

Johnson Drive Corridor Study

The City of Mission, Kansas

Prepared by the University of Kansas Urban Planning Program



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UBPL757/773 - Transportation/Sustainable
Land Use Implementation

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Vision Statement

The City of Mission is small yet mighty. Citizens genuinely care for each other and their community as a whole. They value the accessibility to amenities within their community, even with the opportunity to explore surrounding communities. They support their local businesses and local government. They are grounded in their identity and explore new possibilities. This is the City of Mission. Our study aims to maintain the City's values within the project area for years to come.



Photo Source: City of Mission

Process



Photo Source: Lisa Koch

In February 2019, the KU Urban Planning project team met with the City of Mission staff to discuss existing conditions and future plans for the study area. After the first meeting, the KU team discussed the different values held by the City and analyzed the project area through different lenses. Groups studied the following: existing conditions, market analysis, land organization, roadways, the Metcalf intersection, transit, sidewalks, trails, natural environment, the existing form based code, and funding. The focus is to improve walkability and better implement the City's current code through transportation and land use planning. The KU team submitted its first draft to the City of Mission in April 2019 and presented the final study of the project area in May 2019.

Existing Conditions

Overall Corridor

Figure 1. Johnson Drive Corridor Study Boundaries



Source: KU Urban Planning

According to the *City of Mission Comprehensive Plan*, Johnson Drive is considered the spine of the city, providing a centralized location for commercial uses. Within the West Gateway District, the study area for this project, zoning and land use is for predominantly commercial and office buildings, though several public buildings and residential structures are also located in the district. Currently, housing in the district is primarily single-family residential but the comprehensive plan does indicate and describe plans to incorporate higher-density residential land uses within the district.

Using data collected from the Johnson County Automated Information Mapping System (AIMS) gives an approximate population of 385,204 dwelling units, and a home average appraisal value of \$189,743 for the City of Mission. Specifically, two census tracts were looked at to determine that the study area has seen an overall decrease in total population compared to Johnson County. These tracts also showed that household income levels have increased and now match income levels across the County.

Land Organization

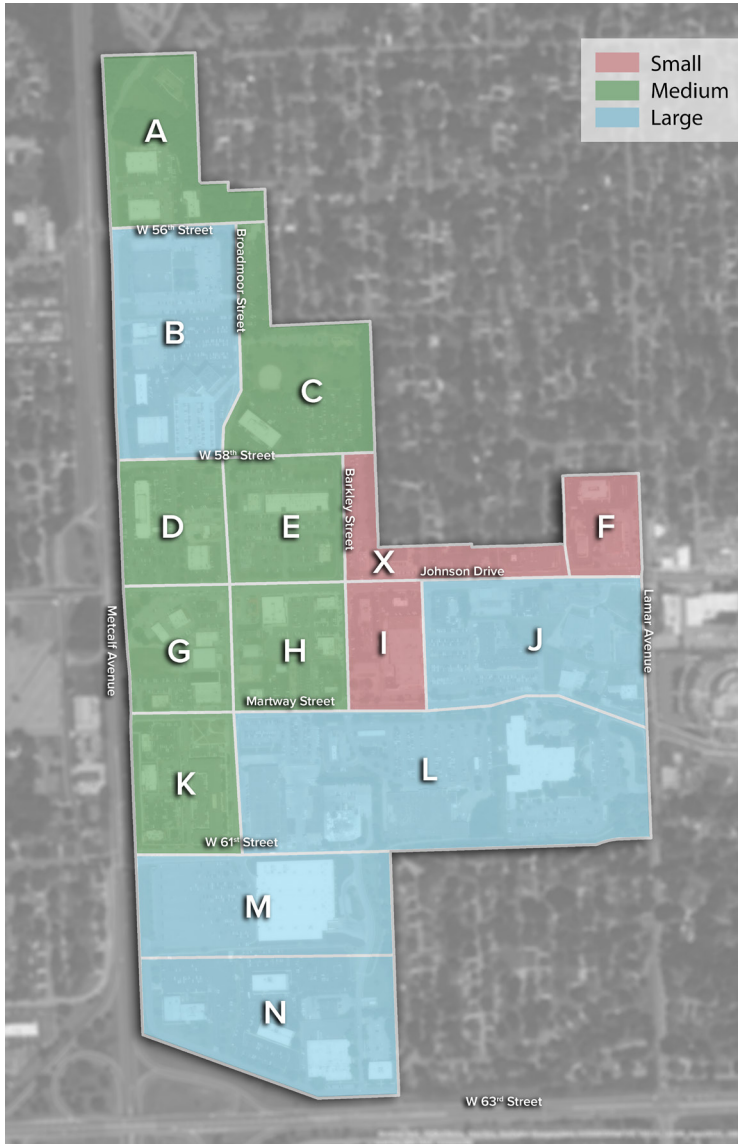


Figure 2. Existing Block Sizes

Source: KU Urban Planning

Parcels and blocks, as they exist today in the West Gateway, are unevenly shaped with no uniform pattern in regards to size or layout.

Three general block sizes exist. Figure 2 displays the different block sizes and their locations in the study area:

1. Small sized blocks (I, F)
2. Medium sized blocks (A, C, D, E, G, H, K)
3. Large sized blocks (B, J, L, M, N)

Smaller parcels in the study area prove difficult to develop because of their confusing layout, and because larger buildings and the parking lots typical of chain stores cannot fit on them. While the larger parcels and blocks are more attractive for development because they have more freedom to place buildings and parking lots, they detract from the walkability and compactness of the area by creating longer distances between roads, sidewalks, and other buildings. The Form Based Code guides development by Building Type and encourages multi-story development, however, this does not address the challenge of creating ideally sized parcels and blocks needed to achieve higher density development. If taller buildings are built on the large blocks as they exist today, with the current parking standards, the study area will quickly run out of land without truly maximizing the desired density.

Roadway Network

Existing roadways within Mission handle traffic satisfactorily, according to locals. Further analysis of available data, however, yielded a more in-depth understanding of the current state of traffic infrastructure, especially in terms of lane functions, counts, and widths. Traffic counts from the City of Mission as well as crash information from local law enforcement informed both existing condition analysis and later recommendations for Form Based Code. A lack of pedestrian information prompted an overestimation of sidewalk and trail utilization in order to promote multi-modal transport, per the City's vision.

Currently, Johnson Drive in the study area may be viewed in three sections: from Metcalf Avenue to Broadmoor Street; from Broadmoor Street to Barkley Street; and from Barkley Street to Lamar Avenue. The section as a whole could be defined as a major arterial street which is a street used to connect many activity centers to one another and move local traffic to highways/expressways. However, due to the low volume of traffic observed via AIMS one could also classify the street as a minor arterial street, the same principle as a major arterial street but more focus on accessing commercial areas.

