work.

In all of these efforts, and most especially in regard to infrastructure, sound planning is essential. To insure that, we've established a State Council of Fiscal and Economic Priorities to work with us on the development of the 5-year capital planning process. The council, which is chaired by President John Brademas of New York University, includes representatives from business, labor, the universities, and community organizations. It represents precisely the kind of partnership that will be needed for rebuilding the entire American economy.

Senator D'Amato, once again we're grateful for your support in this work, for the time and attention you've already invested in insuring New York has the resources that are necessary for us to rebuild New York. We're grateful, as well, to all those from President Reagan on down who fought for the gas tax and the new revenues that it provides for infrastructure repair in this State. They've been very useful.

But as Professor Zimmerman has pointed out, the final price tag for New York alone will be over \$35 billion; and despite all that's



being undertaken, despite all that New York is doing on its own, we simply do not have the resources to accomplish everything that ought to be done.

We need the long-term help and commitment of the Federal Government, not a handout but a partnership; a joint effort where the Federal Government acts as a catalyst for reconstruction much as it did in the thirties and forties when it set in motion the public works and public investments that led to the rise of the now so-called Sun Belt.

Some have suggested this help should take the form of a Reconstruction Finance Corporation along the lines of the institution that proved so successful in pulling America out of the Depression. There are other forms that Federal aid and assistance could take and all of us should be ready to consider all of these ideas. Certainly, at least, as an interim step, there should be a cohesive, unified national planning strategy for public works to replace the current hodgepodge of Federal programs.

The adoption of a Federal capital budget system, we suggest respectfully, should be a priority. We've recognized that problem and that need in the state for years. We've now done it in New York. We were able to achieve it thanks to Speaker Fink, Majority Leader Anderson, and Comptroller Regan last year. We recommend it be done nationally.

Also, it is clear that many of the existing formulas for allocating public works funding are unfair. Areas like New York, that have spent billions to build their own infrastructure, now find the Federal Government is more interested in building new systems than maintaining old ones. For example, between 1970 and 1979 while Federal water resource construction averaged \$7.49 per capita, New York received 61 cents per capita.

History, it is said, is prolog. But in the case of America's infrastructure it has become, I'm afraid, merely backlog.

The work will not wait and it will not be accomplished by the States alone or local governments alone or the private sector alone or even with authorities, but by all of us together in partnership.

Thank you, Senator.

Senator D'AMATO. Governor, I wonder if we might spend a few moments, if your schedule permits you, with respect to the bond issue, as obviously when we talk about infrastructure this becomes of paramount concern to those projects that we have outlined in the initial report of the committee that would seem that must be undertaken.

The bond issue itself calls for \$1.25 billion, but how much in additional revenues do you see being leveraged over and above that \$1.25 billion, over what period of time will those moneys be spent?

Governor CUOMO. We calculate another \$1.9 billion in a 5-year plan which when added to all the other money we've already committed gets us up around to \$7 or \$8 billion overall, and again that still is only a fraction of what we need.

I think, Senator D'Amato, that the difficulty with the bond issues so far in the State has been—inability is perhaps too strong a word because we haven't really made the effort yet, the campaign started on Labor Day—the lack of awareness that the people generally have of all of the implications of the bond issue. For ex-

ample, I think if people understood that if we don't do this, we probably cannot pick up the money that Congress has made available to us, we simply won't have the match. That in effect you'd be leaving \$1.9 billion or an awful lot of it on the table.

So the \$1.25 billion buys us another \$1.9 billion when we use some of the bond moneys for matching. We add to that other funds that will get us somewhere between \$7 and \$8 billion, all of it to be spent according to a capital budgeting plan which is now a matter of law in this state.

The plan, unlike the Federal proposal which is for 10 years, our plan is 5 years in duration.

Senator D'AMATO. Governor, as I make my rounds throughout the State since we've been out of session—and I've shared this with some who've asked me—although I support the concept of the bond issue, I perceive that there is the question of fairness, and that this is something that obviously on the national level we're continually being asked: to balance the needs of whether it's a defense effort, or with regard to the needs for programs for education or senior citizens and handicapped. None of us, obviously, would say that any of those program are not important.

Obviously, it takes place in the sense of regionalism: downstate, suburban downstate, city, upstate, central, and western New York.

How do we go about bringing about a consensus that we don't have an infinite source of money, recognizing that it's a finite to deal with a great magnitude of problems that there will be, we will address fairly, that the issue of fairness, equal, as best as we possibly can because I think that's what the citizens are looking for.

Governor CUOMO. It is obviously, Senator, an immensely complicated matter. Ideally, if you took this democratic system that we have in New York State and you let it operate in the way it was theoretically designed, the people of the State would allow us to raise \$1.25 billion to be spent as it is spent under our laws from year to year by the legislature agreeing to every penny, approving of appropriations that are recommended by the Government.

So, theoretically, the people of the State ought to have confidence in the legislators they elected and the Governor they elected to spend the moneys with notice to them at public discussions and debates, meeting of the legislature, working on appropriations, and the fairness would be evident to the people, or they could express their dissatisfaction at election time, every 2 years in the case of the legislature.

It's not an ideal system, the people don't have enough confidence in the legislature and the Governor to do it that way, and apparently what they're saying is "Look, tell us in advance where the money is going to be spent—not every penny of it because we understand a certain need for flexibility—and then we'll make a judgement on whether we think it is good for us."

That's a very dangerous procedure. It is divisive, fragmentary, and I think does not give the best view of this program's importance to the whole State. But it is a reality.

The only public official in the State that I'm aware of who took a position closer to the ideal was the mayor of Buffalo who stepped forward and said: "I know about the bond issue. I have not seen any list. I don't know exactly what they're going to give us, but I

have confidence that this bond issue is good for the whole State and I will trust the process to make proper judgment.”

Extraordinary—not extraordinary, unique—position by Mayor Jim Griffin of Buffalo. For everyone else that was unsatisfactory, and so we are now working—and have been working, the truth is—from the very first moment I proposed this bond issue have been working through the legislature to put up a list. The list will operate from specific projects, and staffs have been working on it for months.

How do you decide which projects, given that the projects in need—and the ultimate criterion is need; we’re not building new things, need for repair and rehabilitation—given that the ultimate criterion is need, and that there’s more need than you have money for, how do you allocate?

Well here’s what’s been suggested to us. New York City says between 43 and 50 percent for New York City—that was the original figure. On what basis? That’s the wealth we produce to the state treasurer.

Well that’s an interesting criterion. If you took that, you would give back all the money the people send to Washington to the States that send it, which means that poorer States would atrophy. It would mean that in this State, counties like Clinton and Essex would get so little that you wouldn’t even have to record it, because the relative contribution of wealth from those far States is totally out of proportion with their need.

So it can’t just be wealth. If we gave 43 to 50 percent to New York, you’d have to give 26 percent to Nassau and Suffolk, which now has you at 71 percent and dooms the bond issue because 29 percent is not enough for the rest of the state. So it can’t be wealth.

What is it? Well some people say miles of road in place. But then there are the people who don’t have a road outside of Utica and want Route 8, so what kind of test is that? “God helps those whom God has helped. You gave them the roads, you didn’t give us a road, now they get more money because they have the roads.” So that can’t be the test.

The point—and I can go through each criterion and I think effectively show that the criterion doesn’t work well as a matter of logic. What do you do?

We do what we do every year: you make a budget, you compromise, you deal. Nassau-Suffolk’s not going to get 25 percent; New York City is not going to get 43 to 50 percent. They’ll get something less, probably something more than they asked for originally.

Everybody will get less than they feel they want. In the end, I am hoping, that Mayor Koch and County Executive Fran Purcell and County Executive Cohalan and the contractors will all say the same thing.

It’s not what we wanted, but it’s better than nothing, and we think you’ve made an effort to be fair.

I can assure you, Senator D’Amato, to the extent that we are capable of making judgments as to balance and fairness and equity—and I think this system, this legislature demonstrated in the budget that they could make those judgments intelligently, when we finally produce this list which I hope will be next week.

It will not be a perfect list, but it will be a fair list, and I think much of the opposition will dissipate at that point.

Again, I want to underscore: Much of the opposition concedes that we need the bond issue. I have sat repeatedly with contractors, some of whom I knew from my days in practice who said, "We know you need it, we know it's not enough, we know it would be silly to turn it down, but we have to bring pressure to bear because we're trying to get more."

They want a commitment of funds for maintenance over a regular period of time, they want to be assured that we're not going to shuffle by using budget dollars and replacing them with bond dollars to take the pressure off our budget, and I've said that we won't do that.

Most of the objections have nothing to do with the merits of the bond issue. Everybody agrees that we need to protect ourselves from falling bridges and potholes, that we need the 36,000 jobs that is necessary for economic development. The brunt of the opposition is "I want more." I'm hoping we're going to be able to deal with that.

Senator D'AMATO. Mr. Governor, in the event that the bond issue is not passed, you perceive a loss of \$1.9 billion at the very least?

Governor CUOMO. Yes, I perceive—it is very interesting—to use a word that I got addicted to in the campaign, it's a very interesting scenario if you reject a bond issue. There is a group that feels that they should have the bond issue rejected and come back next year and have a bigger bond issue.

I can practically assure that group and you and everybody listening, Senator, that that won't happen. I can't believe as a practical political matter, if this bond issue goes down, that the legislature is going to come forward with a larger one.

Some people say, "Well we know the bridges may fall down the way they have in other places; we don't want the bond issue, spend it out of cash next year."

Well, that's like saying raise taxes. I can assure you of this: to the extent that I have anything to say about it, we will leave with the pledge that I made for last year, and I hope I'll be able to do it again next year, and not raise the income tax or the sales tax or the business taxes in this State.

It was an extraordinary achievement, we felt, last year. We're going to try to do that again. I think the practical possibility for next year, if you turn down the bond issue, an election year, is going to be for a lot of legislators and maybe an occasional Governor in this State, to say, "Well, if people don't want to spend money on roads and bridges, let's spend it elsewhere." Where else? Shelter allowance, education. There are plenty of needs, as you pointed out.

So I think the practical effect of saying no to the bond issue will be to set us further back than we have ever been in this State. It will not be replaced by a generous response from somewhere else.

I don't think the analogy in the prison bond issue which failed here a couple of years ago is a good one. That was a unique circumstance, that was a specific set of projects that was turned down. It was turned down by a close vote and then after that we had ossining, and an explosion of overcrowding that changed things.

Senator D'AMATO. Mr. Governor, that concerns me, and I express that today because I do have a feeling that the most important issue is the constructing of the necessary prison space.

You know, we have that syndrome: "not in my backyard." We all know we need the prison space, "but don't put it here, put it someplace else, they're not my prisoners."

We'd better address that because you and I well know the problems in the metropolitan New York area, and if we look at the upstate cities we see the same kinds of situations. We may not like to talk about it but the problem is very serious.

I feel we're in for a very, very difficult time, and you put your finger on it: The public does not have confidence in elected officials. That issue of fairness once again crops up. Then we have those officials who will work against it because they want more, et cetera, set unreasonable conditions. Maybe we have put them in an amphitheater like this and have them say, "OK, what do you want?" Have them fight among themselves and put the cameras on and see just what it produces.

Governor CUOMO. We have that. It's called the legislative session. [Laughter.]

Let me say a couple of things on that—

Senator D'AMATO. But I am very fearful. I see a bond issue needed for the construction of bridges and dams. I just think there's a lot of work to be done on the issue of fairness. No area will play second fiddle to another area.

Governor CUOMO. Let me say three quick things on that, Senator. First of all, the people of the state ought to recall that this bond issue resolution was passed by Democrats and Republicans alike overwhelmingly.

I think there were seven votes against it—or no, fewer in the Assembly, Republicans voting for it overwhelmingly. Senator Anderson is for it, Clarence Rappleyea is for it, and of course Democrats are as well.

So there was a universality of judgment in the legislature that said "we can do it fairly, and we will."

No. 2, in this State I am absolutely delighted to tell you, Senator, that we have many parts of the State that will do more than their share when it comes to prisons, especially upstate where people reached out in Watertown and Senator Stafford's northern counties and said, "We know you need prisons, we don't think they're all bad, we'll do our share." This year the mayor of the city of New York came to me and said, "We'll do our part, you give me a prison in New York City and I'll stand side by side with you." We have it: 1,000 beds in the Bronx.

Now if you think about it, if you had tried that 4 or 5 years go it would have been very difficult indeed. It wasn't easy this year, but thanks to the mayor's support we were able to get it done.

A final point. You mentioned criminal justice. I would simply very respectfully recommend this for your consideration and for discussion in Washington. It's a point I think that is often overlooked.

We are very proud of our capacity for self-help in New York State. We work very hard to help ourselves.

A lot of us think that our taxes are too high because we put such a great burden on ourselves. We don't go begging to the federal Government.

We do ask, however, for fairness, and I would ask you to consider this. Our criminal justice program derives in large measure not from just an endemic problem, we have a problem with drugs. That is an international problem.

We do not produce the cocaine. It comes past the FBI, past the Secret Service, past the Army, past the Navy, past the Department of Justice, into our State. We pay for that problem. The federal Government doesn't send us any money for police at the docks for when it gets past the Feds, they don't send us any money for the arrests we have to make for what are essentially Federal crimes. They don't send us any real money for prisons.

We have, thank God, a Constitution that allows people to move all over the United States. A lot of them move to our State and are on welfare. The Federal Government doesn't really consider that.

The bad debt pool this year was a wonderful idea and we are grateful for that, but the Federal Government doesn't do enough when it comes to undocumented aliens. We are carrying an enormous burden of undocumented aliens.

They are not native New Yorkers. We are pleased with our ability to treat them civilly, but that's a Federal failure.

Drug problem, undocumented aliens, movement around the Nation that winds up here—we do everything we can to be respectful of the needs of those people who are in need, but this is a Federal obligation and it is in no way reflected in what they give us.

Senator D'AMATO. Governor, if I might share with you my experience's at the Federal level. We had a hearing yesterday in New York City on the narcotics interdiction program. I think we have done an absolutely disgraceful job in addressing this Nation's priorities on the Federal level.

One bill that we did pass—and you helped—was the reimbursement of the State prisons for aliens who commit felonies and who are in our prisons. As you well know, we have almost 900 aliens in State prisons today. It's costing the taxpayers in New York State close to \$15 million.

Now that bill has passed in the Senate and if we can get our House of Representatives to pass the bill, it would establish a built-in entitlement program. In this way, we don't have to worry about refunding it every year. I urge your continued support of this bill.

And then I put in a bill that addressed exactly the problem you mentioned.

You know, we didn't create this drug epidemic. The States have got the problem and have the right to say "help us in dealing with this problem, to provide the facilities." My prison construction bill will call for the Federal Government to allocate \$1 billion annually over the next 3 years. So that's \$3 billion, with a match from the State.

Governor CUOMO. Senator, I assure you we'll continue to work closely together, as I'm delighted to say we have and our staffs, and I want publicly to congratulate you and applaud you on the excel-

lent staff work that you've surrounded yourself with, and thank them for working with Tim Russert and my people here.

We'll be in Washington I think the 14th, next week. We're putting together 10 minutes with your staff, a whole agenda of concerns, and we'll make full use of the opportunity to do what plunking we can with our congressional representatives.

Senator D'AMATO. Thank you very much, Governor.

Governor CUOMO. Thank you.

Senator D'AMATO. We'll take a 2-minute recess and then we'll have Comptroller Regan.

[A brief recess was taken.]

Senator D'AMATO. We will come to order.

At this time I am very pleased to have participating at this hearing the Honorable Edward V. Regan, Comptroller of the State of New York. Comptroller Regan.

#### STATEMENT OF HON. EDWARD V. REGAN, COMPTROLLER, STATE OF NEW YORK

Mr. REGAN. Thank you very much, Senator D'Amato, for sponsoring this hearing of the Joint Economic Committee on one of the most pressing public policy issues facing us today, the rebuilding of our decayed infrastructure, and—as in my role—how to pay for it.

This hearing comes at an opportune time. We are approaching the fall election. The voters of this State will be asked to make a decision on the \$1.25 billion infrastructure bond issue proposed by Governor Cuomo as the cornerstone of the Governor's plan to rebuild the State's highways and other public works.

A number of indicators suggest widespread governmental and public support for the bond issue. The enabling legislation was passed virtually unanimously; public opinion polls would indicate strength; it is claimed that 35,000 new jobs will be created; and it is acclaimed by business leaders, economists, and labor leaders—and I agree with them in this—that New York State's economy climate will improve if this bond issue is passed and if our infrastructure, in the broader sense, is rebuilt.

And, of course, people say that rebuilding the infrastructure, it's best to do it with borrowing where you can spend the money upfront, not now, but not have to pay for it except over a long period of time.

For these and other reasons the bond issue may sound like an offer we can't refuse, especially if you only consider the short term. Undeniably with the infrastructure in widespread decay the prospect of new roads and bridges has a great deal of short-term appeal; and, by the way, I'm part of that. I believe that, and it is appealing to me to get on with rebuilding the roads and bridges, and to repair other infrastructure: The sewer lines and water lines of our State.

It has to be done. It's got to be done. And I again applaud you for sponsoring a hearing that focuses attention on this subject.

But those of us in government do ourselves and the taxpayers a disservice if we only look at the short term failing to consider the long term as well. For as government has painfully learned so many times in the past what appears irresistably attractive over

the short term can prove equally unattractive and high costly over the long haul.

In my opinion, the attractiveness of the bond issue as well as other infrastructure rebuilding depends upon the reconciliation of short-term and long-term considerations in two critical areas.

First, the issuance of capital construction bond meets the short-term need for funds to begin rebuilding the infrastructure. However, bonding could be a long-term mistake if high interest rates saddle future generations of taxpayers with exorbitant borrowing costs.

Second, while the rebuilding of our roads and bridges would produce a short-term gain, it would be a long-term mistake if we failed to adequately maintain what we build and are forced to rebuild all over again in a few years at double or triple the cost.

Please allow me to discuss these factors in greater detail and suggest ways that the short-term benefits can be translated into long-term gains for the taxpayers as well, for as the chief fiscal officer of this State constitutionally entrusted with the responsibility of marketing, the State's debt borrowing costs are an ongoing concern to me; and I am particularly concerned that today's high interest rates could impose excessive repayment costs on future generations of taxpayers, converting the short-term gain of a repaired bridge into something not so—a long-term loss in terms of high interest costs 10, 20, and 30 years from now.

To illustrate the impact of these higher rates let's compare how borrowing costs have shot up over recent years. In 1979 in the first debt issue I handled as State comptroller, New York State was able to borrow at a rate of 6.27 percent. That's well below the 9.37 percent rate we sold debt at last year.

The difference really shows up when borrowing costs over a life of, let's say, a mythical \$1.25 billion bond issue are compared. Taking the case of a hypothetical 20-year serial bond, assuming equal annual payments, total borrowing costs for a \$1.25 billion issue at the 6.27 rate would equal \$822 million; but at the 9.37 rate we paid last year, total borrowing costs would equal \$1.229 billion, \$400 million more and convert the \$1.25 billion bond issue into a \$2.5 billion total cost.

This \$400 million, I think, illustrates the type of hefty premiums State taxpayers could be forced to pay because of today's high interest rates; and what can the State's taxpayers expect to receive in turn for this extra \$400 million?

The simple answer is nothing. It doesn't include a nickel for the actual construction of roads, bridges, or sewers.

Facing this degree of excessive borrowing costs, it is obvious that high interest rates are exerting tremendous fiscal pressure on the ability of State and local governments to finance long-term borrowings. How these interest rates are dealt with will greatly influence our ability to address our capital needs with our own money in future years.

In considering the future course of interest rates, generally complex factors need to be considered, and there are a number of these factors. However, leading economic and financial experts, including Paul Volcker, Arthur Greenspan, and many others, generally agree that a factor in the stubborn persistence of high interest rates is



the prospect of huge Federal budget deficits estimated at \$200 billion this year and for several years to come.

The Federal deficit experts, it seems to me and the experts, a two-dimensional effect on interest rates. First, it is feared that this huge level of Federal debt needed to finance the Federal deficit will flood the market, crowding out other forms of public and private borrowing and, if the law of supply and demand works, driving up interest rates.

Second, it is feared that instead of closing the deficit through fiscal means the supply of money will be increased by the Federal Government to accommodate the deficit. In the past, this practice of increasing the money supply, of extending more credit has led to higher inflation.

When investors expect that inflation is on the increase, they demand a higher return on their investments to compensate for it. The experts say this expectation is keeping interest rates up today.

It is difficult to precisely measure the effect that the deficit is having on New York State's borrowing costs, but even if it's only 1 percentage point it translates into tens of hundreds of millions of dollars in useless interest costs charged to the State taxpayers.

I realize there's no magical solutions or even easy solution to the Federal deficit problem. It has been caused over a period of years and by a variety of factors. I cannot impress upon you strongly enough that we believe that it is an obstacle to the reduction of interest rates.

While more Federal aid for infrastructure programs is certainly desirable, I'm not going to ask for Federal handouts. Rather, I'm just going to recommend a no-cost solution, and that is that the Federal Government assist the States by trying, using their best efforts, to deal with this terribly difficult problem of lowering the cost at which we borrow. Then we can get on with the infrastructure rebuilding on our own.

Lower interest rates are exactly what we need so that we can rebuild and that the localities can rebuild at reasonable long-term cost.

The other factor toward insuring that short-term benefit of rebuilding our infrastructure leads also to long-term gain is to insure that what we rebuild is properly maintained and cared for. In my view, this could be accomplished through a funded program of regularly scheduled maintenance.

Scheduled maintenance is important and essential. We cannot allow the continuation of past practices which caused our public works to rust, crack, and deteriorate because of a lack of any meaningful preservation effort. Otherwise, we will face the same problem of having to needlessly repair and rebuild our infrastructure all over in 10 or 20 years.

There must be a formal mechanism to require us public officials to tell the public what the maintenance cost will be for various projects and authorize funds each year to carry out this necessary repair work. Obviously, scraping, sanding, and painting, while less glamorous from a political standpoint, is a far cheaper alternative in the long run to prematurely replacing rusting bridges made dangerous through long-term neglect.

I have long supported scheduled maintenance as part of a capital planning process and I was pleased to note that you talked about capital planning at the Federal level. The legislation I submitted to the State legislature in the past session included such a proposal. Senator Markey introduced this comprehensive bill, most of which was enacted, but unfortunately the scheduled maintenance section of that bill was not passed. The imminence of a bond issue vote and the potential expenditure of some \$2.5 billion at today's high-interest rates of taxpayers' money over the life of the bonds makes scheduled maintenance all the more important in terms of avoiding yet another costly infrastructure crisis in the near future.

As such, we are conducting intensive and fruitful discussions with Senator Markey's staff to develop legislation to address this matter in the next session. This new development, coupled with Speaker Fink's longstanding support of scheduled maintenance and the recent discussions I have had with Governor Cuomo followed by his first public statements in support of the concept—and I don't know whether he repeated it or not today, a public statement supporting it at a news conference with me last month—gives me great confidence that such a bill will be enacted during the next session.

If the bond issue passes, I think that a scheduled maintenance bill to require us to maintain what we build and rebuild with Federal funds and our own funds should be the No. 1 priority for the State legislature and the Governor in the next session. With such a program in place, projects built and rebuilt will be maintained on a regular basis. It will force a discipline on the State and its localities to keep these expensive taxpayer-supported projects in good safe condition unlike what has been allowed to occur in the past.

We're working hard to implement scheduled maintenance at the State level. When you return to Washington you may wish to consider a requirement that the States and localities make a commitment to scheduled maintenance as a condition of eligibility for Federal infrastructure funds. Perhaps the requirement should be attached to distribution of Federal funds from the new 5-cent gasoline—the Federal tax on the gasoline.

Scheduled maintenance would insure that projects built with these funds are kept in good condition, lowering long-term cost for all concerned.

In conclusion, the points I've outlined today will enhance the ability of government at all levels to address the infrastructure need. With lower interest rates our ability to begin rebuilding the infrastructure will be improved and long-term borrowing cost reduced to reasonable levels.

Second, scheduled maintenance will insure that what we build or rebuild will not just last a few years, but many years in the future. These steps taken together will allow Government to rebuild the infrastructure in a fiscally responsible manner at the lowest cost to the taxpayer both for the short and long terms. Thank you very much.

Senator D'AMATO. Thank you very much, Mr. Comptroller.

Let me compliment you on your participation and for your concern, particularly as it relates to interest rates being driven up. I might call to your attention that Congressman Pickle has spon-

sored a number of bills that this Congress will be considering that, I think, will have quite an adverse impact on the municipal bond rates that we're now paying.

You might consider reviewing some of these bills because it might take, indeed, your very special efforts and your knowledge of the financial conditions that exist in the municipal marketplace to bring together a coalition on a national basis to deal with what I think could worsen the already high cost for municipal finance for local governments.

Mr. REGAN. Well, I'm familiar with some of the provisions of Congressman Pickle's legislation and I certainly, off to the side, applaud your efforts and support your efforts to eliminate the proceeds, the dividends from bonds as a taxable income in certain, maybe many cases of social security payments.

I mean, I think that your jumping on that fast was something that all localities and all State governments across the country ought to support. So I think that's essential.

The issue of tax exemption for pollution control bonds, housing and economic development are a different matter. They all have benefits, especially the economic development bonds, very clear benefits; but they all have a cost because they, taken together, help crowd out, too. While there's a distinct benefit attached to each one of these nontraditional forms of State and municipal borrowing, there is also, taken together, a problem because it just puts more borrowing in the market, such as the Federal deficit does, and contributes to some extent to the interest rates going up.

So I think the problem has to be looked at in its totality, but the No. 1 thing to do is to get your version of that social security legislation passed and passed soon.

Senator D'AMATO. Comptroller Regan, the Governor indicated that he projected the loss of some \$1.9 billion if the bond issue was defeated, or \$1.9 billion that could be utilized for infrastructure construction.

How do you respond to that?

Mr. REGAN. Well, those are the Governor's figures based on what he would raise with \$1.25 billion of local-State money combined with what it would directly leverage that, in his opinion, would be lost if we did not have this.

I have not seen the specific study that he developed those figures from, so I can't comment specifically, but it's logical to assume that if we don't pass the \$1.25 billion maybe some money out there coming from the Federal Government or other sources that we could leverage could be lost. Whether the loss is temporary until we get a new form of borrowing or permanent, I don't know.

But I have no more comment than that because I haven't seen the study.

Senator D'AMATO. In your opinion, do you project that tax-exempt interest rates are going to come down for cities and the State?

Mr. REGAN. No.

Senator D'AMATO. Well, might it not be prudent to say: "Let's pass this bond issue, given that there are needs in the future and rates are going even higher?"

Mr. REGAN. Well, one could reverse it—which I don't advocate; let me make that very clear—and say that hopefully following the Federal elections—and there's been more than just whispers about this—that, in fact, there will be a summit conference of sorts or a commission a la the Greenspan commission on social security that will deal with Federal deficits; and, if there is, and if the Federal budget stops hemorrhaging, which is what the process is now, that would give investors a lot of hope.

So there would be reason to think that in the future we might be able to borrow for less than we could today.

I guess the real answer is that anybody that tries to guess the direction of interest rates is taking enormous risks. The fact is that interest rates are too high today; and New York State has contributed to it itself and I've dealt with that issue quite clearly with the Governor and legislative leaders.

But the fact is that the high-interest rates, in part, to some extent, are responsible for our link to the Federal deficit. So what we need to do is do what you did when you ran one of the Nation's municipalities. Last I heard, you always balanced your budget and had no deficits in a multiple hundred-million-dollar, from memory, budget. That's what the Federal Government needs to do, is follow that lesson.

If they do, interest rates, in the opinion of virtually every expert I know, liberal and conservative—if the Federal deficits start to shrink and it looks as though the process is under control, every expert I know, have consulted, met with or read, says interest rates will come down.

If interest rates come down then we can convert the short-term gain of rebuilding a bridge into a long-term gain because we won't saddle the taxpayers with the high cost.

Senator D'AMATO. Thank you very much, Mr. Comptroller, for your participation.

Mr. REGAN. Thank you.

Senator D'AMATO. I hope we can do something with respect to that problem on the Federal level because you are quite——

Mr. REGAN. Well, you're one person. It's difficult, I suppose, alone, but you try.

Senator D'AMATO. Well, I think we're beginning to bring about a growing awareness of just how important a part those deficits play in keeping the cost of money up and slowing down real economic growth and activity.

Mr. REGAN. That's right.

Senator D'AMATO. Thank you very much.

Mr. REGAN. Thanks.

Senator D'AMATO. The next witness is Mr. Anderson so we will take a several-minute break until he arrives.

[A brief recess was taken.]

Senator D'AMATO. This hearing will come to order.

I am delighted that the leader of our State senate majority leader, Senator Warren Anderson, is able to join us to testify and to participate in today's hearings.

I might also note for the record that he is flanked on either side by Assemblyman Hoblock and Assemblyman Kelleher.

And, Mr. Majority Leader, thank you for being here.

**STATEMENT OF HON. WARREN M. ANDERSON, MAJORITY  
LEADER, NEW YORK STATE SENATE**

Mr. ANDERSON. Thank you very much for giving us this opportunity.

I think I want to begin by thanking Senator D'Amato for holding this hearing of the Joint Economic Committee of Congress in Albany. It gives us a much needed opportunity to be heard on what everybody recognizes as a very important public issue, that of the repairing, rehabilitating, redeveloping, and creating the State's infrastructure.

It also give me a personal opportunity to express the concerns—in addition to expressing the concerns on this subject, to say that we are delighted that you have brought this meeting to Albany and to say something about what you have done as the voice of New York on the Senate Appropriations Committee in Washington.

You have emerged, in my view, as a champion of public transit, which, as everybody knows, is the economic life of our cities, and you have come up with realistic and pragmatic solutions to assist those of us who are concerned with, in some instances, aging transit systems across the State.

Let me start by giving us—or presenting the record today.

We in New York State have been grappling with long-term implications of a deteriorating infrastructure for some time, before but certainly during the 1981 session. By that time the renewal needs of our transportation system in particular had become apparent.

In order to overcome these deficiencies, the State legislature, in cooperation with the State transportation authorities, undertook a massive effort first to identify the capital needs of our transportation system and then to adequately finance them.

The key objective of this joint effort was a new program of dollars and plans to bring our transit systems back to a state of good repair. In that year the 1981 legislature passed a program designed to provide nearly \$8 billion to refurbish, rebuild, maintain the five big mass transportation systems in the State.

In exploring and, most importantly, financing the capital needs of mass transportation systems, it became quite obvious that there still remained the necessity to bring our highways, and particularly our bridges, to an equal position of good repair. The same 1981 legislation also attacked the problem by creating a new highway program, known as the consolidated local highway assistance program. In addition, a modest program of bridge repair, statewide, was instituted, but unfortunately the then Governor refused to fund it.

It is estimated by our own Department of Transportation that the State's highways and bridges would require a minimum capital investment of something like \$20 billion to bring them to a state of good repair.

An example of this determination to do something about this dilemma was the passage by both houses of the legislature of the State Transportation Bond Act to rebuild New York. Subject to voters in November, the Bond Act will supply about \$1 billion of an initial \$7 billion 5-year program. Combined with additional State

dollars and hoped for vital Federal assistance, it is expected that the full \$7 billion will be committed by 1988. We are in the process of developing a fair and equitable regional distribution of funds under the proposed bond issue. It will guarantee construction of the projects based on need.

Outside the transportation agenda, another important infrastructure need now coming into focus is water supply. It is likely that this is more true in the older northeast and midwest communities.

In the area of water resource financing, the Federal Government must review its current policies and eliminate its biases against rehabilitation of existing water infrastructure.

It was New York under the late Governor Rockefeller that moved the nation toward cleaning up our rivers and streams with his pure water program in 1965. Importantly, the Rockefeller program included a component which should be a lesson for us today—State aid for the operation and maintenance of sewage disposal and treatment facilities created under the program. The legislature has defended this state aid since despite the short sighted attempts of the two most recent governors to end it.

To bring our infrastructure to a state of good repair we must accurately determine the extent, precise nature, and scope of these needs.

Second, we must establish priorities, among these at times competing needs. One tool available to both State and Federal Governments in developing these priorities is a rational manner of better capital planning and budgeting.

While capital planning and budgeting is obviously no panacea, it could bring total infrastructure needs into perspective and nationally match them against anticipated financing. Aware of these potential benefits, the legislature this past session passed legislation requiring that the Governor, in addition to the regular budget, submit a detailed 5-year capital plan each fiscal year.

The required statement of funding sources for proposed projects should provide a much needed framework for analyzing the State's debt structure and determining trends in the balance among borrowing, taxes, and user charges as the sources of infrastructure financing.

The need of a comprehensive capital budget at the Federal level is clearly an issue, Senator, which I commend to your committee to explore. A Federal capital budget would spell out what the Government's priorities are and how it intends to finance them.

Now, let me be a little bit more specific. I think both national, State, and local governments should emphasize the need to rejuvenate our existing structures.

This is perhaps a bigger shift for the Federal Government than it is for the other levels of government. For years the Federal Government has put its emphasis on new construction, but I submit that the Federal Government has a major stake in maintaining the projects it has already paid for.

One dilemma facing the Federal Government lies certainly in the diversity of the regions, therefore varying needs across the country. Many areas like the South and the Southwest, for instance, have undergone dramatic changes in recent times.

The influx of people, availability of jobs, the development of technologies such as air conditioning have made living in a very hot climate more comfortable and these areas more attractive. Now, of course, many of these areas are suffering growing pains because of the lack of the basic infrastructure to accommodate this new population. Dallas and Houston are just two examples of Sun Belt cities facing the problem of building and providing efficient public transportation.

Now, one reason these areas have developed is because of tax structures which have made them attractive to industry and to individuals alike, but these areas as well find it difficult to maintain a favorable tax structure, at the same time to pay for expensive infrastructure expansion. Now, we in the Northeast have long since faced this problem, and while our needs for expansion may be less our needs for renewal are greater.

It is imperative that the Federal Government reevaluate its spending priorities to make certain that while it supports expansion in the Sun Belt and older sections of the Nation do not get short changed on funds needed to renew and to maintain existing facilities because without the maintenance of a solid infrastructure it will be impossible to maintain a healthy economy here now but eventually in the Sun Belt later on.

State and local government's have already devoted large sums of capital projects, and we must keep pace with the needs—and it is a need. State and local governments have a very limited capacity for debt, just to mention one thing, and then there is a legitimate desire to hold down the tax burden so as not to drive business and people away from New York. And, frankly, there have been instances where outlays for capital maintenance have been cut first when money got tight.

Another area of real concern is the current condition of the tax-exempt municipal bond market. Although interest rates have dropped from their historic highs of 22 months ago, the cost of borrowing by States and cities has almost doubled since 1977. Traditionally, about 70 percent of every State and local debt service dollar used to go to the repayment of principal and the rest to pay interest. That ratio is now reversed.

The so-called interest rate spread between tax-exempt and taxable issues has narrowed dramatically. Interest rates on tax-exempt formerly were 65 to 70 percent of comparable taxable bond yields. Now this figure is in the 80-percent range. This has become a major constraint on the ability of local governments to finance rehabilitation projects.

A number of factors are responsible for this increased relative cost of municipal borrowing. The municipal bond market has seen a huge expansion of private purpose tax-exempt issues. A good example is single family housing. In 1975, the private purpose tax-exempt issues constituted only about 20 percent of the long-term municipal bond market. Since then this amount has increased more than sixfold and now comprises nearly 50 percent of the long-term market.

Another dilemma in the municipal bond market has been recent changes in the Federal Tax Code. Both the Economic Recovery Act of 1981 and the Tax Equity and Fiscal Responsibility Act of 1982

are responsible for these changes. The Economic Recovery Act of 1981 opened numerous tax shelters to investors who formerly invested in municipal securities. The use of investment tax credits and accelerated cost recovery schedules enhanced the after-tax economic rate of return in private investments, which successfully competed with tax-exempt securities. And the reduction of the marginal income tax rate, while it was a boon to the economy as a whole, had an impact on municipal rates.

The Tax Equity and Financial Responsibility Act of 1982 did restrict certain safe harbor leasing provisions for sure, but the requirement that all municipal bonds issued after July 1, 1983, be registered and the partial removal of the deductibility of bank interest costs used to finance tax-exempt securities, are likely to spell higher costs for municipalities over the long haul.

Many new creative financial techniques have been developed by innovative investment bankers, such as zero coupon bonds, detachable warrant bonds, flexible interest bonds. The list goes on and on. While these different types may enlarge the municipal market, they also increase marketing costs for all levels of government.

Most important, unless and until the cost of borrowing money is reduced, State and local government will be hard pressed to rehabilitate the crumbling infrastructure.

As a nation, we can no longer delay facing up to our responsibility to repair and reconstruct our pothole-laced highways, collapsing bridges, and leaking water systems. As a New Yorker, this is best explained by comparison with the failure of the New York Giants—excuse me—the Yankees—the Giants recently, Yankees in the seventies. When Mickey Mantle was asked what happened, he summed it up best by saying “I guess we all got old at the same time.”

Nor can we ignore the need for long-term capital planning and budgeting by the Federal Government and, indeed, by governments at all levels, which must do a better job of committing resources and energy to devising methods for accumulating funds for infrastructure repair. And, importantly, the Federal Government must be prepared to reorder its priorities to correct existing geographic imbalances in its view of infrastructure needs and to recognize the need for maintenance of capital facilities to protect investments already made. Thank you.

[The prepared statement of Mr. Anderson follows:]



## PREPARED STATEMENT OF HON. WARREN M. ANDERSON

Today I want to begin by thanking Senator D'Amato for holding this special hearing of the Joint Economic Committee of Congress in Albany. This gives us a much needed opportunity to be heard on this important, vital public issue. This issue of repairing, rehabilitating and redeveloping the state's infrastructure.

Moreover, this opportunity gives us the chance to express our concerns on this subject with Senator D'Amato who serves as the voice of New York on the Senate Appropriations Committee. A Senator who has emerged as the champion of public transit, the economic life support system of our cities, and who has come up with realistic and pragmatic solutions to assist in the renewal of our aging transit systems nationwide.

I think that's where the national, state and local government emphasis ought to be properly placed -- on the rejuvenation of our existing structures before they deteriorate so badly that we need some mythological figure to come in and clean out the stables.

The other day I thought about the immense task before us and I quickly conjured up the need for someone like the legendary Hercules who had the distasteful task of cleaning out the Augean stables of the king of Elis.

As the myth tells us, these facilities had been neglected for many years and were in need of immediate care.

The analogy to our infrastructure dilemma of today is on target because we have rusting bridges, potholes in the roads and the closest thing to a Hercules is the federal government. We know we've got to do much of the job ourselves but we need help.

When I say we are going to do the job, I'm speaking of a sharing of responsibility among the federal, state and local governments, both in identifying just what infrastructure needs are and how we will go about paying for such decisions.

