

**AGENDA**  
**REGULAR MEETING OF THE**  
**UTAH STATE UNIVERSITY BOARD OF TRUSTEES**  
**Via Teleconference**  
**June 22, 2018**

- |                   |                 |                            |
|-------------------|-----------------|----------------------------|
| <b>10:00 a.m.</b> | Regular Meeting | Champ Hall Conference Room |
| <b>10:05 a.m.</b> | Closed Session  | Champ Hall Conference Room |
| <b>11:00 a.m.</b> | Regular Meeting | Champ Hall Conference Room |
- Introductory Items
  - Chair's Report
  - President's Report
  - Consent Agenda
  - Action Agenda

## CHAIR'S REPORT

### A. Information Items

1. Annual Joint Meeting of the Board of Regents, Board of Trustees, and Presidents, July 19 and 20, 2018, Cedar City, Utah
2. Upcoming Board of Trustees Meeting and Workshop, August 17, 2018
  - Dinner, August 16, 2018, Mark Holland's Home
  - Workshop/Meeting, August 17, 2018, USU Salt Lake Educational Center, Taylorsville, Utah

### B. Discussion Items

1. Report from Student Health, Safety, and Wellbeing Committee

## PRESIDENT'S REPORT

### I. PRESIDENT'S REPORT

#### A. Information Items

1. Campus visit by Ruth Watkins, President, University of Utah

#### B. Recent Events

1. Athletic Development Road Trip – Idaho, Utah, Nevada, California, May 7-9 2018
2. State of Utah Golden Spike Celebration – Corinne, May 10, 2018
3. Higher Education Strategic Planning Commission – Salt Lake City, May 14, 2018
4. Remarks at Business Services Luncheon – May 16, 2018
5. Keynote Speaker at Alta Club Night – Salt Lake City, May 17, 2018
6. Aggie Auction – May 17, 2018
7. Board of Regents at Salt Lake Community College – May 18, 2018
8. Regence Community Board Meeting – Salt Lake City, May 18, 2018
9. Sunrise Session, Silvana Martini – Salt Lake City, May 22, 2018
10. Governor's Executive Summit – Salt Lake City, May 22, 2018
11. Mountain West Student-Athlete Welfare, Academics and Leadership Committee Telephone Conference – May 23, 2018
12. Mountain West Board of Directors Meetings – Sonoma, California, June 3-5, 2018
13. Presidents' Alliance Steering Committee Telephone Conference – June 8, 2018
14. Salt Lake Chamber Giant in Our City – Salt Lake City, June 9, 2018
15. Salt Lake Chamber Board of Governors Retreat – Salt Lake City, June 12, 2018
16. APLU Council of Presidents Summer Meeting – Washington, DC, June 14, 2018
17. USU Board of Trustees Teleconference Meeting – June 22, 2018

#### C. Upcoming Events

1. Council of Presidents – Salt Lake City, June 25, 2018
2. Business Leaders Breakfast and Luncheon – Salt Lake City, June 27, 2018
3. Northwest Commission on Colleges and Universities Review of Utah State University Review – Kirkland, Washington, June 28, 2018
4. Board of Regents Formal Review of President Cockett – June 27-29, 2018
5. EDCUtah Board of Trustees – Salt Lake City, July 20, 2018
6. Days of '47 Pioneers of Progress Awards Reception – Salt Lake City, July 12, 2018
7. USU Retirement Dinner – July 16, 2018
8. Board of Regents at Southern Utah University – Cedar City, Utah, July 19-20, 2018
9. Sheep Producer Meetings – Davis, California, June 21, 2018
10. Higher Education Strategic Planning Commission – Salt Lake City, August 6, 2018
11. Sunrise Session, Dr. Abby Benninghoff – Salt Lake City, August 7, 2018
12. Panel Member for ADVS Research Symposium – August 8, 2018
13. Remarks at USU Department Head Retreat – August 13, 2018
14. New Faculty Dinner – President's Home, August 14, 2018

15. Presidents' Alliance Steering Committee Telephone Conference – August 15, 2018
16. Regional Campus and USU Eastern Dinner – President's Home, August 15, 2018
17. USU Board of Trustees Workshop – August 27, 2018

## CONSENT AGENDA

1. Minutes from the Closed Session held on May 4, 2018
2. Minutes from the Regular Meeting held on May 4, 2018
3. Certificate of Treasurer for February 2018
4. Delegation/Administrative Reports – 03/23/18 to 04/20/18
5. Delegation/Administrative Reports – 04/20/18 to 05/25/18
6. Faculty and Staff Adjustments
7. Report of Investments for February 2018
8. USU Policy 335 – Relocation Assistance revision
9. Utah State University Research Foundation – re-appointment to the Board – Carlson
10. Utah State University Research Foundation – re-appointment to the Board – Kaluarachchi

CLOSED SESSION  
UTAH STATE UNIVERSITY BOARD OF TRUSTEES  
May 4, 2018

Minutes of the Closed Session of the Utah State University Board of Trustees held at Utah State University, University Inn, Alma Sonne Board Room, commencing at 9:02 a.m.

MEMBERS PRESENT

Jody K. Burnett	Chair
Mark K. Holland	Vice Chair
Kent K. Alder	
David G. Butterfield	
John Y. Ferry	
J. Scott Nixon	
Clark L. Whitworth	

MEMBERS EXCUSED

Karen H. Huntsman  
Crystal C. Maggelet  
Frank Peczuh, Jr

UNIVERSITY REPRESENTATIVES PRESENT

Noelle E. Cockett	President
Mica McKinney	General Counsel
Sydney M. Peterson	Chief of Staff and Secretary to the Board of Trustees
Laurens H. Smith, Jr.	Interim Provost

Chair Burnett conducted the meeting. Personnel and legal issues were discussed.

Action: Trustee Butterfield made a motion to adjourn the meeting. Trustee Whitworth seconded the motion; the voting was unanimous in the affirmative.

The meeting adjourned at 10:06 a.m.

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Jody K. Burnett, Chair

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Sydney M. Peterson, Secretary

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Date Approved

## UTAH STATE UNIVERSITY BOARD OF TRUSTEES

Utah State University, University Inn, Alma Sonne Board Room, Logan, Utah

May 4, 2018

Minutes of the Regular Meeting of the Utah State University Board of Trustees held in the University Inn, Alma Sonne Board Room, commencing at 9:02 a.m.

### MEMBERS PRESENT

Jody K. Burnett	Chair
Mark K. Holland	Vice Chair
Kent K. Alder	
David G. Butterfield	
John Y. Ferry	
Jaren Hunsaker	
J. Scott Nixon	
Clark L. Whitworth	

### MEMBERS EXCUSED

Karen H. Huntsman  
Crystal C. Maggelet  
Frank Peczuh, Jr

### UNIVERSITY REPRESENTATIVES PRESENT

Neil N. Abercrombie	Vice President, Government Relations
Jodi Bailey	Chief Audit Executive
Christine Ballard	President, Staff Employee Association
Carolyn Brittain	Staff Assistant
Noelle E. Cockett	President
David T. Cowley	Vice President, Business and Finance
Richard C. Etchberger	Vice Provost
Kimberly Lott	President, Faculty Senate
Mica McKinney	General Counsel
Mark R. McLellan	Vice President, Research and Dean, School of Graduate Studies
James D. Morales	Vice President, Student Affairs
Joe Peterson	Chancellor, USU Eastern
Sydney M. Peterson	Chief of Staff and Secretary to the Board of Trustees
Laurens H. Smith, Jr.	Interim Provost
Gary S. Straquadine	Vice Chancellor, USU Eastern Campuses
Tim Vitale	Director, Public Relations and Marketing
Robert W. Wagner	Vice President, Academic & Instructional Services
Kenneth L. White	Vice President, Extension and Dean, College of Agriculture and Applied Sciences
Matthew T. White	Vice President, Advancement

OTHERS PRESENT

Spencer Burt	<i>The Statesman</i>
Marlin K. Jensen	Member, Board of Regents
Ronald W. Jibson	Member, Board of Regents

Chair Burnett called the meeting to order.

Action: Trustee Nixon moved in accordance with 52-4-205 of the Utah Code, that the Trustees go into a Closed Session for the sole purpose of discussing the character, professional competence, or physical or mental health of individuals, pending or reasonably imminent litigation, and the possible sale of real property. Trustee Whitworth seconded the motion. The voting was unanimous in the affirmative.

Chair Burnett reopened the Regular Meeting at 10:13 a.m. thanking those present for their attendance.

I. Chair’s Report

A. Information Items

1. Letter of Commendation and Appreciation to Michael Scott Peters

Chair Burnett shared the letter of commendation to Michael Scott Peters (Appendix A). Trustee Peters was thanked for his many contributions throughout the year.

2. Oath of Office for Jaren Hunsaker

Chair Burnett administered the oath of office to Jaren Hunsaker, the new USUSA President and Trustee.

3. Alumni Association Report

Trustee Butterfield noted that recruiting for an Alumni Director will begin this month. The search committee has been formed and the position announcement finalized.

4. Audit Committee Report

Trustee Nixon reported that the Board of Regents was very complimentary of our annual audit reports. He noted that Chief Auditor Jodi Bailey and her team are top notch.

5. USUSA

Trustee Hunsaker noted the success of “Mental Health Week” held in March. Incoming USUSA Officers collaborated with USU Auxiliaries at the Bear Lake Training Center to improve communications between students and administrators. The theme for next year will be “Unity and Diversity.”



6. Academic Approval Committee

Trustee Alder noted that the Committee, guided by Interim Provost Larry Smith, thoroughly reviewed each academic proposal. Trustee Alder recommends the Board approve the proposals the Committee thoroughly reviewed and moved forward.

7. Department of Public Safety Annual Report  
<http://www.usu.edu/trustees/agenda/2018/pdf/dps-2017.pdf>

8. Commencement 2018 Schedule

Chair Burnett asked the Trustees to refer to their commencement folders for their schedules and responsibilities.

9. Date of the next Board of Trustees Meeting, June 22, 2018, to be held via conference call

B. Action Items

1. Formation of a new Student Health, Safety, and Wellbeing Committee  
[Resolution 18-05-01]

Chair Burnett explained the need and purpose of the new Student Health, Safety, and Wellbeing Trustee Committee. The Committee will screen items and assist President Cockett, including working with General Counsel regarding Policies and Procedures affecting student health, safety, and wellbeing.

Action: Trustee Ferry moved to approve the formation of a new Student Health, Safety, and Wellbeing Committee. Trustee Whitworth seconded the motion. The voting was unanimous in the affirmative.

II. PRESIDENT'S REPORT

A. Information Items

1. Student Resolution of Commendation to Connor Draper (Appendix B)

Trustee Hunsaker shared the President's letter of commendation to Connor Draper. Connor has worked and volunteered on campus throughout his time at USU. He is known for his dedication to his education, work, and friends.

2. Resolution of Commendation and Appreciation to Chancellor Joe Peterson

President shared the Resolution of Appreciation and Commendation to Chancellor Peterson (Appendix C). Chancellor Peterson's contributions to the development and direction of USU Eastern will be his legacy. Peterson was dedicated to serving and supporting USU Eastern and the local area.

## B. Recent Events

1. Basketball – UNLV at USU – March 3, 2018
2. Mountain West Men and Women’s Basketball Championship Tournament – Las Vegas, Nevada, March 6-10, 2018
3. Mountain West Board of Directors – Las Vegas, Nevada, March 7, 2018
4. Capitol Council of Presidents – Salt Lake City, March 7, 2018
5. Remarks at USU Athletic National Advisory Board Meeting – Las Vegas, Nevada, March 8, 2018
6. Remarks at USU Employee Recognition Luncheon – March 12, 2018
7. Regents Strategic Working Group: Affordability & Access – Salt Lake City, March 13, 2018
8. Council of Presidents – Salt Lake City, March 13, 2018
9. Tier II Tuition Open Meeting – March 14, 2018
10. Collecting on the Edge Event – Los Angeles, California, March 17, 2018
11. Welcome Remarks at Utah Supreme Court Justices Oral Arguments – March 19, 2018
12. Panel Member at Student Organization for Society and Natural Resources – March 20, 2018
13. USU Salt Lake Campus Open House – Taylorsville, March 21, 2018
14. Student Advisory Council Breakfast, President’s Home – March 22, 2018
15. Remarks at Huntsman Venture Forum – March 22, 2018
16. Remarks at A-Day Welcome Reception – March 23, 2018
17. Northwest Commission on Colleges and Universities Site Visit for Year Seven Review of Utah State University – March 26-28, 2018
18. Salt Lake Chamber Board of Governors – Salt Lake City, March 27, 2018
19. Board of Regents at Dixie University – St. George, March 29-30, 2018
20. Host A.C. Woman’s Luncheon, President’s Home – April 2, 2018
21. Regents Strategic Working Group: Affordability & Access – Salt Lake City, April 5, 2018
22. Board of Trustees Teleconference – April 6, 2018
23. Remarks at Research Gala – April 6, 2018
24. ECUtah Board of Trustees – Salt Lake City, April 10, 2018
25. Seely Hinckley Luncheon – April 10, 2018
26. Diversity Awards Luncheon, President’s Home – April 11, 2018
27. President’s Ambassadors Appreciation Dinner, President’s Home – April 12, 2018
28. USU Retirement Dinner – April 16, 2018
29. Breakfast with Incoming/Outgoing USUSA Officers, President’s Home – April 17, 2018
30. Remarks at Cache Valley Business Summit – April 19, 2018
31. USU Southwest Graduation – Beaver, April 19, 2018
32. USU Tooele Graduation – Tooele, April 19, 2018
33. USU Brigham City Graduation – Brigham City, April 20, 2018
34. Salt Lake Chamber Board of Governors – Salt Lake City, April 24, 2018
35. USU Moab Graduation – Moab, April 26, 2018
36. USU Blanding Graduation – Blanding, April 27, 2018
37. USU Eastern Graduation – Price, April 28, 2018
38. USU Uintah Basin Graduation – Vernal, April 28, 2018

39. Council of Presidents – Salt Lake City, May 1, 2018
40. Utah Campus Compact – Salt Lake City, May 1, 2018
41. USU Clinical Services Building Grand Opening and Ribbon Cutting – May 3, 2018
42. USU Board of Trustees – May 4, 2018
43. USU Graduate Hooding Ceremony – May 4, 2018
44. USU Dignitary Dinner – May 4, 2018
45. USU Undergraduate Commencement Ceremony – May 5, 2018

### C. Upcoming Events

1. Athletic Development Road Trip – Idaho, Utah, Nevada, California, May 7-9 2018
2. State of Utah Golden Spike Celebration – Corinne, May 10, 2018
3. Remarks at Business Services Luncheon – May 16, 2018
4. Keynote Speaker at Alta Club – Salt Lake City, May 17, 2018
5. Aggie Auction – May 17, 2018
6. Board of Regents at Salt Lake Community College – May 18, 2018
7. Regence Community Board Meeting – Salt Lake City, May 18, 2018
8. Mountain West Board of Directors Meetings – Sonoma, California, June 3-5, 2018
9. Salt Lake Chamber Giant in Our City – Salt Lake City, June 9, 2018
10. Salt Lake Chamber Board of Governors Retreat – Salt Lake City, June 12, 2018
11. APLU Council of Presidents Summer Meeting – Washington, DC, June 14, 2018
12. USU Board of Trustees Teleconference Meeting – June 22, 2018

### III. CONSENT AGENDA

Chair Burnett stated that the Trustees were given the following agenda items for review.

1. Minutes from the Closed Session held on April 6, 2018
2. Minutes from the Regular Meeting held on April 6, 2018
3. Academic Program Approvals
  - College of Agriculture and Applied Sciences
    - i. Proposal from the Department of Animal, Dairy and Veterinary Sciences to offer a minor in Animal Biotechnology [Resolution 18-05-02] (Appendix D)
    - ii. Proposal from the Department of Applied Economics to offer a pre-law minor in Agriculture and Natural Resources [Resolution 18-05-03] (Appendix E)
    - iii. Proposal from the Department of Applied Economics to restructure the Bachelor of Science Degree in Agribusiness [Resolution 18-05-04] (Appendix F)
    - iv. Proposal from the School of Applied Sciences, Technology, and Education to offer a minor in Unmanned Aerial Systems [Resolution 18-05-05] (Appendix G)
  - Caine College of the Arts
    - i. Proposal from the Department of Art and Design to offer a minor in Film Studies [Resolution 18-05-06] (Appendix H)
  - Jon M. Huntsman School of Business
    - i. Proposal to establish a new administrative unit, the Marketing and Strategy Department [Resolution 18-05-07] (Appendix I)

- ii. Proposal from the Department of Management to change the name of the MBA specialization “Management Minor” to “Leadership and Management Minor” [Resolution 18-05-08] (Appendix J)
- iii. Proposal from the Department of Management MBA Program to change the name of the MBA specialization “Value Creation Program” to “Strategic Value Creation” [Resolution 18-05-09] (Appendix K)
- iv. Proposal from the Department of Management MBA Program to change the name of the MBA specialization “Shingo Leadership and Operational Excellence/Manufacturing Management” to “Supply Chain Management” [Resolution 18-05-10] (Appendix L)
- S. J. & Jessie E. Quinney College of Natural Resources
  - i. Proposal from the Department of Watershed Science to offer a post-baccalaureate certificate in Aquatic Ecosystem Restoration [Resolution 18-05-11] (Appendix M)
- College of Science
  - i. Proposal from the Department of Biology to restructure the Ph.D. in Biology and Ph.D. in Biology-Ecology [Resolution 18-05-12] (Appendix N)
- 4. Awards/Proposals for February 2018 [Resolution 18-05-13] (Appendix O)
- 5. Awards/Proposals for March 2018 [Resolution 18-05-14] (Appendix P)
- 6. Certificate of Treasurer for November 2017 [Resolution 18-05-15] (Appendix Q)
- 7. Certificate of Treasurer for December 2017 [Resolution 18-05-16] (Appendix R)
- 8. Certificate of Treasurer for January 2018 [Resolution 18-05-17] (Appendix S)
- 9. Delegation/Administrative Reports – 01/26/18 to 02/23/18 [Resolution 18-05-18] (Appendix T)
- 10. Delegation/Administrative Reports – 02/23/18 to 03/23/18 [Resolution 18-05-19] (Appendix U)
- 11. Faculty and Staff Adjustments [Resolution 18-05-20] (Appendix V)
- 12. Report of Investments for November 2017 [Resolution 18-05-21] (Appendix W)
- 13. Report of Investments for December 2017 [Resolution 18-05-22] (Appendix X)
- 14. Report of Investments for January 2018 [Resolution 18-05-23] (Appendix Y)
- 15. Written Reports
  - Academic and Instructional Services (Appendix Z)
  - Advancement (Appendix AA)
  - Business and Finance (Appendix BB)
  - College of Agriculture and Applied Sciences and Extension (Appendix CC)
  - Executive Vice President and Provost (Appendix DD)
  - Faculty Senate (Appendix EE)
  - Public Relations and Marketing (Appendix FF)
  - Research and Graduate Studies (Appendix GG)
  - Staff Employee Association (SEA) (Appendix HH)
  - Student Affairs (Appendix II)
  - USU Eastern (Appendix JJ)
  - USUSA (Appendix KK)

Action: Trustee Holland moved to approve the Consent Agenda. Trustee Alder seconded the motion. The voting was unanimous in the affirmative.

#### IV. ACTION AGENDA

Interim Provost Smith presented the academic proposals.

1. Proposal from the Office of the Provost to offer a Bachelor of Science/Bachelor of Art in Integrated Studies [Resolution 18-05-24] (Appendix LL)

This unique degree is targeted for those students who find themselves in good academic standing but who were unable to qualify for admittance into a major. Many of these students end up either transferring to another institution or not finishing their degrees. This option is not for freshman or sophomores. Degree completion is an important initiative for the University and will change the lives of many people.

Action: Trustee Ferry moved to approve the proposal from the Office of the Provost to offer a Bachelor of Science/Bachelor of Art in Integrated Studies. Trustee Nixon seconded the motion. The voting was unanimous in the affirmative.

2. Proposal from the Department of Communicative Disorders and Deaf Education in the Emma Eccles Jones College of Education and Human Services to offer a Master's Degree in Communication Sciences [Resolution 18-05-25] (Appendix MM)

The department currently has a clinically based master's degree. This proposed non-clinical degree is for students who are interested in communication disorders but do not plan to become practicing speech-language pathologists or audiologists.

Action: Trustee Alder moved to approve the proposal from the Department of Communicative Disorders and Deaf Education to offer a Master's Degree in Communication Sciences. Trustee Nixon seconded the motion. The voting was unanimous in the affirmative.

3. Proposal from the Department of Languages, Philosophy and Communication Studies in the College of Humanities and Social Sciences to offer a Master's Degree in Communication Studies [Resolution 18-05-26] (Appendix NN)

This degree will prepare students to advance in careers that highly value communication skills, including the ability to share knowledge with others. Prospective employers seek candidates with communication skills.

Action: Trustee Holland moved to approve the Department of Languages, Philosophy and Communication Studies to offer a Master's Degree in Communication Studies. Trustee Whitworth seconded the motion. The voting was unanimous in the affirmative.

4. Design and Construction of a Professional Career and Technical Education Lab, a Non-State Funded Project [Resolution 18-05-27] (Appendix OO)

Vice President Cowley explained that the current request is being modified for the design and construction of the building on the Blanding campus. They are currently leasing an old building. The building, with large open bays, will meet the needs of various programs including welding. Although this is a non-state funded project, operations and maintenance funds will be requested from the legislature. There is no way to separate the design and construction request from a legislative standpoint. Applied Technologies degrees meet a need unique to the area.