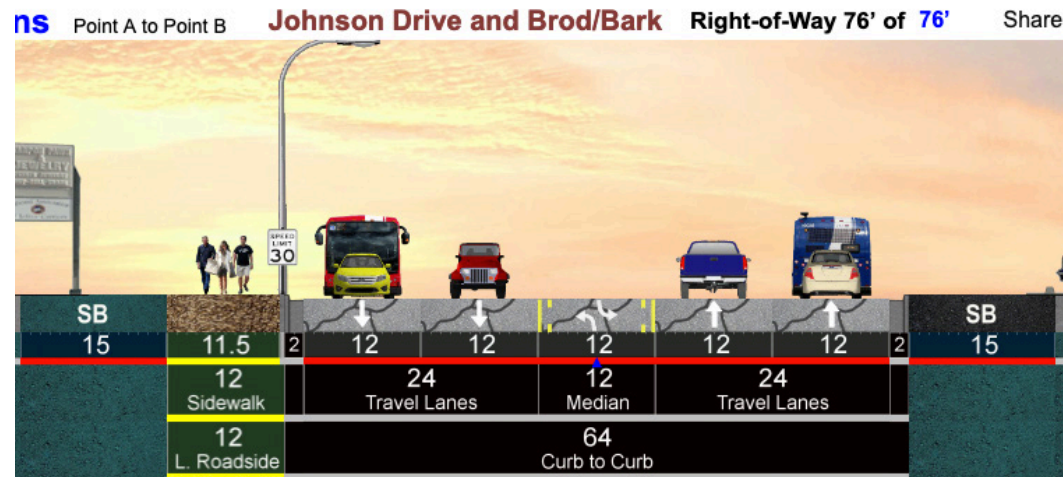


Figure 3. Space Allocation of Johnson Dr

Source: KU Urban Planning

Transit

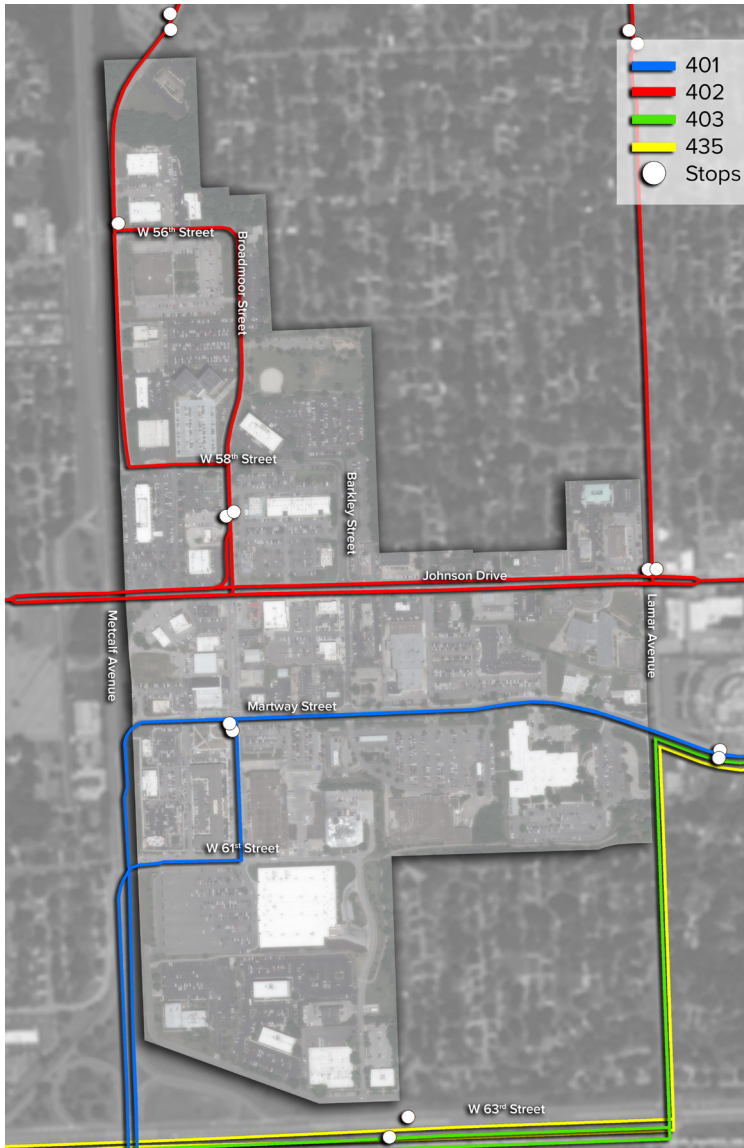


Figure 4. Transit Routes

Source: KU Urban Planning

The Kansas City Area Transportation Authority (KCATA), operating under the collective brand, RideKC, is the principal public transportation agency operating within the study area. Currently, there are four routes that operate during the weekday that service the West Gateway area: 401, 402, 403 and 435. Route 401 is the only frequent service route, while Routes 402, 403 and 435 offer peak or midday services. These routes, shown in Figure 4, operate within the study area between 5 a.m. and 7 p.m. In addition, a temporary ride-hailing pilot program offers on-demand services Monday-Friday, 6 a.m. to 8 p.m. Route 107, not pictured, operates only on a limited weekday and weekend schedule, and does not travel within the West Gateway study area. However, Route 107 stops at the Mission Transit Center. The Mission Transit Center (MTC), seen in Figure 12, is located east of the West Gateway study area at 5251 Johnson Drive. It is a park-and-ride lot and transit transfer center for Johnson County.

Sidewalks

Johnson Drive's sidewalk conditions, as they currently exist, do not promote the The West Gateway Vision Plan's goal of becoming more pedestrian friendly. The sidewalks along Johnson Drive are intersected by an inconsistent streetscape and paths are inconsistently maintained. With the exception of a segment of sidewalk spanning the South side of Johnson Drive from Broadmoor to Barkley Street, the sidewalks along Johnson Dr. have significant cracks, vegetation, abrupt dead ends, and grades that create barriers for pedestrian traffic, especially among those with disabilities or mobility issues.

The intersecting feeder sidewalks and parallel paths to the North and South of Johnson Drive consist primarily of four and five foot, mono-curb, concrete sidewalks which are not offset from streets. These paths suffer mainly from connectivity gaps, poor crosswalk conditions, and ADA compliance issues. Extending sidewalk widths to six feet, targeted facility maintenance and improved lighting offer an opportunities for the City to promote a more inviting walking environment.



Figure 5. Existing Sidewalks along Johnson Drive

Photo Source: KU Urban Planning

Trails



Photo Source: City of Mission

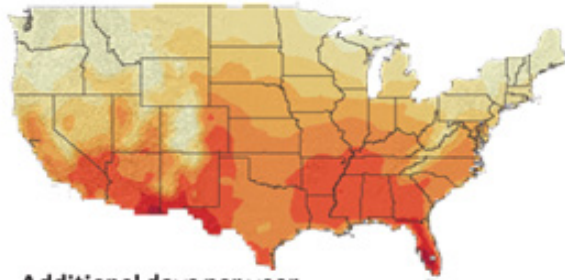
The current trails located in Mission, KS designed as small walking trails. The trails in Mission provides recreational use includes walking, running, dog walking and a variety of other uses. The current trails located in Mission are Broadmoor Park, Mohawk Park, Streamway Park, Waterworks Park and Rock Creek Trails. The trail at Broadmoor Park is a loop around the park that offers easy access for ADA accessibility. Mohawk Park offers several accessible trail loops throughout the park. The trail at Streamway Park is a nice walk throughout the park, but the pavement along the trail needs improvement. The Waterworks Park trail offers a great connection to the school and open space for activities. Rock Creek Trail connects pedestrians to residential and commercial. Rock Creek Trail provides connect across the city through biking and running.

Environmental

Climate Adaptation

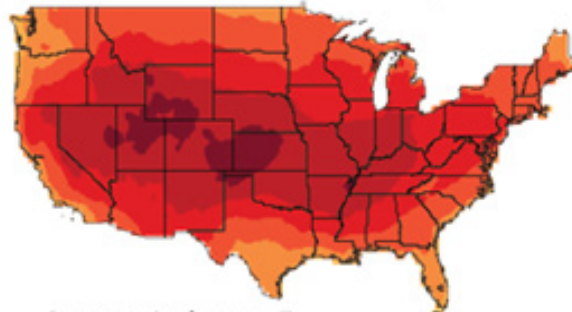
The City of Mission and State of Kansas have not developed climate change adaptation plans. Climate change impacts are estimated to be severe in Kansas and Kansas City is one of the hardest hit areas.

Change in number of days above 95° F



Additional days per year
0 10 20 30 40

Change in average summer temperatures



Increase in degrees F
2.0 4.5 6.5

Figure 6.

Source: Science News

Stormwater

The majority of the study area is located at the top of the Brush Creek watershed. Stormwater that falls in the corridor flows into Brush Creek, the Blue River, and finally the Missouri River. A small section northwest of Broadmoor Park is at the top of the Turkey Creek watershed, which also ultimately flows into the Missouri River. Since the area is at the top of two major watersheds in the region, there is significant opportunity to retain stormwater where it falls as redevelopment occurs, thereby reducing volume and flooding risk downstream.

The existing stormwater infrastructure network south of Broadmoor Park collects stormwater into pipes and sends it to the intersection of Lamar Avenue and Martway Street. From here it enters a culvert and opens up into a channelized stream on the east side of Lamar Avenue.

Park Accessibility

The City of Mission has relatively few park spaces within its city limits, even fewer within the West Gateway District which is the focus of this project. Parks not only provide valuable ecosystem services in that they typically provide pervious surfaces and landscaping which aide in stormwater management, but they also provide spaces where residents and visitors can spend time outdoors connecting with nature and being active. These benefits prove that parks are a valuable amenity to communities.

There is one park within the West Gateway District study area, Broadmoor Park, located in the northeast portion of the corridor. This park is approximately 4.1 acres in size and provides limited on-site amenities to those who visit. While this park does serve the nearby neighborhood with direct sidewalk access to the park on the northeast corner, visitors and those who work in the West Gateway district are not provided with adequate bike and pedestrian infrastructure to access the park.