This has got to be a joint effort and one which must evolve after identifying the needs, evaluating our capacities for solving the problems, and developing long-term strategies available to us to carry out the plans.

I won't dwell on the obvious. The fact that the 100-foot-long section of a bridge on the Connecticut Turnpike collapsed and people died as a result, that a cable snapped on the Brooklyn Bridge and some unlucky tourist was crushed, that our systems which carry fresh water have leaks which cause the loss of billions of gallons. We can all agree on the need for action.

What are the priorities? What is the role of the federal government, the state and local governments in the dilemma?

I think that infrastructure renewal must be the priority for those in Washington, D.C., and that this priority can best be carried out by shifting the emphasis now placed by the federal government on new construction. After all, the federal government does have a stake in maintaining projects it has helped pay for.

For many years it used to be cheaper for a community to buy a new bus with federal grants rather than try to maintain an old one in good condition. The elimination of this type of bias on the part of the federal government in favor of new construction -- which has been attempted in transit -- should be extended to all programs.

One dilemma facing the federal government lies certainly in the diversity of the regions and therefore needs in this country. Many areas like the South and Southwest, for instance, have all undergone dramatic changes in recent times.

This influx of people and the availability of jobs and the development of technologies such as air conditioning to make living more comfortable in a hot climate has made these areas extremely attractive to persons and they have moved in. Now, of course, many of those areas are suffering growing pains because of the lack of basic infrastructure which can accommodate the new population. Dallas and Houston are just two examples of sunbelt cities facing the problems of buildings and providing efficient public transportation.

One reason these areas have developed is because of tax structures which have made them attractive to industry and to individuals alike, but those areas, as well, will find it difficult to maintain a favorable tax climate and at the same time pay for extensive infrastructure expansion. We in the Northeast have long since faced that problem and while our needs for expansion may be less, our need for renewal is greater.

It is imperative now that the federal government reevaluate its spending priorities to make certain that while it supports expansion in the Sun Belt the older sections of the nation do not get short-changed on funds needed to renew and to maintain existing facilities. Without the maintenance of a solid infrastructure it will be impossible to maintain a healthy economy here at home.

THE RECORD TO-DATE

In many respects, we in New York State have been grappling with the long-term implications of a deteriorating infrastructure for some time, certainly since 1981. By that time, the renewal needs of our transportation system, in particular, had become quite apparent.

In order to overcome these deficiencies, the State Legislature, in cooperation with the State's Transportation Authorities undertook a massive effort, first to identify the capital needs of our transportation system and then to adequately finance them. The key objective of this joint effort was a new program of dollars and plans to bring our transit systems back to a state of good repair.

This is all history -- history which I might add, we are proud of. In 1981, the Legislature passed a program designed to provide nearly \$8 billion to refurbish, rebuild and maintain the five big mass transportation systems in the state.

In exploring and most importantly, financing the capital needs of the mass transit systems, it became quite obvious, however, that there still remained the necessity to bring our highways and particularly our bridges to an equal position of good repair. Accordingly, the same 1981 Legislation also attacked the problem by creating a new highway program known as the Consolidated Local Highway Assistance Program -- now commonly referred to as CHIPS.

In addition, a modest but vital program to repair bridges statewide was instituted but unfortunately, the former Governor refused to fund it. Both the local highway and the bridge programs, I might add, were created at the Legislature's insistence.

This effort by the State to repair its highways and bridges, however, still has a way to go. It is estimated by our own Department of Transportation that the State's highways and bridges would require a minimum capital investment of something like \$20 billion to bring them to a state of good repair. In cooperation with the Federal government and the Governor, we in the Senate expect to continue this agenda of renewal.

An example of this determination is the recent State Transportation Bond Act -- Rebuild New York -- that both legislative houses have recently passed. Subject to the voters in November, the Bond Act will supply about a billion of an initial \$7 billion, five year program. Combined with additional State dollars, and vital Federal assistance, it is expected that the full \$7 billion will be committed by 1988. We are in the process of developing a fair and equitable regional distribution of funds from the proposed bond issue that will guarantee projects through need.

#### A Revised Federal Role in Water Resources

Outside the transportation agenda, another important infrastructure need now starting to come into focus is water supply, in common with the rest of the older Northeast and Midwest communities.

In the area of water resources financing, the federal government must review its current policies and eliminate its biases against rehabilitating the existing water infrastructure. For example, eighty-two cents out of every dollar spent by the Army Corp of Engineers is sent to the South and Southwest, while cities such as Boston continue using wooden water pipes.

This geographically imbalanced approach to the nation's water resources neglects the needs of the Northeast and Midwest regions that were responsible for building their own water supply systems.

It was New York State under the late Governor Rockefeller that moved the nation toward cleaning up our rivers and streams with his Pure Waters Program in 1965. Importantly, the Rockefeller program included a component which should be a lesson for us today -- state aid for the operation and maintenance of the sewage treatment facilities created under the program.

The Legislature has defended this state aid since, despite the shortsighted attempts of the two most recent governors to end it.

The federal government could and should assist localities in rehabilitation of water supply facilities in several different ways. It could increase the amount of funding available for states and localities to rehabilitate existing facilities on a pay-as-you-go basis; the federal government could set up a program which would allow states and localities to capitalize annual grants if interest rates are not exorbitant; the federal government could set up a revolving loan fund for replacement of aging distribution systems with little or no interest and a long-term payback schedule. And there may be other approaches as well.

Another program which the federal government could create is a well-tailored program of leverage leasing to attract private investment for water system rehabilitation which does not abuse the federal tax code. Also, maintenance grants would help alleviate the increasing pressures on Northeast-Midwest water systems.

This approach, of course, includes local responsibility and participation in New York. We are willing to do our share to help rebuild the water infrastructure in New York State. The Senate has introduced a five-bill package (S.4114-S.4118) which would provide for creation of local water authorities at local request and to enable localities to undertake necessary financing to meet their water needs based on water revenues.

#### CAPITAL BUDGETING

From the discussion thus far, it is clear that three major functional areas, mass transit, highways and bridges and water supply have been identified as requiring massive infusions of funds to bring them to a state of good repair.

First we must accurately determine the extent, precise nature and scope of these needs. Secondly, we must establish priorities, among these at times competing needs. One tool available to both State and Federal governments in developing these priorities in a rational manner, is better capital planning and budgeting.

While capital planning and budgeting is obviously no panacea, it could bring total infrastructure needs into perspective and nationally match them against anticipated financing. Aware of these potential benefits, the Legislature, this past session, passed legislation requiring that the Governor, in addition to the regular budget, submit a detailed 5-year capital plan each fiscal year.

This plan will present the Governor's recommendations on capital needs and expenditures by state agencies and public benefit corporations and will help both the Governor and the Legislature forge a more rational comprehensive strategy for addressing the State's capital needs within the confines of the annual budget.

The required statement of funding sources for proposed projects should provide a much needed framework for analyzing the state's debt structure and determining trends in the balance between borrowing, taxes and user charges as the sources of infrastructure financing.

The need of a comprehensive capital budget at the federal level is clearly an issue, Senator D'Amato, which your committee should explore. A federal capital budget would better spell out what the government's priorities are and how it intends to finance them.

#### FINANCIAL MARKET ISSUES

As vital as a good planning and budgeting process is, however, it means little without the where-with-all. Financing the need for the repair and replacement of the infrastructure is the crux of the problem. The state and local governments have already devoted large sums to capital projects, and we must keep pace with the needs. Now, however, it is widely recognized that this capital investment is being consumed more rapidly than it is being replenished.

Some reasons for this are state and local governments' limited capacity for more debt; attempts to hold down the tax burden so as not to drive business and people away from the state; and the simple fact that too often outlays for capital maintenance are cut first when money gets tight.



An area of real concern is the current condition of the tax-exempt municipal bond market. Although interest rates have dropped from their historic highs of twenty-two months ago, the cost of borrowing by states and cities has almost doubled since 1977. Traditionally, almost 70 percent of every state and local government debt service dollar went to repayment of principal and the rest to pay interest. That ratio is now reversed.

The so-called interest rate "spread" between tax exempt and taxable issues has narrowed dramatically. Interest rates on tax exempt issues formerly were 65-70 percent of comparable taxable bond yields; now this figure is in the 80 percent range. This has become a major constraint on the ability of local governments to finance rehabilitation projects.

A number of factors are responsible for this increased relative cost of municipal borrowing.

The municipal bond market has seen a huge expansion of private purpose tax exempt issues. In 1975, private purpose tax exempt issues constituted only 20 percent of the long-term municipal bond market. Since then, this amount has increased more than sixfold and now comprises nearly 50 percent of the long-term market.

Another dilemma in the municipal bond market has been the recent changes to the federal tax code. Both the Economic Recovery Tax Act of 1981 and The Tax Equity and Fiscal Responsibility Act of 1982 are responsible for these changes. The ERTA of 1981 opened numerous tax shelters to investors who formerly invested in municipal securities. The use of Investment Tax Credits and Accelerated Cost Recovery Schedules enhanced the after-tax economic rate of return in private investment, which successfully competed with tax-exempt securities. And the reduction of the marginal income tax rate, while a boon for the economy as a whole, has had an impact on municipal rates.

The TEFRA of 1982 did restrict certain safe harbor leasing provisions. But the requirement that all municipal bonds issued after July 1, 1983 be in registered form, and the partial removal of the deductability of bank interest costs used to finance tax-exempt securities, are likely to spell higher costs for municipalities over the long haul.

Many new creative financing techniques have been developed by innovative investment bankers, such as zero coupon bonds, detachable warrant bonds, flexible interest bonds -- the list goes on and on. While these differing types may enlarge the municipal market, they also increase marketing costs for all units of government.

Most important, unless and until the cost of borrowing money is reduced, State and local governments will be hard pressed to rehabilitate the crumbling infrastructure.

As a nation, we can no longer delay facing up to our responsibility to repair and reconstruct our pothole-laced highways, collapsing bridges, and leaking water systems. Nor can we ignore the need for long-term capital planning and budgeting by the federal government and indeed by government at all levels, which must do a better job of committing resources and energy to devising methods for accumulating funds for infrastructure repair. And, importantly, the Federal Government must be prepared to reorder priorities to correct existing geographic imbalances in its view of infrastructure needs, and to recognize the need for maintenance of capital facilities to protect investments already made.

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Senator D'AMATO. Mr. Anderson, I think we are right when you said everybody is getting old at the same time.

Mr. ANDERSON. Except you. [Laughter.]

Senator D'AMATO. How do you best deal with the problem of fairness in determining which projects get built first?

The Governor was here and testified to the importance of the bond issue, the \$1.25 billion bond issue, and I indicated to him that it was my sense that many regions of the State were at the present time looking at this bond issue in a rather negative way. It was perceived as being not fair to the people of their region.

How do you think you can dispel that perception?

Mr. ANDERSON. I think, I hope we can dispel it. I think that actually as you look at it, talk about the enormity of the problem, the amount we are talking about to be done by delayed financing, by bonding, is relatively minor.

It is true that we must work out a manner in which all the areas of the State who will be paying for this in various ways over the years should be treated equally, and that is what—some piece of legislation hopefully will be passed when we get back in a couple of weeks, a percentage between—I hate to get into, you know, parochial terms—but the city, along the island, the Hudson River, and all the rest of we outlanders, whatever—but it has got to be done in such a fashion because the need is all over. We have just got to be sure that the people will support this because I think that if it is so that the need is 10 to 20 times the amount of money we are borrowing, that resources, whether they be from Washington or whether they be allocations from our own tax structure and some of it from borrowings, the needs are so great that as long as we do it in a fair fashion it ought to be supported.

And I hope that that will be the result. I am not personally involved in these negotiations between the two houses and the governor, but people that come back and talk to me say that they get a feeling—I don't know what the Governor testified to today—but they get a feeling that we are relatively close to having a piece of legislation which at least the people involved in the process, who probably know the problem best, are satisfied. And I hope, if that is true, that we can get that across to the voters between now and November.

Senator D'AMATO. I would like to at this time acknowledge the presence of your distinguished colleague, Mr. Flynn, who is here with us today, and a great strength to you, I know, in the State senate and to the people whom he has represented so ably over the years.

I am wondering if the assemblymen, either of them, would have any comment that they would want to make in regard to the infrastructure problems that the committee is looking into. I would certainly be glad to take them into the record.

But if not, we certainly appreciate your being here.

Mr. Anderson, I share your concern with the effect of those interest rates on the cost to Government. I don't know how you balance it, you know, whether we should be in the business of doing that in certain areas that, heretofore, have been financed only by the private sector, recognizing the needs that exist today. But certainly that causes an increasing problem on the municipal markets.

I don't know if your colleagues would like to add anything.

Thank you so very much for giving your testimony today, and I hope we do have a bond issue that will be perceived as being fair because I do believe we cannot continue to neglect the infrastructure needs of this State.

The problems aren't going to go away. They are going to be more difficult. They are going to be exacerbated by time, and I think, if anything—I don't know—I would like to be able to say I thought that the—I could project that the interest rates in the future will be lower, but I am not going to make that prediction now.

Thank you very much.

Mr. ANDERSON. Thank you.

Senator D'AMATO. Our next panel, the panel that gives representation to our cities, who, on a daily basis deal with the problem of infrastructure: Hon. Elizabeth Hoffman, mayor of the city of North Tonawanda; Hon. Thomas Whalen, mayor of the city of Albany; and Deputy Mayor Bob Wagner, Jr., city of New York.

I'd like to call as our first witness Mayor Elizabeth Hoffman from the city of North Tonawanda, N.Y.

**STATEMENT OF HON. ELIZABETH C. HOFFMAN, MAYOR, CITY OF NORTH TONAWANDA, N.Y.**

Mayor HOFFMAN. Thank you, Senator.

Senator D'AMATO. Thank you for being with us.

Mayor HOFFMAN. Thank you very much for having us. I think it's an honor that mayors are having a chance to give you our side of the story. I only wish that North Tonawanda had this opportunity 14 years ago when they did get into infrastructure rehabilitation.

The total North Tonawanda wastewater treatment project which I will be addressing today cost the city of North Tonawanda, the Federal and State Governments, \$43 million; \$28 million for the plant and \$15 million for the attendant truck and interceptor lines. The Federal share was 75 percent; the State share was 12.5 percent; and the city share was 12.5 percent of the eligible funds.

The city of North Tonawanda's municipal wastewater treatment plant is unique because it is one of 13 physical chemical activated carbon wastewater treatment plants in the entire United States of America as of 1981. The North Tonawanda wastewater treatment plant is even more unique because it is one of only three physical chemical activated carbon wastewater treatment plants in the whole United States which successfully operates.

Of the three that are successful in operation, North Tonawanda is the largest in capacity by a wide margin. Six of the thirteen physical chemical plants are shut down for repairs; one has been completely abandoned; and three others are under construction.

What I'm trying to present today is the other side of the picture. It's good to go in there for infrastructure and for rehabilitation—I'm in favor of it, too—but we must make sure our data is correct and accurate information, and make sure the cities don't end up eating a large share of the costs that they cannot afford.

The prime engineering report prepared by the firm of McNamee, Porter & Seely dated September 4, 1973, when this horror story

began for North Tonawanda, projected design year 2000 for a total population of 58,000. The most recent survey by the U.S. Bureau of the Census as a result of the 1980 census set the population for North Tonawanda at 35,760. This represents a decrease for the first time ever indicated by a Federal decennial census in North Tonawanda's population.

It is evident, therefore, that the growth of the city's population has not only slackened but has disappeared altogether. In light of same, it is most unlikely that the city will ever reach its projected population of 58,000 as indicated in the data by McNamee, Porter & Seely.

Furthermore, a study was also made by the firm of Krehbiel, Guy, Rugg & Hall indicated a total undeveloped acreage within the city of 2,548 total undeveloped acres including 369 zoned industrial—where we get our funding from—and 23 zoned commercial. This study indicated that the present industrial acreage was 829 and present developed commercial acreage was 307.

With the decline of area industry and particularly with the loss of several large industrial plants within the city—such as International Paper, Remington-Rand, the Tonawanda Iron Works—it is obviously evident that the developed industrial acreage is far less than the 820 at the present and will never reach its total possible capacity of 1,198 acres.

Therefore, the capacity of our plan was designed for a municipality of far different characteristics than those that presently exist.

It is also evident that the current trends in industrial expansion and population growth have not lived up to the earlier expectations and, in fact, have shown a marked decline in both areas. Engineering firms were not the only ones to assist the city. We had the Erie-Niagara Regional Planning Board, the bureaucratic arm of the government, that presented supporting documents and data alluding to these escalated projections.

As the result of the above-indicated inaccurate projections, the September 14, 1973, McNamee, Porter & Seely report indicated there was an excess flow capacity and the amount of sewage flow would continue to grow from 161 million gallons in calendar year 1967 to 865 million gallons in calendar year 1971. This study gave the distinct impression that such excessive flow would continue to grow and be a serious problem for the city; but based on such projections, the North Tonawanda waste water treatment plant was designed and constructed for a total design flow of 13 million gallons with a maximum plant hydraulic flow capacity of 18 million gallons a day.

At present, our plant has an average of 8 million gallons a day or 57 percent of capacity. Under the current State population discharge elimination system permit standards, the city of North Tonawanda is required to run the carbon treatment system at a cost of approximately \$700 per day for 365 days per year, which is equivalent to an annual operating cost of \$255,000 per year for carbon treatment process alone; and we're just talking about 35,000 people to support this.

I would like to also state that New York State originally said that they would contribute up to 33½ percent reimbursement, but

we saw this once, in 1974. In 1983, which is this year, we hope to receive 13.9 percent for O&M.

We also appreciate the fact that New York State is the only State that does give you O&M assistance. Without it, I don't know where our community would be.

I would like to cite some of the adverse effects on the city's economic resources. The cost of operating and maintaining the wastewater treatment plant has increased at a fantastic rate. Comparing fiscal year 1978, to fiscal year 1983, we have increased in budget appropriations 617 percent.

In 1978, the total appropriations for sewage treatment for the city of North Tonawanda was \$260,000. In fiscal year 1983, it is \$1.6 million.

The debt service. The cost of constructing the wastewater treatment plant has increased our need for borrowing funds. Although the State and Federal Governments are financing a portion of the cost of construction, the municipality's share of cost is estimated to be \$10 million.

The city must also borrow funds to prefinance over \$3 million in State and Federal aid which is being retained by these governments until after the final completion and audit.

Our water rates became a vicious circle, a catch-22. The municipality had to establish a sewer fund in 1979, whereas all the operation and maintenance cost and 50 percent of sewer rents were based on water consumption. Because of this implementation of sewer rents, the municipality's water consumers have cut back on their use of water—they don't have green grass, car washing, pools aren't filled—to reduce their sewer rent cost.

This reduction has contributed to the reduction of water revenues to the extent that, it has become necessary to raise our water rates by 45 percent across the board in 1980; and in 1982, the municipality was forced to drastically change the water rate structure and further increase the water rates in the range of 41 to 196 percent.

The cash flow. The residents are just not paying their bills and with the economic picture as it is in our area it's becoming a matter of fashion not to be paying your water and sewer bills. During the past 5 years, the city has had to issue revenue anticipation notes four times. In 1980, delinquent sewer bills were \$25,000, water \$36,000. In 1983, our total delinquent sewer and water is \$157,000.

An analysis of the operating budgets of the city of North Tonawanda for the past 5 fiscal years documents the fact that the sewer fund, which accounts for the cost of processing sanitary sewage, costs far more to operate than the water fund, which accounts for the cost of processing clean water to drink.

In 1979, the water budget was \$1.1 million and the sewer was \$1.8 million. In 1983, the water budget is \$1.6 million and the sewer is \$1.3 million.

Where does it end? An analysis of the impact that sewer rents has had on an average family is: For 1979, consumption was 110,000 gallons for \$173.58 for the year. For 1982, 110,000 gallons is costing a family for sewer only \$319 a year; and this analysis was based on a family of four and covers a 6-year period.

The municipality had a formal sanitary sewer user charge study prepared by a certified public accountant in 1981. The last page of the study projects an increase in sewer rates of over 310 percent during the next 5 years. It is good to move along with these infrastructure programs, but the bottom line is what you see in North Tonawanda that has been there since 1974. It's a horror story. We just cannot afford it.

It has affected our bonding. We have gone from A1 to A, based on the drawdown because of the people not paying their taxes and we're having to borrow so much money.

In summation, we can make about six or seven items known. First, the reason that we feel the situation is unique in North Tonawanda is the overbuilt capacity of our plant. We have a Cadillac when a Chevy would have sufficed. Second, the fact is that it is one of only three operating physical-chemical plants in the United States and we don't need one. We've lost our smokestack industry.

Third, our unemployment rate in February was the highest, not only in the United States, but in New York State. Its size, as the largest operating physical-chemical plant in the United States does no longer impress the people that are unemployed.

Fourth, the fantastically large escalation in operating costs from 1978 to 1983 of 617 percent. Where else is this happening? Fifth, the high area unemployment, well above the national average, as I cited to you earlier. Ours is 17 percent for the city as opposed to 9.5 percent for the remainder of New York State and 11 for the remainder of the country.

Sixth, the location of this plant on an international waterway also necessitates higher than average effluent standards.

On the basis of all the above referenced factors, Senator, it is felt that there is evident need for renewed interest in and a commitment by the State and Federal Government in the partnership as envisioned by the Water Pollution Control Act of 1972.

The resources of the city of North Tonawanda and its taxpayers alone are simply not enough of sufficient magnitude and economic capacity to handle an increase in the cost of maintenance of the sewage treatment plant facility which, as indicated above, has risen 617 percent.

As mayor of the city of North Tonawanda, I respectfully request that you take our message back to the Federal Government and I hope that some of our State people are here to hear me, too, because we do have a problem.

But, again, I thank you for taking the time to have us lowly mayors address this hearing. I wish, I only wish this was done 14 years ago. Thank you, Senator.

[The prepared statement of Mayor Hoffman, together with enclosures, follows:]

## PREPARED STATEMENT OF HON. ELIZABETH C. HOFFMAN

I am here to address the problems faced by the City of North Tonawanda, New York, in the construction and operation and maintenance of its municipal wastewater treatment plant, and its adverse economic effects on the municipalities' economy and budget as impacted upon the local government and taxpaying population. The total North Tonawanda wastewater treatment project cost was \$43,000,000 (\$28,000,000 for the plant and \$15,000,000 for attendant truck and interceptor lines). The Federal share was 75%, State share was 12.5%, and City share was 12.5% of eligible funds.

I hope my presentation showing the severe economic impact caused by the construction, operation and maintenance, and retirement of debt service of this facility will help the state and federal government devise and implement counter measures to lessen said impact.

The City of North Tonawanda's municipal wastewater treatment plant is unique because it is only one of 13 physical-chemical activated carbon wastewater treatment plants in the entire United States as of 1981. The North Tonawanda wastewater treatment plant is even more unique because it is 1 of only 3 physical-chemical activated carbon wastewater treatment plants in the whole United States which successfully operates. Of the 3 that are successful in operation, North Tonawanda is the largest in capacity by a wide margin. Six of the 13 physical-chemical plants are shut down for



repairs. One has been completely abandoned and 3 others are under construction.

Niagara County, alone has 2 of the 13 physical-chemical activated carbon plants in the entire United States. These 2 plants are located in the cities of Niagara Falls and North Tonawanda. All of Niagara Counties wastewater treatment plants together can handle a total capacity of 104 million gallons per day (hereinafter MGD). The actual amount of capacity being utilized is 77 MGD or 74% of total capacity. The North Tonawanda plant currently runs at an average of 8 MGD or 57% of its capacity. 6 of the 10 existent treatment plants in Niagara County run under their designed capacity. As is obvious, it can be seen that it appears that Niagara County is overblessed with wastewater treatment facilities.

The prime engineering report prepared by the firm of McNamee, Porter and Seeley dated September 14, 1973, projected design year 2000, for a total population of 58,000. The most recent survey by the United States Bureau of the Census as the result of the 1980 census set the population for North Tonawanda at 35,760.

This represents a decrease for the first time ever indicated by a federal decennial census in North Tonawanda's population. The 1970 census was 36,012 and and the 1980 census was 35,760 showing a decrease of 252. It is evident, therefore that the growth of the city's

population had not only slackened, but has disappeared all together. In light of same it is most unlikely that the city will ever reach its projected population of 58,000 as indicated in the McNamee, Porter and Seeley study. Furthermore, this study by MPS cited an earlier study by the firm of Krehbiel, Guay, Rugg and Hall as indicating a total of undeveloped acreage within the city of 2,548 total undeveloped acres including 369 zoned industrial and 23 zoned commercial. This study indicated that the present industrial acreage was 829 and present developed commercial acreage was 307. With the decline of area industry and particularly with the loss of several large industrial plants within the city, such as International Paper Company, Remington Rand, and Tonawanda Iron Works, it is obviously evident that the developed industrial acreage is far less than 829 at the present and will never reach its total possible capacity of 1198 acres. Therefore, the capacity of the plant was designed for a municipality of far different characteristics than those that presently exist. It is also evident that the current trends in industrial expansion and population growth have not lived up to the earlier expectations and, in fact, have showed a marked decline in both areas. The Erie Niagara Regional Planning Board also presented supporting documents alluding to escalated projections.

As the result of the above indicated inaccurate projections the September 14, 1973 MPS study indicated that there was an excess flow capacity in the amount of sewage flow which continued to grow from 161.565 millions of

gallons in calendar year 1967 to 865.312 millions of gallons in calendar year 1971. This study gave the distinct impression that such excess flow would continue to grow and be a serious problem for the city.

Based on such projections, the North Tonawanda wastewater treatment plant was designed and constructed for a total design flow of 13 MGD with a maximum plant hydraulic flow capacity of 18 MGD. At present said plant currently runs at an average of 8 MGD or 57% of capacity. Under the current State Pollutant Discharge Elimination System Permit Standards the City of North Tonawanda is required to run the Carbon Treatment System at a cost of approximately \$700 per day for 365 days per year which is equivalent to an annual operating cost of \$255,000 per year for the carbon treatment process alone.

An indication of how inaccurate these initial projections came to be can be seen by a comparison of the estimated costs of operation of the plant in 1973 based on a predicted population of 39,000 at the time which was calculated by the MPS study of September 14, 1973 to be \$151,085. As can presently be seen by the above figures and, given that actual population of 36,000 in 1983, the cost for operating the plant is approximately \$1,607,923 per year. Therefore, the costs in 10 years is \$1,456,838 more with less population (36,000 actual as opposed to 39,000 projected).

As an additional unique characteristic, the municipal wastewater treatment plant of the City of North Tonawanda is located on an international boundary. In 1954 the Niagara River was classified as "A-Special" by the federal government because of its location, the standards as established by the Water Pollution Control Board were significantly higher than inland water treatment plants. Furthermore, jurisdiction over said standard was over viewed by the International Joint Commission Advisory Board. With such federal and international input into the increased standards which must be met by the North Tonawanda municipal plant, it is only fair, just and proper that the increased cost due to said higher standards be partially subsidized by the federal government.

New York State originally stated they would contribute up to 33-1/3% operation and maintenance re-embursement. But ---

<u>Fiscal Year</u>	<u>Net Cost</u>	<u>Amt. Received</u>	<u>% Received</u>
1974	189,917	63,291	33.3
1975	196,943	20,679	10.5
1976	211,718	52,855	25.0
1977	229,713	56,791	25.0
1978	263,147	65,641	25.0
1979	344,651	86,074	25.0
1980	621,148	154,436	25.0
1981	948,159	174,478	16.6
1982	1,516,779	209,898	13.9

ADVERSE EFFECTS ON CITY ECONOMIC RESOURCES

The new municipal wastewater treatment plant has put a tremendous financial burden on the residents of the City of North Tonawanda. This burden has a severe impact in several areas as follows:

1) OPERATION AND MAINTENANCE COSTS

The cost of operating and maintaining the wastewater treatment plant has increased at a fantastic rate. Comparing fiscal year 1978 to fiscal year 1983 we have an increase in budget appropriations of 617%. In 1978 the total appropriations for Sewage Treatment and Disposal Operation and Maintenance was \$260,808. In fiscal year 1983, it is \$1,607,923.

2) DEBT SERVICE

The cost of constructing the wastewater treatment plant has increased our need for borrowing funds. Although the state and federal government are financing a portion of the cost of construction, the municipality's share of cost is estimated to be \$10,687,865. The City must also borrow funds to pre-finance over \$3 million in state and federal aid, which is being retained by those governments until after the final completion and audit.

3) WATER RATES

The municipality had to establish a sewer fund in 1979, whereas, all the operation and maintenance costs and 50% of sewer rents, based on water consumption. Because of this implementation of sewer rents, the municipality's water consumers have cut back on their use of water, to

reduce their sewer rent cost. This reduction has contributed to the reduction of water revenues, to the extent that it became necessary to raise our water rates by 45% across the board in 1980. And in 1982, the municipality was forced to drastically change the water rate structure and further increase the water rates in the range of 41% to 196%.

#### 4) CASH FLOW

Residents are not paying their bills in a timely fashion, thereby causing the City of borrow funds to maintain a positive cash flow. During the past 5 years, the City has had to issue revenue anticipation notes 4 times. During March 1980, the City borrowed \$100,000 which was redeemed during August 1980. During December 1980, the City again borrowed \$100,000 which matured during August 1981. During October 1981, the City again borrowed \$200,000 which matured on August 31, 1982. During November 1982, the City again borrowed \$300,000 which matured August 1983. In 1980, delinquent sewer bills were \$25,220 and water \$36,487 for a total of \$61,707. In 1983, sewer is \$85,765 and water \$71,954.72 for a total of \$157,720.48.

#### 5) COST COMPARISON

An analysis of the operating budgets of the City of North Tonawanda for the past 5 fiscal years documents the fact that the sewer fund, which accounts for the cost of processing sanitary sewerage, costs far more to operate than the water fund, which accounts for the cost of processing clean water. In 1979, the Water Budget was \$1,109,747 and Sewer was \$1,897,905. In 1983, the Water Budget was \$1,667,910 and Sewer was \$3,387,795.

6) AVERAGE FAMILY

An analysis of the impact that sewer rents has had on an average family is for 1979 consumption was 110,000 gallons for \$173.58 (for the year) and for 1982, 110,000 gallons, \$319.95 (for the year). (The analysis is based on a family of four and covers a 6 year period).

7) PROJECTED FUTURE INCREASES

The municipality had a formal sanitary sewer user charge study prepared by a certified public accounting firm in 1981. The last page of this study projects an increase in sewer rates over 310% during the next 5 years.

8) ADVERSE EFFECT ON CITY'S BOND RATING

The City of North Tonawanda was recently notified by Moody's Investor Service that its bond rating has been lowered from A1 to A. Said report cited "while city finances are adequate financial tightening is evidenced by reduced liquidity in the substantial draw down (88%) of fund balances budgeted for 1983. The property tax, county sales tax, and state aid provide they bulk of revenues. While tax collection performance on a current basis has been good, slippage has occurred recently. The city frequently uses cash flow financing. Outstanding \$300,000 Bonds issued in November 1982 due August 31, 1983 were used to offset a deficit in the water fund. Debt burden is above comparable median and bond payout is average." It is evident that this change in bond rating will adversely affect the sale of city bonds for future projects as well as those presently underway.

OTHER INDIRECT ECONOMIC EFFECTS - LACK OF RESOURCES

The high cost of sewage treatment in the City of North Tonawanda has been partially responsible for the evacuation of and erosion of the city's industrial and commercial tax base. Besides adversely impacting upon existing industry and commercial ventures this financial burden caused by increasing sewage treatment costs has served as a disincentive for new and expanding industry to locate within the City of North Tonawanda. This has served to decrease the amount of resources available to finance the operation and maintenance costs as well as the retirement of debt for the sewage treatment plant.

The study done by McNamee, Porter and Seeley dated September 14, 1973 indicated that the 4 major industries in the city were International Paper Company, Hooker Chemical Company (Durez Plastics Division), Electric City Paper Company (presently Boundry Paper Mills, Inc.), and American Standard Corporation Tonawanda Iron Works. Of the 4 major industries cited, only 2 are still remaining, these being Durez Plastics and Boundry Paper Mills, Inc. The other 2 plants, International Paper Company and American Standard have moved their operations completely out of North Tonawanda and have dismantled their facilities in the city. The above - referenced Moody's Investor report lists the 5 largest employers in the city of follows:



<u>Name of Employer</u>	<u># of Employees</u>
DeGraff Memorial Hospital	781
North Tonawanda Board of Education	485
Hooker Chemical	381
National Grinding Wheel	379
City of North Tonawanda	340

As is self evident only 2 of the above 5 employers is engaged in industrial production, the others being governmental entities or service oriented operation. The Department of Labor, Bureau of Labor Statistics has projected the unemployment figures for the City of North Tonawanda as significantly higher than the remainder of New York State and also of the nation. Such unemployment figures are as follows:

	<u>1980</u>	<u>1981</u>	<u>1982*</u>	<u>1/83*</u>	<u>2/83</u>
City of North Tonawanda % unemployed	10.6	9.9	14.2	17.5	16.5
New York State % unemployed	7.5	7.6	8.6	9.6	9.5

\*Data not consistent with preceding years due to changes in the benchmarking process

It is evident from the above figures that the high unemployment in the area has caused the city significant cash flow problems. This high outstanding receivable problem has caused cash flow problems for the city and has also resulted in a loss of bond rating as indicated above.

The City has also been effected by the course of construction in that several claims for personal injury have been presented to the City of injuries allegedly due to the progress of this project. As the result of said tortious claims, some of which are still pending, the City, or its insured, had paid out a total of monetary damages in excess of \$44,000. It is uncertain what future of projected liabilities will present themselves and/or manifest in monetary damages in excess of this \$44,000 amount.

#### CONCLUSIONS

As should be evident from the increased cost projections above, the City of North Tonawanda, New York will be unable to bear the financial burden of operation and maintenance and the needed repair of major capital items in the sewage treatment plant by itself in the years to come. The plant will have a negative adverse economic impact on future City developments and, due to its increasing costs, will serve as a disincentive for industry to remain or locate in North Tonawanda in the first place.

Several factors make the North Tonawanda situation unique, including:

- 1) The overbuilt capacity of the plant. (Error in original collection of data by all agencies, governmental and otherwise)
- 2) The fact that it is 1 of only 3 operating physical plants in the United States.
- 3) Its size as the largest operating physical-chemical plant.

4) The fantastically large escalation in operating costs from 1978 to 1983 of 617%.

5) The high area unemployment well above the national average of 16.5% for the City as opposed 9.5% for the remainder of New York State and 11.3% for the remainder of the country as of February 1983.

6) The location of this plant on an international boundry necessitating higher than average effluent standards.

On the basis of all of the above referenced factors, it is felt that there is evident need for a renewed interest in and a commitment by the state and federal governments in the partnership as envisioned by the Water Pollution Control Act of 1972. The resources of the City of North Tonawanda alone are simply not of sufficient magnitude and economic capacity to handle an increase in the cost of maintainance of this sewage treatment plant facility which, as indicated above has risen 617% since 1978.

As Mayor of the City of North Tonawanda, I respectfully request the federal and state governments most urgent attention to this matter and your prompt suggestions for resolution of this impending financial municipal crisis.

Water Pollution Control Project

The City is involved in the construction of a water pollution control facility for the treatment of effluent discharge of sewage into the Niagara River. The City has commenced the project in reliance upon Federal and State aid for construction costs. The following schedule shows the estimated net cost of this project.

		<u>% of Total</u>
Total Estimated Project Costs	\$44,948,786	<u>100%</u>
Less: Anticipated Reimbursements:		
Federal Aid	\$29,638,515	66
State Aid	<u>4,622,406</u>	<u>10</u>
Total	34,260,921	<u>76</u>
Estimated City Share of Project Costs	<u>\$10,687,865</u>	<u>24%</u>

The City anticipates issuing long-term indebtedness in an amount approximating the estimated City share of project costs. As of April 25, 1983, \$5,850,000 of bonds have been issued for this project and \$484,000 has been financed with current funds.

At December 31, 1982, the City has expended 99% of the total estimated costs of the project and has received 90% of the anticipated Federal and State aid reimbursements.

All of the amounts reflected as being anticipated Federal and State aid reimbursements are supported by grants already issued to the City by the respective Federal and State agencies. These grants are contractual commitments, subject to the conditions of the laws authorizing these grants. In order to receive payments from the Federal and State governments, the City must apply for aid to the appropriate governmental agency which causes inspection to be made of the project by the State. The payment of aid by the respective governments may be subject to appropriations being made by the U.S. Congress or the State Legislature. The amount of New York State aid payment set forth in the foregoing table may be affected by factors noted in "Special Factors Affecting This Financing". The conditions contained in the grant contracts include compliance with the technical standards and various equal opportunity employment acts and other laws. Since the project began, the City has not experienced any difficulty in complying with such conditions.

While the City expects to receive the major portion of the cost of the project in the form of Federal and State aid, it must prefinance project costs pending the receipt of such aid. Since it would not be practical to issue long-term debt in anticipation of such aid and reimbursements, the City has issued bond anticipation notes to finance a part of the cost of the project as of April 25, 1983 has \$7,650,000 of bond anticipation notes outstanding that relate to this project. It is anticipated that \$3,296,135 of these notes will be redeemed with Federal and State aid and \$4,353,865 by the issuance of bonds.

Prior to receipt of the Federal and State aid of \$3,296,135 and the issuance of approximately \$4,353,865 in bonds, the City expects to continue for a presently indeterminable period to sell additional bond anticipation notes to redeem at maturity bond anticipation notes issued to finance this project. No assurance can be given at this time that the City will have the ability to sell such renewal notes. Under the Local Finance Law, the City is permitted to renew such notes during the period of probable usefulness of the project, provided annual payments are made to redeem a portion of the outstanding aggregate principal amount of such notes as if bonds had been issued in accordance with Section 23.00 of the Local Finance Law.

## CITY OF NORTH TONAWANDA, NEW YORK

SCHEDULE 9

## WATER RATE STUDY - 1981

Projection of Costs of Operations, Revenues at New Rates  
and Excess (Deficiency) Revenues

## PROPOSAL NO. 5

Year	Total Cost of Operations	Total Revenues at New Rates	Fund Balance (Deficiency)
1981	\$1,218,645	\$1,062,109 (1)	\$(195,144) (2)
1982	1,456,155	1,544,190	(107,109)
1983	1,726,985	1,929,891	95,797
1984	1,841,085	1,909,134	163,846
1985	1,956,020	1,971,807	179,633
1986	2,085,120	1,914,503	9,016

(1) Revenues at Present Rates.

(2) Includes Deficit Fund Balance of \$38,608 at December 31, 1980.