Action: Trustee Nixon moved to approve the modified request for the design and construction of a Professional Career and Technical Education Lab, a non-state funded project. Trustee Whitworth seconded the motion. The voting was unanimous in the affirmative.

5. Construction of a Triplex Multifamily Housing Facility, a Non-State Funded Project [Resolution 18-05-28] (Appendix PP)

This proposed triplex for the Blanding campus will be available for rent by incoming new hires or people moving to the area to continue their studies. Blanding has a trade management program. Students learn by building homes which are sold to recover the costs of the building materials. This triplex will be owned by the University but will not be next to or part of the campus. The housing market is difficult in Blanding.

Action: Trustee Alder moved to approve the construction of a Triplex Multifamily Housing Facility, a non-state funded project. Trustee Ferry seconded the motion. The voting was unanimous in the affirmative.

6. Construction of a Beef Teaching Facility, a Non-State Funded Project [Resolution 18-05-29] (Appendix QQ)

This School of Veterinary Medicine Beef Teaching Facility will have teaching, research, and extension components to it. The building will consist of a roof and one enclosed side. In the future more sides may be added. The building is in compliance with environmental issues by managing waste water. Funding comes from the School of Veterinary Medicine and will go through the State Building Board.

Action: Trustee Ferry moved to approve the construction of a Beef Teaching Facility, a non-state funded project. Trustee Nixon seconded the motion. The voting was unanimous in the affirmative.

7. Revenue Bonds, Series 2018 [Resolution 18-05-30] (Appendix RR)

These revenue bonds will finance Phase II of the Space Dynamics Laboratory which has already gone through the approval processes. This second building on the Innovation Campus will mirror the footprint of the first with some modifications. The Space

Dynamics Laboratory is a non-state funded research entity. The bonds will be repaid with funds received from reimbursed overhead on research projects.

Action: Trustee Nixon moved to approve the Revenue Bonds, Series 2018. Trustee Butterfield seconded the motion. The voting was unanimous in the affirmative.

Chair Burnett asked if there were any other items the Trustees would like to discuss before the meeting closed; none were mentioned.

V. STRATEGIC AGENDA – Regional Campuses/USU Eastern Campuses

As a land-grant institution Utah State University serves the entire state. Laurens H. Smith, Interim Provost; Richard C. Etchberger, Vice Provost; and Gary S. Straquadine, Vice Chancellor, USU Eastern Campuses shared their excitement and knowledge about the Regional/USU Eastern Campuses. Their “Aggies are Everywhere” presentation (Appendix SS) gave an introduction to the identity, set-up, challenges, and accomplishments of the system. The system fulfills the needs of a demographic of students with different needs. A re-enrollment campaign is in the works. USU has a partnership with the LDS Church’s PathwayConnect program through BYU-Idaho. Additionally, there are seamless programs with Snow College and Salt Lake Community College.

Action: Trustee Whitworth made a motion to adjourn the meeting. Trustee Alder seconded the motion; the voting was unanimous in the affirmative.

The meeting adjourned at 11:51 a.m.

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Jody K. Burnett, Chair

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Sydney M. Peterson, Secretary  
(Minutes taken by Carolyn Brittain)

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Date Approved

22 June 2018

**ITEM FOR ACTION**

RE: Certificate of Treasurer for February 2018

The Certificate of Treasurer for February 2018 is submitted to the Board of Trustees for consideration. It has received the appropriate administrative review and approval.

**EXECUTIVE SUMMARY**

The State Appropriated Funds budget at 28 February 2018 totaled \$394,592,338, up \$16,631,951 (4.40%) over the same 2016-2017 period. The year-to-date state appropriated funds expenditures totaled \$228,128,157, up \$19,672,043 (9.44%) over the same 2016-2017 period and represented 58% of the total budget. The percent of budget expended, 58%, was 9% less than would be expected to be spent on a strict time of budget year expired basis.

Total expenditures for all funds totaled \$559,696,932, up \$42,633,418 (8.25%) over the same 2016-2017 period.

**RECOMMENDATION**

The President and Vice President for Business and Finance recommend that the Board of Trustees approve the Certificate of Treasurer for February 2018.



**RESOLUTION  
UTAH STATE UNIVERSITY  
BOARD OF TRUSTEES**

WHEREAS, Authorized invoices and supporting papers have been filed pertaining to those expenditures listed on the attached Certificate of Treasurer; and

WHEREAS, Expenditures listed on the attached Certificate of Treasurer have been reviewed and approved for payment by the USU Controller's Office, Purchasing Department, and other departments; and

WHEREAS, The expenditures listed on the attached Certificate of Treasurer are in accordance with the laws and rules of Utah State University and the State of Utah; and

WHEREAS, The Chief Financial Officer for Utah State University, David T. Cowley, Vice President for Business and Finance, has certified to the best of his knowledge and belief that all expenditures listed on the attached Certificate of Treasurer were legitimate claims against Utah State University and funds were available for payment of said claims; and

WHEREAS, Vice President Cowley requests approval of the listed expenditures by fund for the period 1 July 2017 to 28 February 2018 on the attached Certificate of Treasurer; and

WHEREAS, The President of Utah State University has reviewed the attached Certificate of Treasurer and recommends its approval of those expenditures listed thereon by the Utah State University Board of Trustees; and

WHEREAS, The USU Board of Trustees has reviewed and given due consideration, review, and authorization of the expenditures listed on the attached Certificate of Treasurer;

NOW, THEREFORE, BE IT RESOLVED, That the USU Board of Trustees hereby approves the attached Certificate of Treasurer as presented and ratifies the expenditures listed on said Certificate of Treasurer for February 2018.

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RESOLUTION APPROVED BY THE USU BOARD OF TRUSTEES:

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Date

## CERTIFICATE OF TREASURER

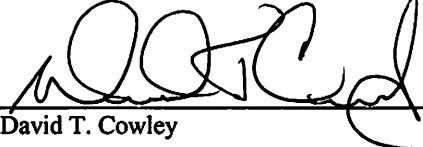
I, David T. Cowley, Vice President for Business and Finance, of Utah State University, do hereby certify as follows and request approval of the listed expenditures by fund for the period 1 July 2017 to 28 February 2018.

Authorization, invoices, and supporting papers have been filed pertaining to the following enumerated expenditures, which have been reviewed and processed for payment by the Controller's Office, Purchasing Department, and other departments; according to the laws, rules, and regulations of Utah State University and the State of Utah. To the best of my knowledge and belief, all are legitimate claims against Utah State University and funds were available for payment of said claims.

State Appropriated Funds	Budget	Percent of Budget Expended (67% Fiscal Year Expired)	1-Feb-18 28-Feb-18	Year to Date	Prior Year to Date	Increase (Decrease) from Prior Year	Percent Increase (Decrease) from Prior Year
Education and General (Except Athletics)	\$263,787,119	61%	\$20,037,212	\$159,864,765	\$146,018,307	\$13,846,458	9.48 %
Athletics	6,729,797	62%	513,164	4,173,832	3,895,043	278,789	7.16 %
E&G - O&M	3,595,967	16%	59,298	578,165	581,052	(2,887)	(0.50) %
Agricultural Experiment Station	17,514,358	50%	1,065,708	8,810,909	8,760,780	50,129	0.57 %
UWRL Appropriation	4,090,109	40%	216,499	1,635,167	1,234,651	400,516	32.44 %
UWRL Apportionment	2,771,636	34%	114,655	954,381	1,530,445	(576,064)	(37.64) %
Tooele - Cont. Ed. Center	13,166,498	64%	685,062	8,416,711	8,188,011	228,700	2.79 %
Educationally Disadvantaged	100,000	91%	790	90,568	67,065	23,503	35.05 %
Southeastern Utah - Cont. Ed. Center	2,668,393	70%	156,485	1,867,958	1,752,620	115,338	6.58 %
Uintah Basin - Cont. Ed. Center	6,981,068	63%	400,402	4,415,779	4,261,207	154,572	3.63 %
Cooperative Extension	21,636,691	41%	1,197,323	8,934,569	8,218,516	716,053	8.71 %
Brigham City - Cont. Ed. Center	19,476,168	63%	1,849,591	12,336,623	8,105,474	4,231,149	52.20 %
USTAR	238	0%	-	-	(10,819)	10,819	100.00 %
E&G - Vet Med	9,705,474	37%	276,180	3,545,528	3,536,728	8,800	0.25 %
Price (USU Eastern)	15,849,336	55%	1,046,961	8,784,884	8,519,213	265,671	3.12 %
Blanding Campus (USU Eastern)	4,416,298	57%	304,579	2,505,606	2,603,138	(97,532)	(3.75) %
Educationally Disadvantaged (USU Eastern)	112,449	41%	7,204	46,496	7,434	39,062	525.45 %
Prehistoric Museum (USU Eastern)	485,592	64%	38,139	309,813	289,634	20,179	6.97 %
Workforce Education (USU Eastern)	1,505,147	57%	98,004	856,403	897,615	(41,212)	(4.59) %
Total State Appropriated Funds	<u>\$394,592,338</u>	58%	<u>\$28,067,256</u>	<u>\$228,128,157</u>	<u>\$208,456,114</u>	<u>\$19,672,043</u>	9.44 %
 Total State Appropriated Funds 2016-2017	 <u>\$377,960,387</u>						
 Increase from 2016-2017	 <u>\$16,631,951</u>						
 Percent Increase from 2016-2017	 <u>4.40%</u>						

	1-Feb-18 28-Feb-18	Year to Date	Prior Year to Date	Increase (Decrease) from Prior Year	Percent Increase (Decrease) from Prior Year
<b>Other Unrestricted Funds</b>					
Overhead Reimbursement for R & D	\$1,132,199	\$8,167,461	\$7,185,198	\$982,263	13.67 %
Designated	5,370,736	48,331,144	49,313,983	(982,839)	(1.99) %
Service Departments	4,503,190	38,127,902	33,577,979	4,549,923	13.55 %
Auxiliary Enterprises (Except Athletics)	2,922,392	25,783,859	25,721,956	61,903	0.24 %
Athletics - USU	1,520,071	15,000,527	13,499,820	1,500,707	11.12 %
	<u>15,448,588</u>	<u>135,410,893</u>	<u>129,298,936</u>	<u>6,111,957</u>	4.73 %
<b>Other Restricted Funds</b>					
Instruction	1,478,290	13,198,824	11,670,434	1,528,390	13.10 %
Research	4,384,214	36,397,911	37,655,056	(1,257,145)	(3.34) %
Public Service	5,583,553	33,284,440	30,122,424	3,162,016	10.50 %
Academic Support	492,617	5,113,630	4,523,911	589,719	13.04 %
Student Services	731,516	6,813,446	5,778,809	1,034,637	17.90 %
Institutional Support	41,803	1,097,646	1,234,806	(137,160)	(11.11) %
Operation and Maintenance of Plant	10,519	(53,182)	235,350	(288,532)	(122.60) %
Scholarships and Fellowships	773,106	55,909,296	54,025,257	1,884,039	3.49 %
Service Departments	8,303	18,390	6,295	12,095	192.14 %
Auxiliary Enterprises	138,273	(458,261)	(215,704)	(242,557)	(112.45) %
	<u>13,642,194</u>	<u>151,322,140</u>	<u>145,036,638</u>	<u>6,285,502</u>	4.33 %
<b>Other Funds</b>					
Plant Funds	12,172,379	44,743,047	34,102,724	10,640,323	31.20 %
Associated Students	-	-	-	-	- %
Other Agency Funds	8,583	92,695	169,102	(76,407)	(45.18) %
	<u>12,180,962</u>	<u>44,835,742</u>	<u>34,271,826</u>	<u>10,563,916</u>	30.82 %
<b>Total All Funds</b>	<u>\$69,339,000</u>	<u>\$559,696,932</u>	<u>\$517,063,514</u>	<u>\$42,633,418</u>	8.25 %

6/5/18  
Date

  
David T. Cowley

## **ITEM FOR ACTION**

**RE:** Delegation/Administrative Reports – 03/23/18 to 04/20/18

Utah State University has been given authority by the Division of Facilities Construction and Management (DFCM) to exercise direct supervision of the design and construction of all alterations, repairs, and improvements to existing facilities on individual projects with budgets of less than \$4 million. The supervision of new construction can also be delegated to USU on a project-by-project basis and can exceed the \$4 million amount. As part of the delegation authority, administrative reports are prepared by USU and presented to the Utah State Building Board at each of its meetings. The monthly format of USU's reports is similar to that of the DFCM's reports presenting professional and construction contracts issued during the reporting period, contingency and project reserves status, and a delegated projects list showing budget and status. On a quarterly basis, additional reports are prepared showing contingency fund cumulative transfers, a summary of the statewide (paving) account, and a construction contract status. The Board of Regents has transferred its authority to review the delegation/ administrative reports to the Board of Trustees.

The reports have received the appropriate administrative review and approval.

## **EXECUTIVE SUMMARY**

The following is a summary of the administrative reports for USU for the period to 03/23/18 to 04/20/18.

**Professional Contracts, 3 contracts issued** (Page 1)

Comments are provided on the report.

**Construction Contracts, 11 contracts issued** (Page 2)

Comments are provided on the report.

**Report of Contingency Reserve Fund** (Page 3)

No projects contributed to or needed funds from the contingency reserve fund during this reporting period. Based on an internal risk assessment, the University finds this fund's balance to be adequate.

**Report of Project Reserve Fund Activity** (Page 4)

Two projects contributed to and two projects needed funds from the reserve fund during this reporting period. Based on an internal risk assessment, the University finds this fund's balance to be adequate.

**Current Delegated Projects List** (Pages 5-7)

Of USU's 75 projects, 6 are pending, 13 are in the design/study phase, 32 are in construction, 20 are substantially complete and 4 are complete. The four projects completed during this period were PDP Air Handling Units, South Farm Loafing Shed, Stairs Replacement N Terrace and Univ. Inn/Widtsoe Steam Line Replacement.

## **RECOMMENDATION**

The President and Vice President for Business and Finance recommend that the delegation/ administrative reports for the current reporting period be approved as presented.

**RESOLUTION  
UTAH STATE UNIVERSITY  
BOARD OF TRUSTEES**

WHEREAS, The Utah Legislature appropriates state funds through the Division of Facilities Construction and Management to Utah State University for the purpose of capital improvements; and

WHEREAS, The Division of Facilities Construction and Management has delegated its authority to exercise direct supervision of the design and construction of such capital improvements to Utah State University; and

WHEREAS, Non-state funded projects with budgets of less than \$4 million are also delegated to Utah State University; and

WHEREAS, Projects in excess of \$4 million can also be delegated to Utah State University with specific approval of the Utah State Building board; and

WHEREAS, Utah State University presents reports on the status of all its delegated projects to the Utah State Building Board on a regular basis; and

WHEREAS, The State Board of Regents has transferred its authority to review the delegation/administrative reports to the Board of Trustees; and

WHEREAS, The President and Vice President for Business and Finance have reviewed the delegation/administrative reports for the current reporting period and recommend approval of the reports to the Board of Trustees; and

WHEREAS, The Board of Trustees has reviewed and given due consideration to the delegation/administrative reports:

NOW, THEREFORE, BE IT RESOLVED, That the USU Board of Trustees hereby approves the delegation/administrative reports as presented.

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RESOLUTION APPROVED BY THE USU BOARD OF TRUSTEES

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Date

**Professional Contracts  
Awarded From 03/23/18 to 04/20/18**

Project Name	Firm Name	A/E Budget	Fee Amount	Comments
1 Planning & Design FY18	Design Workshop	\$175,000.00	\$66,750.00	Design services for 700 N Roadway
2 NFS Lab Ventilation Replacement	Van Boerum & Frank	\$84,769.00	\$28,300.00	Mechanical and plumbing engineering services
<b>MISCELLANEOUS CONTRACTS</b>				
3 Health, LS, Code, Asbestos FY18	Dixon Information	\$146,599.00	\$300.00	Bulk samples Alumni, Educ, HPER

## Construction Contracts Awarded From 03/23/18 to 04/20/18

Project	Firm Name	Design Firm	Const Budget	Contract Amt	Comments
1 Parking Lot Paving FY18	Spindler Construction	CRS Engineers	\$531,990.00	\$384,666.00	Paving services Facilities
2 Emergency Generator FY15	DWA Construction	USU Facilities Planning and Design	\$217,077.00	\$217,077.00	Building generator enclosure NFS
3 BCC Trail and Historical Bldg	Staker & Parson	Cache Landmark	\$179,550.00	\$146,200.00	Construction services Brigham City
4 Education Suite 413 Remodel	USU Facilities Planning and Design	USU Facilities Planning and Design	\$143,594.00	\$137,428.00	Construction services Educ
5 Hydraulics Lab Landscape FY17	Spindler Construction	Design West	\$118,357.00	\$102,220.00	Landscaping services UWRL
6 Health, LS, Code, Asbestos FY18	USU Facilities Planning and Design	USU Facilities Planning and Design	\$146,599.00	\$31,323.00	Snow guards JQL, storage Campus Stores
7 USUE Blanding Housing Fire Safety	Forsythe Fire	Spectrum Engineers	\$102,149.00	\$2,454.00	Diagnostics fire alarm system Blanding
8 Sign System FY15	USU Facilities Planning and Design	USU Facilities Planning and Design	\$41,483.00	\$119.00	Building sign replacement
<b>MISCELLANEOUS CONTRACTS</b>					
9 Medium Voltage Upgrade FY17	Solomon Corporation		\$1,268,163.00	\$4,170.00	Recondition 3 transformers
10 Concrete Replacement FY18	Abstract Masonry		\$371,390.00	\$1,891.00	Masonry restoration Old Main
11 Health, LS, Code, Asbestos FY18	Environmental Abatement		\$146,599.00	\$800.00	Asbestos abatement Maeser 275

**Report of Contingency Reserve Fund  
From 03/23/18 to 04/20/18**

Project Title	Current Transfers	Total Transfers To (From) Contingency	% to Construction Budget	Project Status	% Completed (Paid)
<b>BEGINNING BALANCE</b>	\$91,293.65				
<b>INCREASES TO CONTINGENCY RESERVE FUND</b>					
None					
<b>DECREASES FROM CONTINGENCY RESERVE FUND</b>					
None					
<b>ENDING BALANCE</b>	\$91,293.65				



**Report of Project Reserve Fund Activity  
From 03/23/18 to 04/20/18**

Project Title	Transfer Amount	Description	% of Construction Budget
<b>BEGINNING BALANCE</b>	<b>\$687,245.57</b>		
<b>INCREASES TO PROJECT RESERVE FUND</b>			
Univ Inn/Widtsoe Steam Line Replacement	24,282.00	Close project	32.38%
Stairs Replacement N Terrace	919.03	Close project	0.34%
<b>DECREASES TO PROJECT RESERVE FUND</b>			
Parking Lot Paving FY18	(146,565.46)	Award contract	39.25%
Hydraulics Lab Landscape FY17	(35,324.00)	Award contract	42.98%
<b>ENDING BALANCE</b>	<b>\$530,557.14</b>		

## Current Delegated Projects List

04/20/18

Project Number	Project Name	Phase	Project Budget
<b>CAPITAL DEVELOPMENT/IMPROVEMENT</b>			
A28999	Building Commissioning FY14	Sub Completion	196,296
A29004	Emergency Generator FY14	Sub Completion	250,390
A31325	Emergency Generator FY15	Construction	229,872
A31328	HVAC Controls Upgrade FY15	Pending	228,311
A31333	Planning & Design FY15	Sub Completion	175,075
A31334	Sign System FY15	Sub Completion	47,193
A31335	Site & Safety Lighting	Construction	322,525
A34107	Kaysville Building Addition	Sub Completion	3,321,185
A34283	Chilled Water Infrastructure FY16	Construction	357,878
A34284	Classroom/Auditorium Upgrades FY16	Construction	292,487
A34285	Concrete Replacement FY16	Construction	243,096
A34287	Health, LS, Code, Asbestos FY16	Sub Completion	191,004
A34294	Planning & Design FY16	Sub Completion	129,790
A34296	South Farm Fire Lane/Hydrants FY16	Construction	436,467
A34298	UBC Infrastructure Improvements	Sub Completion	1,193,514
A34299	Univ Inn/Widstoe Steam Line Replacement	Complete	50,718
A34300	VCT Tile Replacement in Hallways	Construction	331,255
A34301	Vet Science Electrical Upgrade FY16	Design	98,753
A35569	Townhouse Stucco Proj Bldg 3	Pending	139,470
A35676	Merrill Cazier Lib Testing Ctr	Construction	2,108,650
A35677	PDP Air Handling Units	Complete	429,879
A35971	PDP Refreshment	Sub Completion	793,929
A36118	Utility Meter Upgrades FY16	Construction	91,500
A36468	Hydraulics Lab Landscape FY17	Construction	128,357
A36469	Medium Voltage Upgrade FY17	Construction	1,268,163
A36734	Classroom Upgrades FY17	Construction	295,598
A36736	Bike Racks/Site Furn FY17	Construction	45,662
A36738	Health, LS, Code, Asbestos FY17	Sub Completion	139,916
A36740	FAV Photo Lab Safety Ventilation	Sub Completion	370,524
A36741	Planning & Design FY17	Design/Study	85,457