Parking

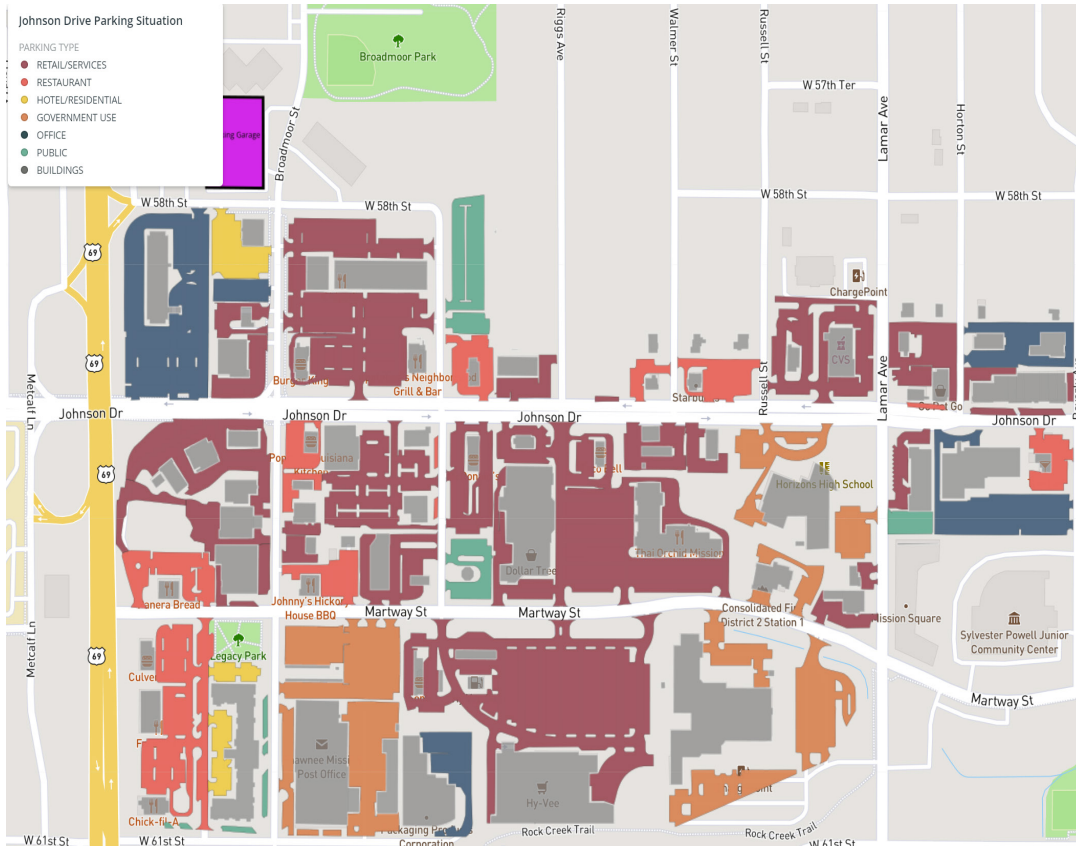


Figure 7. Map of Dedicated Parking by Building Type

The Johnson Drive Corridor’s parking is regulated by the West Gateway Form Based Code and Municipal Code requirements. The Form Based Code dictates the locations of parking structures and requires additional architectural guidelines for development. Surface parking is regulated by primary and secondary frontages, building types, and block - by - block evaluations. Currently there is only one parking structure located north of Johnson Drive in the Broadmoor Sector with the remaining parking consisting of surface parking lots. Shared parking is identified as a tool to provide parking relief but is only identified for use in two specific block evaluations. Figure 7 visually depicts the amount of parking that has been dedicated by building type. Currently, there are 46.71 acres and 6,252 parking spots along the Johnson Drive Corridor.

Market Analysis

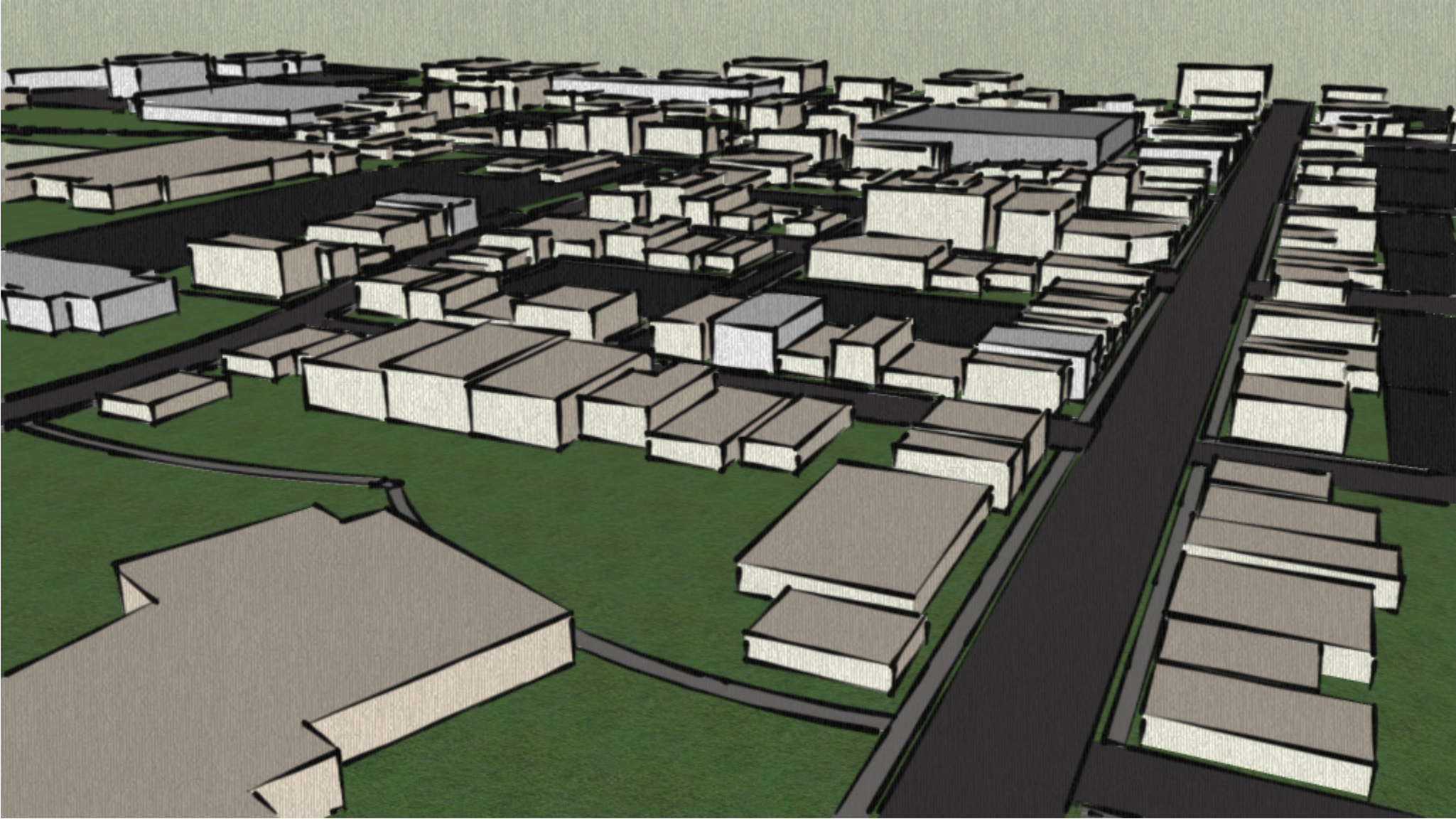


Photo Source: City of Mission

Generally, office buildings with greater than 5 stories had the highest value per square foot with an average of \$46.89 per square foot. Strip shopping centers had the second highest land value with an average of \$44.66 per square foot. Additionally, when examining lot sizes and property taxes, the lot sizes were by the size of the parking area on the site. With the percentage of parking area, an analyses of their relationship to property taxes was conducted. To find the property taxes for each site the assessed values were used from AIMS data, then multiplied by the mil value for Mission. When examining similar lot sizes with variations of parking area, it was generally seen that sites with less parking had higher property taxes, although there were exceptions.

Design

Johnson Drive Vision



Introduction

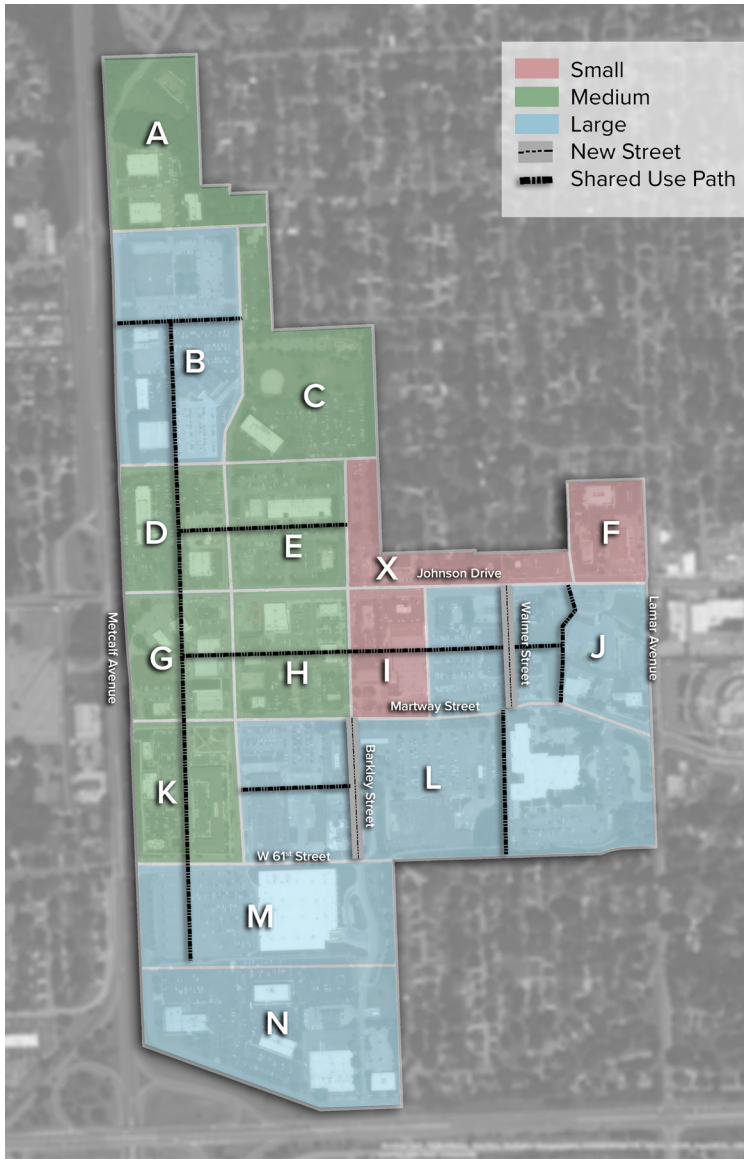
Existing Conditions

Design

Code Review

Implementation

Land Organization



In order to promote walkability and create developable parcels, it is recommended that the City adopt dimensional standards and shorten the block length of existing blocks with shared use paths. Figure 8 demonstrates how the study area can be split into smaller, more walkable blocks by extending Barkley from Martway to 61st, and Walmer from Johnson to Martway. Additionally, Riggs from Johnson to Martway should be reclaimed as a public street. Shared use paths built through the middle of the larger blocks will create more options for pedestrians and cyclists to travel off-street, and shorten their commute time.