## PRESENT RATES (3)

1-5	PRESENT RATES (3)						
	Min.	6-25	26-75	76-150	151-250	251-251+	
1981	\$1.50	\$ .71	\$ .85	\$ .47	.42	\$ .31	\$ .21
	1.50						

## PROPOSED RATES (3)

1-5	PROPOSED RATES (3)			
	Min.	6-25	26-75	251+
1982-Rates	\$2.00	10.00	\$1.00	\$ .80
% Increase	33%		(41%-138%) (4)	(158%-196%)
1983-Rates	2.00	10.00	1.40	1.20
% Increase	-		40%	50%
1984-Rates	2.00	10.00	1.50	1.40
% Increase	-		7%	17%
1985-Rates	2.00	10.00	1.60	1.55
% Increase	-		7%	11%
1986-Rates	2.00	10.00	1.60	1.55
% Increase	-			

(3) 1,000's of gallons

(4) This represents a 41% increase for the 6-25 category; a 54% increase for the 26-75 category; a 113% increase for the 76-150 category and a 138% increase for the 151-250 category.

(5) This represents a 158% increase for the 251-25,250 category and a 196% increase for the 25,251+ category.

## CITY TAX ROLLS

## UNPAID WATER / SEWER ACCOUNTS \*

<u>FISCAL YEAR</u>	<u>SEWER</u>	<u>WATER</u>	<u>TOTAL</u>
1978	-0-	28,799.93	28,799.93
1979	-0-	25,856.64	25,856.64
<del>1980</del>	25,220.00	36,487.00	61,707.00
1981	68,897.00	39,385.00	108,282.00
1982	64,194.65	43,462.88	107,657.53
1983	85,765.76	71,954.72	157,720.48

\* In accordance with the provisions of the City Charter, as amended by Local Law No. 3, unpaid water and sewer accounts receivable to be added to the City Tax Rolls.

Senator D'AMATO. Well, Mayor, thank you for coming in and giving another dimension to the problem. I know it's one that Deputy Mayor Wagner can also cite, a list of problems, and probably Mayor Whalen; but, obviously, when you have a problem of this magnitude coming down on the small city it certainly exacerbates the effect on your homeowners when you start to talk about those incredible tax increases and sewer rates and water rates. It certainly is a difficult problem.

As you know, we're talking to the EPA about your problem. I don't know what we can do, but certainly one of the problems that we saw there or you see demonstrated was the lack of tools to identify properly the growth needs for your community.

We, in Long Island, are experiencing the same kind of problem, not with a municipal wastewater treatment plant or a private water concern, but with another public utility, Long Island Lighting Co., where the projected growth in demand was far above, far above that which had been anticipated and now has the company calling for a 56.5-percent increase in power rates, electric rates, which would be devastating, to say the least, to the local economy—to the homeowners, to the citizens, to the business community.

That all really comes about again as a lack of inadequate data; and, as they moved along, once you dig a hole you just keep digging

to attempt to get a solid foundation and very few times are you ever going to do that.

Now, we have a very, very difficult problem for the entire region that 3 million people are facing. So I share with you to some extent the same kind of burden and a very realistic concern.

Deputy Mayor Wagner and then Mayor Whalen.

**STATEMENT OF HON. ROBERT F. WAGNER, JR., DEPUTY MAYOR  
FOR POLICY, CITY OF NEW YORK**

Deputy Mayor WAGNER. Thank you very much, Senator D'Amato, for holding this hearing. Mayor Koch had, himself, very much wanted to be here and when the meeting was originally scheduled in New York had planned on testifying, but unfortunately—

Senator D'AMATO. I know.

Deputy Mayor WAGNER [continuing]. He wasn't able to be here today; and it is, for me, a special pleasure to have the chance to make the city's case before you today.

Senator D'AMATO. I thank you for your participation and the mayor, also; and he could not be more ably represented than by his trusted deputy mayor who is so knowledgeable in these areas.

Deputy Mayor WAGNER. Well, thank you very much, Senator.

We're delighted with Congress interest in this issue because we see the problem of the infrastructure as ranking just behind the city's fiscal condition in the immediate future and one which, in the long term, may prove more difficult to solve.

The city's capital plant is the platform on which our economy rests. It is the basis for delivery of municipal services. It is the anchor of neighborhoods. When it breaks down, essential activities come to a halt. When it is neglected, there is not only inconvenience but also the possibility of real danger. The recent collapse of the Mianus Bridge in Connecticut dramatized just how real the possibility of danger can be. We in the city of New York saw a similar event back in 1974 when a major section of the West Side Highway collapsed, though fortunately no lives were lost; and over the last few months we've seen a number of water main breaks in midtown Manhattan which closed streets and subways, caused a blackout, and seriously disrupted business.

Let me begin by giving a general sense of the extent of the city's infrastructure and some sense of the needs that are there.

As you know, Senator, we have 51 waterway bridges and some 1,281 highway bridges. We have a water-supply system which produces 1,435 million gallons of water a day from a reservoir system of 1,956 square miles. We have 6,000 miles of sewers; 12 operating water pollution control plants; 80 sewage pumping stations; 450 combined sewer overflow regulators.

We have 6,200 miles of paved streets, approximately 30 percent of the land of the city of New York is city streets; some 6,700 subway cars on 232 miles of track; some 72 miles of elevated subway structure; some 300 acres of landfill; and over 25,000 acres of parkland, and that doesn't include the entire capital plant of the city of New York.

Just as the extent of this plant is extraordinary so has been its neglect. Back in 1978, when the Koch administration came in, we found a pattern of neglect almost frightening in its extent. The desirable rate for repaving streets is once every 20 to 25 years. Back in 1978, we were repaving at the rate of every 200 years. Engineers say a water main should be replaced every 100 years. In 1978, we were replacing water mains at the rate of every 296 years. In 1978, the State found 135 waterway bridges and highway structures to be in poor condition. The same pattern that was found there, the same pattern of neglect in terms of repair cycles, would have applied to the other areas of the city's program.

One of the major efforts of the Koch administration in the last 5½ years and, one that I believe has met with some success, has been reversing this pattern of decline and decay. Back in 1977, the city registered a total of \$349 million in contracts of which \$168 million were funded by city dollars. This past year we registered better than \$1.6 billion for the second year in a row of which \$1.2 billion in each of the last 2 years was raised by city funds; I believe a dramatic increase.

If you look at the last 5 years our total capital commitments have amounted to \$6.4 billion, better than 2½ times what had been done in the 5 years before that; and, if you added to that the TA's capital program which prior to the 1980's had been reflected in the city's commitment program, it would come to a total of \$8.5 billion or over three times what had been committed in the previous 5 years.

In developing this program not only have we emphasized the importance of committing money, but we have dramatically shifted priorities emphasizing reconstruction and rehabilitation as opposed to new construction and focusing on improvements to the city's infrastructure that support, improve, or reduce the cost of city operations.

We have also attempted to do our planning in the context of a 10-year capital program. As far as I know, the city of New York is the only city in this country which attempts to plan its capital budget decisions on a 10-year time horizon.

The current 10-year program contemplates \$34.7 billion in capital investments over the next 10 years; and over 75 percent of that amount would go to the city's infrastructure.

Although the amount is large, it nonetheless represents a compromise between what New York can afford based upon our assessment of available financing over the next 10 years and what we believe we could fully spend which is some \$55 billion.

The city believes that if it can raise the \$35 billion from our own borrowing ability and from the Federal and State Governments, it will make a significant difference but we also believe that the \$55 million we have identified as a real number genuinely needed, not a program with frills and nonessential programs.

I have included with a copy of the testimony the 10-year program that the city has put together.

So far, we have been—thanks to the help of the Federal Government in its loan-guarantee program, thanks to the Municipal Assistance Corp. borrowing—able to meet the program that was put forward; and we have, on our own, been able now to raise some



\$927 million through city borrowing. The real test though, will come in 1986 when we anticipate borrowing some \$1.1 billion in general obligations bonds—a major jump, but one that we believe we'll be able to meet.

In addition, we now are looking for help from the State legislature in the passage of a State water finance authority which will provide mechanism to raise an additional \$300 million annually through water and sewer bonds backed by user fees.

We've taken some other steps too in terms of finding new ways of meeting our capital needs. One is to take advantage of the program that you were instrumental in saving—of the safe harbor leasing for the purchase of two new ferries.

We've been looking at the use of vendor or third-party equity participation for our first resource-recovery plan for the Brooklyn Navy Yard. We are viewing the use of vendor financing to purchase certain office and computer equipment. We're planning to introduce an amendment to the State constitution which would allow the issuance of term sinking fund bonds for any purpose for which serial bonds may now be used.

With the help of our financial advisers we're examining the possibility of using tax-exempt commercial paper similar to MAC's successful \$250 million commercial paper program, and as I've stated, we are committed in our determination to do everything we can to rebuild the city's physical plant, particularly the infrastructure. And we have made progress in our planning, in our spending, and in our financing. We're determined to build on that record. But to achieve the goals we've set forward—not the \$55 billion need but just to achieve the \$35 billion program we have put forward—we will need the help of the Federal Government. And right now our \$35 billion program counts on help from the Federal Government.

While the largest single factor will be city borrowing amounting to some \$17.4 billion, we are looking to the Federal Government for \$7.9 billion in assistance particularly in the traditional areas of support: transit and water pollution control. And, obviously, to go beyond the \$34.7 billion program would require additional assistance from the Federal Government as well as the State and our own ability to borrow.

I believe there is a compelling case for the Federal Government to increase its direct assistance for local and State governments and I believe there is also a compelling case—and this was an issue which Senator Anderson addressed in his remarks—for the Federal Government to develop financing mechanisms to assist State and local governments in their own borrowing efforts.

What has become clear over recent years is that the problem confronted by an older city like New York is now a problem shared by the rest of the Nation. Throughout America, and perhaps because this is a country that has always looked to the future, we have deferred maintenance; we have put off rebuilding; and instead we have concentrated on new projects and new construction. Time has caught up with us, and what would seem to be a problem just of the Northeast and Midwest is today a problem of the Sun Belt as well.

Two recent Federal studies in fact make this abundantly clear: one which indicated that 20 percent—8,000 miles of the interstate program were in need of immediate repair. Another, done by the Department of Transportation just 1 year ago, indicated that some 45 percent of the Nation's 245,000 bridges are structurally or functionally deficient. The cost to reverse this neglect will be a large one, just as the need is a large one.

To put it simply: In the view of the city of New York—and I think it is a fair view—this is a national issue, a national issue of such scope that Federal leadership is required. And what I'm arguing for is not Federal assumption of local and State responsibilities—there are more than enough projects to go around—but an increased Federal role, both in terms of direct assistance and assistance to local governments as they attempt to borrow.

What exactly that Federal role should be deserves serious consideration. While clear lines of responsibility generally exist only on organization charts, it is important for Congress as it discusses greater Federal participation, to sort out what level of government should have responsibility for what kind of projects.

It makes sense in this context, I believe, for the Federal Government to move to the idea of national capital budget. There is currently no comprehensive framework for taking inventory of public facilities, evaluating their condition, and assigning them priority levels.

A Federal capital budget would provide such a framework. Sensible budgeting procedures would seem to dictate such an organized method.

Traditionally in the Northeast, the Federal Government has concentrated its support on water-pollution control and transportation including mass transit. More recently it has expanded into the area of bridge rebuilding.

It strikes me that all three of these areas are appropriate areas for a Federal role and for an expanded role. In other areas of the country, particularly in the Southwest, water projects for irrigation or recreation, flood control, and water supply have received Federal support.

In my view there should be a more equitable national policy, such as that proposed by Senator Moynihan in the past, which would assist those parts of America with water supply systems in place as well as those needing new projects.

And in fact we would very much like to see additional support for the third water tunnel which is right now under construction, a project that will cost us some \$4.2 billion. Again, a piece of legislation introduced by Senator Moynihan to create a bank, a water utilities bank, would be of assistance directly to the city of New York.

I also believe serious consideration should be given to increased Federal involvement in the area of solid waste, particularly in the construction of resource recovery plants. Solid waste has become increasingly a regional problem, and that, taken together with the technological complexity and cost of resource recovery plants, would seem to justify a greater Federal role. Again, here is an area that would be of major benefit to the city of New York over the next decade. We have estimated that our resource recovery plants

will cost at a minimum some \$2.1 billion over the next decade, and Federal assistance obviously would relieve pressure on our own capital budget, freeing up dollars that could go to other urgently needed areas.

For those like myself in the city of New York who are arguing for an expanded Federal role, there is reason for some concern these days. In at least one major area of Federal activity, water pollution control, we have seen actual reductions. We have also seen decisions which can only make the problems of the infrastructure worse. For example, the Federal Government's relaxation of trucking regulations with regard to allowable sizes and weights will only accelerate road and bridge deterioration.

And even when positive actions have been taken by Congress, the administration has shown a reluctance to be supportive. The best example of this came with passage of the 5-cent gas tax. Only a month after the bill was signed, the President's 1984 budget proposals threatened to undermine the gas tax benefits. Congress—with you, Senator D'Amato in the lead—appears to have won the day; but the simple fact that a fight was necessary is hardly reassuring.

And, now there is the issue of H.R. 3110 which would impose more expensive tax treatment of sale leaseback transactions involving government and other tax-exempt entities. Two issues are troubling about this proposed amendment. One is the issue of fairness. This legislation only applies to the public sector. Second is the potentially very damaging impact on the MTA's ability to continue to successfully use this financing technique, as well as what it could do for the city's plans in such areas as resource recovery.

Fighting to keep what we have is hardly what is called for when much more is needed; and part of what New York needs is increased funding in the traditional areas of support: water pollution control; mass transit; and also in the areas of solid waste disposal and national water policy as I mentioned. These would be areas with a very direct benefit to the city of New York.

Before moving on to an issue which I would like to touch on briefly, that of making financing easier for State and local governments, I should touch on the subjects of mandates and the local share required to obtain Federal dollars. This is in fact an issue that reflects some of what Mayor Hoffman said in her testimony.

The Federal Government still too often imposes mandates on State and local governments without providing dollars to cover the cost. Even when it does provide the dollars, it often accompanies these dollars with mandates that keep local governments from dealing with their most urgent need.

Take the case of water pollution control facilities. Because of Federal requirements, New York concentrated on the construction of two new facilities—I should point out that this has changed somewhat over the last 2 years with the help of your office and your intervention, Senator—it concentrated on two new facilities, the North River and Redhook plants, at a time when it should have done much more to upgrade its older facilities particularly those at Owl's Head and Coney Island.

As a result, the Coney Island plant came within a few minutes of total collapse, an event which would have meant that the base-

ments of 250,000 Brooklyn residents would have been flooded with raw sewage.

As for requiring a local match, this is an understandable policy given Congress concern for local maintenance efforts; however, it can also serve to divert local capital dollars away from areas of greatest local need. I would hope that the House and Senate would review the issue and reduce the number of areas where this approach is followed.

Obviously the direct level of funding is important, but helping to make it possible for State and local governments to borrow the dollars required at reasonable rates is also a major issue of concern.

The rapid increase in the number of debt-issuing public authorities and the abuse in the use of industrial revenue bonds has resulted in a long-term tax-exempt credit market that grew from \$42 billion of issuances in 1979 to \$75 billion in 1982, an increase of 79 percent in just over 4 years. This has put local and State governments at a disadvantage. It has meant deferring bond issues or paying excessively high interest rates.

The Federal Government should reevaluate current tax and fiscal policy to define more clearly the range of qualified tax-exempt issues. This would help prevent State and local governments from being crowded out of the marketplace. The availability of alternative tax shelter mechanisms for major institutions, as Senator Anderson also pointed out, should also be reexamined. Part of the problem faced by local governments' borrowing has stemmed from commercial banks and property casualty insurers shifting from tax-exempt markets to these alternatives. Obviously in addition, reduced Federal borrowing would help to open up opportunities for local borrowers.

A new agency perhaps similar to the Reconstruction Finance Corporation or some form of Federal infrastructure bank should be created to provide capital for the revitalization of U.S. industry and the Nation's roads, bridges and other components of the public plant. Such an agency can provide seed dollars as well as low-interest loans for appropriate projects.

Again, the idea of a National Water Utilities Bank, as suggested by Senator Moynihan, is appealing in this context, though my hope would be that this concept would be applied to other infrastructure needs as well.

I also believe there is a real potential in the area of loan guarantees. This approach was of extraordinary importance to the city of New York and could be used to help troubled localities be able to borrow providing they met strict Federal requirements.

One particular guarantee now under discussion concerns allowing FHA to back the bonds in public hospitals. For years this form of financing has been available to voluntary hospitals. Extending it to public hospitals would seem only fair. For New York City, it would be of real assistance.

This hardly represents a definitive answer to how the Federal Government could make it easier for State and local governments to borrow, but it does point in two different policy directions: Reform of the public credit market, which would also benefit the Federal Government through increased tax revenues, and the cre-

ation of several ways to provide money to local governments at low cost.

Finally I'd like to raise an issue which Mayor Koch raised just a few weeks ago in San Francisco. The city of New York would urge the Federal Government to streamline the rules and regulations which govern infrastructure projects and all too often result in cost-inflating delays.

This is particularly true of environmental regulations which in some cases have become so complex they cease to serve the goals for which they were adopted and can delay a project in endless legal actions. New York's Westway is a good example of this phenomenon.

Last month the Mayor proposed that Congress enact legislation that would set definite but reasonable limits on the time and actions that can be taken for reviews, hearings and legal remedies relative to the infrastructure projects subject to environmental review. This approach is similar to that adopted by Congress when the Alaska Pipeline was built. Avoiding delays saves money and those savings can go to rebuild more infrastructure.

The condition of the infrastructure of this country is a disgrace, a disgrace from which until very recently we averted attention. Fortunately that no longer is the case. Congress' interest, reflected by this hearing today, is encouraging news for those of us in New York City. We have begun the long process of rebuilding our city, of reversing decades of neglect and misguided priorities. But the truth is we cannot do it alone. We need the help of the Federal Government. I also believe we deserve it.

[The prepared statement of Deputy Mayor Wagner follows:]

## PREPARED STATEMENT OF HON. ROBERT F. WAGNER, JR.

Senator D'Amato, Senator Moynihan, and members of the Joint Economic Committee, it is my pleasure to appear before you today to discuss Infrastructure Dilemmas Facing Local Governments. We welcome Congress' interest in this problem -- a problem which for us ranks only behind the city's fiscal health in the immediate future and which in the long term may prove more difficult to solve.

The City's capital plant is the platform on which our economy rests; it is the basis for delivery of municipal services; it is the anchor of neighborhoods. When it breaks down, essential activities come to a halt. When it is neglected, there is not only inconvenience but also the possibility of real danger. The recent collapse of the Mianus bridge in Connecticut dramatized just how real the possibility of danger can be. We in New York City saw a similar event back in 1974 when a major section of the West Side highway collapsed, though fortunately no lives were lost. And just last month, water main breaks in midtown Manhattan closed streets and subways, caused a blackout, and seriously disrupted business.

Let me begin by providing you with a sense of the enormity of New York's capital needs. The extent and variety of New York's infrastructure is extraordinary:

- 51 waterway bridges and 1,281 highway bridges;
- A water supply system which produces 1,435 million gallons of water a day from a reservoir system of 1,956 square miles. It delivers water through two tunnels (a third is under construction), 32 million feet of trunk and distribution mains and 20,000 trunk valves;
- 6,000 miles of sewers, 12 operating water pollution control plants, 80 sewage pumping stations, and 450 combined sewer overflow regulators;
- 6,200 miles of paved streets which cover approximately 30 percent of the City's land;
- 6,700 subway cars which ride on 232 miles of track (137 miles underground, 72 miles elevated, and 23 miles openbed) and 4,550 buses;
- 300 acres of landfill and nine marine transfer stations; and
- Over 25,000 acres of parkland.

Just as the extent of the capital plant is extraordinary, so has been its neglect. In 1978 the Koch administration found a pattern of neglect almost frightening in its extent. The desirable rate for repaving streets is one every 20 to 25 years. In 1978 the city was repaving streets at the rate of once every 200 years. Engineers say a water main

should be replaced every 100 years. In 1978 we were replacing water mains at the rate of every 296 years. In 1978 the State found 135 waterway bridges and highway structures to be in poor condition and requiring major reconstruction. The same pattern would apply to all other parts of the city's physical plant.

One of the major aims of the Koch administration has been to reverse this pattern of neglect and decay, and I believe with some success. In fiscal 1977, the City's capital program -- which provides funds for building and rebuilding City streets, highways, bridges, sewers, water mains, mass transit and other City assets -- registered contracts totalling \$349 million, of which \$168 million were to be funded with City dollars. This past year, capital contract registration, or commitments, came well over \$1.6 billion for the second year in a row. Of this amount, approximately \$1.2 billion each year are being financed with City funds.

Overall, between 1979 and 1983, New York has committed more than \$6.4 billion for capital projects -- almost two-and-one-half times what had been committed in the five previous years. If the portion of the TA's capital program not reflected in the city's capital budget is added, the



record becomes even more impressive -- \$8.5 billion or over three times what had been committed in the previous five years.

In developing its policy for capital investments in 1978, the current City Administration established two basic priorities -- reconstruction and rehabilitation of existing assets, as opposed to new construction, with a focus on improvements to the City's infrastructure that support, improve or reduce the cost of City operations.

In addition to setting clear overall priorities, the City has, over the last several years, extended its planning horizon and developed a ten-year capital plan to improve our planning for the future and to identify the magnitude of need for capital investments. As far as I know, New York is the only city in the United States which attempts to plan its capital budget decisions on a ten-year time horizon. Our planning effort attempts to establish standards for annual capital investments which ensure that, within the limits of available financing, appropriate replacement cycles are maintained and operational changes and needed investments are planned to meet future demand. The current ten-year plan contemplates almost \$35 billion in capital investments over the next ten years. Over 75 percent of this amount is anticipated to be spent for improvements

to the City's infrastructure. Although the amount is large, it nonetheless represents a compromise between what New York can afford based upon our assessment of available financing over the ten year period, and what we believe we could usefully spend, which we have estimated is about \$55 billion over the decade. The City believes that if it can raise the expected \$35 billion from Federal, State and City financing sources, significant progress will be made in rebuilding the City. But at the same time it has to be kept in mind that even with all that has been done, even assuming the City will be able to fund its ambitious \$35 billion program, there will be significant capital needs not met. (See Appendix A: 10 Year Capital Plan).

Since 1978, the City has been able to raise the necessary funds to meet its capital program largely through the Municipal Assistance Corporation (MAC) and \$1.6 billion in Federal loan guarantees secured in 1978. Future success in financing the City's capital requirements depends upon the City's continuing market expansion beyond the \$927 million that New York has been able to borrow on its own to date. Our current plan anticipates \$1.1 billion of general obligation issuances in fiscal year 1986. In addition, State legislation has been proposed to create a State Water Finance Authority

which would provide a mechanism to raise an additional \$300 million annually through water and sewer bonds backed by user fees.

We have also taken some additional steps to finance our capital program, many of them using aspects of Federal tax policy. For example, during 1982 the City, consistent with the "safe-harbor" leasing provisions of the Economic Recovery Act of 1981, entered into a tax benefit transfer agreement with a private corporation with respect to two new ferry boats. The transaction netted the City approximately \$1.4 million. The City continues to evaluate whether traditional leverage leasing should be considered for other types of City equipment and facilities.

We are also exploring other possible financing approaches. The City recently selected a financial advisor in connection with the \$226 million Brooklyn Navy Yard Resource Recovery Project. One of the principal financing objectives will be vendor or third-party equity participation in the project to minimize the amount of City bond financing required.

We are reviewing the use of vendor financing to purchase certain office and computer equipment. We plan to introduce an amendment to the State Constitution which would allow the issuance of term (sinking fund) bonds for any purpose for which serial bonds may be used. Right now, under State law, term bonds can only be used to finance water, docks, and rapid transit projects, so that this change would provide us with greater flexibility to meet the demands of the market. With the help of our financial advisers, we are examining the possibility of using tax-exempt commercial paper similar to MAC's successful \$250 million commercial paper program.

As I have stated, we are committed in our determination to rebuild the City's physical plant, particularly its infrastructure. We have made progress -- in our planning, in our spending, and in our financing. We are determined to build on this record. But, to achieve the goals we have already set as well as to meet the real needs not included in the City's ten-year capital plan, we will need the help of the Federal government.

Earlier I mentioned that we believe that over the next ten years we can advance a \$35 billion capital program.

As we see it today, \$17.4 billion would come from City sources, \$7.2 billion would come from sources such as fare backed bonds and TBTA bonds, \$1.4 billion from State sources, \$696 million from private sources, and \$7.9 billion from the federal government. The bulk of federal support would come in two traditional areas of federal infrastructure assistance -- transit and water pollution control. Achieving the anticipated level of federal support, while far from impossible, will require steady increases in funding over the next several years.

As I also said before, based on our assessment we could still spend an additional \$20 billion to satisfy all the needs that we have identified. Additional Federal expenditures for infrastructure would allow us to begin to deal with these needs as well as to allow States and localities to increase and accelerate local capital programs.

I believe there is a compelling case for the federal government to increase its direct assistance for local and State capital needs. I also believe the federal government has a very definite role to play in developing financing mechanisms to assist state and local governments in their own borrowing efforts.

What has become clear over recent years is that the problems confronted by an older city like New York are shared by the rest of the nation. Throughout America, perhaps because as a nation we have always looked to the future rather than the past, maintenance has been deferred, rebuilding put off; instead we have concentrated on new projects and new construction. Time has caught up with us. Now report after report has appeared documenting the state of America's bridges and highways. A problem once thought of as belonging only to the Northeast and Midwest has now become a problem of the Sunbelt as well.

Let me cite two recent studies which give a sense of just how extensive the problem is. According to a recent study by the Council of State Planning Agencies, 8,000 miles -- or 20 percent -- of the nation's interstate highway system are in need of immediate repair. Another study, conducted by the Department of Transportation in 1982, concluded that 45 percent of the nation's 248,500 bridges are structurally or functionally deficient. And just as the extent of the problem is great, so will be the cost of solving it. Dr. Amitai Etzioni in his recent An Immodest Agenda: Rebuilding America Before the 21st Century has even suggested that the United States will have to spend \$3 trillion over the next 10 years to deal with its infrastructure needs. That means we should spend \$300 billion a year.

To put it simply, a national issue of such scope certainly requires federal leadership. What I am arguing for is not federal assumption of the local and state share of infrastructure costs but rather expanded federal participation. There are more than enough projects to go around. What precisely the federal role should be deserves serious consideration. While clear lines of responsibility generally only exist on organization charts, it is important for Congress, as it discusses greater federal participation, to sort out what level of government should have responsibility for what kinds of projects.

In this context it would make sense for the federal government to adopt the idea of a National capital budget. There is currently no comprehensive framework for taking inventory of public facilities, evaluating their condition and assigning them priority levels. A federal capital budget would provide such a framework. Sensible budgeting procedures would seem to dictate such an organized method.

Traditionally in the Northeast, the federal government has concentrated its efforts on water pollution control and transportation, including mass transit. More recently, it has expanded into the area of bridge rebuilding. All three strike me as totally appropriate areas for federal involvement. In other areas of the country, particularly in the Southwest, water projects -- for

irrigation, recreation, flood control, and water supply -- have received federal support. There should be a more equitable national policy, such as that proposed by Senator Moynihan in the past, which would assist those parts of America with water supply systems in place as well as those needing new projects.

I also believe serious consideration should be given to increased federal involvement in the area of solid waste, particularly the construction of resource recovery plants. Solid waste has become increasingly a regional problem, and that, taken together with the technological complexity and cost of resource recovery plants, would seem to justify a greater federal role.

For those who feel as I do about an expanded federal role there is reason for some concern these days. In at least one major area of federal activity -- water pollution control -- we have seen actual reductions. We have also seen decisions which can only make the problems of the infrastructure worse. For example, the federal government's relaxation of trucking regulations with regard to allowable sizes and weights will only accelerate road and bridge deterioration.

Even when positive actions have taken place in Congress, the administration has shown a reluctance to be supportive. The best example of this came with passage of the five cent gas tax



bill. Only a month after the bill was signed, the President's 1984 budget proposals threatened to undermine the gas tax benefits. Congress, with you, Senators D'Amato and Moynihan, in the lead, appears to have won the day, but the simple fact that a fight was necessary is hardly reassuring.

Now there is the issue of H.R. 3110 which imposes more expensive tax treatment of sale-leaseback transactions involving government and other tax-exempt entities. Two issues are troubling about this proposed amendment. One is the issue of fairness; this legislation only applies to the public sector. The other is its potentially very damaging impact on the MTA's ability to continue successfully to use this financing technique as well as what it could do to the city's plans in such areas as resource recovery.

Fighting to keep what we have is hardly what is called for when much more is needed. Part of what we in New York need is an increase of funding in traditional areas of federal capital support -- water pollution control, mass transit, bridge rebuilding, and highway reconstruction. All are areas where there are enormous unmet capital requirements. As I mentioned before, increased financial support in the area of water projects would be desirable. For us, it could make an enormous difference. For example, to complete all four stages of the Third Water

Tunnel will cost an estimated \$4.5 billion (in 1983 dollars). Some level of federal support for this project, such as the National Water Utilities Bank recently proposed by Senator Moynihan, would free up city capital dollars for other essential programs.

An expanded federal role in the area of solid waste would also be very helpful. We are close to a garbage crisis in New York -- not in terms of collecting it but of disposing of it. We have almost run out of places to get rid of it. To deal with this, the Department of Sanitation has put together a plan to build between seven and ten resource recovery plants over the next decade. The cost of these plants will be over \$2.1 billion.

Before moving off the subject of funding, I should touch on the subjects of mandates and the local share required to obtain federal dollars. The federal government still too often imposes mandates on state and local governments without providing the dollars to cover the cost. Even when it does provide the dollars, it often accompanies those dollars with mandates that keep local governments from dealing with their most urgent needs. Take the case of water pollution control facilities. Because of federal requirements, New York concentrated on the construction of two new facilities -- the North River and Red Hook plants -- at a time when it should have done much more to upgrade its older facilities, particularly those at

Owls Head and Coney Island. As a result, last year the Coney Island plant was within a few minutes of total collapse, an event which would have meant that basements of 250,000 Brooklyn residents would have been flooded with sewerage.

As for requiring a local match, this is an understandable policy given Congress's concern for local maintenance of effort. However, it can also serve to divert local capital dollars away from the areas of greatest local need. I would hope that the House and Senate would review the issue and reduce the number of areas where this approach is followed.

Obviously the level of direct funding is important, but helping to make it possible for state and local governments to borrow the dollars required at reasonable rates is also a major issue of concern. The rapid increase in the number of debt-issuing public authorities and the use and abuse of Industrial Revenue Bonds has resulted in a long-term tax exempt credit market that grew from \$42 billion of issuances in 1979 to \$75 billion in 1982, an increase of 79 percent in just four years. This has put local and state governments at a disadvantage in competing for the limited dollars in the public credit markets. It has been hard for those poor, older localities which have the greatest needs. It has meant deferring bond issues or paying

excessively high interest rates.

The federal government should re-evaluate current tax and fiscal policy to define more clearly the range of qualified tax-exempt issues. This would help prevent state and local governments from being crowded out of the marketplace. The availability of alternative tax shelter mechanisms for major institutions should also be re-examined. Part of the problem faced by local governments in borrowing has stemmed from commercial banks and property casualty insurers shifting from the tax-exempt market to these alternatives. Obviously, reduced federal borrowing would help open up opportunities for local borrowing.

A new agency, perhaps similar to the Reconstruction Finance Corporation, or some form of Federal infrastructure bank should be created to provide capital for the revitalization of U.S. industry and the nation's roads, bridges, and other components of the public plant. Such an agency could provide seed dollars as well as low interest loans for appropriate projects. Again, the idea of a National Water Utilities Bank is appealing in this context, though my hope would be that this concept would be applied to other infrastructure needs as well.

I also believe there is real potential in the area of loan guarantees. This approach, which was of extraordinary

importance to New York City, could be used to help troubled localities to borrow, providing they met strict federal requirements. One particular guarantee now under discussion concerns allowing FHA to back the bonds of public hospitals. For years this form of financing has been available to voluntary hospitals. Extending it to public hospitals would seem only fair. For New York City it would be of real assistance.

This hardly represents a definitive discussion of how the federal government can make financing easier for local governments, but it does set out two clear policy directions which should be followed: reform of the public credit market (which would also benefit federal revenues) and the creation of several ways to provide money to local governments at a low cost.

Finally, we would urge the federal government to streamline rules and regulations which govern infrastructure projects and all too often result in cost-inflating delays. This is particularly true of environmental regulations which in some cases have become so complex they cease to serve the goals for which they were adopted and can delay a project in endless legal actions. New York's Westway is a good example of this phenomenon. Last month, Mayor Koch proposed that Congress enact legislation that would set definite but reasonable limits on the time and actions that can be taken for reviews, hearings,

and legal remedies relative to infrastructure projects subject to environmental review. This approach is similar to that adopted by Congress when the Alaska pipeline was built. Avoiding delay saves money, and those savings can go to rebuild more infrastructure.

The condition of the infrastructure of this country is a disgrace, a disgrace from which until very recently we averted attention. Fortunately that is no longer the case. Congress's interest, reflected by this hearing today, is encouraging news for those of us in New York City. We have begun the long process of rebuilding our city, of reversing decades of neglect and misguided priorities. But the truth is that we cannot do it alone. We need the help of the federal government. I also believe we deserve it.

Appendix A

Ten Year Capital Plan  
of the  
City of New York

**Capital Budget and Long-Term Planning**

As part of the development of the 1982 capital budget and four-year plan, the Office of Management and Budget undertook an analysis of the City's capital needs over the next ten years. This planning effort, which drew substantially from various independent studies of the City's capital program, identified a total ten-year need of \$30.2 billion, of which \$16.0 billion was expected to be financed with City funds. In planning the 1983 capital budget, OMB expanded its ten-year needs assessment process by involving City agencies more directly in identifying their long-term capital needs and priorities and also by developing a set of criteria which could be applied to categorize the various projects which compete for the City's limited capital resources. This reassessment of the City's capital needs and financing ability over the ten-year period 1983-1992 identified a ten-year program totalling \$34.7 billion, of which \$17.5 billion would be provided from City financing resources. This program provides for the following:

*Mandates*—inclusion of all projects required to meet existing Federal and court mandates, including completion of the North River and Red Hook water pollution control plants, improvement and expansion of correctional facilities to meet minimum standards and house a higher projected population, and social service programs to provide shelter for the indigent.

*Infrastructure*—consistent with the City's stated policy objectives for its capital programs, primary emphasis was placed on investments in key elements of the City's infrastructure including:

- *bridges*—reconstruction of the four East River bridges; major reconstruction of 42 bridges rated in poor condition, and rehabilitation of 230 bridges which have been evaluated as being in fair condition.
- *water supply*—completion of stage I and initiation of stage II of the third City water tunnel and reconstruction of mechanical and structural work at the three upstate watershed systems.
- *water mains*—annual replacement of approximately 23 miles of water distribution mains and 5 miles of the trunk main system, completion of the Jerome Park water treatment demonstration plant and initiation of other major work to upgrade the quality of water from the Croton System.
- *sewers*—annual replacement or rehabilitation of 17 miles of damaged or collapsed sewers and construction of 11 miles of new sewers each year.
- *streets and highways*—a program of highway reconstruction which will grow from a rate of 55 miles per year to an annual level of 109 miles at the end of 15 years. Streets will be resurfaced twice between reconstruction.
- *transit*—annual replacement of all subway cars more than 30 years old and all buses more than 12 years old; rehabilitation or replacement of main line subway track, tunnel lighting, ventilation systems and signals; rehabilitation and upgrading of shops, barns and yards to improve productivity. (Mass transit capital costs are now substantially funded outside the City's capital budget and financed by bonds supported from Transit Authority revenue.)

*City Operations*—emphasis was also placed on capital expenditures to benefit critical elements of City operations including:

- *equipment*—establishment of appropriate regular replacement cycles for sanitation vehicles, fire apparatus, heavy duty equipment used by other City agencies and purchase of labor-saving equipment to reduce operating costs.
- *waste disposal*—upgrading of operations at the Fresh Kills landfill; reconstruction of marine transfer stations; expansion of the current barge fleet and continuous replacement of all barges more than 30 years old; replacement or rehabilitation of air pollution control equipment at the City's three incinerators as well as development of resource recovery facilities.

*Economic and Port Development*—creation of a foreign trade zone adjacent to the Howland Hook container port and improvement of the South Brooklyn Marine Terminal; investments to permit recreational and commercial development of such areas as Sheepshead Bay and the Brooklyn and Queens East River waterfronts; continuing development of the College Point and Staten Island corporate parks and the Harborside Industrial Center, as well as restaurant and residential development on the Hudson and East Rivers.

*City Structures*—because infrastructure and economic development investments are so important to the City's vitality, the investments anticipated over the next ten years for City facilities are less than optimal and have been constrained due to financial limitations. However, the ten-year plan would provide for improvements which include:

- *public buildings* -- basic rehabilitation to prevent further structural and systems deterioration of buildings less than 50 years old together with renovation and systems upgrading of those buildings older than 50 years.
- *schools* -- replacement of one elementary and one high school built before 1920; major modernization of thirteen elementary, six junior high, one vocational and four high schools not previously modernized; and general rehabilitation at other schools with an estimated 180 rehabilitation projects to be undertaken each year.
- *hospitals* -- major reconstruction of Kings County, Bronx Municipal, Elmhurst and Coney Island Hospitals, construction of a new psychiatric and prison unit at Bellevue Hospital, completion of Woodhull Hospital and renovation of out-patient departments at Metropolitan, Harlem and Queens Hospitals, life-cycle replacement for equipment as well as procurement of new equipment due to technology changes.

The table below shows the planned investment over the ten-year period.

**Ten-Year Capital Needs Assessment  
1983-1992**

(\$ in millions)

	City	Non-City	Total
<i>Mass Transit</i> .....	\$ 1,479	\$12,651	\$14,130
<i>Other Infrastructure</i>			
● Streets, Highways and Bridges .....	4,610	867	5,477
● Sewers and Water Mains .....	2,424	—	2,424
● Water Supply .....	724	—	724
● Water Pollution Control .....	645	2,499	3,144
	8,403	3,366	11,769
<i>Economic and Port Development</i> .....	522	—	522
<i>Education</i> .....	1,424	93	1,517
<i>City Operations and Facilities</i>			
● Sanitation .....	1,486	600	2,086
● Correction .....	263	—	263
● Parks .....	717	27	744
● Public Buildings .....	651	—	651
● Hospitals .....	906	166	1,072
● Other .....	1,616	352	1,968
	5,639	1,145	6,784
<b>Citywide Total</b> .....	<b>\$17,467</b>	<b>\$17,255</b>	<b>\$34,722</b>

To advance a program to meet these needs, the City will be required to provide funding of approximately \$17.5 billion over the ten-year period. Such financing is expected to be available from a combination of sources including public issuances of City and MAC Bonds, water and sewer revenue bonds, MAC escrow funds, restricted cash, and City Expense Budget surpluses which may be made available to finance capital expenditures. The basic assumption of the financing program is that the City will be able to issue \$1.1 billion in general obligation bonds in fiscal year 1986, increasing thereafter by approximately ten percent each year. The City also anticipates being able to issue water and sewer revenue bonds at a level of \$150 million late in 1984 and at an annual level of \$300 million in 1985, increasing thereafter at an annual rate of approximately five percent. This will provide an additional \$3.2 billion over the ten-year period needed to finance this critical element of the City's infrastructure.