A36742	Univ Inn to Widstoe Steamline-Construction	Sub Completion	1,022,331
A37302	South Farm New Dairy Barn	Construction	2,282,776
A38008	Blue Square Parking Expansion	Sub Completion	559,564
A38143	Student Organic Farm Facility	Design	146,666
A38594	Lillywhite Interior Remodel	Design	1,686,568
A38598	Edith Bowen Playground	Construction	413,300
A38777	IC Irrigation Trunk Line	Construction	394,141
A38903	Education Suite 109 Remodel	Sub Completion	419,173
A39004	HPER Admin/Nursing Remodel	Sub Completion	466,251
A39185	Medium Voltage Upgrade FY18	Construction	1,493,182
A39186	Planning & Design FY18	Design/Study	175,000
A39187	Health, LS, Code, Asbestos FY18	Construction	146,599
A39188	Concrete Replacement FY18	Construction	381,255
A39189	Bike Racks/Site Furn FY18	Construction	54,795
A39190	Sign System FY18	Pending	45,662
A39191	Classroom Upgrades FY18	Construction	183,907
A39192	Stairs Replacement N Terrace	Complete	569,764
A39193	NFS Lab Ventilation Replace	Pending	950,154
A39194	Parking Lot Paving FY18	Construction	562,020
A39195	Parking Lot Repair & Seal	Construction	138,027
A39196	Champ/OM Hill Sewer Line Repl	Design	1,299,200
A39197	Water Lab Front Bridge	Design	50,000
A39198	SE Sidewalks & Safety Lighting	Construction	792,213
A39202	Lighting Control Upgrade	Design	69,209
A39203	Campus Mapping	Design	200,000
A39204	Bio Tech Lab Controls	Design	462,135
A39205	NR Fire Alarm Upgrade	Pending	138,418
A39206	SDL Fire Alarm Upgrade	Pending	166,101
A39207	Ray B. West Reroof	Construction	414,651
A39502	SLC Campus Relocation	Construction	4,945,295
A40010	Education Atrium Remodel	Sub Completion	421,681
A40454	Tooele Landscape Improvements	Design	170,104
A40585	Education 413 Remodel	Construction	185,490
A40762	Campus Wide Metering	Construction	92,283
A40823	BCC Trail & Historical Bldg	Construction	200,000
A40833	South Farm Loafing Shed	Complete	154,737
A40847	USTAR Autoclave Installation	Sub Completion	104,739
A41399	Technology Shop Renovation	Design	156,450
A41400	Aggie Chocolate Factory	Construction	36,950

C11461 USUE Infrastructure/Automation Upgrade  
 C11508 USUE Career Center Upgrades  
 C11614 USUE Blanding Campus Mechanical FY16  
 C11615 USUE Geary Theatre Bldg Upgrades  
 C11709 USUE Soccer Fields  
 C11781 USUE Blanding Housing Fire Safety  
**TOTAL (75)**

Construction	461,857
Sub Completion	1,071,941
Construction	50,073
Sub Completion	7,103,037
Sub Completion	796,444
Design	170,400
	<u>\$45,797,457</u>

## **ITEM FOR ACTION**

**RE:** Delegation/Administrative Reports –04/20/18 to 05/25/18

Utah State University has been given authority by the Division of Facilities Construction and Management (DFCM) to exercise direct supervision of the design and construction of all alterations, repairs, and improvements to existing facilities on individual projects with budgets of less than \$4 million. The supervision of new construction can also be delegated to USU on a project-by-project basis and can exceed the \$4 million amount. As part of the delegation authority, administrative reports are prepared by USU and presented to the Utah State Building Board at each of its meetings. The monthly format of USU's reports is similar to that of the DFCM's reports presenting professional and construction contracts issued during the reporting period, contingency and project reserves status, and a delegated projects list showing budget and status. On a quarterly basis, additional reports are prepared showing contingency fund cumulative transfers, a summary of the statewide (paving) account, and a construction contract status. The Board of Regents has transferred its authority to review the delegation/ administrative reports to the Board of Trustees.

The reports have received the appropriate administrative review and approval.

## **EXECUTIVE SUMMARY**

The following is a summary of the administrative reports for USU for the period 04/20/18 to 05/25/18.

**Professional Contracts, 13 contracts issued** (Page 1)

Comments are provided on the report.

**Construction Contracts, 11 contracts issued** (Page 2)

Comments are provided on the report.

**Report of Contingency Reserve Fund** (Page 3)

One project needed funds from and no projects contributed to the contingency reserve fund during this reporting period. Based on an internal risk assessment, the University finds this fund's balance to be adequate.

**Report of Project Reserve Fund Activity** (Page 4)

Four projects contributed to and five projects needed funds from the reserve fund during this reporting period. Based on an internal risk assessment, the University finds this fund's balance to be adequate.

**Current Delegated Projects List** (Pages 5-7)

Of USU's 73 projects, 5 are pending, 11 are in the design/study phase, 37 are in construction, 14 are substantially complete and 6 are complete. The six projects completed during this period were FAV Photo Lab Safety Ventilation, HPER Admin/Nursing Remodel, PDP Refreshment, Site & Safety Lighting, Univ Inn to Widtsoe Steam Line and USUE Career Center Upgrades.

## **RECOMMENDATION**

The President and Vice President for Business and Finance recommend that the delegation/ administrative reports for the current reporting period be approved as presented.

**RESOLUTION  
UTAH STATE UNIVERSITY  
BOARD OF TRUSTEES**

WHEREAS, The Utah Legislature appropriates state funds through the Division of Facilities Construction and Management to Utah State University for the purpose of capital improvements; and

WHEREAS, The Division of Facilities Construction and Management has delegated its authority to exercise direct supervision of the design and construction of such capital improvements to Utah State University; and

WHEREAS, Non-state funded projects with budgets of less than \$4 million are also delegated to Utah State University; and

WHEREAS, Projects in excess of \$4 million can also be delegated to Utah State University with specific approval of the Utah State Building board; and

WHEREAS, Utah State University presents reports on the status of all its delegated projects to the Utah State Building Board on a regular basis; and

WHEREAS, The State Board of Regents has transferred its authority to review the delegation/administrative reports to the Board of Trustees; and

WHEREAS, The President and Vice President for Business and Finance have reviewed the delegation/administrative reports for the current reporting period and recommend approval of the reports to the Board of Trustees; and

WHEREAS, The Board of Trustees has reviewed and given due consideration to the delegation/administrative reports:

NOW, THEREFORE, BE IT RESOLVED, That the USU Board of Trustees hereby approves the delegation/administrative reports as presented.

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RESOLUTION APPROVED BY THE USU BOARD OF TRUSTEES

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Date

**Professional Contracts  
Awarded From 04/20/18 to 05/25/18**

Project Name	Firm Name	A/E Budget	Fee Amount	Comments
1 Parking Lot Paving FY19	CRS Consulting	\$69,700.00	\$69,700.00	Engineering design parking lot - Spectrum
2 May Swenson House	Method Studio	\$55,000.00	\$51,920.00	Design services Swenson House and cafe
3 Concrete Replacement FY19	Cache Landmark	\$36,742.00	\$26,855.00	Engineering design sidewalk & lighting 1000 N
4 FAC Concrete Panel Replacement	Bott Pantone Architects	\$30,256.00	\$18,000.00	Structural, civil and landscape design services FA
5 Rock Garden Landscape	Design West	\$16,553.00	\$16,553.00	Landscape design services
6 USU Reservoir Pump Station	Forsgren	\$24,196.00	\$9,300.00	Electrical and engineering design services
<b>MISCELLANEOUS CONTRACTS</b>				
7 Planning & Design FY19	MHTN	\$175,000.00	\$10,980.00	Study Computer Science relocation to SER
8 Health, LS, Code, Asbestos FY18	R&R Environmental	\$146,599.00	\$5,250.00	Hazardous materials survey Tech Bldg
9 Champ OM Hill Sewer Line Repl	CMT Engineering	\$5,000.00	\$3,733.00	Soils and concrete testing and inspections
10 Planning & Design FY18	Method Studio	\$175,000.00	\$3,310.00	Civil engineering services N Core District
11 Parking Lot Paving FY18	Utah Testing and Engineering	\$4,500.00	\$2,537.00	Materials testing and inspection services Facilities
12 Lillywhite Interior Remodel	Utah Testing and Engineering	\$31,182.00	\$1,288.00	Soils, concrete & structural testing & inspections
13 Health, LS, Code, Asbestos FY18	Dixon Information	\$146,599.00	\$435.00	Bulk samples Caine Home, Alumni and Lundberg

## Construction Contracts Awarded From 04/20/18 to 05/25/18

Project	Firm Name	Design Firm	Const Budget	Contract Amt	Comments
1 Lillywhite Interior Remodel	Raymond Construction	Jacoby Architects	\$1,345,552.00	\$1,345,552.00	Construction services interior remodel
2 Champ OM Hill Sewer Line Repl	Jacobsen Construction	Forsgren	\$1,200,000.00	\$1,054,590.00	Construction services sewer line
3 Ray B. West Reroof	Jacobsen Construction	Design West	\$771,689.00	\$757,479.00	Construction services roof replacement
4 Bio Tech Lab Controls	Advanced Heating & Air	Colvin Engineering	\$409,357.00	\$406,950.00	Construction services controls upgrade
5 USUE Infrastructure Automation	Lundahl Building	Van Boerum & Frank	\$448,380.00	\$274,091.00	Mechanical upgrades USUE utility plant
6 UBC Infrastructure Improvements	R&O Construction	Cache Landmark	\$1,129,904.00	\$38,460.00	Irrigation improvements
7 Concrete Replacement FY16	USU Facilities Planning and Design	USU Facilities Planning and Design	\$221,096.00	\$20,867.00	Concrete replacement LOAM
<b>MISCELLANEOUS CONTRACTS</b>					
8 HVAC Controls Upg FY15	Advanced Heating & Air		\$229,140.00	\$229,140.00	Mechanical controls
9 Edith Bowen Playground	Great Western Park & Playground		\$239,148.00	\$205,417.00	Playground equipment and installation
10 Classroom Upgrades FY18	Perlmutter		\$169,400.00	\$29,146.00	Classroom screens OM, RBW
11 Health, LS, Code, Asbestos FY19	Eagle Environmental		\$129,370.00	\$3,849.00	Asbestos removal



**Report of Contingency Reserve Fund  
From 04/20/18 to 05/25/18**

Project Title	Current Transfers	Total Transfers To (From) Contingency	% to Construction Budget	Project Status	% Completed (Paid)
<b>BEGINNING BALANCE</b>	\$91,293.65				
<b>INCREASES TO CONTINGENCY RESERVE FUND</b>					
None					
<b>DECREASES FROM CONTINGENCY RESERVE FUND</b>					
<b>Parking Lot Paving FY18</b> (remove and replace additional asphalt Facilities)	(12,659.97)	(12,659.97)	3.39%	Construction	27.05%
<b>ENDING BALANCE</b>	\$78,633.68				

**Report of Project Reserve Fund Activity  
From 04/20/18 to 05/25/18**

Project Title	Transfer Amount	Description	% of Construction Budget
<b>BEGINNING BALANCE</b>	<b>\$530,557.14</b>		
<b>INCREASES TO PROJECT RESERVE FUND</b>			
FAV Photo Lab Safety Ventilation	85,800.72	Close project	25.61%
Site & Safety Lighting	29,626.11	Close project	9.97%
Univ Inn to Widtsoe Steamline	32,816.60	Close project	4.26%
USUE Career Center Upgrades	4,249.20	Close project	0.58%
<b>DECREASES TO PROJECT RESERVE FUND</b>			
HVAC Controls FY15	(829.00)	Award contract	0.36%
Lillywhite Interior Remodel	(36,784.00)	Award contract	2.88%
Ray B. West Reroof	(33,099.41)	Award contract	4.32%
UBC Infrastructure Improvements	(22,916.96)	Award contract	2.14%
USUE Infrastructure Automation	(50,978.00)	Award contract	12.36%
<b>ENDING BALANCE</b>	<b>\$538,442.40</b>		



## Current Delegated Projects List

05/25/18

Project Number	Project Name	Phase	Project Budget
<b>CAPITAL DEVELOPMENT/IMPROVEMENT</b>			
A28999	Building Commissioning FY14	Construction	196,296
A29004	Emergency Generator FY14	Sub Completion	250,390
A31325	Emergency Generator FY15	Construction	229,872
A31328	HVAC Controls Upgrade FY15	Construction	229,140
A31333	Planning & Design FY15	Sub Completion	175,075
A31334	Sign System FY15	Sub Completion	47,193
A31335	Site & Safety Lighting	Complete	292,899
A34107	Kaysville Building Addition	Sub Completion	3,321,185
A34283	Chilled Water Infrastructure FY16	Construction	357,878
A34284	Classroom/Auditorium Upgrades FY16	Construction	292,487
A34285	Concrete Replacement FY16	Construction	243,096
A34287	Health, LS, Code, Asbestos FY16	Sub Completion	191,004
A34294	Planning & Design FY16	Sub Completion	129,790
A34296	South Farm Fire Lane/Hydrants FY16	Construction	436,467
A34298	UBC Infrastructure Improvements	Construction	1,216,431
A34300	VCT Tile Replacement in Hallways	Construction	331,255
A34301	Vet Science Electrical Upgrade FY16	Design	98,753
A35569	Townhouse Stucco Proj Bldg 3	Pending	139,470
A35676	Merrill Cazier Lib Testing Ctr	Sub Completion	2,108,650
A35971	PDP Refreshment	Complete	775,944
A36118	Utility Meter Upgrades FY16	Construction	91,500
A36468	Hydraulics Lab Landscape FY17	Construction	128,357
A36469	Medium Voltage Upgrade FY17	Construction	1,268,163
A36734	Classroom Upgrades FY17	Construction	295,598
A36736	Bike Racks/Site Furn FY17	Construction	45,662
A36738	Health, LS, Code, Asbestos FY17	Sub Completion	139,916
A36740	FAV Photo Lab Safety Ventilation	Complete	284,723
A36741	Planning & Design FY17	Design/Study	85,457
A36742	Univ Inn to Widstoe Steamline-Construction	Complete	989,514
A37302	South Farm New Dairy Barn	Construction	2,282,776

A38008	Blue Square Parking Expansion	Sub Completion	559,564
A38143	Student Organic Farm Facility	Design	146,666
A38594	Lillywhite Interior Remodel	Construction	1,779,648
A38598	Edith Bowen Playground	Construction	413,300
A38777	IC Irrigation Trunk Line	Construction	394,141
A38903	Education Suite 109 Remodel	Sub Completion	419,173
A39004	HPER Admin/Nursing Remodel	Complete	464,928
A39185	Medium Voltage Upgrade FY18	Construction	1,493,182
A39186	Planning & Design FY18	Design/Study	175,000
A39187	Health, LS, Code, Asbestos FY18	Construction	146,599
A39188	Concrete Replacement FY18	Construction	381,255
A39189	Bike Racks/Site Furn FY18	Construction	54,795
A39190	Sign System FY18	Pending	45,662
A39191	Classroom Upgrades FY18	Construction	183,907
A39193	NFS Lab Ventilation Replace	Design	950,154
A39194	Parking Lot Paving FY18	Construction	574,680
A39195	Parking Lot Repair & Seal	Construction	138,027
A39196	Champ/OM Hill Sewer Line Repl	Construction	1,299,200
A39197	Water Lab Front Bridge	Design	50,000
A39198	SE Sidewalks & Safety Lighting	Construction	792,213
A39202	Lighting Control Upgrade	Design	69,209
A39203	Campus Mapping	Design	200,000
A39204	Bio Tech Lab Controls	Construction	462,135
A39205	NR Fire Alarm Upgrade	Pending	138,418
A39206	SDL Fire Alarm Upgrade	Pending	166,101
A39207	Ray B. West Reroof	Construction	867,750
A39502	SLC Campus Relocation	Construction	4,945,295
A40010	Education Atrium Remodel	Sub Completion	421,681
A40454	Tooele Landscape Improvements	Design	170,104
A40585	Education 413 Remodel	Construction	185,490
A40762	Campus Wide Metering	Construction	92,283
A40823	BCC Trail & Historical Bldg	Construction	244,223
A40847	USTAR Autoclave Installation	Sub Completion	104,739
A41399	Technology Shop Renovation	Design	156,450
A41400	Aggie Chocolate Factory	Construction	273,810
A41702	South Farm Beef Barn (NEW PROJECT)	Pending	480,000
A41801	May Swenson House (NEW PROJECT)	Design	800,000
C11461	USUE Infrastructure/Automation Upgrade	Construction	512,835
C11508	USUE Career Center Upgrades	Complete	1,067,692

C11614	USUE Blanding Campus Mechanical FY16	Construction	50,073
C11615	USUE Geary Theatre Bldg Upgrades	Sub Completion	7,103,037
C11709	USUE Soccer Fields	Sub Completion	796,444
C11781	USUE Blanding Housing Fire Safety	Construction	170,400
<b>TOTAL (73)</b>			<u><u>\$46,615,204</u></u>

22 June 2018

**ITEM FOR ACTION**

**RE:** Faculty and Staff Adjustments

The attached faculty and staff adjustments are submitted for the Trustees consideration. They have received the appropriate administrative review and approval.

**EXECUTIVE SUMMARY**

The faculty and staff adjustments include eleven (11) changes in title or assignment; and one (1) new appointment.

**RECOMMENDATION**

The President and Provost recommend that the Board of Trustees approve the attached faculty and staff adjustments.

**RESOLUTION  
UTAH STATE UNIVERSITY  
BOARD OF TRUSTEES**

WHEREAS, The President and the Provost recommend that the Board of Trustees approve eleven (11) changes in title or assignment; and one (1) new appointment.

NOW, THEREFORE, BE IT RESOLVED, That the USU Board of Trustees hereby approve the recommendation of the faculty and staff adjustments.

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RESOLUTION APPROVED BY THE USU BOARD OF TRUSTEES:

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Date

## **Faculty and Staff Adjustments**

### **a. Change in Title or Assignment**

#### **Office of the Executive Vice President and Provost**

Thomas R. Lee, Dean and Executive Director, Brigham City Regional Campus, Office of the Executive Vice President and Provost, and Professor, Department of Human Development and Family Studies, Emma Eccles Jones College of Education and Human Services, to be Director of Academic Programs for Regional Campuses and USU Eastern and Professor of the same; effective 01 July 2018; Salary to be \$109,088/12-months/.6 FTE (phased retirement).

#### **Office of the Vice President for Research and Graduate Studies**

Alexa K. Sand, Professor, Department of Art and Design, Caine College of the Arts, to be Associate Vice President and Associate Dean, Office of Research and Graduate Studies, and Professor, Department of Art and Design; effective 01 July 2018; replacing Scott C. Bates. Change in salary to \$120,000/12-months.

#### **Office of the Vice President for Business and Finance**

Reed S. Capener, Coordinator of Programs III, Division of Athletics, to be Director, Event Services, Office of the Vice President for Business and Finance; effective 15 May 2018. This is a newly created department and position. Change in salary to \$65,000/12-months.

#### **Jon M. Huntsman School of Business**

James H. Davis, Department Head and Dr. Vernon Maughan Buehler and MaRee C. Buehler Endowed Professor, Department of Management, Jon M. Huntsman School of Business, to be Department Head of newly established Department of Marketing and Strategy, and Executive Director of the Stephen R. Covey Center for Leadership, and Buehler Endowed Professor of Management, Jon M. Huntsman School of Business; effective 01 July 2018. No change in salary.

Vijay R. Kannan, Associate Dean for Academic Affairs and Professor, Department of Management, Jon M. Huntsman School of Business, to be Department Head and Dr. Vernon Maughan Buehler and MaRee C. Buehler Endowed Professor of the same; effective 01 July 2018. Change in salary to \$218,787/12-months.

Merideth J. Thompson, Associate Professor, Department of Management, Jon M. Huntsman School of Business, to be Associate Dean for Academic Affairs and Professor of the same; effective 01 July 2018; replacing Vijay Kannan. Change in salary to \$214,635/12 months.

Christopher J. Skousen, Associate Department Head and Associate Professor, School of Accountancy, Jon M. Huntsman School of Business, to be Department Head and Professor of the same; effective 01 July 2018; replacing Larry Walther. Change in salary to \$244,571/12 months.



### **College of Engineering**

Jagath J. Kaluarachchi, Interim Dean and Professor, College of Engineering, Department of Civil and Environmental Engineering, to be Dean and Professor of the same; effective 01 July 2018. Change in salary to \$230,000/12-months.

### **College of Science**

Diane G. Alston, Professor, Department of Biology, College of Science, to be Department Head and Professor of the same; effective 01 July 2018; replacing Alan H. Savitzky. Change in salary to \$158,213/12-months/.9167 FTE.

Michelle A. Baker, Professor, Department of Biology, College of Science, to be Associate Dean for Research and Faculty\* and Professor of the same; effective 15 June 2018; replacing Lisa M. Berreau. Change in salary to \$138,865/12-months/.9167 FTE.

Sean J. Johnson, Associate Professor, Department of Chemistry and Biochemistry, College of Science, to be Associate Dean for Graduate Studies\* and Professor of the same; effective 15 June 2018; replacing Lisa M. Berreau. Change in salary to \$110,388/12-months/.9167 FTE.

*\*These two positions are replacing the Executive Associate Dean position, which is being eliminated.*

## **b. New Appointments**

### **Emma Eccles Jones College of Education and Human Services**

Parker C. Fawson, Emma Eccles Jones Endowed Chair in Early Childhood and Director of the Center for the School of the Future and Professor with tenure, Emma Eccles Jones College of Education and Human Services, School of Teacher Education and Leadership; effective 1 August 2018; replacing D. Ray Reutzel. B.A. Weber State University, 1983; M.Ed. Brigham Young University, 1986; Ed.D. Brigham Young University. Salary to be \$150,000/9-month.