	Min. Frontage	Max. Frontage	Min. Side (Depth)	Max. Side (Depth)
Small Lot	30'	150'	80'	140'
Medium Lot	60'	200'	100'	200'
Large Lot	90'	250'	120'	300'

Table 1. Recommended Lot Standards

Figure 8. New Blocks

Source: KU Urban Planning

Land Organization Sectors Recommendation

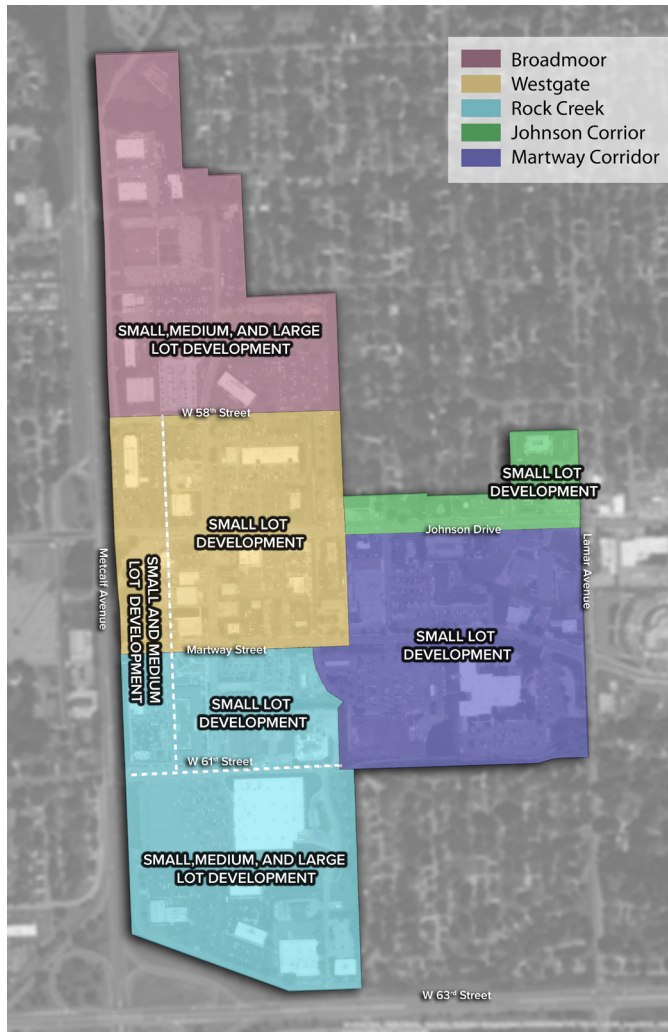


Figure 9. Lot Size Locations by Sector *Source: KU Urban Planning*

It is also recommended that the Form Based Code be revised to organize land by lot size, rather than Building Type. Instead of achieving density by building up, the City can achieve it by building compactly. If standard lot sizes are enforced, more buildings and uses can be fit into spaces that are otherwise being taken up by parking lots and spread out low-rise buildings. Table 1 provides the standard lot sizes recommended. Using these new lot size standards, lot sizes can be recommended by sector, rather than block, as seen in Figure 9. This changes the regulating pattern of the Form Based Code, but it should make it simpler and make more attractive to develop. The lot sizes are not attached to Building Type, because it is not realistic to have every building be mid- or high-rise given the suburban location, and general character and market demand for the area.

Roadway Network



Figure 10. Primary Roadway Network Improvements *Source: KU Urban Planning*

In general, narrower lanes are proposed for the City of Mission to incorporate into their code moving forward. While the recommendation of the American Association for State Highway and Transportation Officials is for lanes of 10-12 feet, especially on urban arterials such as Johnson Drive, many studies have not found a strong correlation between narrower lane widths and a decrease in safety or increase in crashes. In fact, several note the natural slowing effect of narrower lanes on existing traffic, making the incorporation of narrower lanes in the area a natural complement to the desire to make the space appear safer to pedestrians.

Additionally, lanes of no greater than 10 feet in width throughout the area will greatly increase the available space for the incorporation of larger sidewalks, green space like buffer strips or rain gardens, medians, and even bike lanes. As such, Johnson Drive itself is recommended to be reduced to 10-foot lanes; any lanes which feed into Johnson Drive (as shown in Figure 10) may also be reduced to 10 feet, while those which are not connected to Johnson Drive or Metcalf Avenue may be reduced to 9 feet if desired. More information on specific recommendations related to street design can be found on p. 35-37.

Metcalf Intersection

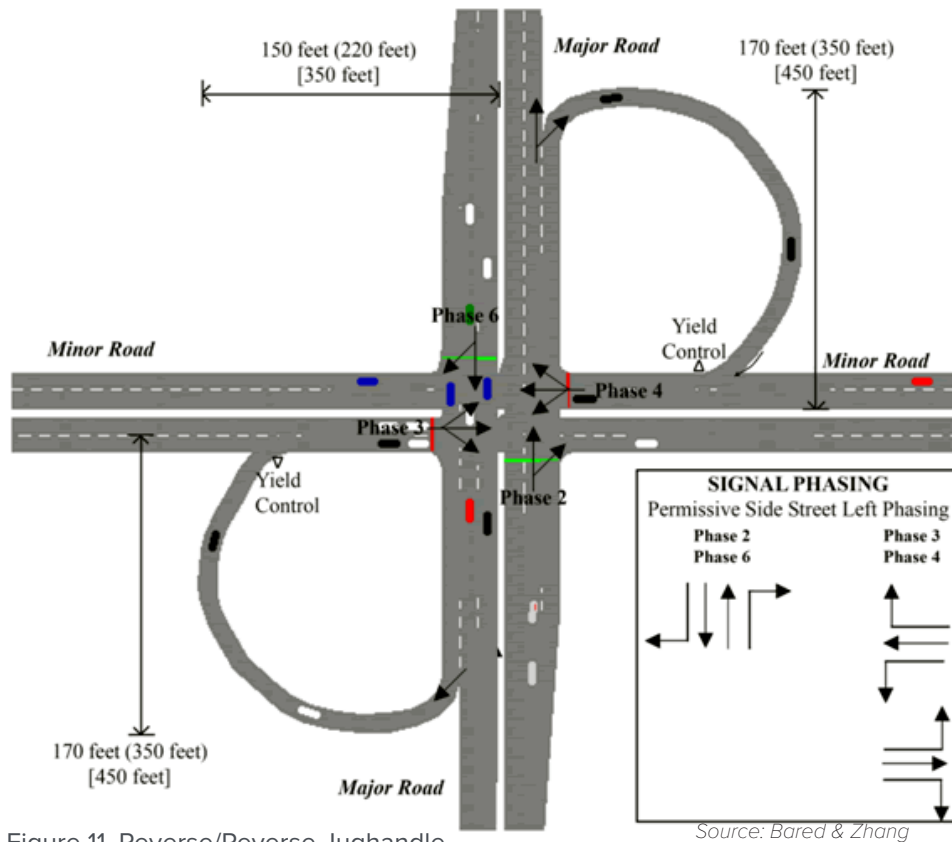


Figure 11. Reverse/Reverse Jughandle Intersection

Although the replacement of the existing interchange of Johnson Drive and Metcalf Avenue with an at-grade intersection might drive more traffic into Mission, current data is insufficient to support that decision. The first recommendation is for the City of Mission and the Kansas Department of Transportation to conduct both traffic and turning counts for the existing interchanges mentioned previously in order to enable a data-based decision. Concurrently, the investigation and public perception of several intersection layouts could be pursued. A simple four-way stoplight comprises one such layout, while a type-A, reverse/reverse intersection, shown in Figure 11, is another. These minimize the space used in a cramped urban corridor and provide a higher-capacity and safer alternative to the traditional intersection, respectively.



Figure 12. Gateway Connection

Source: KU Urban Planning

It is recommended that two docked bike share stations be added in the parking lots of the Mission Transit Center and Hy-Vee (6655 Martway St.). Outlined in Figure 12 is the current MTC, where bike share could be added to existing transit infrastructure. Hy-Vee, located in the West Gateway area, is the location of the second proposed bike share dock location. Currently, there is no transit infrastructure here. The locations pictured in Figure 12 serve as representative boundaries of the East and West Gateways in the City of Mission. The proposed bike share operator is BCycle, a public bicycle company owned by Trek Bicycles who currently operates in Kansas City, Missouri.

In addition to bike share, it is proposed that the City of Mission look at the possibility of expansion of RideKC transit lines to incorporate more frequent bus routes as population and demand increases in the City.