The following table summarizes the anticipated funding for this ten-year program.

**Anticipated Funding of Ten-Year Capital Program: 1983-1992**

		(\$ in millions)
<b>City Sources</b>		
City General Obligation Bonds .....		\$12,050
Water and Sewer Revenue Bonds .....		3,210
MAC Financings .....		850
MAC Escrow Fund Bonds .....		815
Other* .....		<u>542</u>
Subtotal City Sources .....		\$17,467
<b>Non-City Sources</b>		
<b>Transit</b>		
Federal .....		4,913
State .....		531
Other .....		<u>7,207</u>
<b>Water Pollution Control</b>		
Federal .....		2,123
State .....		<u>376</u>
<b>Other Projects</b>		
Federal .....		920
State .....		489
Private .....		<u>696</u>
Subtotal Non-City Sources .....		\$17,255
Total Funding .....		<u>\$34,722</u>

\* Includes any expense budget surpluses appropriated to capital and restricted cash balances.

The major components of non-City financed projects included in this ten-year plan are for mass transit, water pollution control and streets, highways and bridges. Transit funding has been developed in a manner consistent with the MTA five-year capital program. This program, as it is currently approved, anticipates the following sources of funds:

**MTA Five-Year Capital Program**

		(\$ in millions)
<b>Funding Sources</b>		
Federal .....		\$1,933
State .....		107
City .....		587
Port Authority .....		88
TBTA Bonds .....		537
Service Contract Bonds and Direct Payments .....		365
TA Revenue Bonds .....		1,538
Lessor Equity (Sale/Leaseback) .....		393
Other .....		<u>90</u>
Total .....		<u>\$5,638</u>

In addition, recently enacted Federal legislation provides supplemental Federal funds for transit which may enable an acceleration or an expansion of the five-year program.

Water pollution control expenditures are primarily to meet Federal mandates and are largely funded by Federal and State grants. Highway and bridge funding assumptions include levels of Federal and State grants which traditionally have been received for these purposes.

In the coming months, OMB in conjunction with City agencies and the Department of City Planning will reassess this ten-year plan. The revised ten-year plan which will result from this review will incorporate any appropriate modifications resulting from changes in financing assumptions, objectives which have been accomplished or shifts in program emphasis. Overall, however, it is not anticipated that the revised ten-year plan will vary significantly from the current plan. The City will continue to emphasize rehabilitation and reconstruction as opposed to construction of new facilities and the primary focus of the capital program will continue to be upon investments in the City's infrastructure. Once this revised ten-year plan has been completed, it will serve as the basis for the initial resource allocation for the detailed 1985 capital budget and its associated three-year plan.

Senator D'AMATO. Thank you very much, Deputy Mayor Wagner. Mayor Whalen.

STATEMENT OF HON. THOMAS M. WHALEN III, MAYOR, CITY OF ALBANY, N.Y.

Mayor WHALEN. Thank you, Senator. While you are certainly no stranger to Albany, although I am the last, let me wish you a belated presence in the great city of the Empire State, our capital, and the skies outside have opened up to a beautiful September day and the German Festival is now underway up at the mall. If you are inclined and have a few minutes later, I am sure the people up there would be delighted to see you.

Senator D'AMATO. Did you ever know a politician, particularly a D'Amato, to skip a German festival? I'll definitely be there.

Mayor WHALEN. It's a good festival and it's underway now with good food and good music.

I appreciate the opportunity to be here and to speak on behalf of the people of the city. Since we received our charter in the city of Albany some 300 years ago our lifeline has been the Hudson River and the Port of Albany. Since 1686 the Hudson River has been used, and is an essential artery, for the delivery of goods and services throughout the entire Northeast. The Hudson is also the primary water basin of upstate New York, but unfortunately the Hudson River continues to be misused as a receptacle for storm and sanitary waste.

Hardly a week goes by that there is not some type of media account of industrial pollution in the upper Hudson River. The dilemma of our 300-year-old city is very simple: Our infrastructure costs too much to repair and we cannot afford to replace it.

Whether it be the dredging and continual operation of the Port of Albany, the replacement of the antiquated water lines within the city or the separation of storm and sanitary sewers, we cannot simply hope that they will last for another 300 years, nor can we place this overwhelming burden on the taxpayers as you alluded to earlier. I would like to offer some perspectives on each of these vital resources and the Federal Government's contribution to its preservation.

Let's look first at the Port of Albany. Something that a great many people don't realize is it's the only inland, deep water port open all year on the entire eastern seaboard.

Generally speaking it is a tremendous untapped State and local asset. It is the major port in upstate New York. It occupies 201 acres within the city of Albany and 35 acres within the city of Rensselaer on the eastern side of the river. The port serves as a major distribution center for a wide variety of products including petroleum, molasses, grain, scrap metals, and motor vehicles. It is operated by the port district commission, a public corporation with 32 businesses leasing land and facilities from the commission. There are approximately 1,300 workers there and they handle an annual average of 1 million tons of goods valued at \$860 million. As such, the port is a very essential part of the economy of the city as well as the entire capital region.

Operating costs for the port include expenditures for maintenance and operation of the port facilities, and are intended to be financed from revenues obtained from rental incomes and fees charged for loading, storage and docking. In addition the port has the statutory authority to issue bonds for the construction and maintenance of port facilities.

With all these possibilities, the port still incurs an annual deficit year after year in the area of \$400,000. For fiscal year 1983 the city has budgeted nearly \$500,000 for port deficits. Pursuant to State law the cities of Albany and Rensselaer are responsible for the payment of any such deficits.

In terms of the real necessary capital improvements, the comprehensive facilities improvement plan prepared by the CDRPC, a local regional planning commission in 1981 identified the primary needs as rehabilitation of warehouse and shed space, dredging of the port's turning basin and approximately 2,000 feet of berthing space.

Thanks to the efforts of Assemblymen Connolly and McNulty and Senator Nolan we have received considerable financial assistance from the State of New York; however, this is only a small part of that truly needed by the port.

Substantial needs remain over and above the State assistance given, which if not financed through the tenants or the State, will have to be financed by the port commission.

We have a real dilemma in this regard. Although we serve the entire upstate New York region and a portion of New England and a portion of Canada, the financial burden of this service rests entirely upon the taxpayers of Albany and Rensselaer. Since the city's current debt is near the constitutional limit, the ability of the city to assume any additional burden of deficits is severely limited if not completely curtailed.

One might ask, if the benefits of the port are regional, serving adjacent cities, States, and Canada, why not have the region bear the financial burden as well as the benefits of the port? This could be accomplished in two ways. One of course would be to increase the fees and charges to those that are served by the port. That could be self-defeating, especially in these times of tight money. We certainly don't want to drive business away from New York by increasing fees.

The other alternative is the creation of a regional port authority. Aside from the legal, political, and financial difficulties of creating that type of entity, would the cities of Albany and Rensselaer just

receive a polite thank you for paying the bills of the past decade? Such an arrangement would probably be very unfair to Albany and Rensselaer who in a way have paid the mortgage but never received the deed.

The most equitable solution to this problem would seem to dictate Federal financial assistance with continued local and State assistance which we've committed ourselves to.

The second item, of course, is our water supply system. As mayor Wagner said, this is a problem that is endemic to the older cities in the Northeast, most recently within the past 2 weeks in the city of Schenectady only a few miles from here they had a main 48-inch break.

To repair that break cost \$2 million. In addition to that, they have opened themselves up to substantial litigation on the part of residents.

I only offer that as an example because I would venture to say that we will have four or five more Schenectady episodes in this region within the next 6 years, simply by virtue of the age of our piping system network.

Active portions of our system in the city of Albany are now 150 years old. As such, a major priority for the city is the repair and the overall upgrading of the system including treatment, transmission, storage, and distribution components.

With respect to the cost of renovating the system, it would require approximately \$25 to \$30 million just to undertake the replacement of obsolete valves, pipes, and related equipment.

As we all know, when we get into water supply systems—and Albany has one of the finest in New York State, I would venture to say one of the finest in the Nation—a local municipality really doesn't get credit for what it maintains, but it does get a lot of grief if somebody turns the spigot and there isn't any water.

There are no Federal or State programs which address this problem. The cost of these improvements right now are borne solely by the city. As a result of an already strained municipal budget, deferral of such improvements is often necessitated.

My predecessor, Mayor Corning, once observed the distinct difference between the Northeast and the Sun Belt, and that is simply water. Mayor Corning took great pride in the quality and supply of the water serving the city of Albany, and as an ardent conservationist, he noted the inconsistency of providing Federal assistance for waterwork projects in arid parts of the country but not assistance to distribute the water where it exists, in the Northeast. The efficient distribution of our water supply system is a most vital resource, one which must be conserved. The conservation of our water supply system warrants the utmost consideration of the Federal Government.

Likewise, our sewer supply system is also characterized by problems relating to its age. Where most of the city of Albany was built and rebuilt before 1900, major portions of the city are still served by combined storm drainage and sewer lines. As a result, localized flooding occurs and, more importantly, untreated waste flows directly into the Hudson River during periods of heavy runoff.

In terms of the amount of funds needed to correct these deficiencies, a short-term program aimed at immediate repairs would cost

between \$5 and \$10 million, while the cost of ultimately separating the combined sewers has been estimated from \$50 to \$150 million.

With this magnitude of investment required, I would hope that the form of Federal and State assistance might be considered. We can start in the cities to create an environment which makes an attractive place for people to want to live and to work, but we've reached the stage in the Northeast, particularly in the upstate cities, where assistance on a Federal level is vital if we're to see the continuation of the resurgence in the cities which we've undertaken in the past 5 years.

And I would say, Senator, that is a challenge which I'm sure you readily understand, as do the others in Washington, and we look to you for that assistance. Thank you.

[The prepared statement of Mayor Whalen follows:]

## PREPARED STATEMENT OF HON. THOMAS M. WHALEN III

## "OUR NATION'S INFRASTRUCTURE: DEFINING THE PROBLEM AND DEVELOPING REMEDIES"

Since the incorporation of the City of Albany, New York in 1636, our lifeline has been the Hudson River and the Port of Albany. Over this 300 year period, the Hudson River has been used as an essential artery for the delivery of goods and services throughout the Northeast. The Hudson River has also been used as the primary water basin of upstate New York residents. And, unfortunately, the Hudson River continues to be misused as a receptacle of storm and sanitary waste.

The dilemma of our 300 year old City is one of: it costs too much to repair it and we can't afford to replace it.

Whether it be the dredging and continued operation of the Port of Albany, the replacement of antiquated water lines or the separation of storm and sanitary sewers, we cannot simply hope that they will last another 300 years. Nor, can we place this overwhelming burden on the local taxpayers. I would like to offer some perspective on each of these vital resources.

### I. The Port of Albany

The Port of Albany is the major upstate port in New York, occupying 201 acres within the City of Albany and 35 acres within the City of Rensselaer. The Port serves as a major distribution center for a wide variety of products including petroleum products, molasses, grain, scrap metals and automobiles. It is operated by the Albany Port District Commission, a public corporation, with 32 businesses leasing land and facilities from the Commission. These businesses employ approximately 1300 workers and handle an annual average of one million tons of goods valued at over \$850 million. As such, the Port is an essential part of the economy of the City of Albany, as well as the Capital District Region.

Operating costs for the Port include expenditures for the maintenance and operation of Port facilities and are intended to be financed from revenues obtained from rental income and fees charged for loading, storage, docking and wharfage services. In addition, the Port has the statutory authority to issue bonds for the construction and maintenance of Port facilities. During the period of 1971-1980, for example, the Port incurred an average annual deficit after debt repayment of \$397,000. For fiscal year 1983, the City has budgeted nearly \$500,000 for Port deficits. Pursuant to State law, the cities of Albany and Rensselaer are responsible for the payment of any deficits, with Albany paying 87% and Rensselaer 13% of such deficits.

In terms of necessary capital improvements, a comprehensive facilities improvement plan prepared by the Capital District Regional Planning Commission in 1981 identified the primary needs as rehabilitation of warehouse and shed space, dredging of the Port's turning basin and approximately 2,000 feet of berthing space. This activity is essential to insure that ships can move safely dockside to load or discharge their cargo. A portion of this dredging has already been undertaken utilizing considerable financial assistance from the State of New York. A substantial need remains, however, which if not financed through Port tenants or the State, will have to be financed by the Port Commission. Although the Port of Albany serves upstate New York, part of New England, as well as Canada, the financial burden of this service rests upon the taxpayers of Albany and Rensselaer. Since the City's current debt is near the constitutional limit, the ability of the City to assume any additional burden of deficits is severely limited. One might ask, if the benefits of the Port are regional, serving adjacent cities, states and Canada, why not have the region bear the financial burden, as well as the benefits of the Port? This could be accomplished in two ways. One, increase all fees and charges to those who are served by the Port. In these times of "tight money" and severe competition, an increase in fees and charges would drive a number of businesses out of the Port and result in



a disservice to the region. The other alternative is the creation of a regional port authority. Aside from the legal, political and financial difficulties of creating an international-regional entity, would the cities of Albany and Rensselaer receive a polite "thank you" for paying the bills for the past decades?! Such an arrangement would be grossly unfair to Albany and Rensselaer who, in a way, have been paying the mortgage but never received the deed.

The most equitable solution to this problem would seem to be Federal financial assistance with continued local and state assistance.

## II. Water Supply System

The City of Albany's water supply system is among the Nation's oldest, with active portions of the distribution system being approximately 150 years old. As such, a major priority for the City is the repair and overall upgrading of the system, including the treatment, transmission, storage and distribution components. With respect to the cost of renovating the system, it would require approximately \$25 to \$30 million just to undertake the replacement of obsolete distribution pipes, valves and related equipment. Since there are no Federal or State programs which address this problem, the cost of such improvements must be assumed by the City. As a result of an already strained municipal

budget, deferral of such improvements is often necessitated. My esteemed predecessor, Mayor Erastus Corning, 2nd, once observed the distinct difference between the northeast and the sunbelt ... water! Mayor Corning took great pride in the quality and supply of water serving the City of Albany. As an ardent conservationist, he noted the inconsistency of providing Federal assistance for waterwork projects in arid parts of the country, but no assistance to distribute water where it exists ... the northeast. The efficient distribution of our water supply is a most vital resource, which must be conserved. The conservation of our water supply system warrants consideration of Federal and State assistance.

### III. Sewerage System

Like the water supply system, the City's sewage collection system is also characterized by problems related to its age. Where most of the City of Albany was built and rebuilt before 1900, major portions of the city are still served by combined storm drainage and sewer lines. As a result, localized flooding occurs, and more importantly, untreated waste flows directly into the Hudson River during periods of heavy rain.

In terms of the amount of funds needed to correct these deficiencies, a short-term program aimed at immediate repairs would cost between \$5 and \$10 million, while the

cost of ultimately separating the combination sewers has been estimated from \$50 to \$150 million. With this magnitude of investment required, I would hope that some form of Federal and State assistance might be considered.

Sources:

Port of Albany: Facilities Improvement Plan,

Capital District Regional Planning Commission,  
August 1981.

Stephen Cowan, Deputy Commissioner, Department of  
Water and Water Supply

George Nealon, Deputy Commissioner, Department of  
Public Works

James Waugaman, City Engineer

Charles Hemingway, City Comptroller

**Senator D'AMATO.** Well, Mayor, thank you for your testimony and always for your hospitality in a city that epitomizes great strength and warmth in its leaders. We'll work across party lines for the best interests of our constituents, and I enjoyed that relationship, as you know, with Ned Corning and I continue to enjoy it with yourself.

Mayor, let me ask you. What is your position, if any, with respect to the bond issue? Is it a wait-and-see attitude? Are you supportive?

**Mayor WHALEN.** I am fully in support of it, Senator. I would actively ask Albanians to support that in November.

**Senator D'AMATO.** Have you had discussions that would lead you to believe that there are certain projects in terms of reconstruction of infrastructures that would benefit your constituents in the city of Albany?

**Mayor WHALEN.** Yes; I have input from department heads within the city, commissioners who I would look to to give me what their priorities are as far as those improvements are concerned, and they've already begun that task.

**Senator D'AMATO.** I wonder if—and I don't mean to put anybody on the spot, but if our deputy mayor, Mayor Wagner, has any position with respect to that issue also.

**Deputy Mayor WAGNER.** Well, Senator, we would like to be supportive of it, because obviously our infrastructure needs and particularly the needs in terms of bridge rebuilding are enormous. Right now we've had two kinds of problems with the bond issue and are having discussions with the Governor's office.

I gather from hearing the Governor testify before, they're having a number of different discussions here in Albany and around the rest of the State. One concern we have is the share New York City receives.

The early proposal made by the Governor, not enacted by the legislature, was that the city would only get 24 percent of the total dollars coming from the bond issue—and I understand that everybody is going to be, every community in the State is going to be fighting for more—but what troubles me is that here is the city of New York with 43 percent of the population generating 48 percent of the revenues, with infrastructure needs in the area of roads and bridges that would probably be close to 50 percent if not 49 percent, if you use vehicle miles as opposed to just the number of miles of roads, and getting only 24 percent in the bond issue.

The second issue is whether in fact the bond issue will generate new money, or whether it is not simply replacing money that has traditionally been part of the general State budget.

We have been having discussions with the State. Our hope is that we will be able to conclude those conversations by the time the legislature comes back on the 15th, and hopefully we'll be in a position to support it, but like other regions of the State we right now have some problems.

Senator D'AMATO. I'm wondering—let me commend you Mayor Wagner, your comments in terms of industrial revenue bonds that produce quite a lot of jobs in New York, and your city. I have been one of the very, very active promoters and utilizers of IRB's. I'd suggest to you not to succumb to the easy temptation that comes out of Treasury to use IRB's as the whipping boy.

Deputy Mayor WAGNER. I just can say, Senator, I think you're absolutely right that we do need industrial revenue bonds, and the last thing in the world the city of New York would advocate is getting rid of them. But there have been cases where I would argue that there have been some abuses.

For example, to use IDA's to support General Motors in the construction of a plant would hardly seem the best kind of Federal assistance to the program.

Senator D'AMATO. Except if General Motors was going to come into the city.

Deputy Mayor WAGNER. Well then we'd take a different look. [Laughter.] If you can get them to do that, we would then—

Senator D'AMATO. You see? That's what you have to do. But it has been a very, very successfully used business innovative and I share with you—obviously there have been abuses, and what I have sensed is a reluctance to attack the abuses by the Congress and rather just come ahead with a program that would literally kill the IDB's.

I just suggest that we don't let them divide us on this issue. They're coming at us again. Congressman Pickle, who knows—no, he wouldn't do that, but anyway as long as Congressman Pickle's there we've got some real problems and trouble.

Let me tell you, and he is pushing again. In addition he is really going after the sale leaseback provisions that municipalities such as the city have used so very successfully—

Deputy Mayor WAGNER. And particularly the MTA.

Senator D'AMATO. Exactly.

Deputy Mayor WAGNER. And as I said in my statement, what is particularly disturbing about what he is doing is that he is focusing just on the public sector and not on the private sector.

Senator D'AMATO. Yes.

Deputy Mayor WAGNER. I think, first, what he is doing is bad; but, second, that it distinguishes the way he is, distinguishing between public and private.

Senator D'AMATO. Let me just post you on IDB's a little. IDB's are down in terms of their use in 1983 by 66 percent, so maybe they shouldn't be the whipping boy. And if they want to stop McDonald's franchises from opening up, fine.

You see, in other words there are abuses and I would even support elimination, but they're not after that. They'll give you the most outrageous example of where there has been an abuse and then simply go after the real meat and heart of the whole program.

Another tactic is to say we should only use these industrial revenue bonds as tools in the economically depressed areas of our city or State, or in the battle scar zones, the urban enterprise areas, so to speak.

Let me suggest to you, that's vast oversimplification, because it is indeed in the areas that have strength and still have vibrance and vitality, particularly as it relates to the Northeast, that we want to continue that vitality.

To wait for an area to become an abandoned area with no hope and then say "We'll allow you to use this as an investment tool" is literally to deprive investment, because obviously we are aware of the fact that people are not, because they are going to save 2 or 3 percentage points in interest go into some of the economically depressed areas.

So that's just another tactic, that's just another way of them attempting to kill the program.

Deputy Mayor WAGNER. So just to pick up on that point, Senator, in the case of New York City there have been oftentimes complaints about the Portland Hotel which is being constructed in midtown, albeit a part of midtown that had seen better days. But the fact of the matter is that hotel when it's completed will have produced more jobs for low-skilled New Yorkers, some 2,100 jobs a year, than the entire Bedford-Stuyvesant restoration project, which is a terrific operation, has produced in its 14-year history.

So I think the point you're making is a valid one.

Senator D'AMATO. And more importantly, it will have a very beneficial effect on the entire area.

Deputy Mayor WAGNER. On overall redevelopment.

Senator D'AMATO. Mayor, what we do with the port? How can I help you?

Mayor WHALEN. Why, I think that within the infrastructure itself, Senator, that alluding to the dredging, the berthing, and the other improvements that are needed there, I look at that as being not only an asset of the capital district—

Senator D'AMATO. The whole thing.

Mayor WHALEN [continuing]. But a tremendous asset for the State. It's got great possibilities for transportation to Canada, which is completely unexplored, and I think that this is an area where Federal transportation resources can be very, very helpful.

Senator D'AMATO. How are we doing with the EDA? Do you have any EDA application in on that port?

Mayor WHALEN. I don't know whether the port commission has entertained that or not, Senator, but I certainly will find out.

Senator D'AMATO. Let me suggest to you that that might be an area of activity, to see if we can't get them to work with developing that kind of a program, because that certainly seems to me to be one of the areas that we should not neglect.

You know, we are so far behind our brethren in the South and Southwest and other areas who are pursuing every single program that moves and walks, particularly as it relates to hard dollars.

I don't mean social welfare dollars, and I don't denigrate that, but I'm talking about the kind of economic development assistance that we're talking about here today.

May I thank my three colleagues from local government who have the most difficult of jobs, and that is being right on the battle-line, facing the people, preparing the budget, dealing with them, and then dealing with the work force and the infrastructure needs and trying to balance all of these competing forces.

And thank you for your participation today, and hopefully this would be the beginning of at least the Congress playing a more intricate role in the infrastructure problem of the United States, at least seeing to it that we develop an assessment to where the needs are, attempting to prioritize them.

And then I believe it's been stressed in much of your testimonies, Deputy Mayor Wagner's testimony, the need to come out with a program that can sustain the level of support over a period of years so that there can be continuity of that support and long-range planning.

Thank you all. This committee stands adjourned.

[Whereupon, at 2:08 p.m., the committee adjourned, subject to the call of the Chair.]

[The following information was subsequently supplied for the record:]

**TESTIMONY**

**Presented By**

**STANLEY FINK  
SPEAKER  
NEW YORK STATE ASSEMBLY**

**To The**

**JOINT ECONOMIC COMMITTEE  
CONGRESS OF THE UNITED STATES**

**Public Hearing**

**On**

**OUR NATION'S INFRASTRUCTURE:  
DEFINING THE PROBLEM AND DEVELOPING REMEDIES**

**Albany, New York  
September 7, 1983**

Good morning. It is indeed a pleasure to have you here with us today. The maintenance of our Nation's physical infrastructure is without a doubt an "intergovernmental issue" and very clearly requires the attention and cooperation of public officials serving at the federal, State and local levels. As a State official, I know that I welcome the opportunity to share my ideas on this subject with federal and local officials who serve the same constituents that I do, but in different forums. The divisions of responsibility in this field and the financial flows involved are complex and frequently confusing. Only by working together can we ensure that the people of this State are represented in Washington and in Albany and in the county office buildings and town, city and village halls throughout this State in an effective and coordinated manner.

Federal, State and local governments all have a role to play in the maintenance of the Nation's infrastructure, and New York State has much to gain from having its representatives at these three levels work together on this important subject. We can obviously learn from each other in ways that can help us each serve our common constituents more effectively.

In this spirit, I would like review for you some of the steps that we have taken in New York State over the last several years to address the issue of infrastructure maintenance and, in so doing, to provide you with some assistance in your efforts at defining the problem and developing remedies. I must warn you, however, that the better you do at defining the problem the more difficult it is to develop remedies.

In reality infrastructure maintenance is not A problem. It is a significant challenge to the effectiveness of our government institutions and as such it encompasses a number of major public policy problems. It is an economic development problem, but it is also a financial planning and resource allocation problem. It is an intergovernmental problem, but it is also an intergenerational problem and an interregional problem. It is a capital formation problem, but it is also a tax policy problem. And while it is a financial planning and resource allocation problem, it is also in a different sense a financial management problem, and underlying both of these problems is an enormous information problem.

My own involvement with the subject of infrastructure maintenance began in 1980 as part of an effort to think about our State's future economic viability. When I look back at the documentary history of our Infrastructure Project, I am somewhat surprised that we never addressed this issue from the perspective of its immediate job-creation potential. Our perspective was one of jobs and economic growth, but we were thinking of the jobs that come from the economic activity that is made possible by a sound infrastructure, not the jobs that come from the building, repairing and maintaining of that infrastructure.

In addition to reviewing the concerns which led me to identify the condition of the public infrastructure as one of the most significant economic development issues facing our State, I will discuss some of the other major problems which we confronted as we began to probe the issue of infrastructure maintenance more thoroughly. I will also touch on the various activities that we have undertaken as part of our Infrastructure project. I am including this brief review of our Infrastructure Project in my testimony for two reasons. First, I hope to make you aware of what has gone on in your home State on this important issue and to alert you to the fact that we are available to assist you in an informed manner as you proceed to address relevant legislation in Washington. Second, I



am quite proud of what we have done in New York on this issue and would like to make these activities known to the Congress more broadly and to other state and local officials around the country, for whom they may serve as one possible model to utilize in addressing their infrastructure needs in a thorough, informed manner. To a significant extent such a process has already begun through referrals from various national organizations, such as the Council of State Planning Agencies. As the result of such referrals, we have provided information and assistance to the states of California, Massachusetts, Maine, Washington, North Carolina, Colorado, Pennsylvania, Kentucky and Idaho as they have undertaken similar projects and several States have used the survey instruments which we developed in undertaking their own inventories or needs assessments. While it is now somewhat dated, I have included as one of the exhibits accompanying this testimony a copy of a report prepared by the National Conference of State Legislatures entitled Colorado and New York Evaluate Their Infrastructure Needs and Capital Budgeting Processes. This report was one in a series of Legislative Finance Papers which was supported by funding from the U.S. Department of Housing and Urban Development through a program designed to assist state and local governments in their efforts to strengthen their management capabilities. This program, known as HUD's Governmental Capacity Sharing Program, is designed to facilitate the collection and dissemination of information about sound ideas and workable practices from both the public and private sectors that may be transferable to other State and local governments. While the dollars spent on this program may not in the short run have as much immediate impact on people as many important human services programs, it is a small program and has the potential for magnifying the productivity and impact in the long run of federal, state and local tax dollars. I mention this specific program since it represents in my mind one important and appropriate role for the federal government. In fact, as I mention later, it serves as a model or basis for a program to encourage the development of an infrastructure data base which could be used and maintained cooperatively by all three levels of government to improve their capital planning and budgeting processes.

#### Economic Development

As I have previously mentioned, our concern with the condition of the State's infrastructure emanated from an overall review during 1980 of the State's economic situation. Out of this effort came a recognition on my part of the need for a broad-based plan for the State's future economic development and a belief that the maintenance of a sound infrastructure must be an essential part of such a plan.

When we completed our study of the State's economy, I issued a report with the title Toward a Blueprint For Economic Survival. In retrospect that may sound a little overly dramatic. But you must realize that at that time New York State had just come out of a severe economic and fiscal crisis; and that while our economy was then on the upswing, there was no reason whatsoever to be complacent or smug. Between August 1969 and February 1976, private sector employment in New York State plummeted from 6.1 million to 5.4 million, for an overall downturn of 729,000 private sector jobs. By early 1975, when the New York City and New York State fiscal crises finally made everyone aware of the fact that we were in an underlying economic crisis, State officials of all political stripes were willing to try anything in the name of jobs and economic development.

Beginning in 1975, under the leadership of Governor Carey, Senator Anderson and Stanley Steingut, my predecessor as Assembly Speaker, New York State began a successful effort to control State spending and to pursue a wide-ranging economic development program. The State's belt-tightening effort made it possible for us to

undertake, beginning in 1977, the most extensive and continuing tax cut program ever undertaken by a state government in the history of this country. And whether it is related, as we would like to believe, or simply coincidental, this effort has been accompanied by major turn-arounds in the State's trends in both private sector employment and personal income growth.

Between February 1976 and November 1980, private sector employment had increased by more than one-half million--up 532,622 jobs.

During the first eight months of 1980, personal income growth in New York State had exceeded personal income growth nationally. This was quite a reversal of the record of the 1970s when New York ranked dead last among the states in personal income growth.

Beginning in 1978, the rate of inflation in this State was less than the rate of inflation nationally.

In September of 1980 we were able, for the first time since 1970, to say that the unemployment rate in New York State was less than the national unemployment rate. This has now been true for three consecutive years and is all the more significant because the State's total work force today is more than half a million persons larger than it was ten years ago. During the 1974-75 recession, unemployment New York State reached 11.5 percent, a full one-third higher than the comparable U.S. rate of 8.7 percent at the time. In November 1980 unemployment in New York State was 7.2 percent while nationally it was 7.5 percent. Last month New York State's unemployment rate was 8.5 percent while the U.S. rate was 9.5 percent.

In the Blueprint, a copy of which is included as an exhibit (Exhibit B) accompanying this testimony, the many and various tax cuts enacted by New York State in the 1975--1980 period are reviewed and a proposal is put forward for a more targeted, selective tax cut program for 1981 focusing on small business, growth industries, several particularly important New York industries (publishing and agriculture) and the middle and lower-middle income blue collar workers and the elderly who benefited least from the 1975-80 personal income tax cuts which focused primarily on eliminating the fifteen, fourteen, thirteen, twelve and eleven percent brackets on the personal income tax. In 1981, most of that proposed program and several important measures initiated by Senator Anderson were enacted into law, but the primary message of the Blueprint was that the State's economy could not be saved by tax cuts alone. We recognized, and still recognize, the importance of redressing some of the extreme imbalances which had existed in the State tax system. But we felt that we could only accomplish so much from an economic development program based primarily on tax reductions.

To quote from the Blueprint: "New York's economic revival may be a short-lived phenomenon if our physical and social infrastructure continues to deteriorate. If New York State does allow its infrastructure including complementary support services such as police and fire protection to continue to deteriorate, it will dissipate its traditional advantage as a place to live and as a place to do business. New York State must balance its current, understandable zealotness for tax cuts with the need to 'invest' in its economic future."

In the Blueprint, we basically made a statement about economic development. That report and the media attention it attracted helped to alert people to the fact that

government can and must do more to facilitate economic activity than cut taxes. But at the time this was a new idea and we did not have an easy time convincing people that we had an infrastructure problem or that it was related to our economic survival. That may seem surprising today, but at the time we faced a real challenge in this regard. As I look back on the history of our Infrastructure Project, 1981 served mainly as a period of consciousness-raising and of issue identification.

### Capital Formation

From a national perspective, one of the major issues associated with infrastructure maintenance relates to the capital formation process. In February 1981 in a presentation at a National Urban Policy Roundtable, I identified two key infrastructure dilemmas. The first dilemma, the tradeoff among capital investment, current services and tax rates affects all levels of government and all areas of the country. Both the older industrial areas of the Northeast and the Midwest and the newer areas of the South and Southwest will face this infrastructure dilemma.

But in addition to this basic dilemma which confronts all areas of the country, the Nation as a whole faces a related and even more important dilemma--the need to utilize available capital in a manner most conducive to the economic revitalization of the United States.

Economists are beginning to ask whether we can meet the capital costs of discarding and underutilizing significant portions of our Nation's capital investment, both public and private, and still provide the capital necessary for industrial innovation and improved productivity. Underutilizing our existing capital plant and moving people and jobs to areas where we must duplicate that investment could seriously distort our national capital budget.

I am not referring to the capital budget of our national government, but rather the de facto capital budget of our Nation as a whole. The capital necessary to fund the infrastructure needs of growing areas is capital that must be aggregated in competition with all other public and private capital formation needs. An important strategic consideration facing the Nation, therefore, is the degree to which national policies should encourage or discourage development patterns which increase the demand for capital, thus making capital more and more expensive for productive economic purposes. But despite general agreement that greater private sector investment is necessary and that capital formation and industrial productivity are closely intertwined, little attention has been given to the relationship between the infrastructure needs resulting from national development trends and the level of private sector investment. It may very well turn out that the overall economic challenge facing the United States is more related to the infrastructure dilemma than we presently realize. I know that the subject of capital formation is an ongoing concern of the Joint Economic Committee, and I recommend your attention to this particular infrastructure problem even though it may be much more difficult to address than the capital planning and budgeting and infrastructure financing questions that are now occupying most of our attention.

### The Assembly Infrastructure Project

Following our initial "infrastructure consciousness-raising" efforts in early 1981 we began a concerted effort to educate ourselves and the public on the details of the infrastructure problem and to understand and evaluate the options available to us. Since

no single Assembly standing committee had jurisdiction over all aspects of infrastructure maintenance, or even a significant portion of it, we created an Assembly Infrastructure Task Force consisting of the Chairmen of the ten Assembly standing committees with responsibility for most infrastructure-related legislation. The Task Force's mandate was and is to (1) examine the State's infrastructure needs, (2) review various methods of financing the reconstruction and rehabilitation of the State's infrastructure and (3) devise workable methods for assuring that the available resources are utilized in a manner that ensures continued viability of the State's important public facilities.

To kick off the work of the Task Force, we organized a major two-day seminar on "New York's Infrastructure." This session was held as part of a series of "Speaker's Seminars on the 1980's" during which we have addressed a number of major issues affecting our State's future. Other seminars in the series have focused on "Growth Industries for New York's Future," "Capital Formation and Job Creation for New York's Future," "International Trade and Finance: New York in the World Economy" and, most recently, the "Changing Financing Services Industries."

That September 1981 seminar brought to Albany more than two hundred leaders of business, government and academia, together with national experts in infrastructure finance and capital budgeting for a two-day brainstorming session. The seminar included presentations on methods for assessing the state of the State and local infrastructures, on ideas for improving the State capital budgeting process and for coordinating capital budgeting with the planning and economic development functions, and on ways of financing infrastructure needs. In addition, a series of ten workshops were held on specific infrastructure components. The results of the workshop on highways, roads and bridges are included in Chapter III of the Task Force's May 1983 report which I have included as one of the exhibits accompanying this testimony. The results of the workshops on water supply and distribution and on industrial and residential waste disposal are included in Chapter IV and the other seven workshops are all summarized in Chapter V of that report.

It was from this seminar that we have drawn the conceptual framework for our infrastructure survey, our bill on capital planning and budgeting, our work on water and transportation systems and our new projects on port development and waste management.

Also in September 1981 we organized, in conjunction with the National Conference of State Legislatures and the Municipal Finance Officers Association, a major national conference on "Debt Policy: Pressing Problems, Emerging Solutions" to examine the institutional framework of State debt issuance and control policies. Better coordination of debt issues was seen as essential, particularly with the increasing need to finance improvements to the deteriorating infrastructure.

These two major, somewhat academic events were followed by some more practical legislative fieldwork, including on-site visits and regional hearings.

On November 13, 1981, we held our first regional infrastructure hearing in Syracuse. This was followed on December 16, 1981, by four more regional hearings held simultaneously in Buffalo, Binghamton, New Paltz and Melville by various members of the Task Force, and in February 1982 by a hearing in Mount Vernon sponsored jointly by the Task Force and the Westchester County Legislature's Public Works Committee.

Out of these hearings came several major premises which have served as the foundation for our work in this area.

First, we concluded that it is very unlikely that we will ever be able to do everything that we should do or that we would like to do. The corollary of this conclusion was a recognition of the need to assure that the resources which we do have available are used as effectively as possible. This led to our early emphasis on improving the State's capital planning and budgeting processes.

Second, we concluded that we must utilize a wide range of financing alternatives to meet our infrastructure needs. There is no pot of gold at the end of the rainbow. There is no one source of revenue which will provide us with all of the funds necessary to meet our many and diverse needs.

### Capital Planning and Budgeting

New York, like virtually all other states and the federal government, does not presently have a sound, long-term capital planning process. Capital expenditure decisions are, for the most part, determined on a year-to-year basis. The Legislature and the public are provided with an annual capital appropriation bill which is no more than a wish list of projects which may or may not be undertaken in the ensuing fiscal year. The control of capital expenditures is also weak because of the lack of centralized management of the State's construction program. With little centralized responsibility for capital project expenditures and an inadequate system for tracking these expenditures, accountability for capital expenditures is almost nil.

Our conclusion was that New York has to improve its system for planning and controlling the dollars it spends on public works. Consequently, we placed a high priority on the development and enactment of legislation to do just this.

In 1982, we introduced a bill on this subject (A.13124) for study purposes. At that time it looked very unlikely that we would succeed in the enactment of this legislation in the short run. Note, for example, the pessimism of most observers quoted in the NCSL's October 1982 study of our efforts. In 1983, however, Governor Cuomo showed much more enthusiasm for this reform than had his predecessor, and a revised version of this bill (A.4-B) passed both Houses of the Legislature and was signed into law by Governor Cuomo.

Most people who think about infrastructure maintenance for any length of time ultimately reach the conclusion that the present deteriorated condition of the infrastructure is the result of the deferral of needed maintenance. We have therefore concluded that as New York State faces its next round of investment in public works, it must take steps to assure the State's taxpayers and the users of the infrastructure that maintenance will be properly carried out so that these facilities do not deteriorate again. Major new capital projects which are initiated should be continuously monitored and future maintenance should be taken into account in determining the life-cycle cost of such facilities. Legislation along these lines (A.6034, "An Act to amend the State Finance Law, in relation to establishing a system of continuous budgeting for infrastructure maintenance"), was passed by the Assembly and is now before the State Senate.

We also believe that service standards must be developed (especially for critical public infrastructure components) to indicate program performance and guide capital investment priorities. Good capital planning requires that the goals and objectives served by a capital facility be clearly outlined and that the costs and benefits of investments be determined and compared. Wastewater treatment systems' capital priorities are guided by environmental standards, while public water supply systems are controlled by public

health considerations. A particularly strong case can be found for establishing standards for mass transit systems, where safety and convenience for the travelling public is a primary consideration. Water quality and pollution control systems have long enjoyed the benefits of enforceable service standards, and this concept should be progressively applied to other infrastructure components. An example of this approach was included in a 1982 bill (S.8970/A.11374, "An Act to amend the Public Authorities Law, in relation to requiring annual consolidated financial reports by certain transportation authorities and the submission of service plans by the Metropolitan Transportation Authority"), which was passed by the Legislature in 1982 but was vetoed by the Governor.