**ITEM FOR ACTION**

RE: Report of Investments for February 2018

The Report of Investments for February 2018 is submitted to the Board of Trustees for consideration. It has received the appropriate administrative review and approval.

**EXECUTIVE SUMMARY**

This set of investment reports presents investment activity for February 2018 and comparative year-to-date totals for FY 2017-2018 and FY 2016-2017.

**CASH MANAGEMENT INVESTMENT POOL**

The average daily fair value invested during February 2018 was \$365,319,476, up \$9,622,838 over January 2018. Total investment loss was \$225,645, up \$1,662,679 over January 2018, reflecting the increase in the amount available for investing and an increase in total investment return. The annualized total investment return was -0.74%, up 5.63% over January 2018.

Year-to-date numbers show that the average daily fair value invested for FY 2017-2018 was \$337,368,430, up \$9,455,463 (2.88%) over FY 2016-2017. Total interest income for FY 2017-2018 amounted to \$5,047,994, up \$1,037,749 (25.88%) over FY 2016-2017, reflecting an increase in the amount available for investing and an increase in interest rates.

The total amount invested at 28 February 2018 was \$357,531,831, down \$4,284,805 (1.18%) from 28 February 2017.

**ENDOWMENT POOL**

The average daily fair value invested during February 2018 was \$186,239,040, up \$1,489,143 over January 2018. Interest and dividend income of \$122,617 plus net realized gains of \$14,526 totaled \$137,143 in realized income for the month.

Year-to-date numbers show that the average daily fair value invested for FY 2017-2018 was \$177,136,698, up \$24,717,620 (16.22%) over FY 2016-2017. Total realized income for FY 2017-2018 was \$3,920,880, up \$1,595,759 (68.63%) over FY 2016-2017. This increase resulted from \$477,525 more in interest and dividends and \$1,118,234 more net realized gains during FY 2017-2018.

The total amount invested at 28 February 2018 was \$184,218,704, up \$18,101,097 (10.90%) over 28 February 2017.

## OTHER INVESTMENTS

The average daily fair value invested during February 2018 was \$117,515,856, down \$1,019,782 from January 2018. Interest and dividend income of \$357,331 plus net realized gains of \$3,389 totaled \$360,720 in realized income for the month.

Year-to-date numbers show that the average daily fair value invested for FY 2017-2018 was \$115,486,308, up \$16,143,741 (16.25%) over FY 2016-2017. Total realized income for FY 2017-2018 was \$3,166,525, up \$263,300 (9.07%) over FY 2016-2017. This increase resulted from \$518,714 more in interest and dividend income and \$255,414 more in net realized losses during FY 2017-2018.

The total amount invested at 28 February 2018 was \$116,940,967, up \$15,475,473 (15.25%) over 28 February 2017.

## ENDOWMENT TRUSTS

The average daily fair value invested during February 2018 was \$6,090,142 down \$113,159 from January 2018. Interest and dividend income of \$29,141 minus net realized losses of \$29,024 totaled \$117 in realized income for the month.

Year-to-date numbers show that the average daily fair value invested for FY 2017-2018 was \$6,015,409, up \$248,762 (4.31%) over FY 2016-2017. Total realized income for FY 2017-2018 was \$390,584, up \$83,145 (27.04%) over FY 2016-2017. This increase resulted from \$10,636 less interest and dividend income and \$93,781 more net realized gains during FY 2017-2018.

The total amount invested at 28 February 2018 was \$5,916,670, down \$212,173 (3.46%) from 28 February 2017.

## PLANT FUND TRUSTS

The average daily fair value invested during February 2018 was \$10,201,687, down \$2,673,585 from January 2018. Interest income totaled \$14,086 in realized income for the month.

Year-to-date numbers show that the average daily fair value invested for 2017-2018 was \$20,679,425, down \$36,260,607 (63.68%) from FY 2016-2017. Total realized income for 2017-2018 was \$377,953, down \$68,962 (15.43%) from FY 2016-2017. This decrease reflects the decreased amount available for investing and an increase in the rate of return.

The total amount invested at 28 February 2018 was \$8,933,344, down \$34,460,624 (79.41%) from 28 February 2017.

## SUMMARY OF INVESTMENT TRANSACTIONS

The University's average daily fair value invested for the month of February was \$685,366,201. Purchases totaled \$18,361,836 and sales totaled \$24,287,535. From this activity the University realized net losses of \$11,109 and earnings of \$1,171,086.

### **RECOMMENDATION**

The President and Vice President for Business and Finance recommend that the Board of Trustees approve the Report of Investments for February 2018.

**RESOLUTION  
UTAH STATE UNIVERSITY  
BOARD OF TRUSTEES**

WHEREAS, The attached Report of Investments containing authorized transactions, documentation, and supporting papers has been filed for review by the Board of Trustees pertaining to the investment activities; and

WHEREAS, The investment transactions listed on the attached Report of Investments have been approved by the USU Controller' s Office; and

WHEREAS, The investment activities listed on the attached Report of Investments are in accordance with the Utah State Money Management Act, the rules of the Utah State Money Management Council, the Utah State Uniform Prudent Management of Institutional Funds Act, and the laws and rules of Utah State University and the State of Utah; and

WHEREAS, The Chief Financial Officer for Utah State University, David T. Cowley, Vice President for Business and Finance, has certified to the best of his knowledge and belief all investment transactions listed on the attached Report of Investments were made in accordance with the guidelines, rules, and laws; and

WHEREAS, Vice President Cowley requests approval of the attached Report of Investments for the period 1 February 2018 to 28 February 2018 and comparative year-to-date totals for the periods 1 July 2017 to 28 February 2018 and 1 July 2016 to 28 February 2017; and

WHEREAS, The President of Utah State University has reviewed the attached report and recommends its approval by the Utah State University Board of Trustees; and

WHEREAS, The USU Board of Trustees has reviewed and given due consideration, review, and authorization of the investment transactions listed on the attached Report of Investments for the period 1 February 2018 to 28 February 2018 and comparative year-to-date totals for the periods 1 July 2017 to 28 February 2018 and 1 July 2016 to 28 February 2017;

NOW, THEREFORE, BE IT RESOLVED, That the USU Board of Trustees hereby approves the attached Report of Investments as presented and ratifies the transactions listed on said Report of Investments for February 2018.


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RESOLUTION APPROVED BY THE USU BOARD OF TRUSTEES:

\_\_\_\_\_  
Date

UTAH STATE UNIVERSITY  
REPORT OF INVESTMENTS  
FEBRUARY 2018

The following schedules (A through E2) provide a report of the University's Investments. To the best of my knowledge, Utah State University is in compliance with the Utah State Money Management Act and the rules of the Utah State Money Management Council and the Utah State Uniform Prudent Management of Institutional Funds Act.

  
\_\_\_\_\_  
Danford R. Christensen  
Controller  
6/1/18  
\_\_\_\_\_  
Date

  
\_\_\_\_\_  
David T. Cowley  
Vice President for Business and Finance  
6/5/18  
\_\_\_\_\_  
Date

UTAH STATE UNIVERSITY  
CASH MANAGEMENT INVESTMENT POOL  
SUMMARY REPORT OF INVESTMENTS AND INVESTMENT INCOME

Schedule A-1

	Beginning Fair Value	Purchases	Sales Proceeds	Change in Fair Value	Ending Fair Value	Average Daily Fair Value	Total Interest Income	Less Service Charges	Net Interest Income
Jul 2017	\$309,649,563			\$175,248	\$309,824,811	\$312,604,205	\$532,282	\$2,299	\$529,983
Aug 2017	309,824,811	\$30,505,000	\$22,775,450	1,112,969	318,667,330	315,768,721	766,001	(15)	766,016
Sep 2017	318,667,330	33,937,750	3,071,429	(1,952,212)	347,581,439	344,287,243	577,093	(80)	577,173
Oct 2017	347,581,439	8,750,000	22,510,300	(158,404)	333,662,735	342,133,631	678,283	(17)	678,300
Nov 2017	333,662,735	0	4,946,300	(637,181)	328,079,254	334,966,626	595,942	(25)	595,967
Dec 2017	328,079,254	10,000,000	9,000,000	56,113	329,135,367	328,170,896	582,826	0	582,826
Jan 2018	329,135,367	45,826,000	8,000,000	(2,555,980)	364,405,387	355,696,638	667,656	(113)	667,769
Feb 2018	364,405,387	5,000,000	11,000,000	(873,556)	357,531,831	365,319,476	647,911	(56)	647,967
Mar 2018									
Apr 2018									
May 2018									
Jun 2018									

Comparative Totals:

Year-to-date									
FY 2017-18	\$309,649,563	\$134,018,750	\$81,303,479	(\$4,833,003)	\$357,531,831	\$337,368,430	\$5,047,994	\$1,993	\$5,046,001
FY 2016-17	259,491,304	220,814,333	113,876,038	(4,612,963)	361,816,636	327,912,967	4,010,245	6,811	4,003,434
Amt Change					(4,284,805)	9,455,463	1,037,749	(4,818)	1,042,567
% Change					-1.18%	2.88%	25.88%	-70.74%	26.04%

Note: The Cash Management Investment Pool includes cash of all funds over estimated daily operating requirements.

UTAH STATE UNIVERSITY  
CASH MANAGEMENT INVESTMENT POOL  
SUMMARY OF INVESTMENT TRANSACTIONS AND PERFORMANCE  
For the Month of February 2018

Schedule A-2

	Purchases	Sales		Earnings	Change in Fair Value	Total Investment Income	Average Daily Fair Value	Annualized Total Investment Return
		Cost	Receipts					
Money Market Account				\$30,223		\$30,223	\$21,200,000	1.71%
Utah Public Treasurers' Investment Fund				10,165		10,165	7,100,000	1.72%
Commercial Paper and Corporate Notes	\$5,000,000	\$11,000,000	\$11,000,000	291,082	(\$290,060)	1,022	168,563,105	0.01%
Obligations of U. S. Government				297,390	(546,929)	(249,539)	157,016,071	-1.91%
Municipal Bonds				19,051	(36,567)	(17,516)	11,440,300	-1.84%
Total	<u>\$5,000,000</u>	<u>\$11,000,000</u>	<u>\$11,000,000</u>	<u>\$647,911</u>	<u>(\$873,556)</u>	<u>(\$225,645)</u>	<u>\$365,319,476</u>	-0.74%





UTAH STATE UNIVERSITY  
 ENDOWMENT POOL  
 SUMMARY REPORT OF INVESTMENTS AND INVESTMENT INCOME

Schedule B-1

	Beginning Fair Value	Purchases	Sales Proceeds	Change in Fair Value	Ending Fair Value	Average Daily Fair Value	Total Interest and Dividends	Realized Gain or (Loss)	Total Realized Income	Less Expenses	Net Realized Income/(Loss)
*Jul 2017	\$168,154,235	\$4,274,121	\$4,145,018	\$2,200,109	\$170,483,447	\$169,318,841	\$129,103	(\$10,755)	\$118,348		\$118,348
Aug 2017	170,483,447	2,572,663	2,435,115	294,582	170,915,577	170,699,512	149,312	(697)	148,615	\$11,765	136,850
Sep 2017	170,915,577	2,691,816	2,248,517	2,318,728	173,677,604	172,296,591	443,298	(1,120)	442,178	0	442,178
Oct 2017	173,677,604	16,653,319	15,234,492	1,971,666	177,068,097	175,372,851	184,207	1,542,538	1,726,745	10,056	1,716,689
Nov 2017	177,068,097	5,756,366	5,521,450	1,959,583	179,262,596	178,165,347	246,914	(196)	246,718	10,019	236,699
Dec 2017	179,262,596	3,073,044	2,428,772	1,333,550	181,240,418	180,251,507	644,272	232,316	876,588		876,588
Jan 2018	181,240,418	4,983,895	2,675,052	4,710,115	188,259,376	184,749,897	227,784	(3,239)	224,545	12,568	211,977
Feb 2018	188,259,376	1,974,365	1,864,086	(4,150,951)	184,218,704	186,239,040	122,617	14,526	137,143	14,317	122,826
Mar 2018											
Apr 2018											
May 2018											
Jun 2018											

Comparative Totals:

Year-to-date

FY 2017-18	\$168,154,235	\$41,979,589	\$36,552,502	\$10,637,382	\$184,218,704	\$177,136,698	\$2,147,507	\$1,773,373	\$3,920,880	\$58,725	\$3,862,155
FY 2016-17	144,288,701	47,247,019	36,795,925	11,377,812	166,117,607	152,419,078	1,669,982	655,139	2,325,121	44,564	2,280,557
Amt Change					18,101,097	24,717,620	477,525	1,118,234	1,595,759	14,161	1,581,598
% Change					10.90%	16.22%	28.59%	-170.69%	68.63%	31.78%	69.35%

Note: The Endowment Pool includes endowment funds designated for long-term investment. Included in this pool are endowment funds invested in the University's Cash Management Investment Pool (CMIP) consisting of \$11,791,636 principal beginning balance, a \$11,768,363 ending balance, and a \$11,784,684 average daily balance for the current month. Current month interest and dividends from the CMIP were \$20,671 bringing the total to \$154,245 year-to-date. These amounts have also been reported in Schedules A-1 and A-2.

\*The July beginning fair value has been adjusted to reflect the amount distributed to expendable accounts at fiscal year end.

UTAH STATE UNIVERSITY  
SUMMARY OF ENDOWMENT POOL TRANSACTIONS  
For the Month of February 2017

Schedule B-2  
Page 1 of 1

	Purchases		Sales			Earnings	
	Shares	Cost	Shares	Cost	Receipts		Gain/(Loss)
<b>Endowment Pool Transactions</b>							
Cash Management Investment Pool							
Utah State University				\$43,944	\$43,944	\$0	\$20,671
CMP Interest		\$20,671					
Equity funds							
RhumbLine QSI Index			91.375	2,144	2,144	0	
Fixed Income funds							
Longfellow		821,163		443,448	438,255	(5,193)	38,594
Wells Fargo							
High Yield Bond Fund	3,410.822	36,096					37,077
Paydenfunds - Emerging Markets Bond Fund	961.577	13,443					13,443
Stone Harbor Emerging Market	945.529	9,881					9,880
Alternatives							
Commonfund							
CEP VII		1,000		1,000	20,719	19,719	2,379
CEP VIII		33,750					
CNR IX				20,047	20,047	0	
Constitution Capital							
Ironsides Partnership Fund III		150,380		50,380	50,380	0	
Money Market Funds							
Money Market - 05374002		2					2
Goldman Sachs Bank Deposit		571					571
Accrued Income / Other							
05374002							
Wells Fargo - Cash		186,696		244,551	244,551	0	
Wells Fargo - High Yield		37,077		36,096	36,096	0	
05374004							
Cash		521,965		924,240	924,240	0	
Receivable - Interest Accrual		41,670		41,829	41,829	0	
Receivable / Payable		100,000		41,881	41,881	0	
<b>Total Endowment Pool Transactions</b>		<u>\$1,974,365</u>		<u>\$1,849,560</u>	<u>\$1,864,086</u>	<u>\$14,526</u>	<u>\$122,617</u>

UTAH STATE UNIVERSITY  
OTHER INVESTMENTS  
SUMMARY REPORT OF INVESTMENTS AND INVESTMENT INCOME

Schedule C-1

	Beginning Fair Value	Purchases	Sales Proceeds	Change in Fair Value	Ending Fair Value	Average Daily Fair Value	Total Interest and Dividends	Realized Gain or (Loss)	Total Realized Income
Jul 2017	\$108,186,294	\$3,571,505	\$3,300,698	\$779,986	\$109,237,087	\$108,711,691	\$369,501	(\$371,339)	(\$1,838)
Aug 2017	109,237,087	10,468,132	5,309,132	1,008,791	115,404,878	112,320,983	351,564	(13,827)	337,737
Sep 2017	115,404,878	1,505,884	1,019,733	(260,761)	115,630,268	115,517,573	486,730	3,299	490,029
Oct 2017	115,630,268	1,841,195	1,514,942	877,508	116,834,029	116,232,149	410,947	(1,072)	409,875
Nov 2017	116,834,029	1,158,567	1,035,069	191,773	117,149,300	116,991,665	364,145	62,247	426,392
Dec 2017	117,149,300	4,293,380	2,880,320	418,170	118,980,530	118,064,915	661,612	(5,354)	656,258
Jan 2018	118,980,530	2,235,822	2,560,631	(564,976)	118,090,745	118,535,638	414,671	72,681	487,352
Feb 2018	118,090,745	4,585,998	3,931,930	(1,803,846)	116,940,967	117,515,856	357,331	3,389	360,720
Mar 2018									
Apr 2018									
May 2018									
Jun 2018									
<hr/> <hr/>									
Comparative Totals:									
Year-to-date									
FY 2017-18	\$108,186,294	\$29,660,483	\$21,552,455	\$646,645	\$116,940,967	\$115,486,308	\$3,416,501	(\$249,976)	\$3,166,525
FY 2016-17	97,827,697	49,462,511	46,943,598	1,118,884	101,465,494	99,342,567	2,897,787	5,438	2,903,225
Amt Change					15,475,473	16,143,741	518,714	(255,414)	263,300
% Change					15.25%	16.25%	17.90%	-4696.84%	9.07%

UTAH STATE UNIVERSITY  
SUMMARY OF OTHER INVESTMENT TRANSACTIONS  
For the Month of February 2018

Schedule C-2  
Page 1 of 1

	Purchases		Sales			Earnings	
	Shares	Cost	Shares	Cost	Receipts		Gain/(Loss)
<u>Other Investments</u>							
Corporate Bonds and Notes							
U.S. Treasury Bond						\$619	
Common and Preferred Stock							
Morgan Stanley							
Oakmark Investor	58,000	\$5,011					
Utah Public Treasurers'							
Investment Fund		8,099				8,098	
Fixed Income							
Wells Fargo							
Verizon Communications	5,000,000	500,000					
Dte Energy Co 5.25%	40,000,000	980,000					
Newtek	40,000,000	1,000,000					
Wells Fargo - Earnings						348,568	
Mutual Funds							
Commonfund							
CEU Title III							
Multi-Strategy Bond			80,453	\$922	\$1,177	\$255	
Multi-Strategy Equity			9,794	600	3,734	3,134	
Money Market / Cash							
Morgan Stanley Bank N.A.		26		31	31	0	
Morgan Stanley Private Bank N.A.		51				20	
Wells Fargo - Cash		1,743,624		1,980,000	1,980,000	0	
Receivable / In Transit / Unsettled Purchases							
Commonfund						0	
Morgan Stanley - Unsettled Purchases				2,598	2,598	0	
Wells Fargo - Payable				500,766	500,766	0	
Wells Fargo - Receivable		348,568		1,443,624	1,443,624	0	
U.S. Treasury Bond		619					
 Total Other Investments		<u>\$4,585,998</u>		<u>\$3,928,541</u>	<u>\$3,931,930</u>	<u>\$3,389</u>	<u>\$357,331</u>

UTAH STATE UNIVERSITY  
 ENDOWMENT TRUSTS  
 SUMMARY REPORT OF INVESTMENTS AND INVESTMENT INCOME

Schedule D-1

	Beginning Fair Value	Purchases	Sales Proceeds	Change in Fair Value	Ending Fair Value	Average Daily Fair Value	Total Interest and Dividends	Realized Gain or (Loss)	Total Realized Income/(Loss)	Less Expenses	Net Realized Income/(Loss)
Jul 2017	\$5,934,529	\$344,928	\$328,406	\$9,940	\$5,960,991	\$5,947,760	\$17,174	(\$36,001)	(\$18,827)	\$651	(\$19,478)
Aug 2017	5,960,991	213,278	196,531	(119,209)	5,858,529	5,909,760	24,455	(38,036)	(13,581)	75	(13,656)
Sep 2017	5,858,529	302,286	276,635	183,146	6,067,326	5,962,928	25,676	12	25,688	25	25,663
Oct 2017	6,067,326	655,975	639,078	(154,018)	5,930,205	5,998,766	17,549	14,403	31,952	652	31,300
Nov 2017	5,930,205	1,380,875	1,364,561	27,502	5,974,021	5,952,113	16,300	358,383	374,683	(15)	374,698
Dec 2017	5,974,021	656,115	626,319	139,172	6,142,989	6,058,505	26,714	(2,579)	24,135	25	24,110
Jan 2018	6,142,989	312,398	299,861	108,087	6,263,613	6,203,301	13,167	(46,750)	(33,583)	629	(34,212)
Feb 2018	6,263,613	540,824	511,737	(376,030)	5,916,670	6,090,142	29,141	(29,024)	117	54	63
Mar 2018											
Apr 2018											
May 2018											
Jun 2018											
<hr/> <hr/>											
Comparative Totals:											
Year-to-date											
FY 2017-18	\$5,934,529	\$4,406,679	\$4,243,128	(\$181,410)	\$5,916,670	\$6,015,409	\$170,176	\$220,408	\$390,584	\$2,096	\$388,488
FY 2016-17	5,606,497	2,510,810	2,339,798	351,334	6,128,843	5,766,647	180,812	126,627	307,439	2,122	305,317
Amt Change					(212,173)	248,762	(10,636)	93,781	83,145	(26)	83,171
% Change					-3.46%	4.31%	-5.88%	74.06%	27.04%	-1.23%	27.24%

Note: Endowment Trusts include externally managed endowment trusts.