Sidewalks

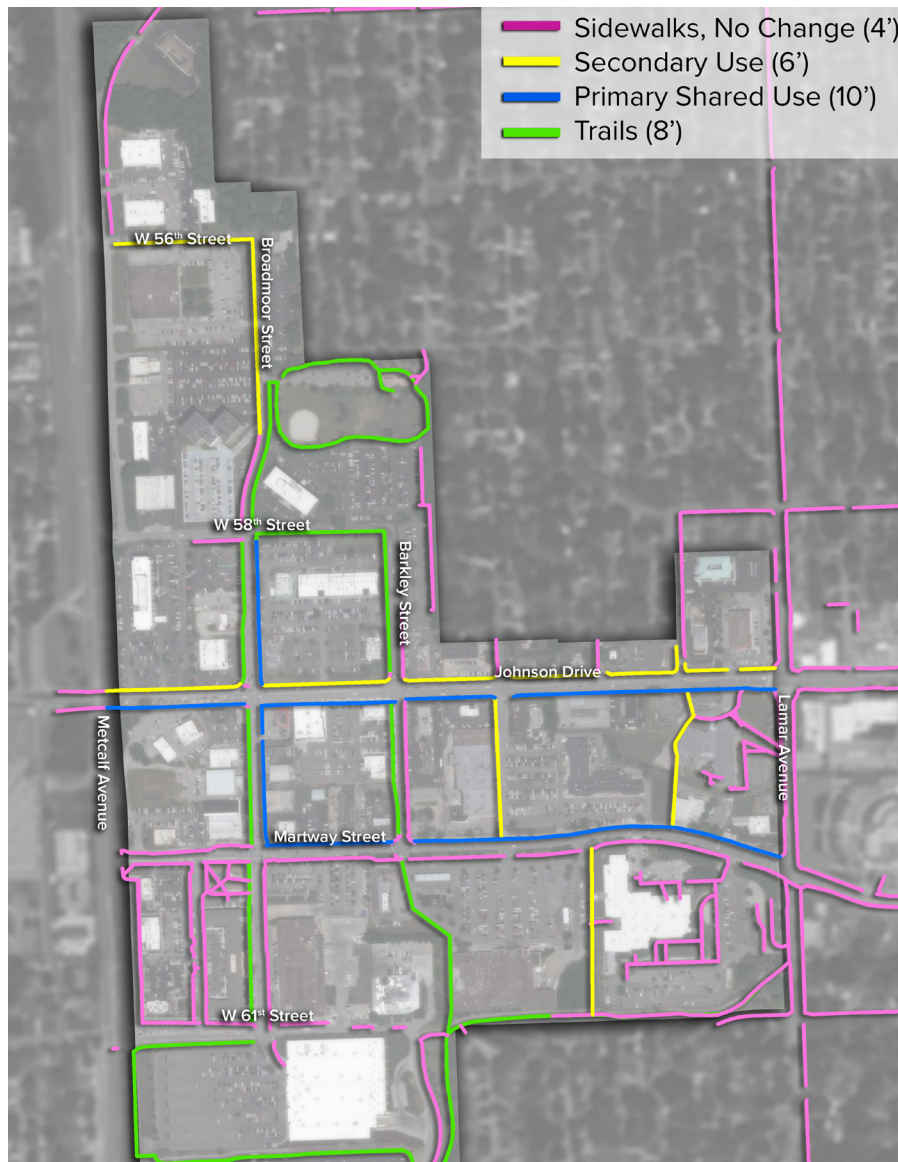


Figure 13. Proposed Pedestrian Network

Source: KU Urban Planning

The Form Based Code provides guidance on the manner in which development will be implemented in the West Gateway area going forward. Mission’s priority, as stated in the code, is designed to encourage a pedestrian-friendly, high quality urban space. Appendix F, focuses principally on integrating that vision into a robust pedestrian environment for not only Johnson Drive, but the entirety of the West Gateway corridor. A comprehensive examination of feeder networks to the North and South of Johnson Drive are considered in the context of connectivity to the greater sidewalk and trail network. Figure 13 shows a prioritization schedule for pedestrian amenities based on productions and attractions in the West Gateway.

Trails

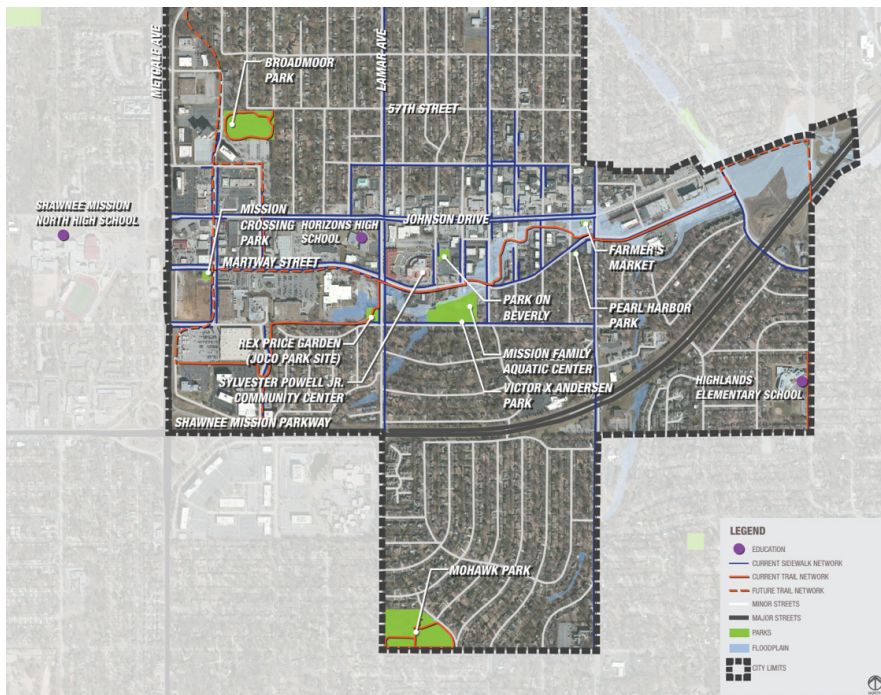


Figure 14. Parks Master Plan Proposal

Source: Mission Parks Master Plan

The information assembled and evaluated by the trail team outlined a similar proposal to the Parks and Recreation Master Plan that formed the basis for the specific Master Plan recommendations. Figure 14 shows a proposed trail network which links a trail from Broadmoor Park to Rock Creek Trail. This proposed trail will run from Broadmoor Park along Broadmoor Street connecting to the west of Rock Creek Park. Other proposed trail networks will be along Martway Street to Lamar Avenue and from W 58th to Barkley Street to Martway. Our recommendation is to fully connect the trail from Broadmoor Park to W 61st Street and enhance the experience of the trail user, while maintaining the downtown feel. The recommendations address all facets of the Parks and Recreation system. Opportunities for further trail development include connecting Broadmoor Park and Legacy Park to Rock Creek Trail along the west of Broadmoor Park into the parking lot west of Rock Creek Trail. Another opportunity for trail development will be to create connections on Lamar Avenue to Rock Creek Trail

Climate Adaptation

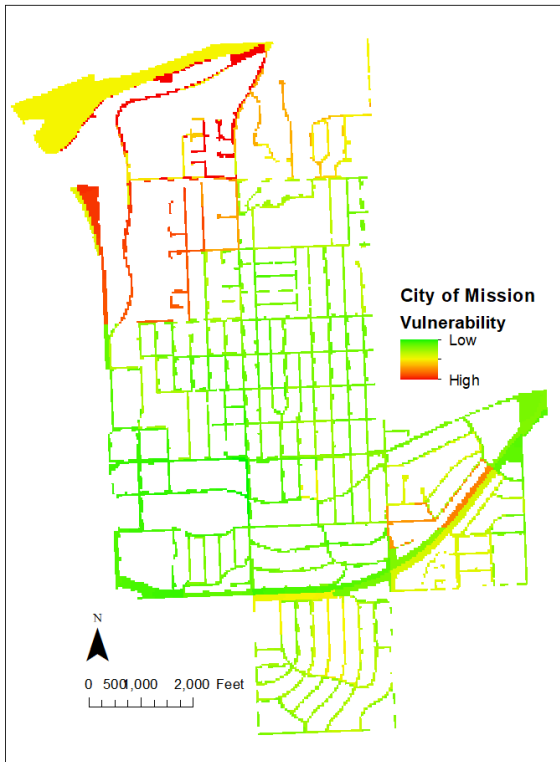


Figure 15. Vulnerability Analysis

Source: KU Urban Planning



Photo source: <https://inhabitat.com/wp-content/blogs.dir/1/files/2013/08/Folsom-Powerhouse-Postgreen-Homes-1.jpg>

Climate adaptation measures recommended for the City to consider pursuing:

- Disseminate information about possible heatwave effects and its measures
- Develop a neighbor check system and health hotline
- Provide incentives or rebates to promote green roof installment, lighter-colored pavement, and high permeable pavement in the form-based code
- Develop rebates and a program to encourage tree planting partnering with other levels of governments, private firms, and non-governmental organizations
- Include shade tree policy in the landscape manual
- Develop regulations for the 500-year flood plain, urban flooding areas
- Implement a stormwater fee based on the contribution to runoff to a property owner. The fee can be reduced by installing green infrastructure such as rain gardens, permeable paving, etc.

Cooling centers are an important heat adaptation measure. Figure 15 shows a vulnerability analysis. The recommendation is to add additional cooling centers to the northwestern area of Mission.