#### Assessing Infrastructure Conditions and Needs

Improvements in the State's capital planning and budgeting system as proposed above will ensure that priorities for capital spending are established in a rational manner, that planning is done on a multi-year basis and that the fiscal implications of various undertakings are clarified at an early point in the decisionmaking process. But even an improved system of capital planning and budgeting will not ensure that the projects being proposed by the Governor address all of the most important infrastructure needs in the State--or even all of the important needs that can be addressed within the fiscal parameters of the plan being proposed. Such a situation would depend not only on the priorities of the Governor but also on the quality of the information on infrastructure conditions and needs available to the Governor and to those individuals who assist him in preparing the multi-year capital improvement program which he proposes to the Legislature. Similarly, the Legislature, in evaluating the Governor's proposals, will not be able to add an extremely important project to the program and drop a less important project if it does not know about the former and its importance to the economic viability or the public health of the residents of a particular part of the State.

The Governor and the Legislature need access to good information about the public infrastructure in New York State--what it is, where it is, what condition it is in--and about infrastructure construction, maintenance and rehabilitation needs. While good information is essential to good decisionmaking, we must not get caught up in the quest for complete and perfect information. If we waited till we had a complete inventory of all of the public works in the State, an assessment of the condition they were in and a listing of our State's most important infrastructure needs before we established any priorities or made any funding decisions, the twin demons of obsolescence and deterioration would overtake us completely. On the other hand, we should not allow these constraints to lead us to the opposite extreme--to a decision to write off the need for an infrastructure data base and to establish priorities entirely on a seat-of-the-pants basis.

This situation is made much more complex by the fact that the public infrastructure is the responsibility of many different levels and units of government. Moreover, New York State addresses infrastructure needs through both direct State expenditures and through aid to local governments in the State.

We believe that New York State (and other states for that matter) should work cooperatively with the federal government and with the State's various local jurisdictions to establish an infrastructure data base that would be available not only to both branches of the State government for State capital planning and budgeting purposes but also to federal and local governments for use in their capital planning and budgeting activities. Based on our experience with our own informal infrastructure survey, it is clear that this is a very difficult task--but it is also clear that it is an extremely important undertaking. Consideration must be given to the infrastructure components to be included in the data

base, to the methods to be used in both building and maintaining the data base and to questions of access.

I have written to all of the members of the New York State Congressional delegation encouraging them to support legislation which would provide financial assistance to states that undertake to develop such inventories. Such an approach could build upon the experience of HUD's Governmental Capacity Sharing Program and could be combined with bills such as Senator Moynihan's S.23 or S.1026, Senator Stafford's S.1330 or with Senator Dominici's S.532 dealing with the capitalization of state infrastructure banks.

### Highways and Bridges

A combination of federal policies and years of deferred maintenance by both State and local governments have resulted in serious deterioration of the State's highway and bridge network. The deterioration has resulted in increased costs to highway users, as well as greater safety hazards. The recent increase in federal motor fuel taxes will allow for some increase in highway spending at the State level. But local investment must also be increased if only to prevent conditions from deteriorating further on nonfederal aid roadways.

This year, as you know, the Governor recommended and the Legislature endorsed for voter consideration a \$1.25 billion transportation infrastructure bond issue. Concomitantly with approving this legislation, the State adopted its new capital planning and budgeting process, thus presenting the bond issue to the voters in the context of an effective capital planning process which will assure that priorities are set in a rational manner and that projects are implemented in an efficient and effective manner.

We are also considering the development of a State-level program which would underwrite a portion of local government interest costs on borrowing for highway and bridge repair. It is estimated that a minimal State commitment would spur massive investments by local governments due to the savings in interest costs. The State's commitment could be financed by earmarking and dedicating either a percentage amount of the motor fuel tax, altering and dedicating a portion of motor vehicle registration fees or drawing from some other highway-related revenue stream.

### Water and Sewer Systems

Many municipalities, particularly cities, have badly deteriorated water systems, some of which are leaking almost half their volume. Constitutional constraints against revenue bond financing by cities have prevented cities from placing water and sewer systems on a self-sustaining basis, whereby needed improvements would be financed wholly by users without recourse to general revenues. Revenue bonds have enjoyed increased acceptance in the financial markets in recent years, constituting about seventy percent today of total State and local tax-exempt borrowing. Cities which have had limited access to the general obligation bond market in recent years would find greater acceptance for local revenue bonds for water and sewer improvements.

This year the Assembly passed A.5956, "An Act to amend the Public Authorities Law, in relation to financing various public improvements within the State by creating the New York State Water Finance Authority and allowing for the creation of water boards, providing for their powers and duties and other matters in connection therewith and to

make an appropriation to the departments of Environmental Conservation and Health to develop a water resources management strategy." This bill would enable cities and other municipalities to place water and sewer systems on a self-sustaining basis. The bonding limit would be set no lower than \$4 billion, with at least \$1 billion reserved for municipalities outside New York City. A statewide water resources management strategy would be devised promptly in order to assist in setting priorities and establishing long-range needs for water and sewer infrastructure investments.

In addition to these desirable State actions, a more rational and equitable federal policy in water project financing is also needed. The block grant approach embodied in the proposal by Senators Moynihan and Domenici would be a very significant step in the right direction, and we in New York will give your effort, Senator, all the support and encouragement we can.

We are also considering the development of an environmental health bond act, with authorization sufficient to assist undercapitalized, small and rural water systems and to assist communities in remediating existing hazards to water quality. Bond funds would be used to subsidize interest payments by such systems, which would qualify for assistance by instituting adequate user charges and by showing that interconnection with an existing, larger system is impractical or uneconomical.

Due to a variety of historical developments, New York State's infrastructure is, to a very great extent, in the custody of local governments. Virtually all water and sewer systems, and much of the highway and street network, are maintained and operated by units of government other than the State. Because of shrinking tax bases, tight municipal budgets and increasing shortages of qualified personnel, backlogs of capital projects have developed, and local budgets lack the means to finance new capital improvements. New and innovative approaches are required, both to clear local engineering departments of backed up projects and to find new ways of attracting financing to declining areas with deteriorated infrastructures.

Within the Port of New York District, the Port Authority of New York and New Jersey should be empowered to act as general contractor on behalf of municipalities, particularly New York City, which request such service. The Port Authority's expertise in design and construction of major infrastructure-related projects would enable New York City to increase the rate of its capital spending and attain the goals which it has established for itself. S.6665/A.7942, "An Act to provide for the further coordination, facilitation, promotion, preservation and protection of trade and commerce in and through the Port of New York District through the financing and effectuation of capital improvement projects therein, and agreeing with the State of New Jersey with respect thereto," was passed by both Houses of the New York State Legislature in 1982 and signed into law by Governor Carey as Chapter 551 of the Laws of 1982. This measure is currently awaiting passage in the New Jersey State Legislature. Enactment of identical measures by both states is necessary before measures affecting the Port Authority can take effect.

The proposal of Governors Keane and Cuomo for the creation of a Bank for Regional Development within the Port Authority is another creative use of the authority for the benefit of municipalities in the Port District. As proposed, the bank would finance local infrastructure improvements at low interest rates, utilizing available surplus revenues from the Port Authority's facilities. Since this proposal would create a bi-State infrastructure bank, I would hope that any Congressional action such as Senator Domenici has proposed capitalizing local infrastructure banks would authorize aid to this bi-State entity as well.



Legislation is currently under consideration by the U.S. Congress and by the New York State Legislature to establish an Enterprise Zone program designed to attract private capital to declining neighborhoods. Typically, however, the infrastructure in such areas is in a deteriorated condition, thus making most business undertakings more difficult and more costly than in other areas. In some cases the infrastructure shortcomings in such areas are so extensive as to completely preclude some types of commerce or industry.

Given the basic role that a sound infrastructure plays in facilitating or allowing for economic development, most enterprise zone proposals, including President Reagan's proposed Enterprise Zone Employment and Development Act, include an ironic Catch-22. These proposals provide that a very high priority in designating zones (the Reagan proposal limits the number of zones nationally to seventy-five) will be given to the tax breaks being offered by the state and local governments involved. Many of the declining areas to which the enterprise zone concept is addressed are located in very hard-pressed localities which are finding it difficult to meet their current budgetary requirements out of their existing revenue sources let alone initiate public works programs in deteriorating areas. These same municipalities, however, would be encouraged to provide property tax abatements, thus diminishing the revenue stream from which infrastructure improvements are financed.

A.730/S.607 would provide tax incentives to businesses that help finance public infrastructure improvements in enterprise zones. The U.S. Congress should include provisions for the financing of infrastructure improvements in any enterprise zone legislation prior to final enactment. It should give particular consideration to adopting infrastructure tax incentive provisions of the type contained in A.730-A/S.667-A. Such a provision would prove to be much more practicable if financed federally or by the federal and state governments jointly, rather than falling entirely on financially strapped state governments.

A.730-A/S.667-A would also address the infrastructure needs in such zones by authorizing municipalities to utilize the revenue received from incrementally higher local property taxes resulting from increases in the assessed value in enterprise zones to pay for infrastructure improvements in such zones. This concept of "Tax Increment Financing," as proposed in A.730-A/S.667-A would put projection on enterprise zones on a pay-as-you-go basis.

However, authorization to borrow for this purpose would require an amendment to the State Constitution. Such an amendment will be considered by State voters this November. This amendment would allow municipalities to engage in tax increment financing of infrastructure improvements in deteriorated areas and to issue bonds for such purposes. These bonds would be backed by the increased revenues available from the higher assessed values resulting from private development made possible by the infrastructure improvements involved. A bond issue of this type would involve a planned development and would identify the infrastructure improvements to be undertaken. In presenting this proposed amendment to the State's voters for their consideration, the sponsors of the amendment have introduced implementing legislation so that the public can apprise itself as to how this amendment would work in practice.

#### Fair Deal Amendment

Over the last several years, an informal coalition of state legislative leaders from the Northeast-Midwest states worked on a proposal to modify the Crude Oil Windfall Profit Tax to make that measure fairer to energy consumers throughout the country.

The Windfall Profit Tax Act of 1980 was originally put forward by President Carter on April 5, 1979, as a way of recapturing for the American people a portion of the "windfall" that the oil companies would realize as the result of the decontrol of oil prices. At that time Charles Schultze, Chairman of the Council of Economic Advisers, defined windfall profit as "returns that accrue to the owner of an existing investment that arise from events outside his control and that are in excess of the level needed to replace and expand that investment."

The President's proposal called for the revenues from the tax to be channelled into a Special Energy Security Fund, which would be used for research on alternative energy sources, mass transit, and assistance to low income families burdened with higher energy prices.

The windfall profit tax which was finally signed into law on April 2, 1980, reflected numerous changes but retained the same objective as the original administration proposal--to return to the people some of the increased prices that they would be paying for energy. The Act as finalized did not include the special fund proposal, but allocated the revenues from the Windfall Profit Tax, for accounting purposes, to a separate account in the Treasury and provided that the funds in this account would be further allocated to subaccounts for specified uses: Income Tax Reductions--sixty percent; Low Income Assistance--twenty-five percent (plus two-thirds of any additional net revenues); and, Energy and Transportation Programs--fifteen percent (plus one-third of any additional net revenues).

The final version of the bill included a major interregional compromise on the formula for allocating low income energy assistance. The final formula, in the view of many observers, does not give sufficient weight to the extent to which different regions of the country depend on petroleum products for heating and electricity. Nevertheless, this formula was the result of legislative compromise and any changes would involve shifts that would, at least relatively, benefit some areas at the expense of others.

Two additional major interregional issues were raised by Senator Jack Danforth of Missouri during Senate consideration of the bill. One of these dealt with an exemption for oil interests owned by state and local governments, and the other dealt with an amendment which was added to the President's proposal regarding a deduction for state severance taxes. Senator Danforth proposed an amendment capping state severance taxes but this amendment never came to a vote. The representatives of the producing states argued, successfully, that the profits of the oil companies depended on these states' natural resources and that an adjustment (or deduction) for severance taxes paid to the states was warranted. Not only does the severance tax adjustment benefit the oil companies significantly in terms of their total tax liability, but it results in an immediate sharing of Windfall Profit Tax revenues with the producing states (in proportion to their oil reserves and their severance tax rates), and allows a state to unilaterally increase the share of Federal revenues that it can receive by raising its severance tax rate.

While the rights of the states to levy such taxes can be acknowledged, it must also be recognized that the profits of the oil companies derive not only from the fact that they are able to produce oil, but also from the fact that they are able to sell it. Moreover, the people of the states that are most dependent on oil for home heating and electricity have demonstrated an admirable conservation record, but they will continue to pay for a disproportionate share of the oil company's windfall profit.

Given that the justification for the windfall profit tax was to return to the people a portion of the increased price they would be paying for oil, it therefore appears to be

appropriate that the Congress consider a provision whereby the people of this country would have a portion of the windfall profit returned to them in a fair and equitable manner, that helps them meet their transportation- and energy-related needs in a way that recognizes the diverse needs of the different parts of the country. Our legislative leaders coalition proposed to accomplish this by allowing for a "state excess profits tax adjustment" similar to the "severance tax adjustment" which is currently allowed. Following a presentation to several members of the Senate Finance Committee and the House Ways and Means Committee, our proposal was refined and introduced by Senator Moynihan (S.3210 in the Ninety-seventh Congress and S.1793 in the Ninety-eighth) as the "Fair Deal Amendment."

Under S.1793, oil companies subject to the federal Windfall Profit Tax would be allowed to take as a credit against the tax due the federal government twenty-five percent of any excess profit taxes paid to state governments, if those taxes meet certain standards set in the bill (similar to those imposed in the current law on state severance taxes) and if proceeds from the tax were used for energy or transportation-related purposes. The Amendment would thus serve as a vehicle for delivering on the original argument for the Windfall Profit Tax--that it would be a means of returning to the people a share of the "windfall prices" that they would be paying for oil because of decontrol.

We originally developed the idea behind the "Fair Deal" Amendment as a positive approach to the emergence of significant energy-related economic disparities among the regions of this country.

These disparities take on added importance as we assess the abilities of the states to meet the challenge of a sound infrastructure. There is no reason why only certain states should have access to federal revenue sharing of this type, and I ask for your assistance in giving this proposal a full airing as one possible response to the Nation's infrastructure crisis.

#### Port Development, Solid Waste and Alternative Financing Mechanisms

Over the next several months the Infrastructure Task Force will turn its attention to two other critical components of our infrastructure: our ports and our solid waste disposal systems. In addition, we must continue to examine innovative strategies for assisting State and local governments in financing infrastructure investments.

New York's economy has deep historical roots in our role as the Nation's principal Atlantic seaport. In this century, the port industry throughout the State has been well served by the partnership between State and local governments and the local authorities which finance and operate our ports. However, as other East and Gulf Coast ports develop, we in New York must, in cooperation with the Congress, assure that our ports remain competitive.

The omnibus water resources bill recently approved by the House Public Works Committee represents a progressive step toward the cost-effective improvement of New York's harbor. The cost-sharing arrangement provided in the House bill is preferable to the vague, tentative authorization contained in Senator Hatfield's bill. Senator Moynihan's bill would be an improvement on the House bill. I believe that cost-sharing between the federal government and port users for deep draft dredging will assure that such dredging takes place only where there is an adequate market for it. Such targeted, cost-effective federal assistance, supported by user charges, based on tonnage, not ad

valorem, will help make the State's and local authorities' jobs easier in selecting among alternative capital improvements for our ports.

As for solid wastes, to say the problem is mounting is to speak the truth, both literally and figuratively. Having progressed very little from the Stone Age technology of burying wastes, our society is building toxic mountains of household refuse often commingled with hazardous industrial wastes, and these mountains are contaminating our air, our land and our water. In New York City, more than twenty thousand tons every day are contributing to landfills which may ultimately rise nearly five hundred feet above sea level, making them the highest points on the Eastern seaboard.

This is a problem for which there are no easy answers. In a market economy such as ours, source reduction of the waste stream is an almost impossible goal without federal leadership. Resource recovery technology is promising, but also raises its own environmental questions which must be answered. Recycling is also needed, but widely fluctuating materials markets make this alternative difficult to implement and undependable.

In order to assist the states in dealing with this problem, the federal role in funding solid waste management must be fully restored to its pre-1979 levels, and closure of local open dumps should be made eligible for ninety percent assistance from the federal Superfund in the same way as hazardous waste sites. The present fifty-fifty split between federal and local governments for local dumps discourages localities from taking action and inhibits them from undertaking new technologies to handle solid wastes.

After almost three years of looking at the problems of the State's infrastructure, I most confess that we have still not found the money tree, but I think we are closing in on it. Over the past five or more years, interest rates on tax-exempt State and local bonds have risen as a proportion of prime rate from their traditional sixty or sixty-five percent of prime up to ninety percent or more. The result is that even though the credit markets have eased somewhat in recent months, State and local governments are paying a substantially higher cost for borrowing when compared to the private sector.

There is no such thing as a free infrastructure, and I believe that substantial State and local borrowing will be necessary to restore it. In order to restore the traditional advantage for tax-exempt bonds for infrastructure, I believe we must look at methods of lowering the interest rates for such bonds--with either State or federal subsidies, or a combination of both. In this way a relatively small commitment of State and federal dollars can leverage a much greater investment from local governments. State bond banks are being proposed elsewhere. New York has had one for over ten years, but has never used it. I believe it could be successfully adapted to assist municipalities in finding interest-free or low-interest financing for infrastructure improvements.

As we all know, the issue of infrastructure maintenance is inextricably interwoven with the economic viability of our State and Nation. Many of us have spent a good deal of time over the last four years in heightening the awareness of the public, elected and appointed officials and the media to this relationship. On a superficial level we have been successful--infrastructure is now a part of the American vocabulary, and virtually everyone knows, at least intellectually, that we have an infrastructure crisis. But the real test will be in the results of the political and governmental processes over the next several years.

I thank the Committee for coming to Albany and holding this hearing. I hope my comments have been helpful in your deliberations, and I would be pleased to respond to any questions you may have.

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STATEMENT BY COMMISSIONER HENRY G. WILLIAMS, NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION, ON THE NATION'S INFRASTRUCTURE PROBLEMS BEFORE THE JOINT ECONOMIC COMMITTEE

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SEPTEMBER 7, 1983

Mr. Chairman and members of the Committee, I am Henry G. Williams, Commissioner of the New York State Department of Environmental Conservation. I appreciate this opportunity to testify before this Committee in support of policies to deal with the problems of infrastructure rehabilitation.

Summary of Recommendations

New York State has invested heavily in its water infrastructure, whether they be water supply systems, flood control facilities, sewerage systems, canals or hydroelectric generating facilities. The infrastructure is the foundation of our economy. It allows people to be productive.

However, these capital assets have been allowed to become obsolete, deteriorated and unreliable. Repair has a multi-billion dollar price tag and the need for it is no longer debated. It is obvious, made so by the uncompetitive nature of our economy. Thus, the financing of the rehabilitation and improvement of the nation's infrastructure has become a major issue facing the Congress.

It is time that the roles of each level of government in this effort are specified. Uncertainty over this issue will prolong the enactment by us all. Thus, it demands immediate attention.

We have developed a program outline which defines these roles. The states must be more responsible for the development, operation and maintenance of their capital plant. Yet if the states are going to assume that role, we must be assured of equitable and consistent ground rules. Traditionally, the Congress has felt that public works investments were in the national interest. However, in New York State where water supply is our most pressing need, we pay 100 percent of project costs as they are ineligible single-purpose projects. Yet according to the Congressional Budget Office, the national average for the non-federal share of federal water supply projects is 64 percent. This puts New York State at a distinct disadvantage.

Unfortunately, the infrastructure deterioration is so pervasive, and the expense so vast that some federal assistance is needed. Clearly, needs and their financing vary from state to state and project to project. Thus, flexibility must be a feature of any solution. Yet, the Federal/non-Federal cost-sharing policies must also be consistent to achieve equity and to preserve competition.

In our view, the federal role becomes one of collecting and pooling of funds as well as establishing guidelines for expenditure. The state's role is that of a banker selecting projects to be funded. What follows are our recommendations on the definition of these roles.

In summary, we recommend Congressional action to accomplish the following:

#### Cost Sharing

- establish, in law, 75 percent Federal and 25 percent non-Federal cost sharing for flood control, beach erosion control and hurricane protection projects.
- provide a Federal subsidy for single-purpose public water supply projects.
- continue 100 percent Federal funding for reconnaissance and feasibility studies for water projects.
- provide 75 percent Federal and 25 percent non-Federal cost-sharing on operation and maintenance of existing navigation projects.
- provide 50 percent Federal and 50 percent non-Federal cost-sharing for developing and operation and maintenance of new navigation projects.
- provide, by law, consistent and flexible cost-sharing policies.

#### Water Supply

- provide for Federal assistance in single-purpose public water supply system rehabilitation projects through changes in the 1958 Water Supply Act.
- authorize the Hudson River Water Supply Project, including additional Phase I studies and the New York City Water Tunnel No. 3.

#### Municipal Waste Water Treatment

- continued and predictable funding of the construction grants program under the Clean Water Act.

#### Flood Control and Beach Erosion Control

- provide authority for Federal participation in major rehabilitation of flood control facilities.

#### Amendments to Existing Laws and Regulations

- direct the Corps of Engineers to rescind Regulation ER 1165-2-21 which establishes criteria for the Federal interest in flood protection works on streams.
- increase the funding authorization of Corps of Engineers technical assistance to states, by amending Section 22, P.L. 93-251.
- enact basic concepts of the National Water Resources Policy and Development Act of 1981, S.621, and parallel House bill, H.R. 5840.
- enact concepts of S.1095 and H.R. 3432 water resources planning legislation.
- enact the basic concepts of S.532, the Public Investment Incentive Act of 1983 to enhance state funding capabilities.
- enact the basic concepts of S.671, the National Dam Safety Program.
- provide an equitable system of commercial traffic user fees on all elements of the Federally supported water transportation system.
- prevent the Corps of Engineers from proceeding with winter navigation in the St. Lawrence River under their general operation and maintenance authority.

STATEMENT ON WATER RESOURCES DEVELOPMENT BY COMMISSIONER HENRY G. WILLIAMS,  
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION, TO THE JOINT ECONOMIC  
COMMITTEE

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SEPTEMBER 7, 1983

The State of New York traditionally has managed its water resources to support economic development and the social well-being of its citizens. Many construction and management activities have been accomplished by the State and local governments without Federal assistance. We have many billions of dollars invested in our water and sewer infrastructure.

Now we are faced with additional water and sewage treatment needs and with the extremely expensive and difficult task of rebuilding our water supply systems. We also need to protect our citizens more adequately from the dangers and damages of floods and beach erosion. We cannot meet these needs alone, or with the limited Federal assistance we are receiving under present policies for allocating Federal water development funds.

New York, along with the other states in the Northeast and Midwest, needs a commitment of Federal funds commensurate with the Federal investment in massive and costly water projects in the South and West. In Fiscal Year 1983, New York received an average of \$2.61 per capita of water development funds compared with \$19.59 per capita for states in the South and West. The Northeast and Midwest together received an average of \$6.28 per capita.

Congress must create a balanced, genuinely national policy to develop and manage water resources in every part of the Country on an equitable basis. Our cost-sharing recommendations will help meet this need. Also, the establishment of infrastructure banks such as proposed in S.532 would help meet these needs.

We also support legislation which will reallocate water development funding, implement a consistent plan for cost-sharing and grant more authority to the states for water resources planning and for establishing water project priorities. The 1981 water resources policy and development proposals of Senators Dominici and Moynihan (S.621) and Congressman Edgar (H.R. 5840) embody concepts which can achieve these goals.

Administration of Infrastructure Development

The New York State Department of Environmental Conservation administers major programs in four major areas:

- Construction of municipal waste water treatment facilities, waste water collection and transmission sewers, sewer system overflow correction, sewer system rehabilitation, sludge disposal facilities, and ancillary items.
- Administration of New York State's water resources programs including the rehabilitation of water supply systems as the Third New York City tunnel and the Hudson River Skimming Project.

- Construction, operation, and rehabilitation of flood and shore protection facilities including flood walls, levees, improved channels, pump stations, drainage facilities, dunes, jetties, and groins.
- Administration of rehabilitation of 128 high-hazard dams, which were found to be unsafe in 1981.

#### Cost Sharing

Fundamental to the proper management and use of the nation's water resources are national policies for joint Federal and non-Federal financing which are equitable and promote the most effective water projects and programs. We believe that it is time for the Congress to reform existing policy to assure consistent cost-sharing, to correct certain important deficiencies, and to encourage efficient water resources management nationwide.

We are concerned with the continued uncertainty resulting from proposed, unilateral changes in Federal policy on Federal involvement in water resource projects. New York supports comprehensive reform of Federal water project financing, including the adoption of cost-sharing and cost recovery policies which simplify current arrangements. However, we believe that such fundamental changes should be adopted only after full consideration and direction from the Congress and should be applied on a uniform basis by all Federal agencies. We oppose their adoption and implementation on an ad hoc basis by individual Federal agencies.

Consequently, we advocate the continued use of the current cost-sharing arrangements for planning, construction, and operation and maintenance of projects which were established under Federal law, until appropriate uniform changes can be agreed upon and adopted by the Congress. Also, we support the existing system which spreads repayment of the non-Federal cost share of a project over the life of such project or up to 50 years. We are opposed to up-front funding or the repayment of the entire non-Federal share during the construction of the project.

Meaningful reform of Federal water resource policies must also address the regional inequities in the distribution of Federal water resource funds. Current Federal policies continue to favor the construction of large-scale, multi-purpose projects which do not address the particular needs of New York and the Northeast.

The water resource problems of New York are not the same as those of the Far West. Federal water policy must recognize this fundamental fact. Changes are necessary if we are to address the legitimate and pressing needs of all regions of our country. Safe and reliable water supplies for public use are as important a national interest as irrigation, recreation, navigation, and flood control, all of which are subsidized, sometimes substantially, by the Federal government.

Equitable cost-sharing requires consideration of four aspects of project financing:

1. Non-Federal contributions
2. Study costs



3. Consistency among agencies and methods
4. Flexibility

1. Non-Federal Contributions

New York is particularly concerned about equitable cost-sharing for flood control, beach erosion control and hurricane protection projects, and for water supply projects. We urge that the Congress incorporate into law appropriate cost-sharing arrangements for such projects to meet the needs of State and local sponsors while achieving Federal objectives. We recommend the following cost-sharing:

- a. Flood control, beach erosion and hurricane protection should be subject to a cost-sharing formula of 75 percent Federal and 25 percent non-Federal for both structural and non-structural solutions for all Federal agencies. The total cost to be shared includes preconstruction planning, design, construction first costs, lands, easements, and rights-of-way, and all relocations necessary for project construction. Credit for in-kind services, either Federal or non-Federal, should be applied to the respective shares. We could support cost-sharing of post-authorization project design if the Federal procedures are greatly streamlined and full credit is given for in-kind services.

New York State is strongly opposed to requiring a certain percentage of project cost to be borne by non-Federal sponsors as a minimum but still requiring that all costs for lands be non-Federal. We also strongly oppose the requirement contained in S.1031 that non-Federal sponsors must contribute 10 percent of project costs in cash during the construction period. Both of these requirements are inconsistent with the concepts of equitability and consistency between projects and Federal water resources agencies which New York endorses.

- b. We believe it is essential that the Federal government recognize, through its assistance programs, that water supply for people is a necessity as a life supporting system and as a catalyst for economic development. Specifically, we support the inclusion of single-purpose, public water supply projects and the rehabilitation of water supply systems for Federal financing assistance. We believe the provisions contained in the 1958 Water Supply Act provide a basis for Federal financial involvement in the form of: (1) low interest rates for loans, (2) long repayment periods, (3) delay of start of payments until use, and (4) added project eligibility. Also, innovative approaches for financing water supply rehabilitation needs through water banks and/or other capital investment incentives are needed.
- c. There is a need for a more equitable system of cost-sharing and/or user fees on Federally-supported water transportation systems. Navigation projects should provide some reimbursement to the Federal government for the cost of construction and operation and maintenance. We would support a cost-sharing arrangement of 75 percent Federal and 25 percent non-Federal on operation and maintenance of existing projects and 50 percent Federal, 50 percent non-Federal for development, operation and maintenance of new projects. Non-Federal interests should be allowed to recover their costs for improvements through the use of user fees on a port-by-port basis and a waterway segment-by-segment basis.

## 2. Study Costs

New York State is particularly concerned about proposals that non-Federal interests share in the cost of studies. The states should not have to underwrite Federal studies undertaken to determine the feasibility of Federal involvements.

We support the continuation of a 100 percent Federal funding of reconnaissance and feasibility studies. The Federal government should fund the project which it conducts to determine the feasibility of Federal involvement in water resource projects. However, the more detailed post-authorization studies should be added to project costs when construction begins and cost-shared in the same way as construction costs.

## 3. Consistency

Cost-sharing arrangements should be consistent among agencies and among alternative methods for achieving the same result. They are not so today. Project beneficiaries can "shop around" from one agency to another, looking for the best water project deal. Congress should establish, by law, the same cost-sharing levels for the Corps of Engineers, the Bureau of Reclamation and the Soil Conservation Service for projects with like purposes, to eliminate competitive advantages based solely on Federal subsidies which differ from region to region and from agency to agency.

Recent experience in the construction of flood protection projects in New York has shown substantial inequities for alternative solutions under traditional cost-sharing requirements. Cost shares for different approaches to satisfy the same purpose should be the same. For instance, a non-structural flood damage abatement solution, such as relocation, should be jointly financed at the same level as a structural solution.

Cost-sharing need not be consistent from purpose to purpose. The Country's economic and environmental goals may best be met by having variable cost-sharing percentages for different project purposes. The requirement that if beneficiaries can be identified they should pay, should be applied not only to water supply but also to irrigation and recreation projects, including their operation and maintenance.

## 4. Flexibility

We recommend that Federal water resource programs allow the states discretionary authority to utilize all kinds of measures considered most appropriate to achieve a desired result. The most cost-effective solution to a particular problem can vary depending upon conditions including local and regional economics. For example, water supply needs may be equally well satisfied by rehabilitating obsolescent and deteriorated water distribution systems or by the construction of reservoirs. Only the latter solution is funded under existing authority.

### Water Supply Infrastructure

Water supply infrastructure rehabilitation is one of the most urgent water resource problems in New York State and in most urban areas of the Country.

Supplying adequate water to our cities will require equal emphasis on rehabilitation and replacements and on development of new water supply sources and systems. A major State/Federal/local cooperative effort is required to restore deteriorating systems.

Although the exact magnitude of water system infrastructure problems is not known, critical community needs are rapidly emerging as a result of recent studies at the State and national levels. In New York, we estimate our statewide water system rehabilitation needs at between \$6 and \$9 billion. If projected water supply needs are included, a capital construction cost of about \$20 billion is likely. The interest expense adds to the dilemma. Clearly, this kind of expenditure is beyond the financial capability of State and local governments. For example, the capital expenditure necessary to undertake a recommended rehabilitation program in Buffalo, based on a 1981 Corps of Engineers study, ranges from \$171 million to \$313 million. The financial impact on the City, because of borrowing costs which were estimated at a low 8.6 percent, still would leave Buffalo with a cost between \$191 million and \$429 million which they will be unable to meet. If historical rates of inflation are considered, the shortfall of funding for Buffalo could reach \$1.6 billion.

Water system rehabilitation needs in New York City will range to \$2.8 billion over the next 10 years without the Third New York City Water Tunnel. The tunnel cost is estimated at \$3 to \$11 billion depending on how many of the stages are built and when Rochester and Niagara Falls each estimate a \$200 million need. Smaller cities like Albany and Binghamton have at least \$45 million needs.

The problem is not limited to cities. Rural water systems in Cortland County were recently investigated by the Corps of Engineers as well. The rehabilitation need is estimated at \$5.2 million for the 7 smaller systems investigated. In New York State, there are nearly 1,800 such water supply systems. The average cost per connection ranges from \$170 to \$710 annually with a 20-year, 10 percent loan to \$380 to \$1,500 annually over 5 years at 10 percent. None of these communities has plans or equipment for an emergency. In their case studies, the Corps recommended State and Federal assistance as the capital improvement costs are beyond the financial ability of each community.

In the last few years, New York State has conducted fourteen studies of individual water supply systems and interviewed officials in nearly 50 other communities. Some of the characteristics of the deteriorating systems based on the studies and interviews are as follows:

- Unaccounted for water, that is, non-revenue producing water, generally ranges from 35-55 percent. In rural areas, the figure is higher.
- Many distribution systems are inadequate because of obsolescent materials, poor design, external corrosion, tuberculation and inoperative valves. These conditions result in frequent main breaks, low pipe carrying capacities and low fire hydrant pressures.
- As a result of the poor condition of distribution and transmission facilities, leakage is greater, causing higher treatment and pumping costs, increased water losses and inadequate fire flows. In many localities, there is a need to improve rate structures, install new

meters or replace old ones, reduce unaccounted-for water and implement more effective water conservation practices. In some cases, there are significant additional indirect costs to the water consumer for fire insurance because of inadequate pressure, higher taxes to meet added expenses to maintain and operate the water system and higher liability claims against the municipality because of damage caused by main breaks. In addition, the reputation and attractiveness of a community to industry, labor and management is damaged by the constant disruption caused by infrastructure failures.

- Plans for water supply emergencies are non-existent in most communities.
- Additional treatment plant capacity associated with meeting safe drinking water standards for toxics will add an additional burden on municipalities that will tend to defer rehabilitation projects, and add to operation and maintenance expenses.
- Almost all water systems operators understand their systems and know their priority needs but lack funds and commitment by others to undertake the necessary improvements.
- Additional supply and storage capacity is needed particularly in rural areas and in southeastern New York.

In New York, Governor Cuomo has proposed the creation of a State Water Finance Authority to assist communities in financing their water and sewer system infrastructure rehabilitation and improvement projects. The Authority would help communities principally by enabling revenue bond financing and isolating utility revenue to protect investors' capital. The Authority legislation has passed the Assembly, but not the Senate.

The nature of the Authority is such that it could operate as an infrastructure bank. S.532 which we support, would assist in capitalization of the bank.

Although this financing arrangement would put the water and sewer utilities on a self-sustaining basis with the costs equitably borne by the users, it is our belief that grants are sometimes required as an incentive for initial program acceptance. Also, some New York cities as well as rural communities are unable to pay the entire rehabilitation/improvement project cost. We recommend that the states be provided through the banking concept developed in S.532 the discretionary authority to grant communities a portion of the project cost. Guidelines similar to those used by FmHA could be developed by the States in cooperation with the Federal government to ensure grant consistency.

#### Municipal Waste Water Treatment

Since the beginning of our municipal waste water treatment program in 1965, New York has invested \$7.6 billion in the construction of these facilities. While this investment is massive, and a great deal has been accomplished, much remains to be done. The Environmental Protection Agency estimates that an additional \$16.5 billion is needed to complete all water pollution control facilities needed in New York.

Presently, some local governments are unable to provide their share of project costs. As the federal share is reduced, New York is concerned about the ability of many additional communities to meet the increased costs. New York and the federal government share the responsibility to develop and implement flexible financing options which will enable local governments to meet their share of construction burdens.

#### Alternative Financing

New York supports the adoption of the Investment Incentives Act of 1983 (S.532). Enactment of this legislation would allow states flexibility to provide either a water bank or a more general infrastructure bank. Such a bank could provide the funds necessary for infrastructure rehabilitation. Capitalization of the bank could include use of funds provided under Section 201 of the Clean Water Act. Of course, we do not propose the use of funds already authorized.

Use of a bank provides the opportunity to maximize available funding for water projects; for example, if a bank were capitalized with \$500 million and began to issue 15 years of low interest loans, a total of \$890 million in projects could be financed in the first 10 years.

A state bank for public works could allow priorities to be established locally. Clearly the states and local governments must be allowed to establish their own priorities. Providing a bank from which they can seek assistance is more realistic, cost-effective, and timely than insisting on federal determination of priorities for special purpose funding.

#### Specific Water Supply Projects and Studies

We recommend the additional Phase I studies, including the identified Federally-funded studies relating to new supply development, for the Hudson River Water Supply Project. These studies would assess existing and future demands in light of the 1980-81 drought experience, define alternative solutions within acceptable environmental limits and water quality standards, and determine the Corps of Engineers' role in the Hudson River water supply and in water system rehabilitation and improvement.

The Third City Water Tunnel is urgently needed to alleviate water supply distribution problems in the New York Metropolitan Area. Completion of the tunnel at an estimated cost of \$3-\$11 billion prices is needed to avert a water supply emergency and to deliver additional needed water to the Metropolitan Area.

The first stage is under construction by the City, but construction must be accelerated. Early completion of Stages 1 and 2 essential to allow for inspection and repair of the existing two tunnels built in 1917 and 1936. We recommend that the project be authorized for construction and made eligible for Federal financial assistance through changes in the 1958 Water Supply Act.

#### Flood Control Project Rehabilitation

In recent years, the Department of Environmental Conservation, as the agency representing all non-Federal interests in New York in Corps of Engineers'

flood control programs and as the agency responsible for operation and maintenance of completed flood protection projects, has become increasingly concerned with the need for major rehabilitation of major project facilities which pre-date Corps of Engineers' projects and were incorporated into a Federal project, and of Federally-constructed facilities which have reached or are approaching the end of useful economic life. Of particular concern are facilities such as concrete floodwalls and floodwater pumping stations. In the case of old floodwalls which are deteriorating even though properly maintained, the cost of floodwall replacement is far beyond the anticipated costs for operation and maintenance envisioned at the time State assurances were originally furnished. In the case of pumping stations, replacement parts for electrical and mechanical equipment become unavailable 40 or more years after the original installations, and pumps, motors and electrical equipment must be replaced to ensure proper project operation. Again, the cost of these replacements is beyond the operation and maintenance costs anticipated at the time assurances were provided to the Federal government.

We urge that legislation be enacted which would provide for Federal participation in the cost of major facility rehabilitation or replacement in those cases where the need for rehabilitation or replacement is not the result of inadequate maintenance. Federal participation could be based upon the cost-sharing in the original project or a new cost-sharing formula as established by the Congress.

We would welcome the opportunity to work with staff of this Committee in drafting suitable legislation.