UTAH STATE UNIVERSITY  
SUMMARY OF ENDOWMENT TRUST INVESTMENT TRANSACTIONS  
For the Month of February 2018

Schedule D-2  
Page 1 of 1

	Purchases		Sales				Earnings
	Shares	Cost	Shares	Cost	Receipts	Gain/(Loss)	
<b>Endowment Trusts</b>							
Common and Preferred Stock							
Utilities Sel Sect Spdr Fund	5,200.000	\$256,334					
Vaneck Vectors Preferred Sec			13,700.000	\$282,311	\$254,793	(\$27,518)	
Funds held at Morgan Stanley - Dividends							\$28,685
Funds held at Wells Fargo - Dividends							4
Options							
Altria Group (expires 06/15/2018)			(10.000)	(881)	(238)	643	
Altria Group (expires 06/15/2018)	(10.000)	(728)					
Apple Inc (expires 02/16/2018)			(10.000)	(3,622)	(12)	3,610	
Apple Inc (expires 06/15/2018)	(10.000)	(3,651)					
Chevron Texaco Corp (expires 03/16/2018)			(31.000)	(1,133)	(222)	911	
Chevron Texaco Corp (expires 06/15/2018)	(31.000)	(3,872)					
Cisco Sys Inc (expires 04/20/2018)			(50.000)	(7,153)	(15,252)	(8,099)	
Cisco Sys Inc (expires 09/21/2018)	(50.000)	(15,539)					
Johnson & Johnson (expires 06/15/2018)	(4.000)	(442)					
Johnson & Johnson (expires 06/15/2018)			(4.000)	(1,742)	(313)	1,429	
Mutual Funds							
Dodge & Cox Income Fund Com #147			19.928	271	271	0	
Federated Total Return Bond Fund	8.109	87					
Metropolitan West Total Return Bond Fund	6.034	64					
Wells Fargo Advantage Core Bond Fund	4.912	62					
Dodge & Cox Income Fund Com #147			19.921	271	271	0	
Federated Total Return Bond Fund	8.109	88					
Metropolitan West Total Return Bond Fund	6.034	64					
Wells Fargo Advantage Core Bond Fund	4.910	62					
Funds held at Wells Fargo - Dividends							427
Money Market & Cash Funds							
Morgan Stanley Bank N.A. #		307,725		272,439	272,439	0	15
Wells Fargo #451		285					5
Wells Fargo #451		285					5
Total Endowment Trusts		<u>\$540,824</u>		<u>\$540,761</u>	<u>\$511,737</u>	<u>(\$29,024)</u>	<u>\$29,141</u>

UTAH STATE UNIVERSITY  
PLANT FUND TRUSTS  
SUMMARY REPORT OF INVESTMENTS AND INVESTMENT INCOME

Schedule E-1

	Beginning Fair Value	Purchases	Sales Proceeds	Change in Fair Value	Ending Fair Value	Average Daily Fair Value	Total Interest Income	Realized Gain or (Loss)	Total Realized Income	Less Expenses	Net Realized Income/(Loss)
Jul 2017	\$30,965,477	\$32,779	\$3,002,238	\$3,610	\$27,999,628	\$28,863,655	\$39,474		\$39,474		\$39,474
Aug 2017	27,999,628	43,815	3,061,695	6,707	24,988,455	25,968,444	37,410		37,410		37,410
Sep 2017	24,988,455	4,622,928	5,530,475	3,731	24,084,639	24,321,788	35,019		35,019		35,019
Oct 2017	24,084,639	90,742	3,695,304	(3,490)	20,476,587	21,353,025	32,884		32,884		32,884
Nov 2017	20,476,587	19,244,627	13,500,481	(5,878)	26,214,855	23,486,606	34,777		34,777		34,777
Dec 2017	26,214,855	3,108,859	12,880,244	9,872	16,453,342	18,364,922	28,898	\$135,785	164,683		164,683
Jan 2018	16,453,342	71,023	6,845,245	(17,629)	9,661,491	12,875,272	19,620		19,620		19,620
Feb 2018	9,661,491	6,260,649	6,979,782	(9,014)	8,933,344	10,201,687	14,086		14,086		14,086
Mar 2018											
Apr 2018											
May 2018											
Jun 2018											
<hr/>											
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Comparative Totals:											
Year-to-date											
FY 2017-18	\$30,965,477	\$33,475,422	\$55,495,464	(\$12,091)	\$8,933,344	\$20,679,425	\$242,168	\$135,785	\$377,953	\$0	\$377,953
FY 2016-17	67,903,805	62,560,057	86,948,210	(121,684)	43,393,968	56,940,032	446,915	0	446,915	0	446,915
Amt Change					(34,460,624)	(36,260,607)	(204,747)	135,785	(68,962)	0	(68,962)
% Change					-79.41%	-63.68%	-45.81%	100.00%	-15.43%	0.00%	-15.43%

Note: Plant Fund Trusts include all debt service reserve and construction fund accounts in compliance with bond issue covenants.





22 June 2018

### **ITEM FOR ACTION**

**RE:** Proposal to Revise Policy 335 Relocation Assistance

The attached policy is submitted to the Board of Trustees for consideration. It has received the appropriate administrative review and approval.

### **EXECUTIVE SUMMARY**

The University desires to revise Policy 335 Relocation Assistance as shown in the attached redlined and final documents. Consistent with USU Policy 201, the proposed policy was submitted to Faculty Senate and Staff Employees Association for review and comment; forwarded by the President to the Executive Committee; and approved by the Executive Committee.

The following is a summary of the revisions to Policy 335 Relocation.

- Section 335.2
  - Revised to comply with a new tax law that states that all payments for moving expenses are taxable to the employee

### **RECOMMENDATION**

The President and the Vice President for Business and Finance recommend that the Board of Trustees approves the revisions to Policy 335 Relocation Assistance of the Utah State University Policy Manual.

**RESOLUTION  
UTAH STATE UNIVERSITY  
BOARD OF TRUSTEES**

WHEREAS, The University desires to revise Policy 335 Relocation Assistance, as shown in the documents; and

WHEREAS, This policy was submitted to Faculty Senate and Staff Employees Association for review and comment; forwarded by the President to the Executive Committee; and approved by the Executive Committee; and

WHEREAS, The procedures for revising policies outlined in Section 201 of the University Policy Manual have been followed:

NOW, THEREFORE, BE IT RESOLVED, That the USU Board of Trustees approves revising Policy 335 Relocation Assistance of the University Policy Manual effective 22 June 2018.

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RESOLUTION APPROVED BY THE BOARD OF TRUSTEES:

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Date



## POLICY MANUAL

### GENERAL

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Number 335

Subject: Relocation Assistance

Covered Employees: Faculty and Exempt Employees

Date of Origin: January 24, 1997

Date of Revision(s): May 23, 2008, March 4, 2016, [June 22, 2018](#)

Effective Date: ~~March 4, 2016~~ [June 22, 2018](#)

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#### 335.1 POLICY

The payment or reimbursement of moving expenses may be offered to prospective employees when the hiring department believes such an offer is a critical factor in securing a highly qualified applicant for a faculty or administrative position. In determining the appropriate payment amount, the department should consider factors such as unusual qualifications and/or needs of the applicant, competitiveness of the applicable job market, budget available, and estimated relocation costs.

The hiring department head will negotiate with the new employee and determine an agreeable relocation plan in writing prior to the time the move takes place. The hiring department is responsible for covering the agreed-upon cost of relocation assistance.

#### 335.2 PAYMENT OR REIMBURSEMENT TO THE NEW EMPLOYEE OR DIRECT PAYMENT TO COMPANIES

Under the new tax law, effective January 1, 2018, all payments for moving expenses are taxable to the employee, whether paid directly to companies or as a reimbursement to the employee. These payments will be taxed through the payroll system and included as taxable income on the employee's W-2 tax form.~~The University complies with IRS regulations as outlined in Publication 521 regarding payments or reimbursements made directly to the new employee for moving expenses. These are treated as additional income and are subject to payroll taxes.~~

#### ~~DIRECT PAYMENT TO COMPANIES~~

Generally, moving expenses paid by the University directly to a commercial moving company are non-taxable to the new employee. Departments are required to use state contracts available through Purchasing and Contract Services unless a less expensive option is available.

Payments made directly to companies for taxable expenses are treated as additional income and are subject to payroll taxes. Examples of taxable expenses include payments to airlines or hotels for house hunting trips.

#### TAXABILITY OF REIMBURSEMENTS FOR MOVING EXPENSES

Non-taxable reimbursements for moving expenses include:

Cost of moving ordinary and customary personal and household goods  
Mileage allowance for the employee and/or family to move to the new location.  
Traveling (including lodging but not meals) to your new home

Taxable reimbursements for moving expenses that are subject to payroll taxes include:

Insurance provided by the moving firm for packing and shipping your household goods and personal effects  
Costs associated with a trip to locate new housing

Almost all other moving related expenses are taxable, including house hunting trips and temporary lodging. (See IRS Publication 521 "Moving Expenses," for detailed information on non-taxable and taxable moving expenses.)



## **POLICY MANUAL**

### **GENERAL**

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**Number 335**

**Subject: Relocation Assistance**

**Covered Employees: Faculty and Exempt Employees**

**Date of Origin: January 24, 1997**

**Date of Revision(s): May 23, 2008, March 4, 2016, June 22, 2018**

**Effective Date: June 22, 2018**

---

#### **335.1 POLICY**

The payment or reimbursement of moving expenses may be offered to prospective employees when the hiring department believes such an offer is a critical factor in securing a highly qualified applicant for a faculty or administrative position. In determining the appropriate payment amount, the department should consider factors such as unusual qualifications and/or needs of the applicant, competitiveness of the applicable job market, budget available, and estimated relocation costs.

The hiring department head will negotiate with the new employee and determine an agreeable relocation plan in writing prior to the time the move takes place. The hiring department is responsible for covering the agreed-upon cost of relocation assistance.

#### **335.2 PAYMENT OR REIMBURSEMENT TO THE NEW EMPLOYEE OR DIRECT PAYMENT TO COMPANIES**

Under the new tax law, effective January 1, 2018, all payments for moving expenses are taxable to the employee, whether paid directly to companies or as a reimbursement to the employee. These payments will be taxed through the payroll system and included as taxable income on the employee's W-2 tax form.

Resolution

ITEM FOR ACTION

Re: Utah State University Research Foundation

- Recommendation for re-appointment to Research Foundation Board

EXECUTIVE SUMMARY

Utah State University Research Foundation Board submits to the President of Utah State University and the Utah State University Board of Trustees recommendations to appoint individuals to the Research Foundation Board. These recommendations are consistent with Article VI of the Amended and Restated Articles of Incorporation and Article II, Sections 4 and 5, and Article III, Sections 1 and 2, of the Amended Bylaws of the USU Research Foundation. This recommendation was made by a resolution of the majority of the USU Research Foundation Board after appropriate review and discussion.

RECOMMENDATION

- 1) The USU Research Foundation Board recommends the re-appointment of Dr. Jagath Kaluarachchi as Trustee to the Utah State University Research Foundation Board for an additional three (3) year term beginning when his current term expires.

RESOLUTION  
UTAH STATE UNIVERSITY  
BOARD OF TRUSTEES

*WHEREAS*, the term of Dr. Jagath Kaluarachchi as Trustee for the Utah State University Research Foundation expires June 2018; and

*WHEREAS*, Dr. Kaluarachchi's service as Trustee has been very beneficial to the Foundation; and

*WHEREAS*, the Foundation recommends it would be beneficial for his service as Trustee to continue;

*NOW, THEREFORE, BE IT RESOLVED*, that the President of Utah State University and the Utah State University Board of Trustees hereby approve Dr. Jagath Kaluarachchi's re-appointment to the Utah State University Research Foundation Board for a three (3) year term beginning June 2018.

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RESOLUTION APPROVED BY THE USU BOARD OF TRUSTEES:

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Date



## JAGATH J. KALUARACHCHI, PhD

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1625 North 1640 East, Logan, UT 84341

Voice: (435) 755-0287 | Mobile: (435) 881-5954 | Email: jkalu2001@gmail.com

### Contact Information

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<https://jkalu.usu.edu/>  
 Status: US Citizen, Married

Google Scholar Citation <https://scholar.google.com/citations?user=Wib8ezUAAAAJ&hl=en>

### Education

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PhD	Environmental Sciences and Engineering, 1988 Virginia Tech, Blacksburg, Virginia Emphasis: Subsurface Hydrology and Contaminant Transport
MPhil	Civil Engineering, 1984 University of Hong Kong Emphasis: Hydrology
BSc	Civil Engineering, 1980 University of Moratuwa, Sri Lanka Major: Civil Engineering

### Professional Experience

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Interim Department Head Biological Engineering, USU	2015 – present
Senior Associate Dean College of Engineering, USU	2012 - present
Associate Dean College of Engineering, USU	2007 – 2012
Head Water Engineering Program, USU	2004 - 2007
Professor Civil and Environmental Engineering, USU	2001 – present
Associate Professor Civil and Environmental Engineering, USU	1995 – 2001

Visiting Professor (on sabbatical leave) Royal Institute of Technology, Stockholm, Sweden	1997- 1998
Assistant Professor Civil and Environmental Engineering, USU	1991 - 1995
Visiting Scientist Department of Soil Protection, Swiss Federal Institute of Technology, Zurich	1990 - 1991
Graduate Research Assistant Virginia Tech	1984 – 1988
Commonwealth Fellowship Recipient University of Hong Kong	1981 – 1984
Civil Engineer, State Engineering Corporation, Sri Lanka	1980 – 1981

### Honors and Recognitions

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Outstanding Researcher Civil and Environmental Engineering	1996 -1997
Registered Professional Engineer (PE) State of Utah, Registration Number 96-295746-2202	1996
Fellow American Society of Civil Engineers	2004
Outstanding Researcher Civil and Environmental Engineering	2005-2006
EWRI Expression of Appreciation Environmental and Water Resources Institute, Annual Congress, Omaha, NE	May 2006
Outstanding Researcher Civil and Environmental Engineering	2006 - 2007
Outstanding Researcher College of Engineering	2006 - 2007
Associate Editor Journal of Hydrologic Engineering	2006 - 2013
Outstanding Researcher College of Engineering	2007- 2008
Robins Award for Faculty Researcher of the Year Utah State University	2007- 2008
Invited Keynote Speaker	January 12-16, 2009

International Conference on Water, Environment Energy and Society (WEES), National Institute of Hydrology, India	
Invited Keynote Speaker Second International Conference on Water: Values and Rights. Palestinian Academy for Science and Technology, Jericho, Palestine	April, 2009
EWRI Expression of Appreciation as the Chair of the Watershed Council Environmental and Water Resources Institute, Annual Congress, Rhode Island	May 2010
Invited Keynote Speaker 5 <sup>th</sup> International Groundwater Conference (IGWC-2012), Association of Geologists and Hydrogeologists, India	December, 2012
Fellow Environmental and Water Resources Institute	2014
Editor Sustainability Science	2013 – now
Western Globe Member, Association of Global Ground Water Scientists	2015 - now

#### Professional Societies and Outreach

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Control Group Member Ground Water Quality Committee, Division of Environmental Engineering, ASCE	1993 - 1998
Chair Sub-Committee on Multiphase Flow and Transport, Division of Environmental Engineering, ASCE	1996 - 1998
Member Organizing Committee, Specialty conference on “Non-Aqueous Phase Liquids (NAPLs) in Subsurface Environment: Assessment and Remediation”, ASCE National Conference, Washington, D.C.	November 1996
External PhD dissertation supervisor of Jerker Jarsjo, Water Resources, Program, Royal Institute of Technology, Stockholm, Sweden, Major Professor, Ghia Destouni	April 1998
Secretary Ground Water Quality Committee, Environmental and Water Resources Institute	1998 - 2000
Secretary	1998 - 2000

Animal Waste management Task Committee, Environmental and Water Resources Institute	
Editor Groundwater Contamination by Organic Pollutants; Analysis and Remediation, ASCE Manual and Reports on Engineering Practice, No. 100	2000
Chair National Committee of Ground Water Quality, Environmental and Water Resources Institute	2000-2002
Member Resident Advisory Board for Tooele Army Depot, Utah	2000-2002
Co-major professor to Champika Wettasinghe PhD graduate student Department of Civil Engineering, University of Melbourne, Australia	2000 - 2004
Member Organizing Committee, Symposium on "Integrated Surface and Ground Water Management", World Water and Environmental Resources Congress, Orlando, FL	May 2001
Member Curriculum Development Committee, Subsurface Science Graduate Program, Inland Northwest Research Alliance, and US DOE, Idaho Falls, Idaho	2001-2005
Member Organizing Committee, Symposium on "Probabilistic Approaches and Groundwater Modeling", World Water and Environmental Resources Congress, Philadelphia, PA	June 2003
Vice-Chair Watershed Council, Environmental and Water Resources Institute	2003 - 2006
Member Task Committee on Groundwater Hydrology Monograph Preparation, Environmental and Water Resources Institute	2005 - 2006
Member Ground Water Quality Scientific Panel of National Science Foundation for Tsunami affected Sri Lanka	2005
Member Technical Executive Committee, Environmental and Water Resources Institute	2006 - 2009

External PhD dissertation supervisor of Meththika Vithanage Geological Institute, University of Copenhagen, Denmark. Major Professor, Karsten H. Jensen.	January 2009
Member/Contributor Ground Water Hydrology Manual, Environmental and Water Resources Institute	2011
Member, EPA-STAR Review Panel	March 2013

### Research Interests

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- Subsurface and watershed hydrology
- Ground water quality assessment and modeling
- Water resources planning and management
- Engineering economics in watershed planning and management
- Environmental risk assessment and decision-analysis

### Teaching

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CEE 644	Ground Water Problem Solving
CEE 647	Ground Water Modeling
CEE 648	Contaminant Transport
CEE 5430/6430	Ground Water Engineering
CEE 6480	Subsurface Contaminant Transport
CEE 3430	Engineering Hydrology
Distance Education Course for Consortium of eight intermountain west universities Inland Northwest Research Alliance (INRA), US Department of Energy, 2003-2007	Subsurface Hydrology and Transport

### Books and Chapters

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1. J. Keum and J. J. Kaluarachchi, Salinization and salinity management in watersheds. In Handbook of Applied Hydrology, 2nd Edition, June 2015.
2. Almasri, M. and J. J. Kaluarachchi, Fate and Transport of Ground Water Contaminants. In Ground Water Hydrology Manual, American Society of Civil Engineers, ISBN 978-07-7844-1176-6, 2011.
3. Shaqadan, A. and J. J. Kaluarachchi, Assessment of social welfare impacts in water resources management: Selected Applications – Groundwater contamination, NPS pollution, and social equity. VDM Verlag Publishing, Germany. ISBN: 978-3-639-14199-3, 2009.
4. Al-Juaidy, A., U. Kim, and J. J. Kaluarachchi, Decision analysis to minimize agricultural groundwater demand and salt water intrusion using treated wastewater, IAHS-GQ10 Book, 2011.
5. Almasri, M. and J. J. Kaluarachchi, Groundwater flow and transport processes, GW – 411, The Encyclopedia of Water, John Wiley and Sons, NY, 2004.

6. Almasri, M. and J. J. Kaluarachchi, Best management practices, WR – 5, The Encyclopedia of Water, John Wiley and Sons, NY, 2004.

### International Research Reports

---

Kim U., J. J. Kaluarachchi, and V. U. Smakhtin, Climate Change Impacts on Water Resources of the Upper Blue Nile River Basin, Ethiopia. 2008. Research Report 126, International Water management Institute, Colombo, Sri Lanka.

### Journal Publications

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1. Jayawardena, A. W. and J. J. Kaluarachchi, Infiltration into decomposed granite soils; numerical modeling, applications and some laboratory observations, *J. Hydrology*, 84:231-260, 1986.
2. Kaluarachchi, J. J. and J. C. Parker, Finite element analysis of water flow in variably saturated soils, *J. Hydrology*, 90:269-291, 1987.
3. Kaluarachchi, J. J. and J. C. Parker, Effects of hysteresis with air entrapment on water flow in the unsaturated zone, *Water Resources Research*, 23:1967-1976, 1987.
4. Kaluarachchi, J. J. and J. C. Parker, Finite element simulation of nitrogen transformation and transport during hysteretic flow with air entrapment, In *Developments in Water Science*, 36, Ed. M. A. Celia, L. A. Ferrand, C. A. Brebbia, W. G. Gray, and G. F. Pinder, Elsevier Publishers, 466 pp. 1988.
5. Kaluarachchi, J. J. and J. C. Parker, Finite element model of nitrogen species transformation and transport in the unsaturated zone, *J. Hydrology*, 103:249-274, 1988.
6. Lenhard, R. J., J. Dane, J. C. Parker, and J. J. Kaluarachchi, Measurement and simulation of one-dimensional transient three phase flow for monotonic liquid drainage, *Water Resources Research*, 24:853-863, 1988.
7. Kaluarachchi, J. J. and J. C. Parker, Improving the efficiency of finite element method in modeling multiphase flow, *Water Resources Research*, 25:43-54, 1989.
8. Lenhard, R. J., J. C. Parker, and J. J. Kaluarachchi, A model for hysteretic relations governing multiphase flow; Refinements and numerical simulations, *Water Resources Research*, 25:1727-1736, 1989.
9. Kaluarachchi, J. J., J. C. Parker, and R. J. Lenhard, A numerical model for areal migration of water and light hydrocarbon in unconfined aquifers, *Advances in Water Resources*, 13:29-40, 1990.
10. Kaluarachchi, J. J. and J. C. Parker, Modeling of multicomponent organic chemical transport in three phase porous media, *J. of Contaminant Hydrology*, 5:349-374, 1990.
11. Lenhard, R. J., J. C. Parker, and J. J. Kaluarachchi, Comparing simulated and experimental hysteretic two-phase transient fluid flow phenomena, *Water Resources Research*, 27:2113-2124, 1991.