Stormwater

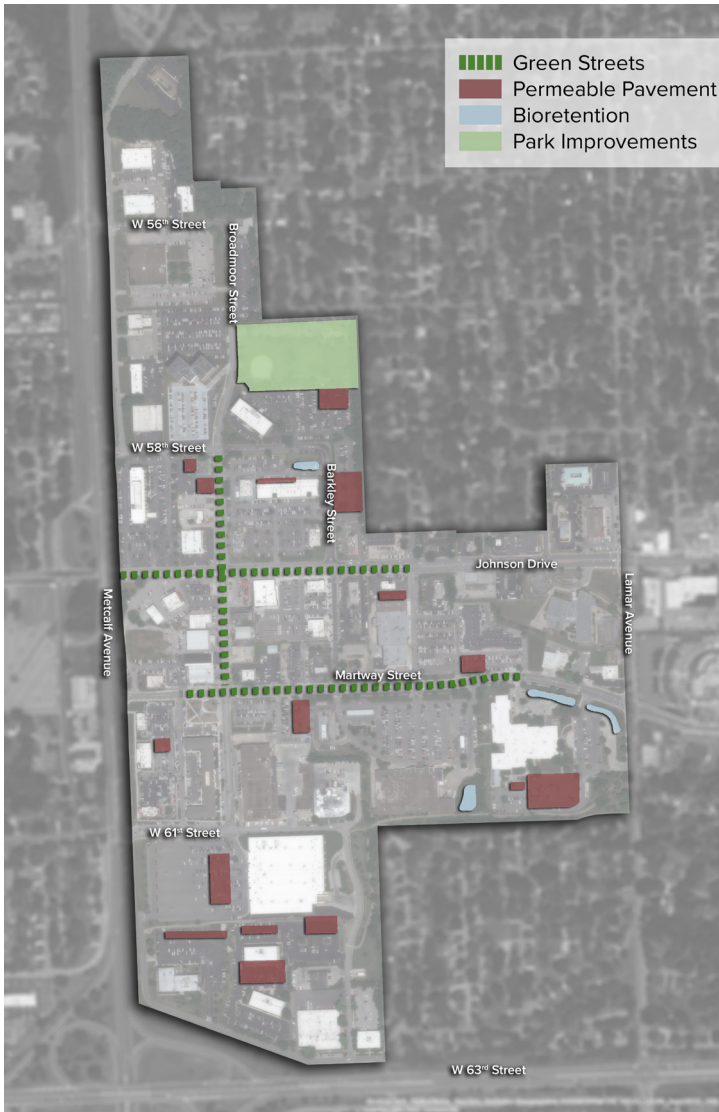


Figure 16. Potential Green Stormwater Infrastructure Locations

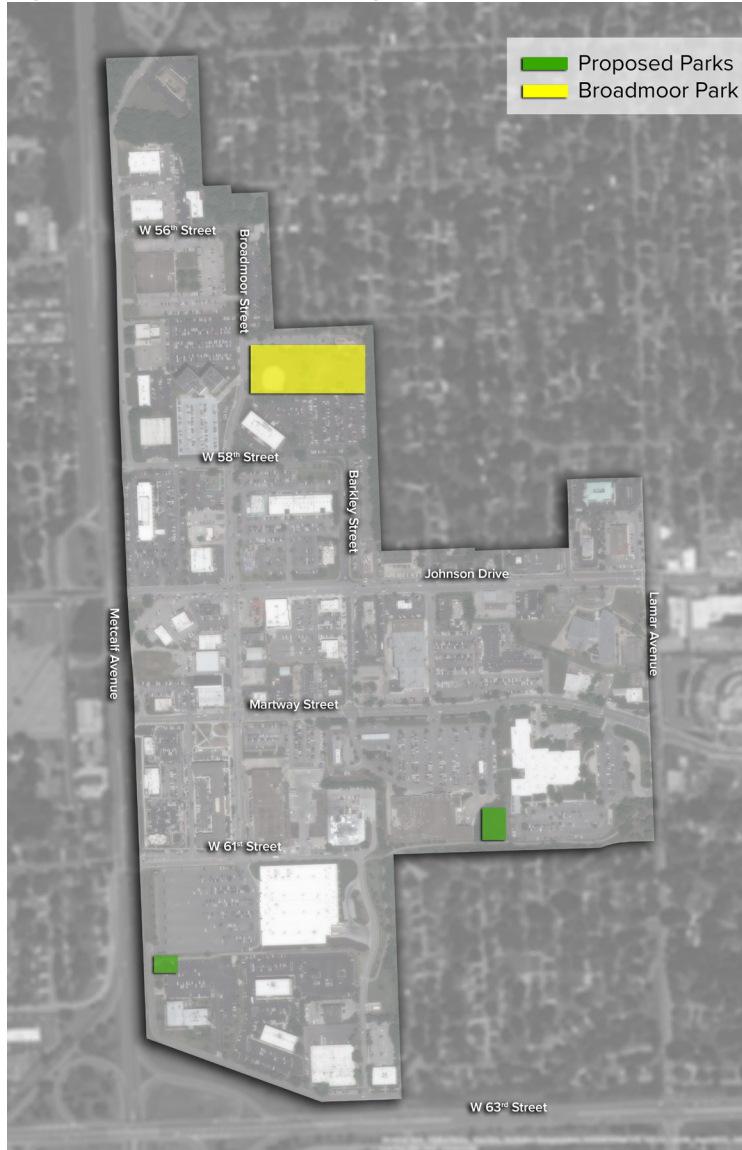
Source: KU Urban Planning

Figure 16 identifies several locations that would be optimal for green stormwater infrastructure that can be implemented in a number of ways. Implementing green stormwater infrastructure is often a cost effective way of managing stormwater where it falls, while providing other benefits such as neighborhood beautification. Green streets should be located along sections of Broadmoor, Johnson, and Martway, where majority of the drainage is flowing. An figure of the drainage analysis is provided in Appendix H. Permeable parking can be replaced for impervious surfaces where indicated in Figure 16, and a few existing basins indicated may be suitable for bioretention practices.

Another recommendation is to consider adopting lot coverage percentages to reduce the amount of stormwater runoff. As seen in Figure 18, adopting an 80% lot coverage policy looks fairly standard. At 70% lot coverage, the parcel starts to look a little more green, and even more so at 60%. Another layer that could be added to this policy is allowing higher lot coverage percentages if the developer uses a certain amount of pervious pavement parking. This lot coverage policy could work in tandem with a shared parking policy, by ensuring a business that it will have enough parking even if it is limited on how much impervious surface they can build.

Park Accessibility

Figure 17. Proposed and Existing Parks within Johnson Drive Corridor



Source: KU Urban Planning

After analyzing park accessibility within the West Gateway District, there are two recommendations for improving visitor and worker access to natural open space. The first recommendation is to install two new parks within the West Gateway District. These locations are identified in Figure 17 and were determined based on the stormwater and park accessibility analysis. Parks can be installed as development and redevelopment occurs in the district by requiring development to preserve open space or through city purchases. The second recommendation is to improve/add bicycle and pedestrian infrastructure throughout the district, leading to existing and future parks, as development and redevelopment occurs.

Parking

Lot Coverage Percentage

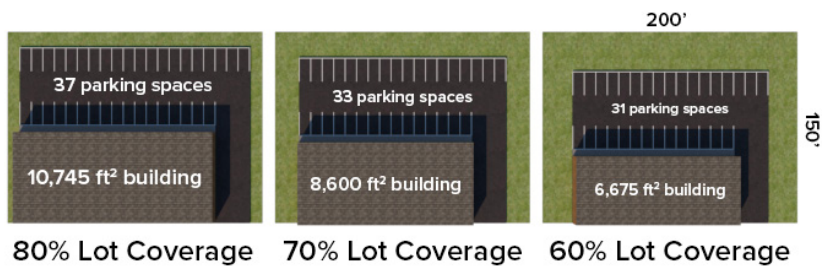


Figure 18. Recommended Parking by Lot Coverage *Source: KU Urban Planning*

To better utilize space within Johnson Drive three tools and practices have been identified to better implement parking regulations. Recommendations are:

- A shared parking policy would define the amount of relief shared parking can provide with the benefit of reducing surface parking, reducing developers costs, and preserving land for development.
- A change to the municipal code would regulate new developments solely by their square footage, and cap the number of spaces with a parking maximum. Existing drive through restaurants developed under the Form Based Code have parking ratios greater than 11 spaces per 1,000 square feet.
- Redevelopment of the parking garage at the intersection of W. 58th and Broadmoor Street as a three or four story parking structure would allow for higher parking densities. Additionally, the parking structure would be regulated by the West Gateway Form Based Code creating new retail and restaurant space in high traffic area.

Form Based Code Review

Review - Land Use

Based on the study of current condition on Johnson Drive Corridor, a disconnection is found between commercial and single-family land uses. As a result, most commercial developments are highly self-motivated to create extra parking space to attract customers.

As parking guidelines are not specifically laid out in the Form Based Code, unnecessary parking space has been established. Auto-oriented environments are therefore clustered in Mission. The purpose of the Form Based Code ought to be more focused on reducing the parking supply in order to provide more public space for improving the overall walkability.



Photo Source: City of Mission

Analysis - Land Use

According to *Practice Form Based Zoning of Zoning Practice* by the American Planning Association (APA), the suggestion for Form Based Code, states that creating walkable communities is a core tenet of form based codes. For a walkable community, the standards include:

1. proper street design with a good combination of travel lanes and bike lanes, parking areas, and sidewalks;
2. well-established streetscape designs for better connectivity; and
3. good use of public space.

Based on the current conditions, there are two recommendations regarding the Form Based Code:

1. mix the use of small and medium lot developments for lots in portions of both Westgate and Rock Creek sectors and adjacent to Metcalf Avenue (shown in figure 19); and
2. develop a section dedicated to parking standards for reducing the parking supply. Specifically, shared parking should be widely introduced; maximum parking standards should be established.