Recommended Amendments to Existing Laws and Regulations

Chief of Engineers' Regulation ER 1165-2-21

In May of 1978, the Chief of Engineers promulgated Regulation ER 1165-2-21, which establishes criteria for the Federal interest in flood protection works on streams. This regulation established a new policy governing Corps of Engineers' flood control activities. It limits Federal participation to damage areas along a stream with a 10-year discharge of 800 cfs or more or of drainage areas of one-half square mile or more. This policy is inconsistent with many past authorizations for various flood control projects, and, in our opinion, is contrary to the intent of the Congress as expressed in laws authorizing various Federal flood control programs (see discussion of Mamaroneck and Sheldrake River Project). The regulation was adopted administratively, without an opportunity for input from affected non-Federal interests.

We strongly urge that the Chief of Engineers be instructed to rescind ER 1165-2-21. If, in fact, there is a legitimate need to establish criteria for differentiating between drainage problems which are a local responsibility and flood problems where Federal assistance may be justified, such criteria should be adopted by the Congress after a thorough study, with opportunity for input from non-Federal interests. Further, we urge that there be Congressional oversight of Corps regulations to require input from non-Federal interests before potentially controversial regulations are promulgated.

### Section 214-22 Program

Currently, the only Federal funds that are available to assess water resource problems in New York State are through Section 214 of the River and Harbor Act of 1965 (P.L. 89-298)/Section 22 of the Water Resources Development Act of 1974 (P.L. 93-251). In recent years, Section 214/22 funds have been used to investigate urban water supply rehabilitation needs, flood plain management projects and hydraulic and hydrologic aspects of projects.

The Section 214 Program has worked extremely well. It provides an opportunity for the Federal, State and local governmental communities to reconcile issues together, to their mutual satisfaction and benefit. This consensus decision-making results in productive solutions to local problems of Statewide significance. Recently, under the Section 214 Program, the Corps of Engineers has investigated the critical needs of several of the State's municipal water supply systems including studies in Albany, Buffalo and New York City.

Public water supply rehabilitation investments and maintenance of water supplies in the event of drought are urgent needs that can no longer be ignored, particularly in this time of high unemployment. The Section 214 Program allows the Corps to respond to State and local water resource study priorities in a timely fashion.

In spite of its success, the Corps of Engineers has discontinued use of the Section 214 authorization and is providing technical assistance to New York under Section 22 authorization which has a funding ceiling that reduces the availability of Corps assistance. We recommend that the Congress increase the authority ceiling of \$200,000 in Section 22 of P.L. 93-251 to \$500,000.

### National Water Resources Policy and Development Act

We support the basic concepts of the National Water Resources Policy and Development Act, S.621, and the parallel provisions of H.R. 5840 that were developed in 1981. Enactment of national legislation is particularly important at this time because critical and varied water resources problems of many regions of the nation are not being addressed under the present archaic system of project planning. The concept that water problems and needs occur uniformly across the Country and should therefore be addressed in the same fashion everywhere, is out of step with events.

Requirements for water vary by region and by purpose. Demands for irrigation, industry, navigation, power and domestic water uses are widespread. For the nation to adequately fill all its water requirements, a flexible regionalized program for allocating water project resources, such as that created by S.621, is urgently needed. We believe that costly delays in project development will be removed by placing the principal responsibility for setting project priorities where it belongs, with the states.

Existing Federal water programs are geared to provide assistance for new construction but not for rehabilitation of the nation's existing capital assets, nor for new water supply development. Provision for infrastructure rehabilitation is needed. The nation's capital assets depreciate, deteriorate

and become obsolete with age. The concepts of S.621 would provide flexibility in Federal participation, so that states and localities can realistically meet their needs on a priority basis.

#### National Water Resources Planning Act

We support the concepts of the 1981 water resources planning legislation, S.1095 and H.R. 3432. In particular, we support a grant program to the states for management of water resources, as well as planning, with annual appropriations over a 5-year period to permit the states to plan and complement long-term management strategies. We also support the need for a Federal/State water resources coordinating mechanism with an independent Chairman and a State Advisory Group to assure consideration of regional interests.

#### National Harbors Improvement and Maintenance Act of 1983 (S.970)

We support an equitable system of commercial traffic user fees on all elements of the Federally-supported water transportation system. User fees should be collected and used for operations, maintenance and capital improvements on a port-by-port and segment-by-segment basis.

Our support of S.970 for deep-draft channels and harbors, is contingent on the development of shallow-draft legislation with parallel provisions as to the scope, levels and administration of cost recovery. The legislation should be written to allow New York State the option of including the navigation function of the State Barge Canal in the national shallow-draft system. The Canal is the only significant inland waterway in the nation not financed by the Federal government.

#### National Dam Safety Program (S.671)

We strongly support S.671 with the following exceptions:

We oppose the recommendation in Section 1 to delete the final sentence of P.L. 92-367 which states, "This Act does not apply to any such barrier which is not in excess of six feet in height, regardless of storage capacity or which has a storage capacity at maximum water storage elevation not in excess of fifteen acre-feet regardless of height." This sentence should remain with the following addition. "This Act should also include all high hazard dams without minimum restrictions for height or storage capacity."

We support all parts of Section 8 except Item (3). Item (3) indicates that every dam in the State shall be inspected at least once every two years. The implementation of S.671 in New York will involve the additional inspection of 560 low hazard dams. These low hazard dams have minimum hazard potential and should not be inspected as often as the high and moderate hazard dams. The cost for this type of program would be disproportionate to the potential benefits. We recommend that the low hazard dams be inspected once every four years.

We propose an option to Section 15 which authorizes the Corps to maintain and periodically publish updated information on the inventory of dams. The Corps of Engineers terminated their involvement in the dam inventory program in February 1982. We suggest the Corps of Engineers should be authorized to contract with the States to maintain an inventory of dams program.



An Act to Modernize Certain Corps of Engineers' Authorities (S.709)

We strongly oppose Sections 7 and 8 which deal with automatic deauthorization of projects and studies after 10 and 4 years, respectively. Deauthorization should be a direct action of the Corps with input from states and/or local sponsors. We oppose the bill unless it is amended to provide for inclusion of states and/or local sponsors in the decision process.

Public Investment Incentive Act of 1983 (S.532)

We strongly support the concept of creating State infrastructure banks capitalized by the Federal government to finance public works and infrastructure investment. The needs of states and localities vary from region to region, with abilities to pay varying from locality to locality and project to project. The states can best determine project priorities and cost-sharing arrangements.

S.532 is applicable to a broad range of physical structures and facilities. From a water perspective, we prefer an infrastructure bank limited to water supply and wastewater facilities. The Federal contribution also should be increased to at least 20 billion over ten years in view of the magnitude of returned water infrastructure needs.

We recommend that an allocation formula for the distribution of funds appropriated for capitalization be specified in the bill based on population only. In addition, the states should have the ability to provide grants from the bank as well as loans. These could be administered under a formula similar to the one now used by the Farmers Home Administration.

Soil Conservation Service - Agricultural Benefits

In the recent past, proposals have been made for amending P.L.-566, the Small Watershed Protection Law, to require that in future projects, at least 20 percent of the benefits must accrue to agriculture. We strongly oppose such an amendment because it would make ineligible most P.L.-566 projects in New York for protection of urban areas.

State Obligations

The Flood Control Act of 1970 requires the non-Federal interest to enter into a written agreement with the Secretary of the Army to furnish the required cooperation for the project. We favor an amendment such that where the non-Federal interest is the State itself, the agreement does not obligate future legislative appropriations for such performance payment when obligating future appropriations would be inconsistent with State constitutional limitations. This amendment would eliminate the need to provide the total non-Federal share up-front for a project funded by the Federal government on a multi-year basis.

River Ice

We recommend an amendment which would direct the Corps of Engineers to undertake a research program to increase their capability to control river ice and give them a more active role in ice control and ice break-up.

Winter Navigation

New York State remains unequivocally opposed to any winter navigation/season extension on the St. Lawrence River. We urge the Congress not to appropriate any more funds for this project and to stop the Corps of Engineers from proceeding with winter navigation under their general operation and maintenance authority.

The Corps of Engineers recently transmitted its season extension report to Congress for information, but not for authorization consideration (the Corps has stated it already has the authority for winter navigation). We seriously question whether existing law gives the Corps authority for season extension because the Great Lakes-St. Lawrence System is extremely complex with intergovernmental and international concerns of significant consequence. The season extension would not be a routine operation and maintenance project, but rather could have immense impacts of the System.

With its incomplete data on environmental considerations, the report, as transmitted, is totally inadequate. A systemwide Great Lakes environmental study is needed. Independent economic and environmental analyses made to date have shown that winter navigation/season extension on the St. Lawrence is not economically nor environmentally justified. Our review of the Corps; survey report indicated that the national economic benefits have been overestimated by a factor of 10 and potential costs far outweigh the benefits.

We appreciate the opportunity to present our views on these very important aspects of the water resource programs of the state and nation.

The Honorable Henry G. Williams  
Commissioner  
New York State Department of  
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Statement of James L. Larocca, Commissioner,  
New York State Department of Transportation  
Before The Joint Economic Committee of Congress  
Albany, NY; September 7, 1983

I appreciate the invitation from Senator D'Amato to submit this statement to the Committee on the problems New York State faces in trying to rehabilitate our aging transportation infrastructure.

At one time New York's integrated system of highways, railroads, ports, canals, airports and transit facilities were models of efficient, dependable service. These facilities provided the public infrastructure needed to support the private investment in industry, commerce and agriculture which made New York the Empire State. After years of inadequate capital investment and deferred maintenance imposed by fiscal constraints and austerity, this vital infrastructure has reached the point where unless an intensive effort is made to restore and preserve the system, we risk the total loss of vital transportation links.

The problem has reached such proportions and is so acute that it is no longer feasible to provide the needed capital funds from State sources on a "pay-as-you-go" basis. To finance a program of the required magnitude the Governor has resorted to the issuance of \$1.25 billion in State debt to fund the \$7.0 billion Rebuild New York Through Transportation Infrastructure Renewal Bond Program.

The 15,700 miles of highways and 7,200 bridges which comprise the State Highway System are among the most important components of the state's infrastructure. The system carries 60 per cent of the state's traffic. Since 1960 the number of state highway miles has increased only 10 per cent, yet their volume of traffic carried has increased by 90 per cent.

The preservation of this highway network in a usable and safe condition is vital to the maintenance of commercial activity throughout the state. Almost all of the goods and freight which move through the state must utilize state highways at least part of the way, and the majority of the work force must use these highways to get to work. The importance of maintaining an adequate transportation infrastructure in New York State cannot be overestimated.

Until a few years ago the emphasis of the state's highway program was on the construction of the new highways which were needed to support our growing population and expanding industries. To a great extent, this emphasis on new construction has passed. We have completed most of our Interstate and other new highway facilities. We are now increasingly focusing our efforts on the reconditioning and preservation of the highway network already in place.

Last year the Department of Transportation administered a highway contracting program of \$550 million. Only \$147 million, or 27 per cent, was allocated to new construction. The remaining three-quarters of the program

was dedicated to improvement of existing facilities. Five years ago, new construction accounted for 58 per cent of the program.

Despite the apparently huge size of our annual highway rehabilitation program, it has been inadequate to prevent the system from deteriorating. Inflation in the highway construction industry over the past 15 years has reduced the buying power of our rehabilitation dollars to 30 per cent of their 1967-68 value. State investment in the highway system has not kept pace with this inflation. Other reasons for not having been able to increase expenditures for needed highway capital rehabilitation or maintenance include the combined impacts of budget austerity, recession and the competing pressures for State funds to maintain health, social welfare, local assistance and education programs.

It is not surprising, therefore, that deterioration is outrunning restoration. Recent surveys show that 14 per cent of the 15,700 miles of state highways have deteriorated to the point where their condition is rated as poor. Although a systematic evaluation of the condition of the remaining 93,000 miles of county, town, village and city streets and highways has not been made, we are certain that their condition is worse than that of the State system.

The condition of bridges in the state is even more critical. Inspections show that 1,684 of the 7,200 state highway bridges have become structurally deficient. About 450 are seriously deficient and require immediate attention. In addition, 5400 local bridges are in need of replacement or rehabilitation.

The cost to bring the highway system up to good condition is currently estimated at \$5.6 billion for highways and \$1.9 billion for bridges. Additional billions are needed to repair highways and bridges owned and operated by over 1600 local jurisdictions.

The problem is not unique to New York State. Recognition of the infrastructure crisis at the federal level led to passage of the Surface Transportation Assistance Act of 1982, which was signed into law by the President last January. The new Act will provide an estimated \$3.1 billion for New York State in federal aid for highways during federal fiscal years 1983-1986. This represents an additional \$1.3 billion over the 1982 funding level, or an increase of 72 per cent. However, \$7.5 billion is needed to simply bring the existing highway system up to good condition. Additional billions are needed to complete long-planned and needed new facilities, and to take care of local roads and bridges.

Directing available funding to the most critical problem areas is hampered by the fact that the federal-aid highway program is a categorical funding program. Federal funds are allocated to the states to be used for specified purposes on specified miles of highway. Almost half of the \$1.3 billion in increased funding we will receive over the four years of the Act result in a 30% increase in funding for completion and rehabilitation of the Interstate system. The categories of greatest need, the Primary and Bridge, will increase by a more modest 26 and 15 per cent, respectively. Other critical categories of federal-aid such as the Secondary and Urban systems are not increased at all and will remain at about the same levels as before the new

Act. In addition, 84,000 miles of roads and streets are not eligible for Federal-aid.

We must also recognize that the federal aid highway program is a matching program. If the state is to make use of this increased federal aid, additional funds will be needed to provide the state match. An additional \$300 million in state funds will be required over the next five years simply to match the added Federal-aid. In an environment of tightly balanced budgets and continued fiscal austerity, these funds will not be easy to come by.

Finally, there are many critical projects which are not eligible for federal assistance, or where the application of federal standards is inappropriate or would result in excessively costly designs. Such projects require state funded programs which allow us to carry out more modest cost-effective projects without conforming to inappropriate federal design standards.

For these reasons, Governor Cuomo has proposed his Transportation Infrastructure Renewal Bond Issue. The Bond Issue will enable the state to mount a five-year, \$7 billion effort to reverse the deteriorating condition of highways, bridges, ports, waterways, airports, railroads and mass transit facilities in New York State. Bond funds will provide \$1.25 billion, which will be combined with \$1.5 billion in other state funds to match \$4.2 billion in federal-aid and to fund those projects for which federal aid is not available. When the Governor submitted this legislation he commented that the gasoline tax increase recently approved by Congress "will be of enormous help in maintaining and improving highways, bridges and transit

facilities, but it will not meet all of our needs. Additional state resources will be needed if we are to reverse the pattern of under-investment and deterioration that has for too long plagued our State."

The "Bridge Problem" in New York State

I have been asked to give special attention to the problems of bridges in New York. I have already mentioned that the condition of bridges on the State Highway System is especially critical. Not only is the number of bridges which are rated in deteriorated condition growing each year, the rate at which this number is growing is increasing. In 1977, 973 State highway bridges were deficient; today, 1684 of 7200 bridges are deficient. This means that our bridges went from 14% deficient to 23% deficient in six years. For each bridge we fix, two bridges become deficient at the current rate of bridge deterioration and program level for bridge rehabilitation and replacement.

This alarming situation is developing in spite of a substantial on-going program of bridge rehabilitation and replacement involving about 125 bridges per year, costing an average of \$168 million per year in contract lettings.

One factor which is causing the steady increase in the number of deteriorated bridges is the age distribution of New York bridges. There were two peaks in bridge building in New York which are related to historic and economic events in our state and the nation as a whole. The growth of automobile and truck traffic in the 1920's led to the first great building period which reached its peak during the Depression when public works were a



nationwide program. Over 1800 bridges were built in New York State from 1925 to 1939. These bridges are reaching their design life now. While many in this group have been replaced, we will be dealing with the remnants of this group for the rest of the decade.

The second and larger peak in bridge construction took place with the construction of the Interstate System between 1955 and 1974. During this period, almost 3300 bridges were built in the State. These bridges are beginning to show deterioration due to such factors as increased salt usage for snow and ice control, and deferral of maintenance caused by the State fiscal austerity of the past decade.

The impact of these events shows up in the distribution of bridges in different rating categories. As these groups of bridges which were built during the same period age and deteriorate, they move down the condition rating scale and cause bulges in the different categories. An ominous development of the past six years has been a 38% decline in the number of bridges rated in the highest or best categories, and a corresponding 44% growth in the category just above deficient. This suggests that without some remedial action the number of deficient bridges will increase at an alarming and perhaps catastrophic rate during the next decade.

Our best estimates indicate that even the record program levels which will be made possible by the new federal gas tax legislation will not enable us to keep pace with the deterioration of bridges and not allow us to significantly reduce our present backlog of structurally deficient and functionally obsolete bridges. Starting with the current need of \$1

billion, if the current rate of deterioration and planned rehabilitation continues, at the end of the Surface Transportation Assistance Act authorization period in 1986 our bridge needs will have increased to \$1.5 billion. If we are not able to arrest the deterioration of the large number of Interstate bridges built in the 1960's through improved maintenance, we may be headed toward shutdown of major portions of the highway system in the years ahead.

These gloomy statistics are reflected in Federal Highway Administration reports. The latest available FHWA Bridge Report shows that New York has more deficient bridges on the Federal-aid System than any other state. The report lists 3308 bridges in New York as deficient, or 38%, which is 1000 more deficient bridges than the closest other state. Another tabulation shows that New York has almost twice as many structurally deficient Interstate bridges as any other state. About 30% of our Interstate bridges are listed as structurally deficient. The next worst state is only 16%. FHWA figures that over \$500 million is needed to rehabilitate our Interstate bridges alone. This is almost four times the amount needed by any other state.

One obvious remedy for the improving the condition of New York State bridges is more money for rehabilitation and replacement. A positive step in this direction would be to remove the arbitrary cap on Federal-aid apportionments for the Highway Bridge Replacement and Rehabilitation Program. Funds for the program are apportioned to the States by a formula which reflects relative need. Under that formula New York should receive 15.7% of the national authorization. However, the current Act limits the maximum amount

apportioned to each State to 10%. New York is the only state affected by this cap. Its removal would have increased our Bridge Program apportionments under the '82 Act by almost \$400 million.

Additional help for the "bridge problem" could be provided without increasing funding by assuring that available resources are spent in a manner that maximizes return on investment. Achievement of this goal is sometimes frustrated by insistence by the Federal Highway Administration that bridge designs adhere to the highest geometric standards. Designing to the highest standards substantially increases costs and reduces the amount of work that can be done with limited available funding.

The State Department of Transportation uses geometric standards established by the American Association of State Highway and Transportation Officials (AASHTO) in designing its highways and bridges. These standards have been adopted by the Federal Highway Administration (FHWA) for use on Federal-aid projects. FHWA's interpretation of the standards generally requires more expensive solutions. If State engineers feel that a solution utilizing minimum requirements allowed by the standards is adequate, the result is frequently a time consuming justification process or compromise in the name of expediency to a more expensive solution.

An illustration of this problem occurred last year when officials in Lewis County proposed to replace a small bridge in poor condition for \$50,000. The FHWA insisted that in order for the project to qualify for Federal-aid the structure must be wider and longer than proposed, which would have increased the project cost to \$285,000. The County rejected this as an

overblown solution to the problem and elected to proceed with the project with its own resources without Federal-aid.

We are not suggesting that national design standards should be abandoned. However, it should be understood that federal-aid standards need to provide flexibility to reflect the local situation, that individual State concerns need to be addressable, and that improvement to maximum standards in all cases is neither desirable nor rational.

#### Need For Federal Assistance For The New York State Barge Canal

In recent years there has been growing concern over the deteriorating condition of the New York State Barge Canal system. At a hearing held in 1978 by the New York State Senate, both the Buffalo District Engineer of the U.S. Army Corps of Engineers and the Director of the New York Waterways Associations warned that if the deterioration continues at the present pace, the Canal may have to be closed to commercial use within ten years. This situation has not changed and the condition of Canal facilities continues to deteriorate despite annual State expenditures of \$15 million for operation, maintenance and rehabilitation. New York State Department of Transportation studies have found that an additional \$10 million per year is required for increased rehabilitation and dredging to preserve the integrity of the canal and continue its operation as a transportation facility.

The New York State Barge Canal system controls and interconnects the flow of practically all of the major rivers and streams located in upstate New York. Consequently, maintenance of these rivers and streams at some level is

essential. The Canal is a major source of fresh water for communities, individuals and businesses; some communities, including Cohoes, Colonie, Queensbury and Waterford rely heavily or completely on the Canal for water supplies. The moveable and stationary dams and intake valves at lakes and reservoirs used to control the water level in the Canal provide a vital flood control function.

Power generation has recently become a major source of economic activity on the Canal with twenty hydroelectric sites already located along the Canal and another eighteen under development. Finally, the Canal serves as a recreational waterway for fisherman and boaters and a tourist attraction for hikers, bikers and picnickers. Trails, historic sites, boat launches, comfort stations and parks are distributed along the banks of the entire 524 mile system.

If the Canal is to continue to function as a navigable waterway and also serve its flood control, water supply, hydro power and recreational purposes, additional capital funds for reconstruction and major maintenance must be secured soon. Because New York State can not spare the substantial resources required for preservation and rehabilitation, Federal funding for the Barge Canal appears to be the only means by which such rehabilitation can be achieved. The Canal is part of the National Waterways System and half of the cargo carried on it is interstate in character. The Rivers and Harbors Act of 1935 authorized \$27 million for improvements between Albany and Oswego which was increased in 1945 and 1962 to a total of \$34 million. The work was completed in 1969.

The 524-mile New York State Barge Canal is the only state-operated waterway in the nation. Despite its importance to the growth and development of the Great Lake States and the entire nation, not a penny of Federal money is now going into its improvement or maintenance. Although \$34 million in capital improvements were financed with Federal funds in the past, the billions of Federal dollars spent on the inland waterway system in the South and Midwest have helped put New York at a competitive disadvantage.

New York State is badly shortchanged by the Federal water navigation program. During the past decade, New York has been allocated an average of only three percent of Corps of Engineers budget for maintenance, operation and construction of ports, waterways and flood control facilities. During the same period, New Yorkers contributed more than nine percent of the Federal tax payments used to support that budget. The 1984 Corps budget proposal will reduce New York's share to about 1.5 percent, which means that we get back \$1 for every \$6 paid in taxes. Any new Federal legislation on waterway financing should provide for full participation of the New York State Barge Canal in the National Inland Waterways System improvement program. A past willingness to bear the cost of construction and operation of the Barge Canal should not exclude the citizens of New York from the benefits of the Federal Waterway program.

#### Development of New York State's Upstate Ports

Both the Governor and the State Legislature have recognized New York's upstate ports as critical segments in our transportation system. A

Carefully targeted State effort to assist these ports is an integral part of the State's economic program.

Until recently there was no coordinated improvement program for the upstate ports. Since there was very little in the way of federal assistance to support proposed projects, each port individually sought assistance directly from the Legislature. To avoid the inconsistencies and duplications which would result, a coordinated port improvement program which reflects the relative priority of port needs has been developed.

The State's coordinated program for financial assistance to upstate public ports totals \$25 million for the next five years. Major state-supported projects include berth extension and warehouse space in Ogdensburg, bulk handling and store facilities in Oswego and dock rehabilitation projects in Albany and Buffalo. Technical assistance for master plan development in Oswego and Ogdensburg and a waterfront redevelopment study in Buffalo are also anticipated. An integrated assistance program, developed by the State in cooperation with the upstate public port authorities, will continue to be the basis for Legislative action.

State-sponsored studies of upstate public ports have addressed the question of port development financing. We have concluded that, in time, port fees could and should be raised to cover all capital and operating costs of upstate ports. The studies show that the cost advantage of shipping by water via these ports is such that increased port fees would not divert a significant amount of traffic, existing or potential, from the upstate ports.

However, the State is concerned with the continued uncertainty resulting from proposed changes in federal involvement for financing waterborne transportation projects. We support a comprehensive reform of federal water project financing because there is a need for an equitable system of cost sharing for the maintenance and improvement of federally supported water transportation facilities and systems.

The present elaborate waterways development and funding process no longer seems to work. Needs are growing and the time for project development has increased to an average of over 24 years. No new channel improvement projects have been authorized and funded for several years. Many important navigation improvements are urgently needed to bring this country's waterways facilities into a condition where they can handle in an efficient and economic manner not only domestic waterborne commerce but also deep-draft vessels for both the export and import of coal, grain, crude oil and other commodities. These improvement needs, if not met, will have a detrimental impact on the efficiency of our state and the nations transportation system, our competitive position in world markets, balance of payments, cost of energy and national security. Clearly, user charges are not only a question of cost sharing revenues, but concern matters directly related to the further development of the country's water transportation system.

The taxes of New York State and Northeast residents have for too many years subsidized the creation of new and costly ports and waterways elsewhere in the nation, while little, if anything, was being directed to facilities here. New York's geographic and market advantage has been severely



curtailed by federal assistance to competing ports along the East coast, and to Gulf ports competing for the Midwest markets with service via the inland waterways. Any move towards financing waterway operations with user charges will tend to restore the natural advantage of New York's ports and industry. Ample evidence suggests that major federal waterways investments in the South and Southwest encouraged industry to halt expansion or to move out of the Northeast and Midwest states. We see waterway cost recovery as potentially reducing or even reversing this trend. New York's ports enjoy many natural geographic and trade advantages. They are already in place and are relatively inexpensive to maintain. At least, New York State taxpayers would no longer have to pay for the flight of our own industry.

We support the imposition of an equitable system of commercial traffic user fees on all elements of the federally-supported water transportation system to pay for a share of the cost of operations, maintenance and improvements of waterway freight facilities. We favor legislation proposed by Senator Moynihan (S.970) that would assign uniform port charges on a tonnage basis and would be phased in over a five year period. We feel that this bill would equitably spread the cost for operation and maintenance of the federal channels to all users.

If user charges are enacted to support the national waterways system, we believe that tolls collected for use of the St. Lawrence Seaway should be set at a level that will recover the same proportion of total costs as would be recovered for other federal waterways, with the remaining costs to be paid directly by the Federal Treasury. Otherwise, those states whose shippers use the Seaway will be paying a disproportionate share of the Seaway costs while subsidizing waterways elsewhere in the Nation.

Thank you for the opportunity to present to this Committee the infrastructure concerns of the New York State Department of Transportation.

STATEMENT OF  
THOMAS ELLIS OF  
THE ALBANY PEACE & ENERGY COUNCIL  
BEFORE  
THE JOINT ECONOMIC COMMITTEE  
OF  
THE UNITED STATES CONGRESS  
SEPTEMBER 7, 1983  
ALBANY, NEW YORK

Over the last several years, many of the politicians in NYS have had many things to say about the declining quality of the roads in NYS. A hearing is being held today in Albany to discuss the problem.

The Albany Peace & Energy Council is also concerned about the poor quality of the roads within the State. We all saw the pictures of the bridge which fell in Conn. a few months ago and we know that it could happen in NYS too.

We are extremely concerned about the fact that beginning on Sept. 28, 1983, hundreds of spent nuclear fuel waste shipments are scheduled to begin to be moved from the West Valley nuclear waste dump near Buffalo to nuclear power plants in NJ, Illinois, and Wisconsin.

Spent nuclear fuel is a million times more radioactive than fresh or not yet fissioned nuclear fuel. It is to be moved on trucks on the Interstate and

other major Federal roads. The people in our group agree that the roads in NYS need a considerable amount of work to restore them to acceptable standards. Mr. D'Amato, in his opening statement this morning stated that at least 42 % of the bridges in NYS need at least some repair.

The Albany Peace & Energy Council wishes to ask the Congress and the NYS Legislature to carefully consider the condition of the roads before they allow these nuclear waste shipments to go forward. An accident could cause hundreds or thousands of fatalities. We propose that the spent nuclear fuel be kept at West Valley until it can be moved to a final repository.



## CAPITAL DISTRICT REGIONAL PLANNING COMMISSION

251 RIVER STREET, MONUMENT SQUARE

TROY, NEW YORK 12180

518 272-1414

120-5

**CHAIRMAN** Thomas H. Clements  
**1ST VICE CHAIRMAN** John F. Kirvin  
**2ND VICE CHAIRMAN** John L. Deane  
**TREASURER** Fred G. Field, Jr.  
**EXECUTIVE DIRECTOR** Changchih Chen

July 18, 1983

Senator Alfonse M. D'Amato  
 Leo O'Brien Building  
 Clinton Avenue & No. Pearl Street  
 Albany, New York 12207

Dear Senator D'Amato:

In behalf of the Capital District Regional Planning Commission, I am pleased to submit to you a copy of our recent report for reference in support of your public hearing in Albany on the Nation's Infrastructure Needs.

Our report, entitled "Survey of Community Water Systems" documents the capital improvement needs for only water systems in our Region. During the next ten years, our findings reveal certain critical issues of our Region's urban infrastructure, and some should be given particular attention.

1. Water systems in the four-county Capital District are, on the average, forty to eighty years in age. The amount of waste (unaccounted-for water) is estimated at 50 to 60 percent of the water produced in some of the older systems.
2. Many parts of the Region's water facilities should be rehabilitated or reconstructed because of the nature of the systems' original construction and deterioration due to age. It is conservatively estimated that over \$56,000,000 is needed to upgrade the Region's water systems during the next decade.
3. In general, funding for planned improvements are affordable by most local municipalities. However, there are some municipalities which because of dwindling financial resources find it difficult to improve their systems to an acceptable standard. For this reason, we do advocate some new type of Federal or State assistance for rehabilitating water systems.

**ALBANY COUNTY**  
 Erastus Corning, 2nd  
 Fred G. Field, Jr.  
 Homer L. Perkins

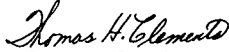
**RENSSELAER COUNTY**  
 John L. Buono  
 Thomas J. McGrath  
 Kelly T. Sanvidge

**SARATOGA COUNTY**  
 Thomas H. Clements  
 Richard M. Hurst  
 Kermil G. Plummer, Jr.

**SCHENECTADY COUNTY**  
 Bruce C. Bensoo  
 John F. Kirvin  
 David Vincent

We appreciate your kind invitation to submit our written testimony.

Sincerely,

  
Thomas H. Clements  
Chairman

THC/rmt  
Enclosure

CC: CDRPC Commissioners

Technical Report **200-13**



# **SURVEY OF COMMUNITY WATER SYSTEMS**

## CAPITAL DISTRICT REGIONAL PLANNING COMMISSION

The Capital District Regional Planning Commission was established in 1967 by resolution of the legislative bodies of Albany, Rensselaer, Saratoga, and Schenectady Counties in accordance with Article 5-G of the General Municipal Law of the State of New York. It has been designated as the comprehensive planning agency for the four-county Capital District area by the Governor and the Federal Government pursuant to Section 204 of the Demonstration Cities and Metropolitan Act of 1966.

The CDRPC is governed by a Board of twelve commissioners consisting of three representatives appointed by each of the four-county legislative bodies. The Commission is financed by annual appropriations from the four-member counties on a per capita basis, supplemented by State and Federal funds.

The Region encompasses over 2,200 square miles, had a 1980 population of over 741,000 and consists of 8 cities, 48 towns and 22 villages. Major functions of CDRPC are: to formulate regional development goals and a comprehensive regional plan; to provide a central clearinghouse for planning and development information and recommendations with government agencies, civic associations of areawide interests; to bring into focus the areawide problems and to formulate alternative plans and policies for solving these problems; to perform areawide clearinghouse functions on PNRS project reviews pursuant to OMB Circular A-95; and to provide organizational machinery for effective communication and coordination among governmental bodies, agencies, and interested private institutions in the Region. In addition, CDRPC conducts regional crime control planning within the nine-county Upper Hudson Region for the New York State Division of Criminal Justice Services under the Federal Omnibus Crime Control and Safe Streets Act of 1968.

\*\*\*\*\*

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12. Sponsoring Organization Name and Address US Department of Housing and Urban Development and NYS Department of State, Division of Community Affairs 162 Washington Avenue Albany, NY 12231				10. Project/Task/Work Unit No.
15. Supplementary Notes				11. Contract/Grant No. CPA-NY-02-36-1215
16. Abstracts  This report presents the findings of a survey conducted during the summer of 1982. The survey gathered information on the existing facilities, current problems and future capital improvement plans from 109 of the 112 community water systems in the New York counties of Albany, Rensselaer, Saratoga and Schenectady.				13. Type of Report & Period Covered
17. Key Words and Document Analysis. 17a. Descriptors Community Water Systems Existing Facilities Current Problems Capital Improvement Plans				14.
17b. Identifiers/Open-Ended Terms				
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## EXECUTIVE SUMMARY

SURVEY OF COMMUNITY WATER SYSTEMS

This report presents the findings of a survey conducted by the Capital District Regional Planning Commission (CDRPC) during the summer of 1982. The survey gathered information on the existing facilities, current problems and future capital improvement plans from 109 of the 112 major community water systems in the four-county Capital District area. Below is a summary of the findings:

- . Eighty percent of the population in the Capital District is served by community water systems. These systems are located in and around urban areas, generally following growth patterns of the region.
- . Presently, the Capital District Region has a plentiful source for water in most areas. The water is generally high in quality.
- . Although many water systems in the region date back to the early 1900's, municipal officials in most cases have maintained and upgraded their systems as needed.
- . Nearly one hundred million gallons of water are used each day in the Capital District by its residents, industries and businesses.
- . Water charges for the majority of community systems are applied through metered rates. In general, most residential households pay less than \$100 per year for water.
- . Over \$26,000,000 were expended on community water systems in fiscal year 1981. The sum total of bonded indebtedness for recent system improvements in the Capital District is \$67,000,000.
- . Problems of water systems in the region generally consist of needed replacement and upgrading aging components.
- . Protection of water sources is of rising concern in areas of the region.
- . Over \$56,000,000 is needed to upgrade water systems in the Region. Of this amount, \$25,000,000 is needed by the City of Albany.
- . Overall, the water systems in the Capital District are in good condition, with few areas in need of a high degree of assistance.

## INTRODUCTION

PURPOSE OF SURVEY

During the summer of 1982, the Capital District Regional Planning Commission (CDRPC) conducted a survey of community water systems in the counties of Albany, Rensselaer, Saratoga and Schenectady. This survey gathered information on the existing facilities, current problems and needed capital improvements for each system. The findings of this survey are presented in this report.

Municipal and private water systems in the Capital District serve approximately 600,000 people (or 80% of the Region's total population). Water systems are an important part of our Region's infrastructure or foundation services. In recent years, New York State has become increasingly concerned over the condition of its highways, sewers and water systems. Efforts have been initiated to determine the physical condition of the aged infrastructure, the amount of funds necessary to upgrade the systems and the financing mechanism available to make the needed improvements. This survey of the water systems in the Capital District is part of that larger structural effort.

In 1981, the NYS Department of Health mailed a Condition Assessment Survey to all community water system officials in New York State. While 40% of the 112 water systems in the Capital District responded to the NYS DOH survey, many sections of returned forms were incomplete making a comprehensive assessment impossible.

In early 1982, the NYS Assembly Task Force on Infrastructure mailed a Water System Assessment Form to all mayors and town supervisors across the State. Only 5% of the local officials in the Capital District responded to this survey.

In undertaking its survey, CDRPC wanted to follow up on these earlier efforts and achieve a nearly 100% response rate.

METHODOLOGY

The information presented in this assessment report primarily results from a survey CDRPC conducted among the operators of local community water systems.

CDRPC developed a comprehensive water assessment survey form. A copy of this survey form may be found in the appendix of this report. The form consists of three parts. Part I addresses the system's physical components; Part II, system problems; and Part III, planned or needed capital improvements.

Before becoming final draft, editions were reviewed by officials at the NYS Department of Environmental Conservation, NYS Department of Health, and county planning agencies.

Telephone and personal interviews were conducted by CDRPC's staff. Contacts for these interviews included city and village engineers, consultant engineers, supervisors and commissioners of public works, water district commissioners, system and treatment operators, town and village clerks and owners of private water systems.

Water system officials in Albany, Rensselaer, Saratoga and Schenectady Counties were interviewed directly. The survey forms for water systems in Albany County were completed in part from recent information and interviews compiled and conducted by the NYS Department of Health as part of their effort to produce an updated comprehensive county water supply study.

In all, CDRPC was able to complete survey forms for 109 of the 112 (96%) community water systems in the Capital District Region.

#### ADDITIONAL DATA SOURCES

Supplemental documentation on existing water system facilities was obtained from the NYS Department of Health, NYS Department of Environmental Conservation, NYS Department of Audit and Control, and NYS Public Service Commission.

NYS DOH provided a comprehensive listing of community water systems, ownership, operators, population served, water source, safe yields and treatment. DOH's Bureau of Public Water Supply made available to CDRPC the responses from local communities to their 1981 statewide survey.

The NYS Department of Environmental Conservation provided recent studies on municipal water systems in the Capital District. These studies, conducted by the New York State Division of the Army Corps of Engineers, aided in the identification of problems and needs for the communities of the City of Albany, the City of Cohoes, and the Village of Green Island.

The NYS Department of Audit and Control made possible the acquisition of financial data for municipal water systems. The Department provided access to the annual reports of cities, towns and villages, along with a description of reporting procedures on water systems.

The NYS Public Service Commission (PSC) provided access to annual reports of private water systems and water rates. Insight into problems of private water systems was also provided.

#### DEFINITION OF COMMUNITY WATER SYSTEMS

Community Water Systems are water systems which serve at least five service connections used by year-round residents, or systems which regularly serve at least 25 year-round residents. A community water system may be privately or publicly owned. A Private Community Water System is owned and operated by a non-municipal entity such as a developer, corporation or company.

Certain kinds of community water systems, such as trailer parks, apartment complexes, and institutions having their own individual water connections, have been excluded from this study for the purpose of simplification. The community water systems (program code 100 of the NYS Department of Health's Safewater Data Management System) that were included in this survey serve the vast majority of the population with water connections in the Region.

ACKNOWLEDGMENTS

This study was greatly assisted by the efforts and cooperation of individual agencies, and departments within the State, county and local governments, as well as responsible purveyors of individual water systems. The Capital District Regional Planning Commission wishes to express special appreciation for assistance to:

John Orndorff, Bureau Chief, NYS Department of Health, Bureau of Public Water Supply

Irving Grossman, Assistant Bureau Director, NYS Department of Health, Bureau of Public Water Supply

Walter Bundy, NYS Department of Health, Bureau of Public Water Supply

Peter Chiefari, NYS Department of Health, Bureau of Public Water Supply

Brian Fear, NYS Department of Health District Office

William Lee, NYS Department of Environmental Conservation

Howard Pike, NYS Department of Environmental Conservation

Ellen A. Biggane, NYS Assembly Program Development Group

Roy Lamberton, NYS Public Service Commission, Water Division

Dennis Carrol, Rensselaer County Health Department

Latimer Schmidt, Schenectady County Planning Department

Don Zizzi, Schenectady County Planning Department.