12. Kaluarachchi, J. J., R. Schulin, and U. Fischer, Modeling soil venting as an option to remove dense hydrocarbon from an air-water system, *Mitteilungen d. Dt. Bodenkundlichen Gesellschaft*, 63:115-118, 1991.
13. Fischer, U., R. Schulin, F. Stauffer, J. J. Kaluarachchi and M. Keller, Experimentelle Untersuchungen zur Mobilitat von leichtfluchtigen CKW in der Bodenzone, *Mitteilungen d. Dt. Bodenkundlichen Gesellschaft*, 63:95-98, 1991.
14. Kaluarachchi, J. J. and J. C. Parker, Multiphase flow with a simplified model for oil entrapment, *Transport in Porous Media*, 7:1-14, 1992.
15. Kaluarachchi, J. J. and A. H. Wijedasa, Optimal soil venting design using Bayesian Decision analysis, *J. of Hydrology*, 163, 325-346, 1994.
16. Kaluarachchi, J. J. and J. C. Parker, Correction to "An efficient finite element method for modeling multiphase flow", *Water Resources Research*, 30(8): 2485-2486, 1994.
17. Kaluarachchi, J. J., Analytical solution to two-dimensional axisymmetric gas flow with Klinkenberg effect, *J. of Environmental Engineering, ASCE*, 121(5), 417-420, 1995.
18. Kaluarachchi, J. J. and K. M. Islam, Thermal venting to recover less-volatile hydrocarbons from the unsaturated zone: 1. Theory, *J. of Contaminant Hydrology*, 17, 293-311, 1995.
19. Islam, K. M., and J. J. Kaluarachchi, Thermal venting to recover less-volatile hydrocarbons from the unsaturated zone: 2. Model applications, *J. of Contaminant Hydrology*, 17, 313-331, 1995.
20. Kaluarachchi, J. J., and J. Morshed, Critical assessment of the operator-splitting technique in solving the advection-dispersion-reaction equation: 1. First-order reaction, *Advances in Water Resources*, 18(2), 89-100, 1995.
21. Morshed, J., and J. J. Kaluarachchi, Critical assessment of the operator-splitting technique in solving the advection-dispersion-reaction equation: 2. Monod kinetics and coupled transport, *Advances in Water Resources*, 18(2), 101-110, 1995.
22. Chang, C-M, M. W. Kemblowski, J. J. Kaluarachchi, and A. Abdin, Stochastic analysis of two-phase water and oil flow: I. Spectral perturbation analysis, *Transport in Porous Media*, 19(3), 233-259, 1995.
23. Abdin, A., J. J. Kaluarachchi, C-M. Chang, and M. W. Kemblowski, Stochastic analysis of two-phase water and oil flow: II. Comparison between perturbation and Monte Carlo results, *Transport in Porous Media*, 19(3), 261-280, 1995.
24. Chang, C-M, M. W. Kemblowski, J. J. Kaluarachchi, and A. Abdin, Stochastic analysis of multiphase flow in porous media: I. Spectral/perturbation approach, *Stochastic Hydrology and Hydraulics*, 9, 239-267, 1995.
25. Kaluarachchi, J. J. and R. Elliott, Design factors for improving the efficiency of free-product recovery systems in unconfined aquifers, *Ground Water*, 33(6), 909-916, 1995.

26. Abdin, A., J. J. Kaluarachchi, M. W. Kemblowski, and C-M. Chang, Stochastic analysis of multiphase flow in porous media: II. Numerical simulations, *Stochastic Hydrology and Hydraulics*, 10:231-251, 1996.
27. Cooper, G. S., R. C. Peralta, and J. J. Kaluarachchi, Stepwise pumping approach to improve free phase light hydrocarbon recovery from unconfined aquifers, *J. Contaminant Hydrology*, 18, 141-159, 1996.
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17. Kaluarachchi, J. and A. Abdin, Stochastic analysis of three-phase flow in heterogeneous porous media, *Western Pacific Geophysical Meeting*, Brisbane, Australia, July, 1996.
18. Zhao, Q. and J. J. Kaluarachchi, Impact of groundwater contamination on human health: Assessment of risk due to population heterogeneity, *Western Pacific Geophysical Meeting*, Tokyo, Japan, June, 2000.
19. Kaluarachchi, J. J., V. Cvetkovic, and S. Berglund, Oxygen- and nitrate-based biodegradation of hydrocarbons in heterogeneous aquifers, *European Geophysical Society Meeting*, Nice, France, April, 2000.
20. Khadam, I. and J. Kaluarachchi, Risk-based decision analysis at hazardous waste contaminated sites: Current understanding and future directions, *Subsurface Science Symposium*, Inland Northwest Research Alliance, Idaho Falls, Idaho, September 6, 2001.
21. Khadam, I. and J. Kaluarachchi, The need and potential approaches for decision analysis for environmental management, *Subsurface Science Symposium*, Inland Northwest Research Alliance, Idaho Falls, Idaho, October 13, 2002.
22. Khadam, I. and J. Kaluarachchi, Probabilistic risk assessment and multi-criteria decision analysis for the management of contaminated subsurface, *Subsurface Science Symposium*, Inland Northwest Research Alliance, Salt Lake City, UT, 2003.
23. Tesfamichael, A. A. and J. J. Kaluarachchi, A regression method to estimate the distribution of atrazine in surface water, *Proceedings of the Annual Meetings of the American Water Resources Association*, San Diego, CA, 2003.
24. Twarakavi, N. K. and J. J. Kaluarachchi, Modeling arsenic occurrence in western United States using ordinal logistic regression analysis, Presented at the Spring Runoff Conference, Utah State University, Logan, UT, March 25-26, 2004.
25. Almasri, M. and J. J. Kaluarachchi, Management of nitrate contamination of ground water due to agricultural activities, Presented at the Spring Runoff Conference, Utah State University, Logan, UT, March 25-26, 2004.
26. Tesfamichael, A. A. and J. J. Kaluarachchi, Uncertainty propagation in drinking water risk assessment, *Subsurface Science Symposium*, Inland Northwest Research Alliance, Spokane, WA, 2004.
27. Twarakavi, N. and J. J. Kaluarachchi, Assessment of future land use changes on ground water quality using a probabilistic multi-objective framework, *Subsurface Science Symposium*, Inland Northwest Research Alliance, Spokane, WA, 2004.
28. Khalil, A., M. N. Almasri, M. McKee, and J. J. Kaluarachchi, Simulation of nitrate contamination in groundwater using learning machines, *Proceedings of the Annual*

- Meetings of the American Water Resources Association, Orlando, FL, November, 2004.
29. Twarakavi, N. and J. Kaluarachchi, Aquifer vulnerability to arsenic contamination in the Conterminous United States: Health risks and economic implications, Fall Meetings, American Geophysical Union, San Francisco, CA, December 13-18, 2004.
  30. Tesfamichael, A. A. and J. Kaluarachchi, Cross-sectional and longitudinal uncertainty propagation in drinking water risk assessment, Fall Meetings, American Geophysical Union, San Francisco, CA, December 13-18, 2004.
  31. Tesfamichael, A. A. and J. Kaluarachchi, Risk-cost-benefit analysis of atrazine in drinking water from agricultural activities, Fall Meetings, American Geophysical Union, San Francisco, CA, December 13-18, 2004.
  32. Hassan, W. and J. J. Kaluarachchi, Sustainable water resource management considering population growth and land use changes. Fall Meetings, American Geophysical Union, San Francisco, CA, December 5-9, 2005.
  33. Lenhard, R. J., P. Mekins, H. Huang, A. M. Tartakovsky, and J. J. Kaluarachchi, Evaluation of a modeling approach for water movement through fractured porous media using mesoscale experiments. Annual Meeting of the Soil Science Society of America, Salt Lake City, November, 2005.
  34. Kim, U. and J. Kaluarachchi, Conditional generation of monthly precipitation. Fall Meetings, American Geophysical Union, San Francisco, CA, December 11-15, 2006.
  35. Shaqadan, A. and J. Kaluarachchi, Integration of socio-economic measures in benefit-cost analysis for groundwater remediation. Fall Meetings, American Geophysical Union, San Francisco, CA, December 11-15, 2006.
  36. Kim, U. and J. Kaluarachchi, Regional aquifer assessment using linear programming, Subsurface Science Symposium, Inland Northwest Research Alliance, Moscow, ID, 2006.
  37. Kaluarachchi, J. M. McKee, W. Walker, C. Fawson, M. Whitaker, E. Price, and C. A. Jones, Human capacity building in the water sector of Middle East using Distance Education Technology, Presented at the 3<sup>rd</sup> Arab Water Conference, Cairo, Egypt, Dec 9-11, 2006.
  38. Hasan, W. and J. Kaluarachchi, Economic value of water in planning and management. Fall Meetings, American Geophysical Union, San Francisco, CA, December 11-15, 2006.
  39. Kim, U. and J. J. Kaluarachchi, Parameter estimation using regionalization for ungaged basins: An example from the Upper Blue Nile River Basin. Presented at the Spring Runoff Conference, Utah State University, Logan, UT, April 5-6, 2007.
  40. Al-Juaidy, A. and J. J. Kaluarachchi, Optimal agricultural water management under water deficit conditions, Presented at the Spring Runoff Conference, Utah State University, Logan, UT, April 5-6, 2007.
  41. Kim, U. and J. Kaluarachchi, Predicting monthly runoff of the Upper Blue Nile River basin of Ethiopia using Regionalization Methods. Annual Conference of the American Water Resources Association, Albuquerque, NM, November 12-15, 2007.

42. Kim, U. and J. Kaluarachchi, Applicability of Partially Observed Runoff Data in Parameter Calibration. Fall Meetings, American Geophysical Union, San Francisco, CA, December 15-19, 2008.
43. Weragala, N. and J. Kaluarachchi, Use of Optimization Modeling in Adaptive Management of Water Resources: A Case Study from Walawe River Basin, Sri Lanka. Summer Specialty Conference of the American Water Resources Association, Snowbird, UT, June 29 – July 1, 2009.
44. Al-Juaidy, A., D. Rosenberg, and J. J. Kaluarachchi, Water management with wastewater treatment and reuse, desalination, and conveyance to counteract climate change in the Gaza strip. Presented at the Spring Runoff Conference, Utah State University, Logan, UT, April 1-3, 2009.
45. Rosenberg, D., A. Al-Juaidy, and J. J. Kaluarachchi. Managing water and salinity with desalination, conveyance, conservation, waste-water treatment and reuse to counteract climate variability in Gaza. Fall Meetings, American Geophysical Union, San Francisco, CA, December 15-19, 2009.
46. Anayah, F. and J. J. Kaluarachchi. Can complementary methods reliably estimate evapotranspiration in semi-arid regions? Fall Meetings, American Geophysical Union, San Francisco, CA, December 13-17, 2010.
47. Anayah, F. and J. J. Kaluarachchi, Can complementary methods reliably estimate evapotranspiration in semi-arid regions? Presented at the Spring Runoff Conference, Utah State University, Logan, UT, April, 2011.
48. Anayah, F. and J. J. Kaluarachchi, Can complementary methods reliably estimate evapotranspiration in semi-arid regions? Presented at the Intermountain Graduate Research Symposium, Utah State University, Logan, UT, March 31, 2011.
49. Jayasekara, D. and J. J. Kaluarachchi, Modeling the hydrology and water allocation under climate change in rural river basins: A case study from Nam Ngum River Basin, Laos. American Geophysical Union, San Francisco, CA, December 5-9, 2011.
50. Anayah, F. and J. J. Kaluarachchi, Is there a global model to reliably predicting evapotranspiration? Presented at the Spring Runoff Conference, Utah State University, Logan, UT, April 3-4, 2012. <http://wetwater.usu.edu/htm/conference>
51. Anayah, F. and J. J. Kaluarachchi, Are actual and crop evapotranspiration equivalent?? Presented at the Intermountain Graduate Research Symposium, Utah State University, Logan, UT, April 5-6, 2012. <http://www.igr-symposium.org/>
52. Keum, J. and J. J. Kaluarachchi, Cost effective Allocation strategies for salinity removal in the upper Colorado River Basin. Presented at the Spring Runoff Conference, Utah State University, Logan, UT, April 3-4, 2012. <http://wetwater.usu.edu/htm/conference>
53. Murphy K., E. Price, K. Whitney, R. Smith, S. Waage, J. Lillywhite, J. Hill, L. Ferguson, J. Kaluarachchi, C. Pannkuk, Building capacity of the Iraq extension system: An end-of-project evaluation of the 2007-2011 Iraq Agricultural Extension Revitalization project, ASA, CCSA, and SSSA International Annual Meeting, October 21-24, Cincinnati, OH.

54. Kim, D. and J. J. Kaluarachchi, Characterization of river basins with irrigation diversions using regionalization methods. American Geophysical Union, San Francisco, CA, December 3-7, 2012.
55. Keum, J. and J. J. Kaluarachchi, Cost-equity considerations in salinity control in the Upper Colorado River Basin. American Geophysical Union, San Francisco, CA, December 3-7, 2012.
56. Keum, J. and J. J. Kaluarachchi, Predicting annual Variation of salinity production from the Upper Colorado River Basin Using SPARROW. Presented at the Spring Runoff Conference, Utah State University, Logan, UT, April 9-10, 2013.  
<http://wetwater.usu.edu/htm/conference>
57. Keum, J. and J. J. Kaluarachchi Salinity generation in the Upper Colorado River Basin: Model predictions and management issues, Presentation at the 6<sup>th</sup> International Conference on Water Resources and Environmental Research: Water & Environmental Dynamics, June 3-7, 2013.
58. Keum, J. and J. J. Kaluarachchi. Predicting salinity generation in the Colorado River Basin and cost and equity considerations in salinity reduction, Presentation at the 6<sup>th</sup> International Conference on Water Resources and Environmental Research: Water & Environmental Dynamics, June 3-7, 2013.
59. Keum J. and J. J. Kaluarachchi, Analysis of monitoring needs and redundancies of the Upper Colorado River Basin for salinity prediction using SPARROW, Annual Conference of the American Water Resources Association, Portland, OR, November 4-7, 2013.
60. Kim D. and J. J. Kaluarachchi, Predicating water resources in snowmelt-driven watersheds using the flow duration curve method, 2014 Annual Summer Specialty Conference of the American Water Resources Association, Reno, NV, June 30-July 2, 2014.
61. Kim D. and J. J. Kaluarachchi, Hydro-economic optimization for agricultural productivity using Bayesian estimates, 2014 Annual Summer Specialty Conference of the American Water Resources Association, Reno, NV, June 30-July 2, 2014.
62. Kim D. and J. J. Kaluarachchi, A risk based agro-economic analysis to maximize income of salinity-affected agricultural lands with limited water. 8<sup>th</sup> International Perspective on Water Resources and the Environment, Environmental and Water Resources Institute, Colombo, Sri Lanka, January 4-6, 2016.

### International Development

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Principal Investigator  
Workshop on Water Resources Development in Egypt  
National Science Foundation

May 2014

Technical Lead  
Workshop on Proposal Planning and Writing  
Further Advancing the Blue Revolution Initiative  
(FABRI)  
USAID and DAI

October 2012

Middle East Desalination Research Center, Muscat, Oman	
Member Research Development Committee, International Water Management Institute, Colombo, Sri Lanka	April 2011
Principal Investigator Water resources and hydropower assessment in the Nam Ngum River Basin of Laos under climate change; Joint project with International Water Management Institute, Sri Lanka	2009 - 2013
Principal Investigator Natural groundwater recharge assessment in Northern Ghana under climate change, Ghana; Joint project with International Water Management Institute, Sri Lanka	2009 - 2011
USU Lead Inauguration of the Arab Water Academy, Abu Dhabi, UAE	July 2008
Organizer Extension Needs Assessment Forum for Iraqi Ministries of Water Resources, Agriculture, Environment, and Higher Education, Amman, Jordan, Funded by the US Department of Agriculture	February 2007
Principal Investigator Water and Irrigation, Iraqi Agriculture Extension Revitalization (IAER) Program, Funded by US Department of Agriculture	2006 - 2011
Project Director Academic Exchange Program with An-Najah National University, Nablus, Palestine. Funded by the US State Department	2000 - 2005
Principal Investigator Water resources management in the Walawe River Basin, Sri Lanka, Joint project with International Water Management Institute, Sri Lanka	2004 - 2010
Principal Investigator Hydrologic analysis and water resources assessment in the Blue Nile River Basin, Ethiopia; Joint project with International Water Management Institute, Sri Lanka.	2004 - 2008
Principal Investigator Aquifer vulnerability assessment of eastern coastal aquifer zone of Sri Lanka; Joint project with International Water Management Institute, Sri Lanka	2005 - 2008

Consultant TOKTEN Consultant to Government of Sri Lanka on groundwater pollution and management, Funded by UNDP	August 1998
Consultant TOKTEN Consultant to Government of Sri Lanka on developing groundwater modeling capacity, Funded by UNDP	August 1997
Visiting Professor Royal Institute of Technology, Stockholm, Sweden	1997 - 1998

### Invited Short Courses

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1. Short course on Multiphase Organic Transport Modeling with Emphasis on Pollution by Hydrocarbons, International Ground Water Modeling Center, Holcomb Research Institute, Butler University, Indianapolis, Indiana, October, 1988.
2. Short course on Multiphase Organic Transport Modeling with Emphasis on Pollution by Hydrocarbons, International Ground Water Modeling Center, Holcomb Research Institute, Butler University, Indianapolis, Indiana, October, 1989.
3. Short course on Petroleum Hydrocarbons and Organic Chemicals in Ground Water; Use of Models for Site Assessment and Remediation, Los Angeles, California, May, 1990.
4. Short course on Multiphase Organic Transport Modeling for Site Assessment and Remedial Design, International Ground Water Modeling Center, Delft, Netherlands, September, 1990.
5. Short course on Numerical Methods on Modeling Multiphase Flow and Transport in Porous Media, Swiss Federal Institute of Technology, Zurich, Switzerland, March, 1991.
6. Course on Fate and Transport of Chemicals in the Subsurface, Environmental Engineering Directorate, Hill Air Force Base, Ogden, Utah, March, 1995.
7. Course on Groundwater Hydrology and Modeling, Utah Department of Environmental Quality, Salt Lake City, Utah, March-July, 1997.
8. Course on Surface Water Management and Modeling, National Building Research Organization, Colombo, Sri Lanka, September 1998.
9. Course on Terrestrial Subsurface Processes II, Flow and Transport Processes, Long-distance course for Inland Northwest Research Alliance, Subsurface Science Program, March-May, 2002, 2003, 2004, 2005, 2006, and 2007.
10. Short Course on Water and Irrigation to Iraqi Ministry of Agriculture, Desert Development Center, The American University of Cairo, Egypt, July 8-26, 2007.
11. Short Course on Water and Irrigation to Iraqi Ministry of Agriculture, Amman Marriott, Amman, Jordan, Egypt, October 28-November 2, 2007.

12. Short Course on Water and Hydrology to Iraqi Ministry of Agriculture, Amman Marriott, Amman, Jordan, Egypt, January 12-17, 2008.
13. Short Course on Water and Hydrology to Iraqi Ministry of Agriculture, Amman Marriott, Amman, Jordan, Egypt, April 27-May 1, 2008.
14. Short Course on Land and Water Resources Management: Irrigated Agriculture – Groundwater Hydraulics and management, International Center for Advanced Mediterranean Agronomic Studies (CIHEAM), Bari, Italy, December 6-11, 2010.
15. Pre-Training Short Course on Water and Irrigation to Iraqi Ministry of Agriculture, Erbil, Kurdistan, Iraq, June 1-3, 2009.
16. Short Course on Water, Hydrology and Irrigation to Iraqi Ministry of Agriculture, Utah State University, Logan, Utah, September 27- November 9, 2009.
17. Short Course on Irrigation Water Management to Iraqi Ministry of Agriculture, Agricultural Research Center, Erbil, Kurdistan, Iraq, March 27-April 7, 2011.
18. Short Course on Land and Water Resources Management: Irrigated Agriculture – Groundwater Hydraulics and management, International Center for Advanced Mediterranean Agronomic Studies (CIHEAM), Bari, Italy, December 12-16, 2011.
19. Short Course on Proposal Planning and Writing, Participants from the Further Advancing the Blue Revolution Initiative (FABRI) and Partnerships for Enhanced Engagement in Research (PEER), USAID, Muscat, Oman, October 7-10, 2012.
20. Short Course on Land and Water Resources Management: Irrigated Agriculture – Groundwater Hydraulics and management, International Center for Advanced Mediterranean Agronomic Studies (CIHEAM), Bari, Italy, December 10-15, 2012.
21. Short Course on Land and Water Resources Management: Irrigated Agriculture – Groundwater Hydraulics and management, International Center for Advanced Mediterranean Agronomic Studies (CIHEAM), Bari, Italy, November 11-15, 2013.
22. Short Course on Land and Water Resources Management: Irrigated Agriculture – Groundwater Hydraulics and management, International Center for Advanced Mediterranean Agronomic Studies (CIHEAM), Bari, Italy, November 17-21, 2014.
23. Short Course on Land and Water Resources Management: Irrigated Agriculture – Groundwater Hydraulics and management, International Center for Advanced Mediterranean Agronomic Studies (CIHEAM), Bari, Italy, November 9-13, 2015.