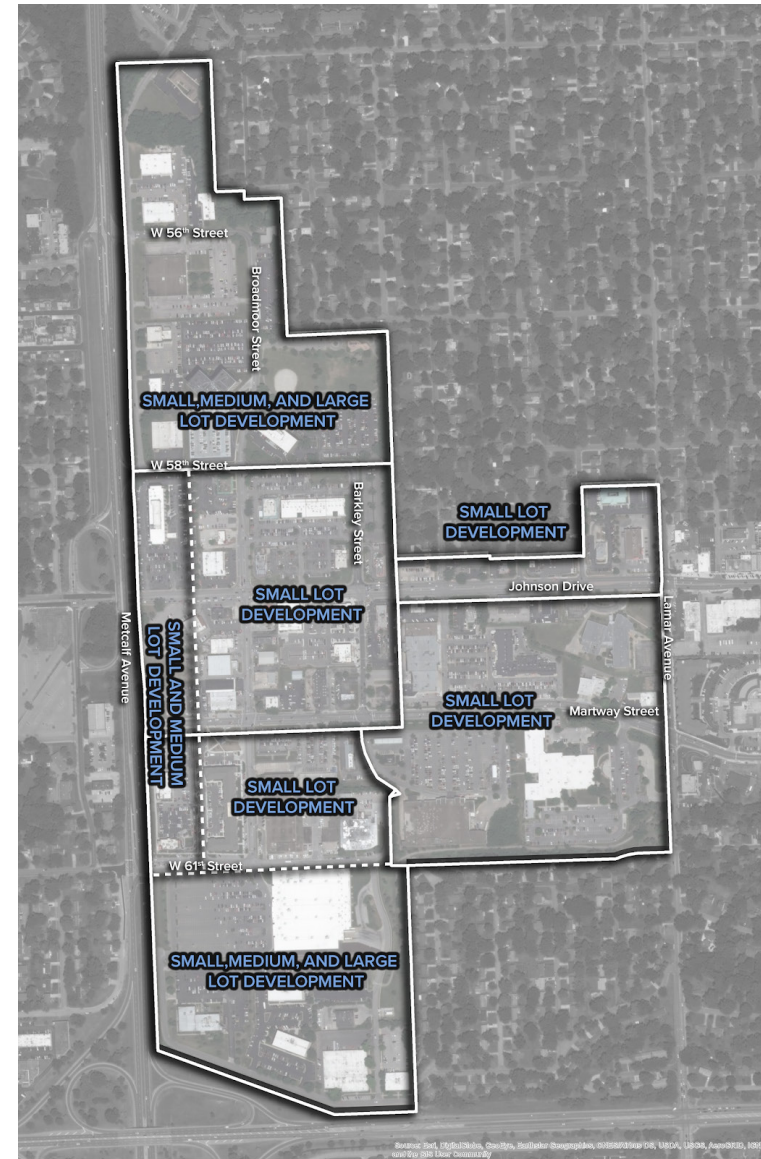


Figure 19.

Source: KU Urban Planning

Review - Transportation

Introduction: The following provides an overview of each roadway section in the study area with recommendations. The reader can locate a specific section on the map by identifying the color the street name is highlighted in.

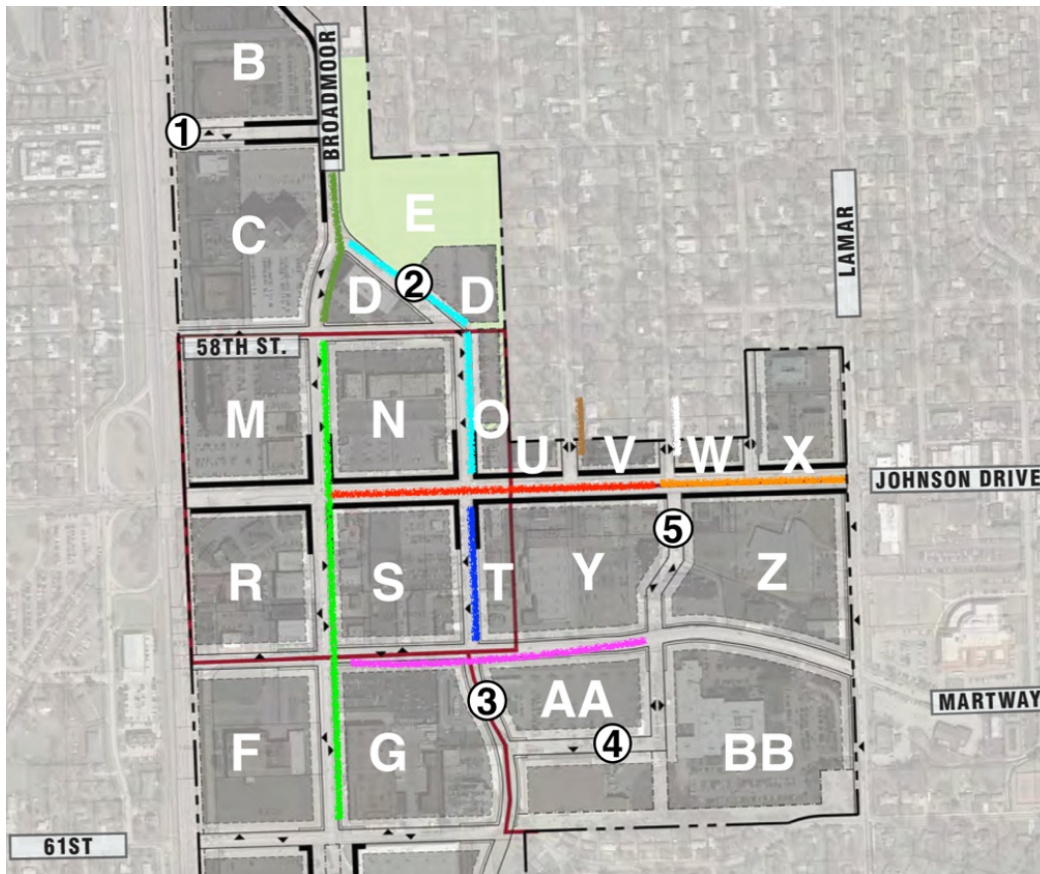


Figure 20. Proposed Street Sections

Source: KU Urban Planning

Johnson Drive

The ground-level retail and office spaces along Johnson drive could provide a strong pedestrian realm, but the limited tree zone and short sidewalk size along the street does not encourage people to walk. So, it is important to create a pedestrian-friendly environment. Since parking and service access should be accommodated away from Johnson Drive frontages, many buildings would need to use Broadmoor Avenue, Barkley Street and the new Walmer for their parking and service access. However, putting on-street parking on these streets could generate congestion and increase traffic crashes.

Martway Street

Barkley and Wallmer extension (3) would be constructed to connect with a new 60th Street (4) on the South to assist with traffic dispersal and lead more cars to Martway, it is important to reduce North-South travel speed to reduce crashes.

Broadmoor Street

The new 57th and Metcalf intersection (1) is anticipated to occur, and the Barkley is extended (2) to connect Broadmoor which will make it a busy area. It is important to control speed for vehicles, promote open roadway and smooth traffic flow.

Barkley Street

This section is on a slope and because the numbers of access are generated by limited access on Johnson Drive, it is neither safe nor convenient to put parking spaces on both sides. Adding parking lanes will also reduce the size of Broadmoor Park.

Analysis - Transportation

The following section recommends specific typical sections for each roadway in the study area:

Johnson Drive

Narrow each travel lane to 10 feet, expand the left-side sidewalk to 6 feet and the right-side sidewalk to 10 feet in order to slow down vehicle speed and provide a pedestrian-friendly environment. For the Walmer and Russell section add a 10-foot turn lane in the middle.

Johnson Drive: Section between Broadmoor and Barkley looking east

SIDE WALK	TREE ZONE	TRAVEL LANE	TRAVEL LANE	TURN LANE	TRAVEL LANE	TRAVEL LANE	TREE ZONE	SIDE WALK
6	4	10	10	10	10	10	4	10

Martway Street

Do not construct on-street parking along Martway. Instead, narrow each travel lane to 10 feet and expand the left-side sidewalk to 10 feet. Provide a 3-foot bike lane on both sides of the street to improve access for bicycles and to connect to the bike trails as well as add a 10-foot turn lane in the middle of the street.

Johnson Drive: Section between Walmer and Russell looking east

SIDE WALK	TRAVEL LANE	TRAVEL LANE	TURN LANE	TRAVEL LANE	TRAVEL LANE	SIDE WALK
6	10	10	10	10	10	10

Broadmoor Street: Section between Martway and 61 Street looking north

SIDE WALK	TREE ZONE	TRAVEL LANE	TURN LANE	TRAVEL LANE	TREE ZONE	SIDE WALK
5	4	9	9	9	4	10

Broadmoor Street

Remove the on-street parking on both sides of the street and narrow each travel lane to 9 feet to reduce vehicle speed. Expand left-side sidewalk to 5 feet and right-side sidewalk to 10 feet to create a pedestrian-friendly environment. For Martway and 61st Street section, add a 9-foot turn lane in the middle. For 58th and Barkley section, add a 9-foot turn lane in the middle only when approaching intersection area.

Broadmoor Street: Section between 58th and Barkley Looking north

SIDE WALK	TREE ZONE	TRAVEL LANE	TRAVEL LANE	TREE ZONE	SIDE WALK
6	4	9	9	4	10

Martway Street: Section between Broadmoor and Barkley looking east

SIDE WALK	TREE ZONE	BIKE LANE	TRAVEL LANE	TURN LANE	TRAVEL LANE	BIKE LANE	TREE ZONE	SIDE WALK
10	4	3	10	10	10	3	4	10

Analysis - Transportation

Barkley Street

Remove both parking lanes on this street to reduce congestion and safety issues and narrow each travel lane to 9 feet and add a 9-foot turn lane in the middle.