## CHAPTER I

DESCRIPTION OF EXISTING COMMUNITY WATER SYSTEMSPOPULATION SERVED

There are 112 community water systems within the Capital District Region. Approximately 80 percent of these systems are municipally owned and the remainder are privately owned systems. These community water systems provide service to about 600,000 people or 80 percent of the region. The rest of the population is generally supplied water by individual wells. The percent of population served in each county is as follows: 90 percent for Albany County; 60 percent for Rensselaer County; 50 percent for Saratoga County and 95 percent for Schenectady County. A listing of populations served by individual systems, as well as the percent served within municipalities, may be found in Table I. Figure I illustrates the geographic areas of the Capital District that are served by community water systems.

SOURCES OF WATER

Community water systems receive water from surface and groundwater sources consisting of: reservoirs, rivers, springs and wells or by purchasing water from other systems. Of the total number of community water systems in the region, 8 percent draw water from reservoirs, 8 percent use rivers or streams, 8 percent use a combination of sources, 40 percent draw from wells and approximately 38 percent purchase their water.

The majority of the population in the counties of Albany (95%), Rensselaer (89.6%) and Saratoga (71%) receive water from surface sources (generally reservoirs). The County of Schenectady receives most of its water (99.9%) from ground water sources (wells). For the Region as a whole, 70% of the populous receives water from surface sources and 30% receive water from ground water sources.

The sources of water for individual systems are displayed in Table I. Water resources within the Capital District Region are reported to be plentiful. More than twice as much water is capable of being produced as is currently being used by water systems. The largest single quantity of water in the Region comes from reservoirs which are capable of producing a total of about 95 million gallons per day or 45 percent of the Region's total safe yield. These reservoirs also serve the majority of the population in the Region from interconnecting systems.

The Alcove and Basic Reservoirs, located in southern Albany County supply the City of Albany. Water is transported and stored in the Loudonville Reservoirs from this source.

The Tomhannock Reservoir in northern Rensselaer County supplies the City of Troy's water system which, in turn, supplies the City of Rensselaer, the Village of Menands and parts of the Towns of East Greenbush, North Greenbush, Schaghticoke and Brunswick.

FIGURE I  
GEOGRAPHIC AREA SERVED BY COMMUNITY WATER SYSTEMS

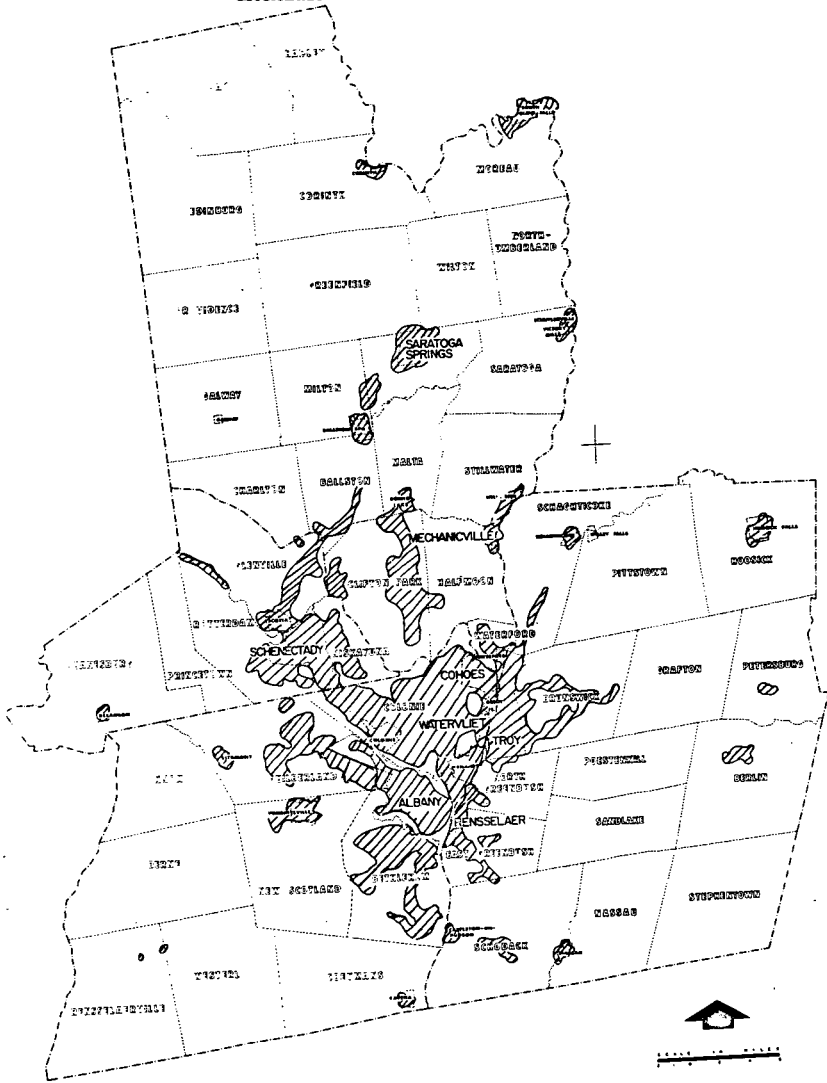


TABLE I

(Page 1 of 8)

COMMUNITY WATER SYSTEMS: SELECTED CHARACTERISTICS

MUNICIPALITY/SYSTEM	OWNERSHIP		POPULATION SERVED		SOURCE	APPROX TOTAL SAFE YIELD (MGD)	1981 AVG DAILY PRODUCTION/ PURCHASE (MGD)	TOTAL DISTRIBUTION STORAGE (MG)	TYPE TREATMENT
	PUBLIC	PRIVATE	APPROX #	APPROX % OF MUNICIPALITY					
<u>Albany County:</u>									
City of Albany	x		101,700	100%	R	28,400	22,400	211,000	D, F, Cc
Village of Altamont	x		1,300	100%	R, W	0.360	0.165	.500	D, F
Town of Bethlehem	x		( 21,240 )	87%					
Bethlehem W.D. #1	x		21,000		R, W	4,820	3,000	11,400	D, F, Cc
South Albany W.D.	x		40		W	N/A		.011	D
City of Cohoes	x		18,150	100%	S	--	3.960	10,250	D, F
Town of Colonie			(69,700)	95%					
Latham W.D.	x		60,830		W, R, S	24,000	9,700	8,400	D, F, Cc
Village of Colonie	x		8,870	100%	P				
Village of Green Island	x		2,700	100%	IG	1,000	(0.870)	0,500	D, F, Cc
Town of Guilderland			(21,050)	80%					
Fort Hunter	x		500		W	0.170	0.048	0.060	D
Guilderland W.D. #1	x		410		W	0.110	0.053	0,050	D
Lone Pine W.D.	x		125		W	0.078	0.013	0,000	D
Westmore-McKownville W.D.	x		20,000		R, W	3,750	2,000	2,200	D, F, Cc, FI
Village of Menands	x		4,000	100%	P	--	(1.420)	--	--
Town of New Scotland			( 110 )	> 5%					
Heldervale W.D.	x		110		P	--	(0.006)	--	--
Village of Ravona	x		4,700	100%	S	2,000	0.540	0,500	D, F, FI
Town of Rensselaerville	x		300	20%	S	N/A	0.035		D, F

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COMMUNITY WATER SYSTEMS: SELECTED CHARACTERISTICS (Cont'd.)

<u>MUNICIPALITY/SYSTEM</u>	<u>OWNERSHIP</u>		<u>POPULATION SERVED</u>		<u>SOURCE</u>	<u>APPROX TOTAL SAFE YIELD (MGD)</u>	<u>1981 AVG DAILY PRODUCTION/ PURCHASE (MGD)</u>	<u>TOTAL DISTRIBUTION STORAGE (MG)</u>	<u>TYPE TREATMENT</u>
	<u>PUBLIC</u>	<u>PRIVATE</u>	<u>APPROX #</u>	<u>APPROX % OF MUNICIPALITY</u>					
Village of Voorheesville	x		3,320	100%	W	1.030	0.450	1.000	D
City of Watervliet	x		11,300	100%	R	11.900	3.080	2.650	D, F
Town of Wusterlo			( 160)	5%					
Northside W.D.	x	x	160		W	N/A	0.006	0.010	D
<u>ALBANY COUNTY TOTALS</u>	<u>20</u>	<u>1</u>	<u>259,515</u>	<u>90%</u>		<u>77.618</u>	<u>45.467</u>	<u>253.011</u>	
<u>Rensselaer County:</u>									
Town of Berlin			( 655)	40%					
Berlin W.D. #2	x		655		W	0.220	0.220	0.075	D
Town of Brunswick			( 6,725)	60%		--	0.588		
Brunswick W.D. #1	x		2,520		P	--	--	--	--
W.D. #2	x		1,025		P	--	--	--	--
W.D. #3	x		1,480		P	--	--	--	--
W.D. #4	x		550		P	--	--	2.000	D
W.D. #5	x		225		P	--	--	--	D
W.D. #6	x		930		P	--	--	--	D
Village of Castleton	x		2,105	100%	S	0.500	0.300	0.446	D
Town of East Greenbush			(10,325)	80%					
E. Greenbush Gen W.D.	x		7,905		P	--	(1.313)	0.318	D
E. Greenbush Water & Imp. Co.		x	180		W	0.029	0.012	0.004	D
Hampton Manor-Hillview W.D. #4	x		2,240		W	1.020	0.225	0.200	D



## COMMUNITY WATER SYSTEMS: SELECTED CHARACTERISTICS (Cont'd.)

MUNICIPALITY/SYSTEM	OWNERSHIP		POPULATION SERVED		SOURCE	APPROX TOTAL SAFE YIELD (MGD)	1981 AVG DAILY PRODUCTION/ PURCHASE (MGD)	TOTAL DISTRIBUTION STORAGE (MG)	TYPE TREATMENT
	PUBLIC	PRIVATE	APPROX #	APPROX % OF MUNICIPALITY					
Village of Hoosick Falls	x		4,100	100%	W	2.300	0.700	0.638	D
Village of Nassau	x		1,300	100%	W	1.900	0.250	0.185	D
Town of North Greenbush			( 440)	> 5%				4.000 <sup>2</sup>	
North Greenbush W.D. #1	x		310		P	--	(0.060)	--	--
W.D. #3	x		600		P	--	(0.016)	--	--
Town of Petersburg	x		400	30%	W, Sp	0.032	0.032	0.430	D
City of Rensselaer	x		9,600	100%	P	--	(1.517)	2.000	D
Town of Schaghticoke			(2,420)						
Schaghticoke W.D. #1	x		700	35%	P	--	(0.020)	0.055	--
W.D. #2	x		625		P	--	(0.005)	--	--
W.D. #3	x		1,010		P	--	(0.065)	--	--
W.D. #4	x		85		P	--	(0.388)	--	D
Village of Schaghticoke	x		860	100%	W	0.209	0.070	0.076	D
Town of Schodack			( 820)	5%					
Battisti Public Water Supply		x	185		W	0.050 (est.)	0.009 (est.)	0.004	D
Maple Hill Water Company		x	90		W	0.040 (est.)	0.020	0.005	D
Schodack W.D. #1	x		375		W	0.756	0.020 (est.)	0.003	D
W.D. #2A	x		120		W	0.048	0.006 (est.)	0.001	D
W.D. #2B	x		50		P	--	(0.024)	--	--
City of Troy			55,000	100%	R	42.000	14.700	--	D, F, Cc, F1
RENSSELAER COUNTY TOTAL	24	3	95,225	60%		49.101	17.082 <sup>2</sup>	11.762	

## COMMUNITY WATER SYSTEMS: SELECTED CHARACTERISTICS (Cont'd.)

MUNICIPALITY/SYSTEM	OWNERSHIP		POPULATION SERVED		SOURCE	APPROX TOTAL SAFE YIELD (MGD)	1981 AVG DAILY PRODUCTION/ PURCHASE (MGD)	TOTAL DISTRIBUTION STORAGE (MGD)	TYPE TREATMENT
	PUBLIC	PRIVATE	APPROX #	APPROX % OF MUNICIPALITY					
<u>Saratoga County:</u>									
Town of Ballston			( 3,500)	50%					
Burnt Hills-Ballston Lake W.D.	x		3,500		P	--	(0.170)	0.500	--
Village of Ballston Spa	x		5,000	100%	W,R	0.850	0.250 (est.)	0.750	D
Town of Charlton	x		2,000	50%	P	--	(0.011)	1.000	--
Town of Clifton Park			(22,140)	90%					
CalicoColony-Woodland Hills		x	440		W	0.162	0.099 (est.)	0.090	D
Clifton Gardens W.S.		x	2,700		W	0.290	0.170	0.080	D
Clifton Knolls Subdivision		x	3,200		W	0.615	0.180	0.171	D
Country Knolls Estates W.S.		x	8,000		W	0.976	0.554	0.240	D
Crescent Estates		x	5,400		W	2.400 (est.)	0.389	0.775	D
North Crest		x	420		W	N/A	0.029	--	D
Roxford W.D. #2	x		1,000		P	--	(0.090)	0.100	--
Rivercrest W.D.		x	80		P	--	(0.005)	--	--
Sherwood Forest		x	550		W	N/A	0.068	0.950	D
Village Green		x	350		W	0.045	0.103	0.013	D
Town of Corinth			( 440)	10%					
Corinth Homes W.D.	x		40		P	--	(0.002)	--	--
Eastern Avenue W.D.	x		100		P	--	(0.005)	--	--
Village of Corinth	x		3,000	100%	W	1.400	0.500	0.500	D

COMMUNITY WATER SYSTEMS: SELECTED CHARACTERISTICS (Cont'd.)

MUNICIPALITY/SYSTEM	OWNERSHIP		POPULATION SERVED		SOURCE	APPROX TOTAL SAFE YIELD (MGD)	1981 AVG DAILY PRODUCTION/ PURCHASE (MGD)	TOTAL DISTRIBUTION STORAGE (MGD)	TYPE TREATMENT
	PUBLIC	PRIVATE	APPROX #	APPROX % OF MUNICIPALITY					
Town of Hadley			( 765)	60%					
H & M Subdivision		x	15			N/A	0.001		--
Hadley W.D.	x		500		P	--	(0.007)	--	D
South Hadley W.D.	x		250		W	0.100	0.020	--	D
Town of Halfmoon			( 930)	10%					
Halfmoon W.D. #1	x		400		P	--	(0.360)	--	--
W.D. #2	x		490		W	0.057	0.251 (est.)	0.001	D
W.D. #3	x		40		P	--	(0.006)	--	--
Town of Malta			( 480)	5%					
Luther Forest		x	300		W	0.324	0.017	--	--
Pine North Subdivision		x	180		W	0.027	0.017	0.025	D
City of Mechanicville	x		5,500	100%	R	1.500	0.683	4.250	D,F
Town of Milton			( 1,200)	10%					
Milton Terrace W.D.	x		80		P	--	(0.004) (est.)	--	--
Town of Moreau	x		( 1,840)	15%					
Morcau W.D. #1 (Fenimore)	x		400		P	--	(0.014)	--	--
W.D. #2 (Fernwood)	x		1,440		W	0.180	0.080	0.006	D
Town of Northumberland			( 40)	75%					
Terrel Hills		x	40		W	0.691	0.002	0.080	D
Village of Round Lake	x		790	100%	R	0.250	0.116	0.100	D

## COMMUNITY WATER SYSTEMS: SELECTED CHARACTERISTICS (Cont'd.)

MUNICIPALITY/SYSTEM	OWNERSHIP		POPULATION SERVED		SOURCE	APPROX TOTAL SAFE YIELD (MGD)	1981 AVG DAILY PRODUCTION/ PURCHASE (MGD)	TOTAL DISTRIBUTION STORAGE (MGD)	TYPE TREATMENT
	PUBLIC	PRIVATE	APPROX #	APPROX % OF MUNICIPALITY					
City of Saratoga Springs			(23,700)	95%					
Saratoga Spa City	x		17,700		R	5.000	3.900	5.000	D, F, Cc, F1
Geysar Crest-Heritage Knolls	x		4,800		W	2.300	0.270	--	D
Gilbert Road Waterworks		x	40		W	0.092	0.003	0.010	--
Rowlands Hollow Subdivision		x	150		W	N/A	0.008 (est.)	N/A	--
Village of Schuylerville	x		1,250	100%	R	2.080	0.315	0.600	D
Village of South Glens Falls	x		3,700	100%	W, Sp	1.500	0.700	1.000	D
Town of Stillwater			( 2,000)	30%					
Stillwater W.D. #1 & 2	x		2,000		P	--	(0.074)	0.200	--
Village of Stillwater	x		1,570	100%	W	1.080	0.250	0.200	D, F
Village of Victory Mills <sup>3</sup>	x		500	90%	R	--	--	--	--
Town of Waterford			( 1,100)	15%					
Colonial Green		x	490		W	0.130	0.380	0.100	D
Waterford Water Works Comm. <sup>4</sup>	x		3,000		S	3.000	1.079 (est.)	1.150	--
Village of Waterford			( 2,400)	100%	S	--	--	--	D, F, Cc
Town of Wilton			( 1,060)	15%					
Featherwood Water Company		x	440		W	0.280	0.005	0.043	D
Lake Elizabeth		x	620		W	0.108	0.047	0.200	D
<b>SARATOGA COUNTY TOTALS</b>	<b>27</b>	<b>18</b>	<b>81,405</b>	<b>50%</b>		<b>25.445</b>	<b>10.486</b>	<b>18.134</b>	

COMMUNITY WATER SYSTEMS: SELECTED CHARACTERISTICS (Cont'd.)

<u>MUNICIPALITY/SYSTEM</u>	<u>OWNERSHIP</u>		<u>POPULATION SERVED</u>		<u>SOURCE</u>	<u>APPROX TOTAL SAFE YIELD (MGD)</u>	<u>1981 AVG DAILY PRODUCTION/ PURCHASE (MGD)</u>	<u>TOTAL DISTRIBUTION STORAGE (MGD)</u>	<u>TYPE TREATMENT</u>
	<u>PUBLIC</u>	<u>PRIVATE</u>	<u>APPROX #</u>	<u>APPROX % OF MUNICIPALITY</u>					
<u>Schenectady County:</u>									
Village of Delanson	x		900	100%	R	0.050	0.035	--	D
Town of Glenville			(17,400)	60%					
Glenville W.D. #11	x		14,000		W	5.300	1.750	2.000	D
W.D. #2	x		2,300		P	--	(0.350 for		--
W.D. #3	x		600		P	--	#2, 3, 8 & 12)	--	--
W.D. #8	x		300		P	--	--	--	--
W.D. #12	x		200		P	--	--	--	--
Town of Niskayuna			(17,150)	100%					
Niskayuna W.D. #1	x		1,475		P	--	(0.012)	--	--
W.D. #2	x		225		P	--	(0.041)	--	--
W.D. #3	x		2,400		P	--	(0.196)	0.400	--
W.D. #5	x		11,000		W,P	3.000	1.626 (1.63)	1.000	D,F,Cc,Fl
W.D. #6	x		1,000		P	--	(0.083)	--	--
W.D. #7	x		550		P	--	(0.701)	--	--
W.D. #8	x		500		P	--	(0.251)	--	--
Town of Rotterdam			(29,450)	100%					
Rotterdam W.D. #1	x		5,250		P	--	(0.340)	--	--

COMMUNITY WATER SYSTEMS: SELECTED CHARACTERISTICS (Cont'd.)

MUNICIPALITY/SYSTEM	OWNERSHIP		POPULATION SERVED		SOURCE	APPROX TOTAL SAFE YIELD (MGD)	1981 AVG DAILY PRODUCTION/ PURCHASE (MGD)	TOTAL DISTRIBUTION STORAGE (MG)	TYPE TREATMENT
	PUBLIC	PRIVATE	APPROX #	APPROX % OF MUNICIPALITY					
Rotterdam W.D. #3	x		1,700		W	0.500	0.186	0.200	D
W.D. #4 & #5	x		22,200		W	7.500	2.633	3.200	D
West Hill Water Co., Inc.		x	300		W	0.054	0.015	0.005	--
City of Schenectady	x		67,970	100%	W	38.200	16.330	21.000	D, F1
Village of Scotia	x		7,300	100%	W	2.800	1.200	2.700	D
<b>SCHENECTADY COUNTY TOTALS</b>	<b>18</b>	<b>1</b>	<b>140,170</b>	<b>95%</b>		<b>57.404</b>	<b>23.775</b>	<b>27.505</b>	
<b>CAPITAL DISTRICT REGION TOTALS</b>	<b>89</b>	<b>23</b>	<b>577,375</b>	<b>80%</b>		<b>209.570</b>	<b>96,810</b>	<b>310,432</b>	

<sup>1</sup> Figure represents total production

<sup>2</sup> 4.000 MGD joint storage for City of Rensselaer and Town of East Greenbush (located in the Town of North Greenbush)

<sup>3</sup> The Village of Schuylerville and the Village of Victory have a joint Water Commission.

<sup>4</sup> The Waterford Water Works Commission represents both the Town and Village of Waterford

N/A = Not Available

SOURCE: R = Reservoir  
S = River or Stream  
W = Well(s)  
Sp = Spring  
P = Purchased

TREATMENT: D = Disinfectant (Chlorination)  
F = Filtration  
Cc = Corrosion Control  
F1 = Fluoridation

IG - Infiltration Gallery

Other major reservoirs include the Watervliet Reservoir serving the City of Watervliet and Loughberry Lake serving the City of Saratoga Springs.

Aquifers (a water bearing stratum of permeable rock, sand, or gravel) are also a large source of water in the Region. This ground water source is often very pure, being trapped below ground and filtered over long period of time. Water is obtained from aquifers by means of wells. The City of Schenectady, Town of Rotterdam, Village of Scotia and Town of Glenville all obtain water from a major aquifer located in Schenectady County along the Mohawk River. Areas in southern Rensselaer County in the Town of Schodack have also tapped aquifers for their source of water.

Rivers are used to supply areas within the Capital District to a smaller degree. The Hudson River supplies the Town of Waterford and also the Village of Green Island through an infiltration gallery. The Latham Water District in the Town of Colonie supplements its supply from the Mohawk River.

Wells supply the majority of water systems in the Region, the safe yield of these wells being the determinate factor for service. Currently, in most areas within the Region, the safe yield of wells exceeds the demand. This may be seen in Table I by comparing safe yield to production. The safe yield for a ground water source is based on the rate at which water may flow or be pumped at a stabilized drawdown (water level). The safe yield for a surface water source is based on the rate at which water may flow or be pumped under the historic worst drought conditions for that area.

The total safe yield for all 112 community water systems in the Capital District is estimated to be 209.57 million gallons per day. The average daily production or purchase is estimated at 96.81 million gallons, only 46 percent of the total available safe yield. However, not all water systems in the Region have an excessive or adequate safe yield.

#### DISTRIBUTION

Every city, all but two villages, and the large clusters of population within the towns of the Capital District have community water systems. The majority of these systems are municipally owned and operated. Privately owned systems exist generally within the more recently developed areas in the Town of Clifton Park and several other suburban communities.

All of the cities' and most village water systems within the Region date back to the early 1900's and some to the mid-1800's. Town water systems came into existence generally as the Region developed, spreading outward from the cities. In the early 1900's water systems in towns such as Guelderland, Colonie, Brunswick and Niskayuna began to develop. In the 1940's and 50's areas such as Rotterdam and East Greenbush developed, being further from city centers. In the 1960's and early 70's water systems in the Region followed development north in towns such as Glenville, Clifton Park and Halfmoon.

Water from a surface source or underground source is pumped or gravity fed through transmission mains, submains, and service lines for those served by the water system. Valves are used to control flow in pipes. Elevated tanks and standpipes provide storage to meet pressure requirement and peak flow needs for a relatively short time, while reservoirs may store water for dry periods. Water

treatment plants, varying in size, are usually required. Standards for water quality have been established and are a major determinant factor in types of treatment provided by an individual system.

Most transmission mains in the Capital District consist of cast iron, steel or concrete lined pipe. Distribution mains are generally of cast iron. Ductile iron, asbestos cement and some plastic pipe have been used in newer systems. Some of the older mains in systems have been cleaned and lined, such as in the City of Troy. In many systems older pipes are replaced as they deteriorate.

Most systems in the Region have enclosed or covered storage facilities. These facilities consist of tanks or reservoirs generally of steel, concrete, or earth. The storage tanks must be cleaned and resurfaced periodically and reservoirs must also be maintained. Both pipe and reservoir repair is costly and may limit service for a time. For most water systems in the Region the amount of water in storage approaches the amount of water needed for one day. The exception is for those systems where water is held in reservoirs. This additional storage pushes the amount of storage in the whole Region to over three times the daily demand.

#### TREATMENT

All water systems in New York State must provide adequate treatment of water for those they serve. The water supply in the Region generally is of high quality; however, because of the nature of storage and distribution, treatment is usually required. NYS DOH monitors all community water systems in the State by means of periodic sampling. They also maintain a list of the types of treatment used by community water systems.

There are a great number of treatments applied to raw water. For simplification, this report only looks at four types of treatment: disinfectant, filtration, corrosion control, and fluoridation.

Disinfection usually consists of the addition of chlorine to water in a limited amount necessary to kill harmful organisms. Filtration, usually associated with surface water, is used by larger treatment facilities for purification to remove suspended particles, odor and color. There are a great variety of filtration methods. Corrosion control usually means neutralizing the acidity of water to prevent damage to pipes. Fluoridation is the adding of fluoride to water to aid in the prevention of tooth decay.

In the Capital District Region, over 60 percent of the water systems have disinfection. The remaining systems receive water from other systems using a disinfectant or in the case of a few, no treatment is used. About 12 percent of the systems have filtration. This 12 percent represents the larger water systems which usually have other methods of treatment as well. About 5 percent of the systems have corrosion control and only 5 percent use fluoridation. Treatments for individual systems are displayed in Table I.



CONSUMPTION

Nearly one hundred million gallons of water are used each day in the Capital District. This water is used by residences as well as public institutions, commercial businesses and industry. The Region is fortunate in that nearly twice the amount of water consumed can be produced, although water in these quantities may not always be able to be distributed to all areas in need. Water produced for some systems has declined over the last decade because of population loss, leak detection and metering. Seventy-five percent of the water systems in the Region are metered.

MANAGEMENT

Statutes relating to water supply for various communities provide for many local management options. In cities and villages, water systems may be operated as a part of the general municipal government or powers and liabilities may be imposed upon special officers or boards. Town boards may take responsibility for system operation or delegate powers to water district commissioners. In most municipalities in the Capital District the chief public works office is responsible for the day-to-day operation of the water system. In the large cities there is a structured supervision of staff which ranges up to eighty people in one instance. In small villages and districts there may be only one part-time operator.

Operators of water treatment plants, as well as operators of distribution systems serving 1,000 people or more, must meet qualifications specified by the State. Most systems within the Region have qualified staff or staff in training for certification.

Repair work is done by public works crews or contracted out. Owners of private water systems hire personnel to operate and work on their systems.

REVENUES AND EXPENDITURE

Revenues for water systems generally come from three sources--charges for water, taxes and borrowing in the form of bonds, bond anticipation notes, capital notes or budget notes. Private water system owners generally rely on water charges and non-municipal borrowing methods.

Water charges are established by the governing body in a municipality or by the New York State Public Service Commission in the case of private water systems. Water charges, when collected, are applied toward the maintenance operation, enlargement and improvement of the water system and the payment of principal and interest of bonds issued for the purpose of the water system. In the event that charges for water sold are insufficient for a municipal system (public) the excess of cost over revenues may be assessed against the real property within the jurisdiction of that water district. Costs may be apportioned on a benefit and/or ad valorem basis. Taxes may also be used as a means of collecting unpaid water charges. Cities, towns, and villages are exempt from municipal limitations on borrowing for water supply and distribution.

Water charges in the Capital District have been grouped into five categories for the purpose of this report: 1) Flat Rate (one specific charge for water service); 2) Metered Flat Rate (metered charges with one specific charge per gallon used--usually dollars per 1,000 gallons); 3) Metered Sliding Scale (a metered charge varying with the gallonage used--usually the charge per gallon decreases as the amount of water used increases); 4) Plumbing Fixtures (water charges established by the number and type of plumbing units such as sinks, toilets, pools, etc.) and 5) Taxes (real property taxes applied for water service or improvements). The type of charges by each water system are identified in Table II.

Twenty-three percent of the water systems in the Region use the Flat Rate method of charging for water. Of those systems using Flat Rate, the average charge for one year's water service is \$77.58.

Seventy-five percent of the water systems in the Capital District use metering as a means of charging for water. Of those systems with meters, approximately half use a Metered Flat Rate charge and half use a Metered Sliding Scale. An average of \$1.31 per 1000 gallons was charged by those systems with a Metered Flat Rate. Metered Sliding Scale Rates were not analyzed because of the variety and variances in scales used.

Only 4 percent of the water systems in the Region use Plumbing Fixtures as a means of water charges. Thirty-six percent of the water systems used Property Taxes to supplement water charges.

For the total 1981 annual reports on water systems in the Region (describing revenue and expenditures) approximately 90 percent were analyzed with only a few small private water systems' annual reports not available. A summary of the findings is presented in Table II for: income from water charges, total income, expenditures for debt, total expenditures, fund balance, and water debt remaining at the end of the 1981 fiscal year.

Income from water sales, charges, and interest accounted for 78 percent of the total income for water systems in the Region. Other revenue came from such sources as: use of funds, inter fund transfers, permits and sales of property. Total income for water systems in the Region exceeds \$27 million. This figure was 4 percent higher than total expenditures for the Region.

Total payments on water-related debts for community systems was equal to one-third of the total expenditures for community water systems in the Region. Total expenditures equaled approximately \$26 million for the Region.

Fund balance is the amount of money left in the water system fund after expenditures. For 1981, the total fund balance for nearly all systems in the Region was only 9 percent of the total money expended for water systems. Eighty percent of the systems analyzed had a positive fund balance while the remaining systems showed a deficit. Fund balances are maintained for repairs, needed system components and emergency use. Fund balances shown in Table II may reflect money allocated for improvements.

The sum total of all water-related debts for community systems at the end of fiscal 1981 was over \$67 million. This debt figure is about twice the total revenues received by community systems.

TABLE II

(Page 1 of 8)

COMMUNITY WATER SYSTEMS: REVENUES AND EXPENDITURES

(All Figures in \$1,000's)

MUNICIPALITY/SYSTEM	1982 METHOD OF WATER CHARGES				1981 INCOME		1981 EXPENDITURES		1981 FUND BALANCE	1981 TOTAL EST. WATER DEBT REMAINING
	FLAT RATE	METERING		REAL PROPERTY TAX	WATER SALES & CHARGES	DEBT PAYMENT	TOTAL			
		FLAT RATE	SLIDING SCALE					PLUMBING FIXTURES		
<u>Albany County:</u>										
City of Albany		x			4,626	4,690	2,908	4,625	851	17,140
Village of Altamont			x		66	68	0	73	4	27
Town of Bethlehem										
Bethlehem W.D. #1		x		x	802	1,565	525	1,571	317	4,271
South Albany W.D.	x				N/A	N/A	N/A	3	N/A	
City of Cohoes			x		763	765	695	718	105	490
Town of Colonie										
Latham W.D.		x		x	2,224	3,964	1,357	3,870	525	11,413
Village of Colonie		x			370	380	6	74	196	25
Village of Green Island			x		250	251	4	285	163	1,828
Town of Guilderland										3,254
Fort Hunter	x			x	6	14	2	12	16	
Guilderland W.D. #1	x			x	5	9	1	13	4	
Lone Pine W.D.			x	x	2	6	1	5	3	
Westmore-McKownville W.D.			x	x	236	890	486	870	335	
Village of Menands			x		352	358	51	420	-27	326
Town of New Scotland										
Heldervale W.D.			x		3	3		4	1	--

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## COMMUNITY WATER SYSTEMS: REVENUES AND EXPENDITURES (Cont'd.)

MUNICIPALITY/SYSTEM	1982 METHOD OF WATER CHARGES					1981 INCOME		1981 EXPENDITURES		1981 FUND BALANCE	1981 TOTAL EST. WATER DEBT REMAINING
	FLAT RATE	METERING		PLUMBING FIXTURES	REAL PROPERTY TAX	WATER SALES & CHARGES	TOTAL	DEBT PAYMENT	TOTAL		
		FLAT RATE	SLIDING SCALE								
Village of Ravena	x		x			179	184	34	231	-10	248
Town of Rensselaerville				x		10	10	3	13	4	105
Village of Voorheesville			x			93	101	17	114	44	205
City of Watervliet	x					546	570	27	597	-455	188
Town of Westerlo						--	--	--	2	--	--
Northside W.D.											
<b>ALBANY COUNTY TOTALS</b>	<b>5</b>	<b>4</b>	<b>9</b>	<b>1</b>	<b>6</b>	<b>10,533</b>	<b>13,828</b>	<b>6,117</b>	<b>13,489</b>	<b>2,076</b>	<b>39,520</b>
<b>Rensselaer County:</b>											
Town of Berlin											
Berlin W.D. #2	x			x		21	21	4	23	2	9
Town of Brunswick											
Brunswick W.D. #1,2,3,4,5,6		x			x	229	316	78	377	-66	814
Village of Castleton	x	x				62	64	21	62	6	200
Town of East Greenbush						539	824	272	867	-115	2,352
East Greenbush Gen. W.D.			x		x						
Hampton Manor-Hillview W.D. #4	x								6	1	--
East Greenbush Water & Imp. Co.	x						7	7			--
Village of Hoosick Falls			x			92	97	3	101	-22	57
Village of Nassau	x					34	41	7	37	18	9

## COMMUNITY WATER SYSTEMS: REVENUES AND EXPENDITURES (Cont'd.)

MUNICIPALITY/SYSTEM	1982 METHOD OF WATER CHARGES					1981 INCOME		1981 EXPENDITURES		1981 FUND BALANCE	1981 TOTAL EST. WATER DEBT REMAINING
	FLAT RATE	METERING		PLUMBING FIXTURES	REAL PROPERTY TAX	WATER SALES & CHARGES	TOTAL	DEBT PAYMENT	TOTAL		
		FLAT RATE	SLIDING SCALE								
Town of North Greenbush											
North Greenbush W.D. #1		x				2	3	--	4	5	--
W.D. #3		x			x	3	10	8	11	3	76
Town of Petersburg				x	x	5	6	--	4	8	--
City of Rensselaer		x				655	662	162	755	-805	1,580
Town of Schaghticoke											
Schaghticoke W.D. #1		x			x	9	18	2	14	6	3
W.D. #2		x			x	16	23	5	22	7	45
W.D. #3,3A,3B,3C		x			x	44	85	14	65	35	75
W.D. #4		x				1	1	--	1	1	--
Village of Schaghticoke			x			17	21	5	19	5	20
Town of Schodack W.D. #1,2A,2B						16	20	4	10	42	25
Battisti Public Water Supply	x					4	4	--	4	5	--
Maple Hill Water Co.	x					3	3		2	8	--
Schodack W.D. #1			x								
W.D. #2A	x										
W.D. #2B			x								
City of Troy	x					2,671	2,945	549	2,924	-59	5,859
<b>RENSSELAER COUNTY TOTAL</b>	<b>8</b>	<b>16</b>	<b>4</b>	<b>1</b>	<b>7</b>	<b>4,430</b>	<b>5,171</b>	<b>1,134</b>	<b>5,308</b>	<b>-915</b>	<b>11,124</b>

## COMMUNITY WATER SYSTEMS: REVENUES AND EXPENDITURES (Cont'd.)

MUNICIPALITY/SYSTEM	1982 METHOD OF WATER CHARGES				1981 INCOME		1981 EXPENDITURES		1981 FUND BALANCE	1981 TOTAL EST. WATER DEBT REMAINING	
	METERING			REAL PROPERTY TAX	WATER SALES & CHARGES	TOTAL	DEBT PAYMENT	TOTAL			
	FLAT RATE	FLAT RATE	SLIDING SCALE								PLUMBING FIXTURES
<u>Saratoga County:</u>											
Town of Ballston											
Burnt Hills-Ballston Lake W.D.		x			x	53	149	31	156	15	450
Village of Ballston Spa			x			120	132	--	145	200	--
Town of Charlton		x			x	58	86	40	98	20	250
Town of Clifton Park											
CalicoColony-Woodland Hills		x				N/A	N/A	N/A	N/A	N/A	N/A
Clifton Gardens W.S.			x			27	34		27	-14	
Clifton Knolls Subdivision,			x								
Country Knolls Estates W.S. and			x			443	472	315	729	-485	1,727
North Crest			x					(interest)			
Cresent Estates			x								
Rexford W.D. #2		x			x	10	131	3	123	36	516
Rivercrest W.D.		x				N/A	N/A	N/A	N/A	N/A	N/A
Sherwood Forest			x			14	14	--	36	- 4	--
Village Green			x			4	4	--	15	- 20	--
Town of Corinth					x	3	6	2	7	2	24
Corinth Homes W.D.		x									
Eastern Avenue W.D.		x									

## COMMUNITY WATER SYSTEMS: REVENUES AND EXPENDITURES (Cont'd.)

MUNICIPALITY/SYSTEM	1982 METHOD OF WATER CHARGES					1981 INCOME		1981 EXPENDITURES		1981 FUND BALANCE	1981 TOTAL EST. WATER DEBT REMAINING
	FLAT RATE	FLAT RATE	METERING		REAL PROPERTY TAX	WATER SALES & CHARGES	TOTAL	DEBT PAYMENT	TOTAL		
			SLIDING SCALE	PLUMBING FIXTURES							
Village of Corinth	x					59	60	55	68	16	130
Town of Hadley											
H & M Subdivision	x					1	1	--	1	--	--
Hadley W.D.					x	--	12	5	12	3	50
South Hadley W.D.	x				x	6	15	8	15	5	45
Town of Halfmoon											250
Halfmoon W.D. #1		x				9	9		10	--	
W.D. #2			x			10	11		10	4	
W.D. #3		x			x	6	7		9	2	
Town of Malta											
Luther Forest		x				20	20	6	20	-51	68
Pine North Subdivision		x				5	5	(Interest)	15	-23	
City of Mechanicville			x			124	124	--	143	-27	54
Town of Milton			x			--	--	--	--	1	--
Milton Terrace W.D.											
Town of Moreau											
Moreau W.D. #1 (Fenimore)			x		x	12	17	4	16	4	7
W.D. #2 (Fernwood)			x		x	20	47	25	47	6	217

## COMMUNITY WATER SYSTEMS: REVENUES AND EXPENDITURES (Cont'd.)

MUNICIPALITY/SYSTEM	1982 METHOD OF WATER CHARGES				1981 INCOME		1981 EXPENDITURES		1981 FUND BALANCE	1981 TOTAL EST. WATER DEBT REMAINING
	FLAT RATE	METERING		PLUMBING FIXTURES	REAL PROPERTY TAX	WATER SALES & CHARGES	DEBT PAYMENT	TOTAL		
		FLAT RATE	SLIDING SCALE							
Town of Northumberland										
Terrel Hills	x	x				N/A	N/A	N/A	N/A	N/A
Village of Round Lake	x		x			15	15	1	19	-35
City of Saratoga Springs, ) Saratoga Spa City and Geyser ) Crest-Heritage Knolls )			(Commercial)			908	965	216	994	9
Gilbert Road Waterworks	x					N/A	N/A	N/A	N/A	N/A
Rowlands Hollow Subdivision		x				N/A	N/A	N/A	N/A	N/A
Village of Schuylerville	x					37	37	--	19	33
Village of South Glens Falls	x	x				17	173	--	161	47
Town of Stillwater			(Commercial)							
Stillwater W.D. #1 & 2		x			x	32	47	--	48	12
Village of Stillwater		x				80	81	--	86	16
Village of Victory Mills	x					6	6		7	--
Town of Waterford										
Colonial Green			x			10	10	--	10	2
Waterford Water Works Comm.			x		x		54	42	42	--
Village of Waterford										
Town of Wilton										



## COMMUNITY WATER SYSTEMS: REVENUES AND EXPENDITURES (Cont'd.)

MUNICIPALITY/SYSTEM	1982 METHOD OF WATER CHARGES					1981 INCOME		1981 EXPENDITURES		1981 FUND BALANCE	1981 TOTAL EST. WATER DEBT REMAINING
	FLAT RATE	METERING		PLUMBING FIXTURES	REAL PROPERTY TAX	WATER SALES & CHARGES	TOTAL	DEBT PAYMENT	TOTAL		
		FLAT RATE	SLIDING SCALE								
Featherwood Water Co.		x				N/A	N/A	N/A	N/A	N/A	N/A
Lake Elizabeth		x				19	19	--	18	--	--
<b>SARATOGA COUNTY TOTALS</b>	<b>11</b>	<b>13</b>	<b>16</b>	<b>0</b>	<b>11</b>	<b>2,128</b>	<b>2,763</b>	<b>753</b>	<b>3,106</b>	<b>-226</b>	<b>7,455</b>
<b>Schenectady County:</b>											
Village of Delanson		x				9	15	1	12	5	--
Town of Glenville											
Glenville W.D. #11			x		x	257	568	281	552	384	1,895
W.D. #2			x		x	--	3	--	3	2	
W.D. #3			x		x	--	--	--	--	1	
W.D. #5			x		x	--	2	2	2	--	12
W.D. #8			x		x	--	1		1	1	--
W.D. #10			x		x	--	1	1	1	--	4
W.D. #12			x		x	--	--	--	--	--	--
Town of Niskayuna											
Niskayuna W.D. #1		x				21	25	--	34	22	1,525
W.D. #2		x				N/A	N/A	N/A	N/A	N/A	N/A
W.D. #3		x			x	48	142	80	170	57	2,457
W.D. #5		x			x	346	684	58	657	398	1,525
W.D. #6		x			x	12	18	--	28	44	--

## COMMUNITY WATER SYSTEMS: REVENUES AND EXPENDITURES (Cont'd.)

MUNICIPALITY/SYSTEM	1982 METHOD OF WATER CHARGES					1981 INCOME		1981 EXPENDITURES		1981 FUND BALANCE	1981 TOTAL EST. WATER DEBT REMAINING
	FLAT RATE	METERING		PLUMBING FIXTURES	REAL PROPERTY TAX	WATER SALES & CHARGES	TOTAL	DEBT PAYMENT	TOTAL		
		FLAT RATE	SLIDING SCALE								
Niskayuna W.D. #7		x				155	165	--	166	37	--
W.D. #8		x				7	9	--	7	16	--
Town of Rotterdam											
Rotterdam W.D. #1		x			x	81	105	--	58	73	--
W.D. #2,3,4,5,6			x		x	157	563	200	532	221	1,394
West Hill Water Co., Inc.	x					5(est)	5(est)	N/A	5(est)	N/A	N/A
City of Schenectady			x	x		2,912	2,949	48	1,734	203	243
Village of Scotia			x			195	215	--	207	6	51
<b>SCHENECTADY COUNTY TOTALS</b>	<b>2</b>	<b>8</b>	<b>14</b>	<b>1</b>	<b>16</b>	<b>4,205</b>	<b>5,470</b>	<b>671</b>	<b>4,169</b>	<b>1,470</b>	<b>9,106</b>
<b>CAPITAL DISTRICT REGION TOTALS</b>	<b>26</b>	<b>41</b>	<b>43</b>	<b>4</b>	<b>40</b>	<b>21,296</b>	<b>27,232</b>	<b>8,675</b>	<b>26,072</b>	<b>2,405</b>	<b>67,205</b>

CHAPTER II  
WATER SYSTEM PROBLEMS

SOURCE AND SUPPLY

Few communities within the Region which responded to the survey indicated problems with the quantity or quality of water. The most frequently reported problems relate to the need for replacing or adding wells or maintaining existing supply facilities. There are, however, some shortage and quality problems. For example, an area of relatively new growth in Clifton Park may require interconnections to other systems to supply a safe, reliable source. Contamination of wells in the Town of Moreau may require the extension of a system to provide safe water. Several water system officials have expressed the need for additional protection of their water sources (watersheds and aquifer recharge areas). One such system is the City of Schenectady's where officials are making an effort to acquire more property adjacent to its well supply.