#### Invited Presentations

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1. Modeling Flow and Multicomponent Transport in Porous Media, Department of Soil Physics, Swiss Federal Institute of Technology, Zurich, Switzerland, January, 1990.
2. Modeling Flow and Multicomponent Transport in Porous Media, Shell Development Company, Westhollow Research Center, Houston, Texas, February, 1991.
3. Applications of Models in Hydrocarbon Contaminated Sites for Remediation Purposes, Lawrence Berkeley Laboratory, Berkeley, California, May, 1991.



4. Modeling Flow and Multicomponent Transport in Porous Media, Southwest Research Institute, San Antonio, Texas, July, 1991.
5. Applications of Mathematical Modeling in Groundwater Contamination Problems, Woodward- Clyde Consultants, Santa Ana, California, May, 1991.
6. Application of Thermal Venting to Recover Less-Volatile Contaminants from the Unsaturated Zone, R. S. Kerr Laboratories, US EPA, Ada, Oklahoma, June, 1993.
7. Current Research Trends in Multiphase Flow and Transport, Tyndall Air Force Base, Panama City, Florida, February, 1995.
8. Free-Product Recovery from Unconfined Aquifers, Division of Environmental Response and Remediation, Utah Department of Environmental Quality, Salt Lake City, Utah, February, 1995.
9. Application of Thermal Venting Technology, US Army Waterways Experimental Station, Vicksburg, Mississippi, April, 1995.
10. Current Research Activities in Contaminant Hydrology, Public Work Research Institute, Ministry of Construction, Tsukuba City, Japan, February, 1996.
11. Current Research Activities in Contaminant Hydrology, Nippon Koei Co. Ltd., Tokyo, Japan, February, 1996.
12. Research Activities in Contaminant Hydrology, Disaster Prevention Institute, Kyoto University, Kyoto, Japan, February, 1996.
13. Free-product recovery from unconfined aquifers, Department of Geology, University of Auckland, New Zealand, July, 1996.
14. Ground Water Contamination by Organic Pollutants, National Building Research Organization, Colombo, Sri Lanka, October, 1996.
15. Free-Product Migration and Recovery: System Operations and Limitations, Department of Civil Engineering, Royal Institute of Technology, Stockholm, Sweden, March, 1997.
16. Dual-Phase Pumping for Gasoline recovery from unconfined aquifers, Department of Civil Engineering, Tsinghua University, Beijing, China, June, 1997.
17. Dual-Phase Pumping for Gasoline recovery from unconfined aquifers, Department of Urban and Environmental Sciences, Beijing University, Beijing, China, June, 1997.
18. Groundwater Contamination and Remediation, Department of Civil Engineering, Seoul National University, Seoul, Korea, September, 1997.
19. Ground Water Management in Resource Allocation, National Building Research Organization, Colombo, Sri Lanka, October, 1998.
20. Ground Water Management in Resource Allocation, Drainage and Reclamation Board, Colombo, Sri Lanka, October, 1998.
21. A Conceptual Framework for the Optimal Management of Nitrate in Ground water, IDS-Water Americas, 2004, Virtual Water Conference, organized by IDS, May 18-24.

22. Ground Water Quality Management through Risk-Based Decision Analysis, Presented at the NSF Research Panel meeting on Post-Tsunami Impacts in Sri Lanka, Colombo, Sri Lanka, Sept 22, 2005.
23. Ground water in sub-Saharan Africa Implications for food security and livelihoods: A case study from Ghana. Workshop of Sub-Saharan groundwater, International water management Institute, Accra, Ghana, March 8-11, 2010.
24. Water Resources Planning and Management Studies: Examples from Nile River Basin, Ethiopia and Gaza Strip, Palestine. International Center for Advanced Mediterranean Agronomic Studies (CIHEAM), Bari, Italy, December 15, 2011.
25. Water Resources Planning and Management in the Nile River Basin, Ethiopia. Water and Environmental Engineering Program, Masdar Institute, Abu Dhabi, April 10, 2012.

### Graduate Student Mentoring

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#### PhD Students (as major professor)

1. Alaa Abdin (1996)  
Dissertation title: "Stochastic analysis of multiphase flow in heterogeneous porous media"
2. Jahangir Morshed (1997)  
Dissertation title: "Optimal groundwater management and inverse analysis using genetic algorithms and artificial neural networks"
3. Mamun Rashid (2003)  
Dissertation title: "Biodegradation of hydrocarbons using alternate electron acceptors: Theoretical development and model applications"
4. Mohammad Almasri (2004)  
Dissertation title: "Optimal management of nitrate contamination of ground water"
5. Navin Twarakavi (2006)  
Dissertation title: "Assessment of aquifer vulnerability to heavy metal contamination and implications on water policy issues"
6. Ibrahim Khadam (2006)  
Dissertation title: "Sustainable management of watersheds considering hydrology, water quality, and economic equity"
7. Aklilu Testafamicheal (2006)  
Dissertation title: "Pesticide risk benefit analysis in drinking water and management implications"
8. Champika Wethasinghe (2006)  
Dissertation title: "Impacts of uncertainty in biokinetic parameters on bioremediation of contaminated aquifers and human health risk"
9. Wafa Hassan (2007)  
Dissertation title: "Water resources management considering demand, supply, land use changes, and economic aspects: A case study from Salt Lake County, Utah"

10. Ungtae Kim (2007)  
Dissertation title: "Impacts of climate change on water resources of the Upper Blue Nile River Basin, Ethiopia"
11. Ashraf Shaqadan (2008)  
Dissertation title: "Decision analysis considering welfare impacts in water resources using the benefit transfer approach"
12. Ahmed Al-Juaidy (2009)  
Dissertation title: "Water allocation for agricultural use considering treated wastewater, public health risk, and economic issues"
13. Neelanga Weragala (2010)  
Dissertation title: "Water allocation challenges in rural river basins: A case study from the Walawe River Basin, Sri Lanka"
14. Fathi Anayah (2012)  
Dissertation title: "Improving complementary methods to predict evapotranspiration for data deficit conditions and global applications under climate change"
15. Dumindu Jayasekera (2013)  
Dissertation title: "Impacts of climate change on water resources and corresponding adaptation strategies of the Nam Ngum River Basin, Laos"
16. Jongho Keum (2014)  
Dissertation title: "Salinity management in the upper Colorado River Basin: Modeling, monitoring, and cost-equity challenges"
17. Daeha Kim (2015)  
Research emphasis: "Water management for agricultural production in the Sevier River Basin, Utah: A multi-disciplinary approach"
18. Homin Kim (in-progress)  
Research emphasis: Water resources
19. Sonia Murshed (in-progress)  
Research emphasis: Water resources
20. Noha Moghazy (in-progress)  
Research emphasis: Water resources

#### MS Students (as major professor)

1. Jahangir Morshed (1994)  
Dissertation title: "Critical assessment of the operator-splitting technique in solving the advection-dispersion-reaction problems"
2. Mesbah Islam (1993)  
Dissertation title: "Theoretical analysis of thermal venting to remediate hydrocarbon contaminated soils"
3. Li Li (1994)  
Dissertation title: "Nonlinear transport simulation of solutes in groundwater"
4. Yi Cao (1992)

- Dissertation title: “Adsorption of solutes during contaminant transport in groundwater”
5. Abidith Pendse (1996)  
Dissertation title: “
  6. Alan Spilker (1997)  
Dissertation title: “Critical evaluation of the site characterization program at Tooele Army Depot, Tooele, Utah”
  7. Hatim Mustafa (1997)  
Dissertation title: “Human health risk assessment for hazardous waste contaminated sites”
  8. Qian Zhao (2000)  
Dissertation title: “Human health risk assessment considering age and gender variability”
  9. Somoodh Abraham (2003)  
Dissertation title: “Impact of parameter uncertainty on pesticide runoff and economic cost in small watersheds
  10. Ibrahim Khadam (2003)  
Dissertation title: “Health risk-based decision analysis at hazardous waste contaminated sites”
  11. Navin Twarakavi (2003)  
Dissertation title: “Ground water quality assessment in Water Resources Inventory Area 1, Whatcom County, Washington”
  12. Ritu Gupta (2005)  
Dissertation title: “Investigation of elevation related controls on semi-arid mountain front hydrology by one dimensional modeling of water balance at two sites in Boise Foothills”
  13. Ajay Karla (2005)  
Dissertation title: “Vertical and lateral flow components of soil water fluxes following spring rainfall in a semi-arid catchment”
  14. Karthik Kumaraswamy (2007)  
Dissertation title: “Vulnerability of shallow aquifers of the conterminous United States to nitrate: Assessment of methodologies”
  15. Dumindu Jayasekera (2007)  
Dissertation title: “Impacts on water quality of rural coastal aquifers due to population growth and land use exploitation: A case study from Kalpitiya Peninsula, Sri Lanka”
  16. Hossam Moursi (2014)  
Water resources (in-progress)

#### Post-Doctoral Research Associates

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- Alaa E. Abdin, 1996-98
- Ungtae Kim, 2007-2008

- Yasser Nazzal, 2007- 2008
- Ahmed Al-Juaidy, 2009
- Neelanga Weragala, 2010

#### Selected University-Wide Assignments

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- Utah Water Research Laboratory (UWRL) Leadership Management Committee, 1994-1995
- Graduate Council, 1999 - 2002
- Provost's Promotion and Tenure Advisory Committee, 2002-2005
- President's Committee on Selective Investments, 2004
- Educational Policies Committee, 2007-2009
- Research Council, 2007 – present
- Vice President's Seed Grant Proposal Review Committee, 2007-present
- Electrical and Computer Engineering Head Search Committee Chair, 2008
- Search Committee, Associate Vice President and Associate Dean, RGS, 2012
- EPSCoR Research Team, 2009-2010

#### Professional Consulting

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- American Petroleum Institute, Washington, D. C.
- Mobil Oil Corporation, Paulsboro, New Jersey
- Amoco Oil, Research and Development, Naperville, Illinois
- Hill Air Force Base, Ogden, Utah
- Montgomery Watson, Salt Lake City, Utah
- Environmental Systems and Technologies, Inc. Blacksburg, Virginia
- JBR Consultants, Midvale, Utah
- CH2MHill, Salt Lake City, Utah
- Hansen, Allen & Luce, Inc., Midvale, Utah
- Stratus Consulting, Boulder, Colorado and the US Department of Justice, Philadelphia

#### Environmental Modeling Software Development

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##### **ARMOS**

Principal author, Two-dimensional finite element model to predict areal flow of water and migration of light hydrocarbon as a free phase in a three fluid phase unconfined aquifer for remediation and design purposes. American Petroleum Institute, Washington, D.C., 1988.

##### **MOFAT**

Principal author, Two-dimensional finite element model to predict multiphase flow and transport of multi-component organics in a vertical three fluid phase porous medium. US Environmental Protection Agency, R. S. Kerr Laboratory, Ada, OK, 1991.

Resolution

ITEM FOR ACTION

Re: Utah State University Research Foundation

- Recommendation for re-appointment to Research Foundation Board

EXECUTIVE SUMMARY

Utah State University Research Foundation Board submits to the President of Utah State University and the Utah State University Board of Trustees recommendations to appoint individuals to the Research Foundation Board. These recommendations are consistent with Article VI of the Amended and Restated Articles of Incorporation and Article II, Sections 4 and 5, and Article III, Sections 1 and 2, of the Amended Bylaws of the USU Research Foundation. This recommendation was made by a resolution of the majority of the USU Research Foundation Board after appropriate review and discussion.

RECOMMENDATION

- 1) The USU Research Foundation Board recommends the re-appointment of General Bruce A. Carlson as Trustee to the Utah State University Research Foundation Board for an additional three (3) year term beginning when his current term expires.

RESOLUTION  
UTAH STATE UNIVERSITY  
BOARD OF TRUSTEES

*WHEREAS*, the term of General Bruce A. Carlson as Trustee for the Utah State University Research Foundation expires July 2018; and

*WHEREAS*, Gen. Carlson's service as Trustee has been very beneficial to the Foundation; and

*WHEREAS*, the Foundation recommends it would be beneficial for his service as Trustee to continue;

*NOW, THEREFORE, BE IT RESOLVED*, that the President of Utah State University and the Utah State University Board of Trustees hereby approve General Bruce A. Carlson's re-appointment to the Utah State University Research Foundation Board for a three (3) year term beginning July 2018.

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RESOLUTION APPROVED BY THE USU BOARD OF TRUSTEES:

\_\_\_\_\_  
Date

**Bruce Carlson, General, USAF (ret)**



**4685 Summerview Road**

**Bountiful, Utah 84010-5896**

**home: 801 298-3954 cell: 801 230 7643 office: 801 240 1796**

**[bruce.carlson417@gmail.com](mailto:bruce.carlson417@gmail.com)**

**Active TS/SCI Clearance held by National Reconnaissance Office, Chantilly VA**

**EXPERIENCE**

**Senior Church**

**Leader:** Jul 2012-Jul 2015. Called to serve in the Church of Jesus Christ of Latter-Day Saints (Mormon) as a Seventy - General Authority. Managed Church affairs and congregations in the Middle East and North Africa (Morocco to Afghanistan) and served as Church representative to international ecumenical events. Led Church humanitarian efforts in Iraq, Syria, Lebanon, Palestine, Jordan, Egypt, Morocco and Tunisia.

**Senior**

**Advisor:** Jun 2013-Present. Chairman, Utah State's Space Dynamics Laboratory, Board of Advisors

**Director:**

Jul 2009-Jul 2012. Director, National Reconnaissance Office (NRO) where he supervised the development, acquisition, testing, launch and operation of the Nation's overhead reconnaissance constellation and its associated ground systems. His responsibilities included membership on the nation's Director of National Intelligence (DNI) Executive Board where he advised the DNI on all reconnaissance and intelligence collection strategies, operations, budgets and acquisition programs. During his tenure he lead the NRO from having six of fourteen major overhead reconnaissance programs over-cost, over-schedule or under-performing to all fourteen being on-costs, schedule and performance in three years. He simultaneously directed the most aggressive NRO launch schedule in over 25 years and brought a failing national intelligence agency back to world-class status.

**Commander:** Aug 2005 to Nov 2008. Commander, Air Force Materiel Command, led 73,000 people with annual execution budget of \$43B and assets in excess of \$46B. Responsible for all USAF science & technology research, acquisition personnel, developmental testing and worldwide sustainment of all AF weapon systems.



- **Strategic Leader:** In wake of AF nuclear caretaker incidents, developed a single manager concept for all AF-controlled nuclear weapons and nuclear weapons related materiel and obtained \$100M to secure all AF-owned nuclear assets as well as consolidate and retrain the AF's entire nuclear sustainment force.
- **Fiscal Specialist:** Consolidated 17 different AF budget authorities for all AF weapons system sustainment (\$13B annually) and for the first time in AF history each Command was able to predict aircraft availability, AF-wide, a year ahead of time. This Consolidated Asset Management (CAM) process returned \$550M back to DoD coffers in its first year of complete execution.
- **Business Oriented Manager:** Optimized BRAC 05 directed moves of diverse AF medical and human performance organizations. Consolidated all AF medical and human performance research, consultation and education under a single new unit, funded the largest construction project in the history of the southern Ohio region and stood up the organization to manage this synergistic effort.
- **Lean Expert:** Created and implemented the consolidation of over 80 separate contracting entities across the AF into 5 regions, initially saving hundreds of manpower spaces and setting the AF up to save in excess of \$500M annually through consolidation of services contracts.

**Commander:** May 2003 to Aug 2005. Commander, Eighth Air Force, commanded all AF nuclear and conventional bomber forces, all of the AF's intelligence gathering and processing capability, an organization of 34,000 people with an annual operating budget of >\$200M and assets in excess of \$10B.

- **Organizational Executive:** Stood up the AF's cyberspace operations by establishing working relationships between diverse groups across the AF, formed working relationships with other Federal Agencies through formal agreements and trained the initial team of experts to operationalize cyberspace inside the USAF.

## **Joint Staff**

**Director:** Jan 2000 to May 2003. Principle advisor to the Chairman of the Joint Chiefs for all DoD budget, requirements and force structure analysis. Major issues included establishment of TRICARE, (the DoD's comprehensive healthcare program for active-duty and retired personnel) the standup of a new Combatant Command and the initial wartime funding and force buildup in the War Against Terror.

- **Credible Senior Staff Officer:** Served as principle Joint Staff advisor to the SecDef on the 2001 Quadrennial Defense Review.
- **Budget Forecaster:** Authored financial options for first wartime Congressional Supplemental (\$38B) in wake of 9/11 attacks on US.

## **Headquarters**

### **AF, Staff**

**Director:** Aug 1996 to Jan 2000. Managed the Air Force's fighter, bomber and weapons portfolio, developed detailed modernization plans for such aircraft as the B-1, B-2 and F-22, and successfully defended program budgets before both houses of Congress. In a second role, directed Air Force-wide efforts to develop requirements for all new Air Force weapons systems, coordinated those new requirements with Combatant Commanders, and the Joint Staff and Office of Secretary of Defense to ensure new air, space and Command & Control systems were supported and funded within the DoD's acquisition budget.

**Commander:** Feb 1995 to Aug 1996. Commander 49<sup>th</sup> Fighter Wing, the Air Force's first operational stealth fighter wing, an organization of 4500 people with execution budget of \$7 million annually and assets valued at greater than \$1B. Responsible for the combat readiness of the nation's stealth fighter capability, the training of two foreign nation's fighter forces, and a large portion of the Air Force's combat rescue forces.

## **Operational**

### **Pilot &**

**Staff Officer:** Jun 1971 to Feb 1995. Operational flying assignments, to include combat operations in the OV-10 as a Forward Air Controller. Flew the F-4, A-10, F-16, F/EF-111, B-52 and F-117. Served as instructor pilot, flight examiner, and aide to the Commander, Tactical Air Command. Additionally, during this time attended and graduated from the Air Force Fighter Weapons School.

## **ACHIEVEMENTS**

**Author:** "Developmental Planning: The Key to Future War-Fighter Capabilities," *Air & Space Power Journal - Spring 2008*

"Protecting Global Utilities, Safeguarding the Next Millennium's Space-Based Public Services," *Aerospace Power Journal - Summer 2000*

**Awards:** Air Force ROTC Distinguished Alumni Award, 2014

National Intelligence Distinguished Service Award, 2012

DoD Medal for Distinguished Public Service, 2012

James V. Hartinger Award for Distinguished Service in the Field of Military Space, 2012

Air Force Association, Wright Memorial Chapter, Heritage Award, an annual award given to a single active duty leader for the most significant contribution by a military member to Air Force programs, 2008

Air Force Association, National H.H. Arnold Award, an annual award given to a single active duty leader for the most significant contribution by a military member to national defense, 2008

Air Force Order of the Sword, highest award given to an officer by the enlisted men and women of a Major Command, 2008

University of Minnesota Distinguished Alumni Award, 2006

Brainerd High School Distinguished Alumni Award, 2001

**Education:** Distinguished Graduate, Naval War College, Master's in Strategic Studies, 1989  
Honors Graduate, Webster University Business Management Master's, 1980  
Graduate, USAF Fighter Weapons School, A-10, 1979  
Graduate, USAF Undergraduate Pilot Training, Top T-38 Flyer, 1972  
Graduate, Cum Laude, University of Minnesota, Bachelor of Arts, Accounting, 1971

**PROFESSIONAL MEMBERSHIPS**

Air Force Association  
Disabled American Veterans  
American Legion  
Order of Daedalians  
Military Officers Association

## **ACTION AGENDA**

1. Proposal from the Department of Nutrition, Dietetics and Food Sciences in the College of Agriculture and Applied Sciences to offer a Bachelor of Science in Dietetics
2. Proposal from the Department of Nutrition, Dietetics and Food Sciences in the College of Agriculture and Applied Sciences to offer a Bachelor of Science in Food Science
3. Proposal from the Department of Nutrition, Dietetics and Food Sciences in the College of Agriculture and Applied Sciences to offer a Bachelor of Science in Nutrition Science
4. Proposal from the Department of Computer Science in the College of Engineering to offer a Master of Science in Data Science
5. Real Property Disposal – Logan, Utah
6. Real Property Acquisition – Richmond, Utah
7. Construction of a Horse Barn, a Non-State Funded Project
8. Capital Development Priority List for Fiscal Year 2019-20
9. Utah State University 2018-19 Budgets

22 June 2018

**ITEM FOR ACTION**

Utah State University's Department of Nutrition, Dietetics and Food Sciences in the College of Agriculture and Applied Sciences proposes a Bachelor of Science in Dietetics in the manner described below.

**EXECUTIVE SUMMARY**

The Department of Nutrition, Dietetics and Food Sciences in the College of Agriculture and Applied Sciences proposes a Bachelor of Science in Dietetics.

**RECOMMENDATION**

The President and Provost recommend that the Board of Trustees approve the proposal to offer a Bachelor of Science in Dietetics in the College of Agriculture and Applied Sciences.

RESOLUTION  
UTAH STATE UNIVERSITY  
BOARD OF TRUSTEES

WHEREAS, Utah State University's Department of Nutrition, Dietetics and Food Sciences in the College of Agriculture and Applied Sciences proposes a Bachelor of Science in Dietetics, and

WHEREAS, The proposed degree will provide separate accreditation and allow better advising and tracking of students and graduates, and

WHEREAS, The proposal has been approved by the academic dean, the Educational Policies Committee, and the USU Faculty Senate, and

WHEREAS, The proposal has been approved by the President and Provost of Utah State University;

NOW THEREFORE BE IT RESOLVED, That the Utah State University Board of Trustees hereby approve the proposal to offer a Bachelor of Science in Dietetics in the College of Agriculture and Applied Sciences and that notification of this proposal be forwarded to the Utah State Board of Regents of the Utah System of Higher Education.