Riggs Street, Walmer Street, Russell Street

For Riggs, Walmer and Russell Streets, add a 9-foot turn lane in the middle of the street only when approaching intersections and narrow each travel lane to 9 feet.

Barkley Street: Section between 58 and Johnson DR looking north

SIDE WALK	TREE ZONE	TRAVEL LANE	TURN LANE	TRAVEL LANE	TREE ZONE	SIDE WALK
6	4	9	9	9	4	6

Barkley Street: Section between Johnson Drive and Martway Street looking north

SIDE WALK	TREE ZONE	TRAVEL LANE	TURN LANE	TRAVEL LANE	TREE ZONE	SIDE WALK
6	4	9	9	9	4	6

Riggs Street: Section north of Johnson Drive looking north

SIDE WALK	TREE ZONE	TRAVEL LANE	TRAVEL LANE	TREE ZONE	SIDE WALK
5	5	9	9	5	5

Wallmer Street: Section north of Johnson Drive looking north

SIDE WALK	TREE ZONE	TRAVEL LANE	TRAVEL LANE	TREE ZONE	SIDE WALK
4	5	9	9	5	4

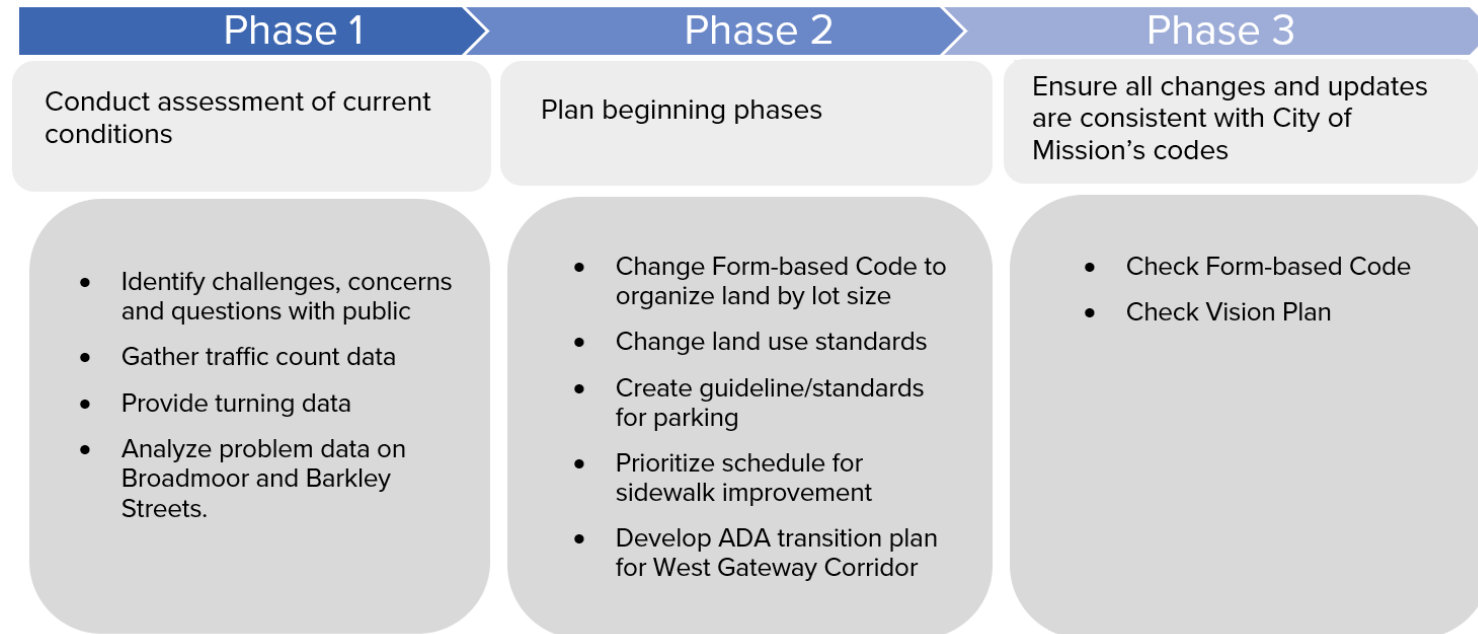
Russell Street: Section north of Johnson Drive looking north

SIDE WALK	TRAVEL LANE	TRAVEL LANE	TREE ZONE	SIDE WALK
4	9	9	4	5

Implementation

Implementation

Short-Term Goal Process

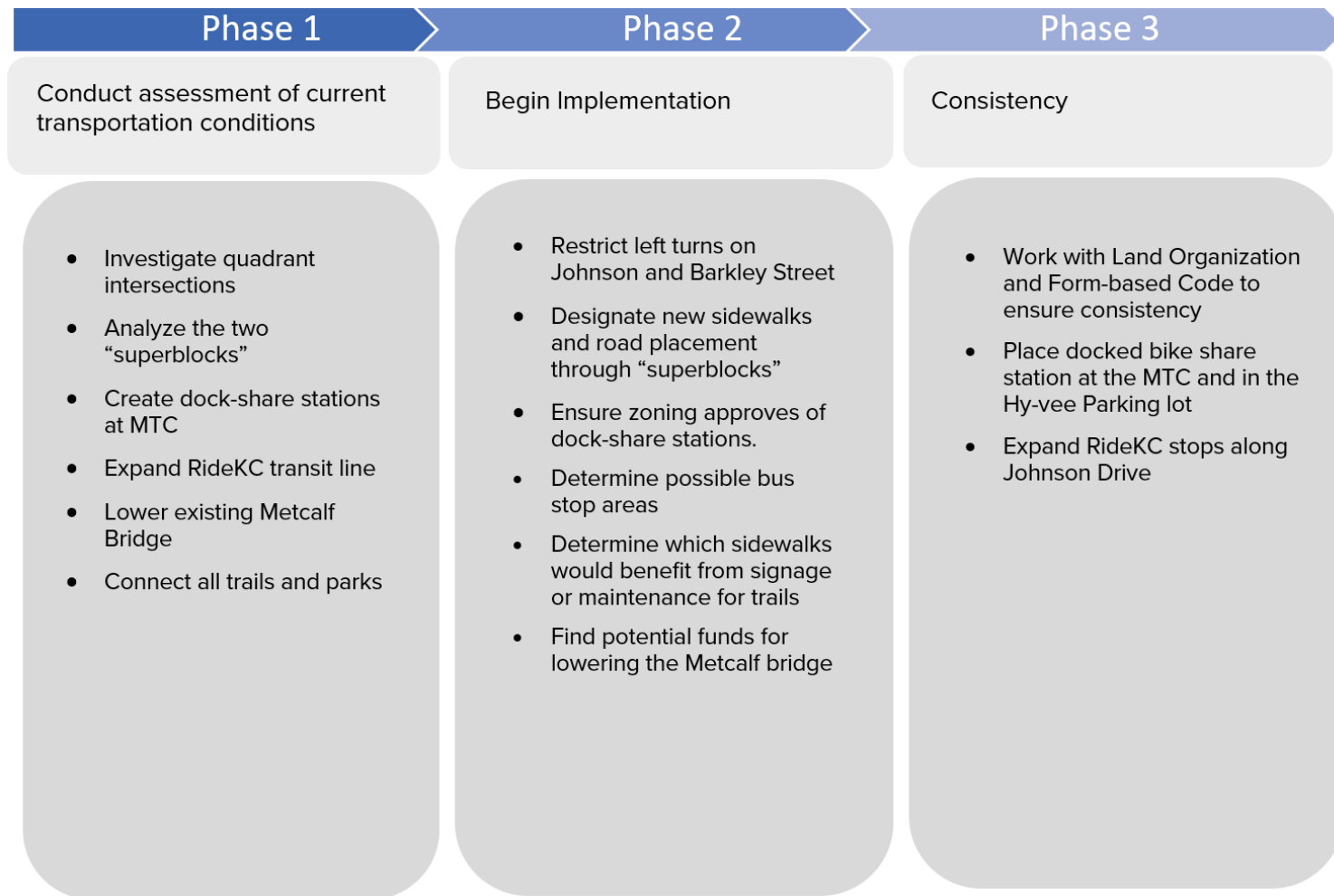


Ongoing Process:

- Identify where consistent funding is needed
- Continuously maintain and update sidewalks
- Green Storm water Infrastructure should be implemented in conjunction with street improvements
- Increase native grasses in parks
- When new construction occurs, designate a certain percentage as pervious surface
- Ensure all new construction is done more compactly

Implementation

Long-Term Goal Process



Funding

Several projects within the Johnson Drive study area need funding for implementation. The best options to achieve funding goals come from federal, state, and local funding opportunities. A mix of funding from all three sources will ensure the best chance for complete funding because there are more opportunities. Applying to multiple funding opportunities diversifies the chance for success because it will not limit the City of Mission to one source.

Federal

From the federal level projects will be funded using the surface transportation program by applying through the Mid-America Regional Council. The surface transportation program should be used to redevelop Metcalf bridge. The highway safety improvement program should be used to fix the roads within the city. To fund traffic studies to improve the lane widths and assess the safety of Johnson Drive, Metcalf and Lemar Avenue.

State

State funding includes programs such as the federal fund exchange program, economic development and the ITs-set aside program. These programs should be used to improve business opportunities in the city, and to increase the safety and efficiency of the surface transportation system.

Local

Local funding will come from the CARS program from Johnson County. Since Metcalf Avenue is an eligible arterial road in the program, the City should submit as many improvements as possible. These improvements would include lane width changes, new pavement, and parking.