TREATMENT

The reported treatment problems in the Region mainly focus on the need to rehabilitate existing treatment plants and add modernized equipment. Many treatment plants have a large capacity for treatment but need repairs and equipment. An example is the City of Albany's treatment plant. Built in 1932, this plant is in need of structural additions and improvements as well as upgrading of equipment.

DISTRIBUTION

A good deal of the problems identified in the Region concerned aging components of distribution systems. Urban centers, having water systems dating back to the early 1900's, have had to maintain active programs for the replacement of lines. Systems were extended sometimes using varying sizes in pipes. Pipes have corroded or clogged reducing pressure and efficiency. Most older systems in the Region replace pipes as needed, but many of these water systems experience a high degree of problems with aging pipes. The City of Rensselaer has such a system. Nearly 20 percent of Rensselaer's distribution system was reported to be in need of replacement. Rural hamlets, such as the Town of Petersburg, are also faced with severe problems of deterioration in system components and declining sources of revenue.

Storage tank deterioration was noted as a problem in some systems. Most storage tanks need periodic cleaning and resurfacing. When this occurs, it is a large expense for some water systems. Systems relying on a single storage tank have problems when it is taken out of line for repairs, as was noted in several communities.

## CHAPTER III

PLANNED OR NEEDED CAPITAL IMPROVEMENTSREPORTED NEEDS

Community water system officials in the Capital District were surveyed as to planned or needed capital improvements above annual operation and maintenance costs. Officials were also asked to estimate funding required to make those improvements. Officials from 109 of the Region's community water systems responded to this item of the survey. Forty-five (40 percent) of those systems contacted expressed some needs. A summary of capital improvement needs as well as total costs are shown by system in Table III. Improvement needs are broken down into groups for identification. These groups include source, treatment, storage, transmission, and mains. Only those communities expressing needs have been listed in Table III.

Only one-third of the systems responding expressing needs identified them under the category of source. Needs identified included dam rehabilitation, additions of wells and pumps, addition of an emergency generator, and reservoir containment repair.

Treatment needs included structural improvements to plants, addition of modern equipment for treatment, enlargement of facilities, and rehabilitation of of facilities.

Storage needs included covering storage units, rehabilitation, and additional storage units.

Needs for transmission mains and distribution mains generally included line replacement, adding new lines or rehabilitating existing lines.

The total amount of money needed for improvements to community water systems in the Capital District is estimated to be \$56,007,000.

One community stands out in expressed need for capital improvements, the City of Albany with a projected need of \$25 million. The major costs of improvements for this system are pipe and valve replacement and repair (\$18 million). Other improvements include treatment plant rehabilitation (about \$7 million). It should be noted that these capital improvement needs mentioned for the City of Albany are not critical issues and that the overall water system is performing well. There is an ongoing rehabilitation program for aging components and treatment capacity exceeds demand. The size and age of Albany's water system together with the desire to ensure continual quality of service are the major contributing factors to the need for a large quantity of funding.

TABLE III

(Page 1 of 4)

COMMUNITY WATER SYSTEMS: CAPITAL IMPROVEMENT NEEDS

MUNICIPALITY/SYSTEM	APPROX TOTAL FUNDS NEEDED 1982 DOLLARS	CAPITAL IMPROVEMENT NEEDS				
		SOURCE	TREATMENT	STORAGE	DISTRIBUTION SYSTEM TRANSMISSION	MAINS
Albany County:						
City of Albany	25,000,000	--	Structural Rehab, Add. Equipment	--	--	Replace, Rehab and Valves
Village of Altamont	413,000	Rehab Dam and Spillway	Reserve Well	Rehab Tank, Dam and Spillway	Replace Line	Replace, Looping
Town of Bethlehem Bethlehem W.D. #1	2,000,000	--	Addition, Equipment	Cover basins	-- Albany	Add lines
City of Cohoes	2,076,000	--	Equipment	--	New Line	Replace, New Lines
Town of Colonie Latham W.D.	5,390,000	--	Additional Facilities	Standpipe, Pump	New Line	New Lines
Village of Green Island	1,500,000	--	--	--	New Line, Rehab	Rehab, New Lines
Town of Guilderland Fort Hunter	81,000	--	Equipment	--	--	--
Guilderland W.D. #1	216,000	--	--	Rehab. Tank	--	--
Lone Pine W.D.	5,000	Add Well, Pump	--	--	--	--
Westmere-McKownville W.D.	81,000	--	Equipment	--	--	--
Village of Menands	50,000	--	--	--	--	Looping
Village of Ravena	1,348,000	--	Upgrade Plant	--	Upgrade	--

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## COMMUNITY WATER SYSTEMS: CAPITAL IMPROVEMENT NEEDS (Cont'd.)

MUNICIPALITY/SYSTEM	APPROX TOTAL FUNDS NEEDED 1982 DOLLARS	CAPITAL IMPROVEMENT NEEDS				
		SOURCE	TREATMENT	STORAGE	DISTRIBUTION SYSTEM TRANSMISSION	MAINS
Town of Rensselaerville	162,000	--	Upgrade Plant	Addition	--	--
City of Watervliet	600,000	--	--	--	New Line, Valves	Additions
Town of Westerlo Northside W.D.	205,000	--	Additions to Plant	Addition	New Line	New Lines
ALBANY COUNTY TOTAL	39,127,000					
<u>Rensselaer County:</u>						
Town of Berlin Berlin W.D. #2	161,000	--	--	--	--	New Lines, Meters
Village of Castleton	9,000	--	--	--	Replace 300 ft.	Replace 400 ft.
Town of East Greenbush East Greenbush Gen. W.D.	62,000	--	Chlorinator	--	--	Looping
East Greenbush Water & Imp. Co.	36,000	New Pumps	--	Add Tank	--	Replace Lines, Valves
Hampton Manor-Hillview W.D. #4	92,000	Rehab Pump	Chlorinator	Add Tank	--	Replace Lines
Village of Nassau	260,000	Add Wells	--	Add Tank	--	--
Town of Petersburg	527,000	--	--	New Roof for Resv.	Replace	Replace, Valves
City of Rensselaer	295,000	--	--	Resurface Tank	Relocate Line	Replace 20% Lines
Village of Schaghticoke	364,000	--	Softner	Resurface Tank	Relocate Line	Replace 8,000 ft.
Town of Schoelck W.D. #1, 2A	13,000	--	--	Add Tank	--	--

## COMMUNITY WATER SYSTEMS: CAPITAL IMPROVEMENT NEEDS (Cont'd.)

MUNICIPALITY/SYSTEM	APPROX TOTAL FUNDS NEEDED 1982 DOLLARS	CAPITAL IMPROVEMENT NEEDS				
		SOURCE	TREATMENT	STORAGE	DISTRIBUTION SYSTEM TRANSMISSION	MAINS
City of Troy	90,000	--	New Equipment	--	--	--
RENSSELAER COUNTY TOTAL	2,229,000					
<u>Saratoga County:</u>						
Village of Ballston Spa	364,000	--	--	--	3 Mi. New 12" Line	--
Town of Charlton	22,000	--	--	--	--	New Lines, Hydrants
Town of Clifton Park						
Clifton Gardens W.S.	100,000	Add Well and Pump	--	Add Tank	Interconnections	--
Clifton Knolls and Country Knolls	500,000	--	--	--	--	--
Village Green	50,000 est.	--	--	Add Tank	--	--
Village of Corinth	35,000	Emergency, Generator	--	--	--	--
City of Mechanicville	257,000	--	Add Basin	Cover Tank	0.5 Mi. New 16" Line	Replace, Looping Valves, New Lines
Town of Moreau	5,840,000	Add Well and Pump	New Plant	--	New Lines	New Lines, Valves
City of Saratoga Springs	175,000	--	--	--	--	Replace Lines, Valves
Village of Stillwater	700,000	Add Wells	Rehab, Equipment	New Tank	New Line	New Lines, Valves Meters
Village of Schuylerville	50,000	Add Well	--	--	New Line	--

## COMMUNITY WATER SYSTEMS: CAPITAL IMPROVEMENT NEEDS (Cont'd.)

MUNICIPALITY/SYSTEM	APPROX TOTAL FUNDS NEEDED 1982 DOLLARS	CAPITAL IMPROVEMENT NEEDS				
		SOURCE	TREATMENT	STORAGE	DISTRIBUTION SYSTEM TRANSMISSION	MAINS
Town of Waterford Colonial Green	43,000	Add Well	Equipment	--	--	Blow-offs
Waterford Water Works Comm.	1,039,000	--	--	Rehab 3 Tanks	--	Replace 4 Mi. Lines and Valves
<b>SARATOGA COUNTY TOTAL</b>	<b>9,175,000</b>					
<b>Schenectady County:</b>						
Village of Delanson	1,000,000	Containment Repair	Equipment, Structural Rehab	Clean Reservoirs and Tank	New Lines	Rehab, Replace, Looping
Town of Rotterdam Rotterdam W.D. #1	405,000	--	--	--	--	Clean, Reline, Meters
W.D. #3	95,000	--	--	Renovate Tank	--	Replace Lines
W.D. #5	800,000	Add Well, Pump	--	--	--	--
City of Schenectady	2,936,000	Acquire Land	--	--	Replace Line	Replace Lines
Village of Scotia	240,000	Add Well	--	--	--	Looping Valves
<b>SCHENECTADY COUNTY TOTAL</b>	<b>5,476,000</b>					
<b>CAPITAL DISTRICT REGION TOTAL</b>	<b>56,007,000</b>					



The second highest need for capital improvements was expressed by the Town of Moreau. The two water systems within the Town are relatively small, requiring an average amount of improvements. However, an entirely new system may be required to serve additional areas within the Town where wells have been contaminated with hazardous waste. The new system would require a new treatment plant and extension of lines costing nearly \$5 million.

The District Office of the NYS Department of Health has suggested that the service area could be expanded for about \$300,000, if the Town connected its lines to those in the Village of South Glens Falls. Purchasing water from its neighbors would reduce the need for a new well and a costly water treatment plant, according to the NYS Department of Health.

The Latham Water District in the Town of Colonie reports the next highest amount of money, approximately \$5 million. This water system is generally in good condition. Similar to the City of Albany's system, the Latham Water District is relatively large in size with some aging components in need of replacement such as transmission mains. The largest portion of improvements expressed were for storage and treatment.

In the Town of Bethlehem, capital improvement needs of approximately \$2 million were expressed. These improvements included: covering storage basins, additional treatment equipment and the extension of water lines.

Other centrally located systems ranging in needed improvement costs from \$1-2 million were the City of Cohoes, Village of Green Island, and the Waterford Water Works Commission. The age of these systems is one of the major factors for needed improvements with rehabilitation and replacement of components being responsible for most costs.

The City of Schenectady reported nearly \$3 million in needed improvements. The improvements included a second transmission line (almost \$2 million), line replacement and land purchase, both at equal costs. The land purchases are planned for source protection.

Six small villages or hamlets in the region expressed fairly large amounts of money needed for capital improvements relative to their size. These communities were the Village of Delanson (\$1 million), Town of Berlin (\$161,000), Town of Petersburg (\$527,000), Village of Schaghticoke (\$364,000), Village of Ravena (\$1,348,000), and the Town of Rensselaerville (\$162,000). Funding for these water systems is generally due to deterioration of aged components. Limited resources in these rural areas may make funding difficult.

Capital improvement needs for private water systems stands out in one location, a section of Clifton Park. Limited water supply has led to the need for interconnection in the systems of Clifton Knolls and Country Knolls (\$500,000) and wells, pumps and storage at Clifton Gardens (\$100,000).

Other water systems in the Region expressed capital improvement needs of fairly consistent amounts. These amounts of needed funding, in most cases, reflected the size and age of the system.

## CHAPTER IV

CONCLUSIONS

The Capital District Region appears to have water resources of outstanding quality and quantity. Awareness of the value and preservation of this resource is rising in the Region.

Water systems have been established in all areas with concentrations of population. Most sources with large quantities of water have been tapped and treatment plants have been developed with excess capacities. A high portion of water systems in the Region have interconnected. Interconnection of systems provides safe, reliable access to water. Continuing interconnection of systems will ensure a high standard of water service in the Region.

Water systems in the Region are, on the average, forty to eighty years in age. Municipalities have, for the most part, maintained and upgraded their systems. Because of the nature of the construction of these systems (building as population expanded) and deterioration due to age, parts of water systems must be reconstructed. Also, improvements such as dual transmission lines to ensure the quantity of water, additional storage and modernization of treatment facilities are needed. Funding for improvements, to some extent, is affordable by municipalities; however, there are some municipalities which will find it difficult to improve their systems adequately. These municipalities are the ones with large expenses and dwindling financial resources such as outlying villages and hamlets and smaller cities. A level of financial assistance is needed to rebuild or maintain these existing systems.

It should be stressed that the information obtained from this survey reflects the opinions of local water officials. The reported identification of problems and capital improvement needs reflect those that are currently perceived by these officials. The findings and conclusions expressed in this report are merely a translation of those reported locally. This report should not be viewed as a substitute for a comprehensive planning/engineering facility assessment.

Capital District Regional  
Planning Commission

## APPENDIX A

County: \_\_\_\_\_

Municipality: \_\_\_\_\_

Water System: \_\_\_\_\_

## COMMUNITY WATER SUPPLY SYSTEM ASSESSMENT

PART I: DESCRIPTION OF SYSTEMSOURCE OF WATER:

1. Ground water: Well number \_\_\_\_\_ Safe Yield \_\_\_\_\_ MGD or GPM  
 \_\_\_\_\_ MGD or GPM  
 \_\_\_\_\_ MGD or GPM  
 \_\_\_\_\_ MGD or GPM  
 Total: \_\_\_\_\_ MGD or GPM

2. Surface water: Name \_\_\_\_\_ Available Safe Yield: \_\_\_\_\_ MGD  
 \_\_\_\_\_ MGD  
 Total: \_\_\_\_\_ MGD

3. Total available safe yield for System: Grand Total: \_\_\_\_\_ MGD

## 4. Average Daily Production:

Ground water: Maximum Daily Production \_\_\_\_\_ MGD, Yearly Avg. per Day \_\_\_\_\_ MGD  
 Surface water: Maximum Daily Production \_\_\_\_\_ MGD, Yearly Avg. per Day \_\_\_\_\_ MGD

## 5. Average daily amount of water purchased from other water systems:

Name of Supplier No. 1: \_\_\_\_\_

Amount actually purchased during 1981: \_\_\_\_\_ MG

Average daily amount available for purchase under terms of contract:

Peak Supply Periods: \_\_\_\_\_ MGD

Normal Periods: \_\_\_\_\_ MGD

Dry Years: \_\_\_\_\_ MGD

Name of Supplier No. 2: \_\_\_\_\_

Amount actually purchased during 1981: \_\_\_\_\_ MG

Average daily amount available for purchase under terms of contract:

Peak Supply Periods: \_\_\_\_\_ MGD

Normal Periods: \_\_\_\_\_ MGD

Dry Years: \_\_\_\_\_ MGD

Total amount available for purchase under contract: \_\_\_\_\_ MGD

## 6. Average daily amount of water supplied to other water systems and/or to customers located outside this municipality:

Other systems/municipality supplied:

<u>Name</u>	<u>Average Daily Amount</u>
_____	_____ MGD
_____	_____ MGD

TREATMENT:

1. Name of Treatment Facility: \_\_\_\_\_

2. Design Capacity of Treatment Facility: \_\_\_\_\_ MGD

3. Year Built: \_\_\_\_\_

## 4. Treatment Used:

<u>Type</u>	<u>Yes</u>	<u>No</u>	<u>Type</u>	<u>Yes</u>	<u>No</u>
None	___	___	FE/MN Remyd	___	___
Disinfection	___	___	Sand Media	___	___
Microscreen	___	___	Dual Media	___	___
Rapid Mix	___	___	Mixed Media	___	___
Coagulation	___	___	GAC Media	___	___
Flocculation	___	___	Fluoridation	___	___
Sediment	___	___	Sequestration	___	___
Tube Settle	___	___	Demineral	___	___
Upflow Clar	___	___	Corr. Cont.	___	___
Aeration	___	___	T/Ordor Cont.	___	___
SS Filt	___	___	Algal Cont.	___	___
RF - 2 or Less	___	___	Softening	___	___
RF - GT 2	___	___	Act. Carbon	___	___
Press Filt	___	___	Polymer Add.	___	___
De Filt	___	___	Sludge Treat	___	___

DISTRIBUTION SYSTEM

## 1. Elevated Storage Tanks:

	<u>Name</u>	<u>Year Built</u>	<u>Capacity (Avg.)</u>
(a)	_____	_____	_____
(b)	_____	_____	_____
(c)	_____	_____	_____
(d)	_____	_____	_____
(e)	_____	_____	_____

## 2. Surface Storage or Others:

(a)	_____	_____	_____
(b)	_____	_____	_____

/

	<u>Yes</u>	<u>No</u>	<u>Length or Percent of System</u>
3. Type of Distribution System:			
- Gridiron or Continuous (Looped)	_____	_____	_____
- Deadend	_____	_____	_____
- Looped with some Deadends	_____	_____	_____
- One Main System	_____	_____	_____
- Two Main Systems (High & Low Pressure Systems)	_____	_____	_____
- Separate Systems (because of elevation)	_____	_____	_____
(If Yes, Number of Separate System: _____)			

4. Description of Pipes by Function:		<u>Approx. Length Feet or Miles</u>	<u>% of System</u>	<u>Size In. Dia.</u>
<u>Type</u>	<u>Year Built</u>			
- Transmission Lines:				
. Concrete	(a)	_____	_____	_____
	(b)	_____	_____	_____
. Cast Iron	(a)	_____	_____	_____
	(b)	_____	_____	_____
. Other:				
_____	(a)	_____	_____	_____
_____	(b)	_____	_____	_____
_____	(c)	_____	_____	_____
_____	(d)	_____	_____	_____
- Distribution Mains:				
. Cast Iron	(a)	_____	_____	_____
	(b)	_____	_____	_____
	(c)	_____	_____	_____
. Asbestos-Cement	(a)	_____	_____	_____
	(b)	_____	_____	_____
	(c)	_____	_____	_____
. Other: _____	(a)	_____	_____	_____
_____	(b)	_____	_____	_____
_____	(c)	_____	_____	_____

## 5. Water Pumping Stations for Distribution:

<u>Station No.</u>	<u>Year Built</u>	<u>Capacity (GPM)</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

CONSUMPTION AND SERVICE:

1. Estimated 1980 Population Served: \_\_\_\_\_
2. Total No. of Service Connections: \_\_\_\_\_
3. Description of Service Connections (1981):
- | <u>Type of User</u> | <u>No. of Connections</u> | <u>Number/Percent Metered</u> | <u>Avg. Daily Consumption</u> | <u>Max. Daily Consumption</u> |
|---------------------|---------------------------|-------------------------------|-------------------------------|-------------------------------|
| Residential         | _____                     | _____                         | _____                         | _____                         |
| Commercial          | _____                     | _____                         | _____                         | _____                         |
| Industrial          | _____                     | _____                         | _____                         | _____                         |
| Other: _____        | _____                     | _____                         | _____                         | _____                         |
| _____               | _____                     | _____                         | _____                         | _____                         |
| TOTAL:              | _____                     | _____                         | _____                         | _____                         |
4. Water Charges (per 1000 gallons, 1000 cu. ft., flat rate/or other method):
- | <u>Type</u>  | <u>Cost</u> | <u>Units (Including sliding scales)</u> |
|--------------|-------------|---|
| Residential  | _____       | _____                                   |
| Commercial   | _____       | _____                                   |
| Industrial   | _____       | _____                                   |
| Other: _____ | _____       | _____                                   |
| _____        | _____       | _____                                   |

MANAGEMENT:

1. Total Number of Current Water District Employees:
- Full Time: \_\_\_\_\_
- Part Time: \_\_\_\_\_
2. Operator Classification: No. of Shifts
- Required Classification of Treatment Operator: \_\_\_\_\_
- Actual Present Classification of Treatment Operator: \_\_\_\_\_
- Required Classification of System Operator: \_\_\_\_\_
- Actual Present Classification of System Operator: \_\_\_\_\_

REVENUES & EXPENDITURES:

## 1. Summary of Annual Fiscal Reports:

<u>Item</u>	<u>1981</u>
Beginning Year Fund Balance:	\$ _____
<u>Revenues:</u>	
- Real Property Tax Items	_____
- Water Sales, Charges & Interest	_____
- Interfund Revenues	_____
- State Aid	_____
- Federal Aid	_____
- Other	_____
- Interfund Transfers	_____
TOTAL	\$( _____ )
<u>Expenditures:</u>	
- General Government Support	_____
- Water Administration	_____
- Source of Supply, Power & Pumping	_____
- Purification	_____
- Transportation & Distribution	_____
- Debt Principal & Insurance for Bonds & Notes	_____
- Employee Benefits	_____
- Other	_____
TOTAL	\$( _____ )
Operating Year Fund Balance:	\$ _____

Year-End Fund Balance: \$ \_\_\_\_\_

2. Estimated total current assessed value of all property within System: \$ \_\_\_\_\_

3. Water System estimated current bonded indebtedness: \$ \_\_\_\_\_

NOTES:

Capital District Regional  
Planning Commission

County: \_\_\_\_\_

Municipality: \_\_\_\_\_

Water System : \_\_\_\_\_

COMMUNITY WATER SUPPLY SYSTEM ASSESSMENT

PART II: WATER SYSTEM PROBLEMS

WATER SOURCE/SUPPLY PROBLEMS:

<u>Problem</u>	<u>Degree of Problem</u>			
	<u>None</u>	<u>Low</u>	<u>Medium</u>	<u>High</u>
- Volume of water	_____	_____	_____	_____
- Watershed protection	_____	_____	_____	_____
- Aquifer Protection	_____	_____	_____	_____
- Reservoir Containment	_____	_____	_____	_____
- Reservoir Sedimentation	_____	_____	_____	_____
- Well Pumps/Pipe/Covering	_____	_____	_____	_____
- Other: _____	_____	_____	_____	_____
_____	_____	_____	_____	_____

WATER TREATMENT PROBLEMS:

1. Treatment Facilities:

- Structure Condition	_____	_____	_____	_____
- Screening	_____	_____	_____	_____
- Filtration Beds	_____	_____	_____	_____
- Chlorinator	_____	_____	_____	_____
- Mixing Basin	_____	_____	_____	_____
- Settling Tank	_____	_____	_____	_____
- Storage Tank	_____	_____	_____	_____
- Other: _____	_____	_____	_____	_____
_____	_____	_____	_____	_____

2. Problems with Treated water:

Characteristic:

Taste	_____	_____	_____	_____
Odor	_____	_____	_____	_____
Bacteria	_____	_____	_____	_____
Hardness	_____	_____	_____	_____
Corrosiveness	_____	_____	_____	_____
Temperature	_____	_____	_____	_____
Chemicals	_____	_____	_____	_____
Other: _____	_____	_____	_____	_____



DISTRIBUTION SYSTEM PROBLEMS:

1. Storage Facilities: <u>Problem</u>	Degree of Problem			
	<u>None</u>	<u>Low</u>	<u>Medium</u>	<u>High</u>
- Inadequate Capacity/Volume	_____	_____	_____	_____
- Tank Condition (Rust, Deterioration, etc.)	_____	_____	_____	_____
- Reservoir Containment (Storage, Dams, spillways, etc.)	_____	_____	_____	_____
- Other: _____	_____	_____	_____	_____

2. Pipes: <u>Problem</u>	<u>Transmission Lines</u>				<u>Mains</u>				<u>Service Lines</u>			
	<u>None</u>	<u>Low</u>	<u>Med.</u>	<u>High</u>	<u>None</u>	<u>Low</u>	<u>Med.</u>	<u>High</u>	<u>None</u>	<u>Low</u>	<u>Med.</u>	<u>High</u>
- Inadequate Size	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
- Leakage*	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
- Inadeq. Pressure**	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
- Corrosion	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
- Deposit Buildup	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
- Closed/Frozen Valves	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
- Freezing, Sub-soil Instability	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
- Other: _____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____

\* Major leakage exceeds 200 gpd per inch of diameter per mile of line.  
(6 inch diameter = 1200 gpd/mile)

\*\* Normal operating pressure is 50 to 60 psi (less than 20 psi is considered inadequate).

3. Pumping Stations: <u>Problem</u>	Degree of Problem			
	<u>None</u>	<u>Low</u>	<u>Medium</u>	<u>High</u>
- Structure Condition	_____	_____	_____	_____
- Pump Conditions	_____	_____	_____	_____
- Other: _____	_____	_____	_____	_____

4. Other Problems: <u>Problem</u>	Degree of Problem			
	<u>None</u>	<u>Low</u>	<u>Medium</u>	<u>High</u>
- Inaccurate Metering	_____	_____	_____	_____
- Inaccessible Meter	_____	_____	_____	_____
- Inaccurate Mapping	_____	_____	_____	_____
- Water Other than Designated Source Entering System (Cross-Connecting)	_____	_____	_____	_____
- Keeping Pace with Annual Maintenance	_____	_____	_____	_____
- Training for Personnel	_____	_____	_____	_____
- Demand for Expansion of System	_____	_____	_____	_____
- Limited Bond Indebtedness	_____	_____	_____	_____
- Other: _____	_____	_____	_____	_____

Capital District Regional  
Planning Commission

County: \_\_\_\_\_  
Municipality: \_\_\_\_\_  
Water System : \_\_\_\_\_

COMMUNITY WATER SUPPLY SYSTEM ASSESSMENT

PART III: LIST OF PLANNED OR NEEDED CAPITAL IMPROVEMENTS

TYPE OF IMPROVEMENT	Short Range: 0-5 Yrs.		Mid Range 5-10 Yrs.		Long Range: 10-20 Yrs.	
	Quantity	Cost Est.*	Quantity	Cost Est.*	Quantity	Cost Est.*
Water Supply Needs:						
- Additional Wells	_____	_____	_____	_____	_____	_____
- Land Acquisition for Protection of Source	_____	_____	_____	_____	_____	_____
- Containment Repair or Expansion	_____	_____	_____	_____	_____	_____
- Pump Replacement or Additions	_____	_____	_____	_____	_____	_____
- Other: _____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____
(Sub-Total)		(_____)		(_____)		(_____)
Water Treatment Needs:						
- Screening	_____	_____	_____	_____	_____	_____
- Chlorinators	_____	_____	_____	_____	_____	_____
- Storage Tanks	_____	_____	_____	_____	_____	_____
- Mixing Basins	_____	_____	_____	_____	_____	_____
- Settling Tanks	_____	_____	_____	_____	_____	_____
- Filter Beds	_____	_____	_____	_____	_____	_____
- General Structural Repairs	_____	_____	_____	_____	_____	_____
- Others: _____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____
(Sub-Total)		(_____)		(_____)		(_____)
Water Distribution Needs:						
- Storage Tank Repair	_____	_____	_____	_____	_____	_____
- Storage Tank Replacement or Addition	_____	_____	_____	_____	_____	_____
- Land Acquisition for Storage	_____	_____	_____	_____	_____	_____
- Containment Repairs or Expansion	_____	_____	_____	_____	_____	_____
- Other: _____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____
(Sub-Total)		(_____)		(_____)		(_____)

\* Current Dollars

	Short Range: 0-5 Yrs.		Mid Range 5-10 Yrs.		Long Range: 10-20 Yrs.	
	Quantity	Cost Est.*	Quantity	Cost Est.*	Quantity	Cost Est.*
Transmission Pipes:						
- Replacement/Repair						
- New Extension						
Main Lines:						
- Replacement/Repair						
- New Extensions						
Valves:						
- Replacement/Repair						
- New Extensions						
Meters:						
- Replacement/Repair						
- New Expansions						
Pumps:						
- Replacement/Repair						
- New Expansion						
Land/Easement Acquisition						
Other: _____						
_____						
_____						
(Sub-Total)		(_____)		(_____)		(_____)
Miscellaneous: _____						
_____						
_____						
(Sub-Total)		(_____)		(_____)		(_____)
GRAND TOTAL		_____		_____		_____

NOTES:

\* Current Dollars

## CAPITAL DISTRICT REGIONAL PLANNING COMMISSION

## Commissioners

Albany CountyErastus Corning, 2nd  
(Chairman)

Homer L. Perkins

Fred G. Field, Jr.

Rensselaer CountyJohn L. Buono  
(Treasurer)

Thomas J. McGrath

Kelly T. Sanvidge

Saratoga County

Thomas H. Clements

Richard Hurst

Charles C. McCloskey, Jr.  
(1st Vice-Chairman)Schenectady County

Bruce C. Benson

John F. Kirvin  
(2nd Vice-Chairman)

David Vincent

Chungchin Chen  
Executive Director

## Contributing Professional Staff:

Geoff Bornemann, Principal Planner

Joe Testo, Assistant Planner

**EF Hutton**  
Public Finance Group

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One Battery Park Plaza  
New York, New York 10004  
212-742-5000

TESTIMONY TO THE  
JOINT ECONOMIC COMMITTEE  
OF CONGRESS  
HEARING ON NEW YORK STATE  
INFRASTRUCTURE NEEDS  
SEPTEMBER 7, 1983  
ALBANY, NEW YORK

Submitted by  
E.F. Hutton & Company Inc.

As New York enters the 1980's, it confronts one of the greatest domestic challenges in its history: planning and financing the rehabilitation of most of its public works, from water supply systems to new mass transit facilities, from bridge replacement to pollution control construction.

The economic revival of New York will not continue if the infrastructure system is not maintained and developed. The challenge is to plan public investment wisely and to allocate scarce public resources carefully. The solution lies in unprecedented volumes of public finance combined with innovative methods of financing needed to meet these vital public projects.

With state and local governments squeezed tighter by the recession and taxpayer rebellion, their ability to support even larger amounts of debt is declining. State and local credit-worthiness will not be significantly boosted by the recovery for some time, since state and local government revenues generally lag behind the recovery. In 1982, there were 384 municipal bond downgradings and only 192 upgradings.

In light of this gloomy picture, how will these massive public improvements be financed?

The current tax-exempt debt markets are the starting place. In 1982, long term tax-exempt debt totaled a record \$85 billion, according to the Public Securities Association, a 50 percent increase over the previous high in 1981.

Over the decade, with moderate growth, the tax-exempt capital markets could generate nearly three-quarters of a trillion dollars. This borrowing capacity of state and local governments, rather than federal aid, may have to be the mainstay for financing future public works. While a major federal presence in capital development should not be totally discounted, it may be unrealistic to expect a substantial new federal program financing the infrastructure in the near future.

Given this environment, New York must take the initiative and design programs that preserve local initiatives and provide local issuers access to the capital markets. To this end, E.F. Hutton recommends that the proposed New York State Water Finance Authority become a reality.

### Water Finance Authority

As opposed by the current administration, the Authority would be a public agency with the ability to issue up to \$4 billion of debt for sewer and water projects. The benefits of this proposed Authority are substantial.

- Cities which are constitutionally prevented from dedicating user revenues to the repayment of debt for water and sewer projects would be allowed to do so.
- The legislation would promote municipalities to adopt cost-of-service based rate structures.
- These rate structures would more closely reflect, the actual demand for water and wastewater treatment services.
- The average life of debt issued through the Water Finance Authority would more closely reflect the useful life of facilities being financed than now provided under State law.
- Statewide and regional strategies would be developed through the Authority's State Water Resources Council.
- Finally poorly rated municipalities would be able to obtain capital at lower interest rates had they otherwise would have gotten on their own.

The Water Finance Authority will allow New York to come closer to funding its water system's needs currently estimated at \$6.8 billion. The continued economic revival of the State is dependent on such a program. Yet the Authority, by itself, is not enough.

### Municipal Bond Bank

E.F. Hutton recommends that the State of New York take another look at reviving its Municipal Bond Bank. Seven other states are currently operating Bond Banks for the purpose of providing municipalities with greater and more efficient access to the capital markets. By pooling small bond issues, the Municipal Bond Bank may be able to raise money at rates lower than what otherwise would have been obtained had the municipality financed independently.

### Capital Planning and Budgeting

E.F. Hutton recommends that the recent efforts to improve the capital planning and budgeting processes in New York should continue. In 1981 the legislature required state adoption of

generally accepted accounting principles over a five year period. This move will assist the State in setting capital construction priorities. Also, in 1983 the legislature strengthened the State's capital development programs with the passage of the five year capital planning bill.

The State should continue its efforts to strengthen its capital planning process by adopting the maintenance budget bill rejected during the last legislative session. This bill would include maintenance as a general fund expenditure item in the state budget.

#### Bond Authorizations

E.F. Hutton supports the \$1.25 billion dollar bond issue which passed the legislature and will appear on the November ballot. The bond issue will make possible increased investment of \$3.2 billion in the states transportation network. For years cities and states have been required by voters to defer the funding of their basic life support system. The real problem is that now the time has come to pay for past deferrals.

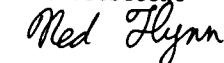
#### A Financing Alternative: The Long Term Floating Rate Monthly Demand Bond

As a final suggestion E.F. Hutton recommends that the State consider the use of long-term floating rate monthly demand bonds (or "Lower Floaters"). The Lower Floater allows the issuer to borrow long-term money at more attractive short term rates. This concept was developed by Hutton in the spring of 1981 in response to chaotic conditions in the traditional long-term tax-exempt market.

Currently interest rates are unattractively high for thirty-year bonds, yet the majority of issuers prefer to finance for as long a term as possible. Currently there is a more than 400 basis point differential between 30 - year and 30 - day rates. To date E.F. Hutton has provided 40 different issuers access to these lower rates through its management of 72 separate bond issues totalling two billion dollars.

Much of the growth which is predicted for New York cannot take place without adequate water, sewage and transit systems. By moving now, New York cannot only retain its industrial base, but also attract industry back into the state.

  
Dick Helmbrecht  
Vice President



Ned Flynn  
Assistant Vice President