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RESOLUTION APPROVED BY THE BOARD OF TRUSTEES

\_\_\_\_\_  
DATE:

## Utah System of Higher Education Program Description - Full Template

### Section I: The Request

Utah State University requests approval to offer the following Baccalaureate degree(s): Bachelor of Science in Dietetics effective Fall 2018. This program was approved by the institutional Board of Trustees on .

### Section II: Program Proposal

#### Program Description

*Present a complete, formal program description.*

This request is to establish a Bachelor of Science (BS) Dietetics degree to replace the current dietetics emphasis areas within the BS Nutrition, Dietetics and Food Sciences. The proposed BS Dietetics will have two emphases, Coordinated Program or Didactic Program, corresponding to the current emphasis areas. The curricula for the 1) Coordinated Program or the 2) Didactic Program in proposed BS Dietetics degree will be exactly the same as for the current emphasis areas following four year degree plans found in the USU course catalog, respectively: 1) [http://catalog.usu.edu/preview\\_program.php?catoid=12&poid=10326&returnto=3800](http://catalog.usu.edu/preview_program.php?catoid=12&poid=10326&returnto=3800) or 2) [http://catalog.usu.edu/preview\\_program.php?catoid=12&poid=10325&returnto=3800](http://catalog.usu.edu/preview_program.php?catoid=12&poid=10325&returnto=3800)

#### Consistency with Institutional Mission

*Explain how the program is consistent with the institution's Regents-approved mission, roles, and goals (see mission and roles at [higheredutah.org/policies/policyr312](http://higheredutah.org/policies/policyr312)) or, for "out of mission" program requests, the rationale for the request.*

The proposed BS Dietetics degree will replace the current emphasis areas of the BS in Nutrition, Dietetics and Food Sciences that is a long-established degree offering at Utah State University.

### Section III: Needs Assessment

#### Program Rationale

*Describe the institutional procedures used to arrive at a decision to offer the program. Briefly indicate why such a program should be initiated. State how the institution and the USHE benefit by offering the proposed program.*

There are several reasons for the proposed change. The first reason for a separate BS Dietetics degree is that the current dietetics emphasis areas within the BS Nutrition, Dietetics and Food Sciences are substantially independent and do not share a core curriculum with the other emphasis areas. The independence and separation of the current dietetics emphasis area is evidenced in that each is separately accredited by the Accreditation Council for Education in Nutrition and Dietetics. The second reason for the request for a separate degree is to allow better advising and tracking of students and graduates. The final reason for the request for a separate degree is to offer a degree that is more focused and recognizable to students and stakeholders across the state and region, and degree separation will enhance marketing the proposed degree to specific targeted groups of potential students.

#### Labor Market Demand

*Provide local, state, and/or national labor market data that speak to the need for this program. Occupational demand, wage, and number of annual openings information may be found at sources such as Utah DWS Occupation Information Data Viewer ([jobs.utah.gov/jsp/wi/utalmis/gotoOccinfo.do](http://jobs.utah.gov/jsp/wi/utalmis/gotoOccinfo.do)) and the Occupation Outlook Handbook ([www.bls.gov/oco](http://www.bls.gov/oco)).*

Job Outlook: According to the Bureau of Labor Statistics, Employment of dietitians and nutritionists is projected to grow 14 percent from 2016 to 2026, faster than the average for all occupations. The role of food in preventing and treating diseases,

such as diabetes, is now well known. More dietitians and nutritionists will be needed to provide care for patients with various medical conditions and to advise people who want to improve their overall health (see: <https://www.bls.gov/ooh/Healthcare/Dietitians-and-nutritionists.htm>)

In the state of Utah, this occupation is expected to experience faster than average employment growth with a moderate volume of annual job openings. Business expansion, as opposed to the need for replacements, will provide the majority of job openings in the coming decade. Dietitians and nutritionists who have earned advanced degrees or certification in a specialty area may enjoy better job prospects (see: <https://jobs.utah.gov/jsp/utalmis/#/occupation/29-1031.00/report>)

### **Student Demand**

*Provide evidence of student interest and demand that supports potential program enrollment. Use Appendix D to project five years' enrollments and graduates. Note: If the proposed program is an expansion of an existing program, present several years enrollment trends by headcount and/or by student credit hours that justify expansion.*

Acceptance of students into the current emphasis areas in dietetics is at full capacity, and student demand for the new BS Dietetics is expected to remain at capacity with 12 graduates/year in the CPD emphasis and 22 graduates/yr in the DPD emphasis.

### **Similar Programs**

*Are similar programs offered elsewhere in the USHE, the state, or Intermountain Region? If yes, identify the existing program(s) and cite justifications for why the Regents should approve another program of this type. How does the proposed program differ from or compliment similar program(s)?*

The proposed degree will replace the current emphasis areas and will not introduce additional overlap across programs in USHE.

### **Collaboration with and Impact on Other USHE Institutions**

*Indicate if the program will be delivered outside of designated service area; provide justification. Service areas are defined in [higheredutah.org/policies/policyr315/](http://higheredutah.org/policies/policyr315/). Assess the impact the new program will have on other USHE institutions. Describe any discussions with other institutions pertaining to this program. Include any collaborative efforts that may have been proposed.*

The proposed degree will replace the current emphasis areas and will not offer additional collaboration or impact other USHE institutions.

### **External Review and Accreditation**

*Indicate whether external consultants or, for a career and technical education program, program advisory committee were involved in the development of the proposed program. List the members of the external consultants or advisory committee and briefly describe their activities. If the program will seek special professional accreditation, project anticipated costs and a date for accreditation review.*

The Coordinated Program and the Didactic Program will remain separately accredited similar to the current emphasis areas that they are replacing.



## Section IV: Program Details

### Graduation Standards and Number of Credits

*Provide graduation standards. Provide justification if number of credit or clock hours exceeds credit limit for this program type described in R401-3.11, which can be found at [higheredutah.org/policies/R401](http://higheredutah.org/policies/R401).*

120 credits required as a minimum. The didactic program emphasis area which requires the students to complete the internship as a post-baccalaureate experience, is at 120 credit hours. The coordinated program emphasis area integrates the internship and adds an additional 12 credits to the BS degree, requiring 132 total credits.

### Admission Requirements

*List admission requirements specific to the proposed program.*

The proposed degree will replace the current emphasis and requirements for admission will remain unchanged as found in the University Catalog: <http://www.usu.edu/degrees/index.cfm?id=128>

### Curriculum and Degree Map

*Use the tables in Appendix A to provide a list of courses and Appendix B to provide a program Degree Map, also referred to as a graduation plan.*

## Section V: Institution, Faculty, and Staff Support

### Institutional Readiness

*How do existing administrative structures support the proposed program? Identify new organizational structures that may be needed to deliver the program. Will the proposed program impact the delivery of undergraduate and/or lower-division education? If yes, how?*

The proposed degree will replace the current emphasis and will not require any adjustments to administrative or organizational structure of the institution.

### Faculty

*Describe faculty development activities that will support this program. Will existing faculty/instructors, including teaching/graduate assistants, be sufficient to instruct the program or will additional faculty be recruited? If needed, provide plans and resources to secure qualified faculty. Use Appendix C to provide detail on faculty profiles and new hires.*

The proposed degree will replace the current emphasis and will be supported by existing faculty.

### Staff

*Describe the staff development activities that will support this program. Will existing staff such as administrative, secretarial/clerical, laboratory aides, advisors, be sufficient to support the program or will additional staff need to be hired? Provide plans and resources to secure qualified staff, as needed.*

The proposed degree will replace the current emphasis and will be supported by existing staff.

## **Student Advisement**

*Describe how students in the proposed program will be advised.*

The proposed degree will replace the current emphasis and will utilize the current advising provided through the Student Services of the College of Agriculture and Applied Sciences.

## **Library and Information Resources**

*Describe library resources required to offer the proposed program if any. List new library resources to be acquired.*

The proposed degree will replace the current emphasis and will utilize the current library and information resources of Utah State University.

## **Projected Enrollment and Finance**

*Use Appendix D to provide projected enrollment and information on related operating expenses and funding sources.*

## **Section VI: Program Evaluation**

### **Program Assessment**

*Identify program goals. Describe the system of assessment to be used to evaluate and develop the program.*

The proposed degree will replace the current emphasis and will follow the assessment plan currently in place for the emphasis. That plan can be found at: <https://ndfs.usu.edu/assessment>

### **Student Standards of Performance**

*List the standards, competencies, and marketable skills students will have achieved at the time of graduation. How and why were these standards and competencies chosen? Include formative and summative assessment measures to be used to determine student learning outcomes.*

The proposed degree is replacing the current emphasis and will require existing student standards of performance for the emphasis. The learning objectives and course map for the current emphasis can be accessed at: <https://ndfs.usu.edu/assessment>

## Appendix A: Program Curriculum

List all courses, including new courses, to be offered in the proposed program by prefix, number, title, and credit hours (or credit equivalences). Indicate new courses with an X in the appropriate columns. The total number of credit hours should reflect the number of credits required to be awarded the degree.

For variable credits, please enter the minimum value in the table for credit hours. To explain variable credit in detail as well as any additional information, use the narrative box at the end of this appendix.

		Course Number	NEW Course	Course Title	Credit Hours
General Education Courses (list specific courses if recommended for this program on Degree Map)					
General Education Credit Hour Sub-Total					18
Required Courses					
+ -		CHEM 1210		Principles of Chemistry I	4
+ -		CHEM 1220		Principles of Chemistry II (BPS)	4
+ -		CHEM 2300		Principles of Organic Chemistry	3
+ -		CHEM 3700		Introductory Biochemistry	3
+ -		MATH 1050		College Algebra (QL)	4
+ -		STAT 1040		Introduction to Statistics (QL)	3
+ -		BIOL 2420		Human Physiology	4
+ -		PSY 1010		General Psychology (BSS)	3
+ -		FCHD 3350		Personal Family Finance (DSS)	3
+ -		NDFS 1020		Science and Application of Human Nutrition (BLS)	3
+ -		NDFS 1030		Introduction to Dietetics	1
+ -		NDFS 1250		Sanitation and Safety	3
+ -		NDFS 1260		Food Literacy	3
+ -		NDFS 2020		Nutrition Through the Life Cycle	3
+ -		NDFS 3020		Nutrition and Physical Performance	2
+ -		NDFS 3070		Science of Food Preparation	4
+ -		NDFS 3600		Medical Terminology for Health Care Professionals	2
+ -		NDFS 4020		Advanced Nutrition	3
+ -		NDFS 4050		Education and Counseling Methods in Dietetics I (CI)	2
+ -		NDFS 4060		Education and Counseling Methods in Dietetics II (CI)	2
+ -		NDFS 4480		Community Nutrition	3
+ -		NDFS 4550		Nutrition Assessment	3
+ -		NDFS 4560		Medical Nutrition Therapy II (CI)	4
+ -		NDFS 4710		Food Service Systems	2
+ -		NDFS 4720		Food Service Organization and Management (QI)	2
+ -		NDFS 4750		Transition to Professional Practice	2
+ -		NDFS 4780		Maternal and Child Nutrition (CI)	2
+ -		NDFS 5210		Advanced Public Health Nutrition	3
+ -		NDFS 5410		Nutrient Gene Interactions	3
+ -		NDFS 4760		Transition to Professional Practice Lab	2
+ -		NDFS 5750		Advanced Dietetics Practicum	3

	Course Number	NEW Course	Course Title	Credit Hours
Choose _____ of the following courses:				
<input type="radio"/>	<input type="radio"/>			
<input type="radio"/>	<input type="radio"/>			
<b>Required Course Credit Hour Sub-Total</b>				<b>88</b>
<b>Elective Courses</b>				
<input type="radio"/>	<input type="radio"/>			0
Choose _____ of the following courses:				
<input type="radio"/>	<input type="radio"/>			
<input type="radio"/>	<input type="radio"/>			
<b>Elective Credit Hour Sub-Total</b>				<b>0</b>
<b>Core Curriculum Credit Hour Sub-Total</b>				<b>106</b>

*Can students complete this degree without emphases? Yes or  No*

	Course Number	NEW Course	Course Title	Credit Hours
Name of Emphasis:			Didactic Program	
<input type="radio"/>	<input type="radio"/>		NDFS 4590 Nutrition Assessment Lab I	1
<input type="radio"/>	<input type="radio"/>		NDFS 4760 Transition to Professional Practice Lab	2
<input type="radio"/>	<input type="radio"/>		NDFS 5200 Nutritional Epidemiology	3
<input type="radio"/>	<input type="radio"/>		NDFS 5230 Communication of Current Topics in Nutrition (CI)	3
<input type="radio"/>	<input type="radio"/>		NDFS 5750 Advanced Dietetics Practicum	2
<input type="radio"/>	<input type="radio"/>		ASTE 2900 Food Matters (BSS)	3
<b>Emphasis Credit Hour Sub-Total</b>				<b>14</b>
<b>Total Number of Credits to Complete Program</b>				<b>120</b>
Remove this emphasis				

	Course Number	NEW Course	Course Title	Credit Hours
Name of Emphasis:			Coordinated Program	
<input type="radio"/>	<input type="radio"/>		NDFS 4490 Community Nutrition Experience I	2
<input type="radio"/>	<input type="radio"/>		NDFS 4500 Community Nutrition Experience II	2
<input type="radio"/>	<input type="radio"/>		NDFS 4570 Clinical Nutrition Experience I	1
<input type="radio"/>	<input type="radio"/>		NDFS 4580 Clinical Nutrition Experience II	2
<input type="radio"/>	<input type="radio"/>		NDFS 4660 Medical Dietetics (CI)	12
<input type="radio"/>	<input type="radio"/>		NDFS 4730 Food Systems Service Lab	2

	Course Number	NEW Course	Course Title	Credit Hours
+ -	NDFS 4740		Food Service Organization and Management Lab	2
+ -	NDFS 4760		Transition to Professional Practice Lab	2
+ -	NDFS 4790		Maternal and Child Nutrition Lab	1
<b>Emphasis Credit Hour Sub-Total</b>				26
<b>Total Number of Credits to Complete Program</b>				132
	Remove this emphasis			

### Program Curriculum Narrative

*Describe any variable credits. You may also include additional curriculum information.*

The higher than typical credits to complete program for the coordinated program is because it includes the 12 credit hour internship in the undergraduate program. In other dietetics programs, including the didactic emphasis, the 12 credit hour internship occurs after the baccalaureate degree.

## Degree Map

Degree maps pertain to undergraduate programs ONLY. Provide a degree map for proposed program. Degree Maps were approved by the State Board of Regents on July 17, 2014 as a degree completion measure. Degree maps or graduation plans are a suggested semester-by-semester class schedule that includes prefix, number, title, and semester hours. For more details see <http://higheredutah.org/pdf/agendas/201407/TAB%20A%202014-7-18.pdf> (Item #3).

Please cut-and-paste the degree map or manually enter the degree map in the table below.

<b>First Year Fall</b>	<b>Cr. Hr.</b>	<b>First Year Spring</b>	<b>Cr. Hr.</b>
CHEM 1210 Prin Chem	4	CHEM 1220 Prin Chem II	4
NDFS 1020 Science & Appl Human Nutrition	3	NDFS 2020 Nutrition through Lifecycle	3
NDFS 1030 Intr to Dietetics	1	ENGL 1010 Intro Writing (CL1)	3
NDFS 1260 Food Literacy	3	STAT 1040 Intro to Stats (QL)	3
MATH 1050 College Algebra (QL)	4	BHU Course	3
PSY 1010 General Psychology (BSS)	3		
<b>Total</b>	<b>18</b>	<b>Total</b>	<b>16</b>
<b>Second Year Fall</b>	<b>Cr. Hr.</b>	<b>Second Year Spring</b>	<b>Cr. Hr.</b>
CHEM 2300 Organic Chem	3	CHEM 3700 Introductory Biochemistry	3
NDFS 3020 Nutrition & Physical Performance	2	NDFS 3070 Science of Food Preparation	4
BIOL 2420 Human Physiology	4	NDFS 1250 Sanitation and Safety	3
ENGL 2010 Inter Writing (CL2)	3	NDFS 3600 Medical Terminology	2
FCHD 3350 Family Finance (DSS)	3	BCA Course	3
BAI Course	3		
<b>Total</b>	<b>18</b>	<b>Total</b>	<b>15</b>
<b>Third Year Fall</b>	<b>Cr. Hr.</b>	<b>Third Year Spring</b>	<b>Cr. Hr.</b>
NDFS 4020 Adv Nutrition	3	NDFS 4060 Educ & Counseling in Dietetics II	2
NDFS 4050 Educ & Counseling in Dietetics I	2	NDFS 4560 Medical Nutrition Therapy II (CI)	4
NDFS 4480 Community Nutrition	3	NDFS 4720 Food Serv Org & Mgmt (OI)	2
NDFS 4550 Nutrition Assessment	3	NDFS 4780 Maternal and Child Nutr (CI)	2
NDFS 4710 Food Service Systems	2	Emphasis Course	3
		DHA Course	3
<b>Total</b>	<b>13</b>	<b>Total</b>	<b>16</b>
<b>Fourth Year Fall</b>	<b>Cr. Hr.</b>	<b>Fourth Year Spring</b>	<b>Cr. Hr.</b>
NDFS 5750 Advanced Dietetics Practicum	3	NDFS 4750 Trans to Professional Practice	2
Emphasis Courses (coordinated prog internship)	9	NDFS 5210 Adv Public Health Nutrition	3
		NDFS 5410 Nutrient Gene Interactions	3
		NDFS 4760 Trans to Prof Practice Lab	2
		Emphasis Course	2
<b>Total</b>	<b>12</b>	<b>Total</b>	<b>12</b>

### Appendix C: Current and New Faculty / Staff Information

#### Part I. Department Faculty / Staff

Identify # of department faculty / staff (headcount) for the year preceding implementation of proposed program.

	# Tenured	# Tenure -Track	# Non -Tenure Track
Faculty: Full Time with Doctorate	13	4	1
Faculty: Part Time with Doctorate			
Faculty: Full Time with Masters			15
Faculty: Part Time with Masters			
Faculty: Full Time with Baccalaureate			
Faculty: Part Time with Baccalaureate			
Teaching / Graduate Assistants	////	////	
Staff: Full Time			17
Staff: Part Time			10

#### Part II. Proposed Program Faculty Profiles

List current faculty within the institution -- with academic qualifications -- to be used in support of the proposed program(s).

	First Name	Last Name	Tenure (T) / Tenure Track (TT) / Other	Degree	Institution where Credential was Earned	Est. % of time faculty member will dedicate to proposed program.	If "Other," describe
Full Time Faculty							
	Sheryl	Aguilar	Other	MS	Utah State University	100	
	Janet	Anderson	Other	MS	Utah State University	40	
	Martha	Archulta	T	PhD	University of Illinois	5	
	Stacy	Bevan	Other	MS	Utah State University	100	
	Rebecca	Charlton	Other	MPH	University of California - Los Angeles	100	
	Marlene	Graf	Other	MS	Utah State University	50	
	Tamara	Steinitz	Other	MS	Utah State University	100	
	Mateja	Roskos	PhD	TT	Utah State University	50	
Part Time Faculty							

#### Part III: New Faculty / Staff Projections for Proposed Program

Indicate the number of faculty / staff to be hired in the first three years of the program, if applicable. Include additional cost for these faculty / staff members in Appendix D.

	# Tenured	# Tenure -Track	# Non -Tenure Track	Academic or Industry Credentials Needed	Est. % of time to be dedicated to proposed program.
Faculty: Full Time with Doctorate				No new faculty or staff required	
Faculty: Part Time with Doctorate					
Faculty: Full Time with Masters					

	# Tenured	# Tenure -Track	# Non -Tenure Track	Academic or Industry Credentials Needed	Est. % of time to be dedicated to proposed program.
Faculty: Part Time with Masters					
Faculty: Full Time with Baccalaureate					
Faculty: Part Time with Baccalaureate					
Teaching / Graduate Assistants					
Staff: Full Time					
Staff: Part Time					



## Appendix D: Projected Program Participation and Finance

### Part I.

*Project the number of students who will be attracted to the proposed program as well as increased expenses, if any. Include new faculty & staff as described in Appendix C.*

Three Year Projection: Program Participation and Department Budget						
	Year Preceding Implementation	New Program				
		Year 1	Year 2	Year 3	Year 4	Year 5
<b>Student Data</b>						
# of Majors in Department	253	260	270	285	295	300
# of Majors in Proposed Program(s)		165	165	170	170	170
# of Graduates from Department	51	53	55	58	60	63
# Graduates in New Program(s)		34	34	34	34	34
<b>Department Financial Data</b>						
	Department Budget					
	Year Preceding Implementation (Base Budget)	Year 1	Year 2	Year 3		
		Addition to Base Budget for New Program(s)	Addition to Base Budget for New Program(s)	Addition to Base Budget for New Program(s)		
<i>Project additional expenses associated with offering new program(s). Account for New Faculty as stated in Appendix C, "Faculty Projections."</i>						
<b>EXPENSES – nature of additional costs required for proposed program(s)</b>						
<i>List salary benefits for additional faculty/staff each year the positions will be filled. For example, if hiring faculty in year 2, include expense in years 2 and 3. List one-time operating expenses only in the year expended.</i>						
Personnel (Faculty & Staff Salary & Benefits)	\$3,177,123	\$0	\$0	\$0		
Operating Expenses (equipment, travel, resources)	\$161,147					
Other:						
<b>TOTAL PROGRAM EXPENSES</b>		\$0	\$0	\$0		
<b>TOTAL EXPENSES</b>	\$3,338,270	\$3,338,270	\$3,338,270	\$3,338,270		
<b>FUNDING – source of funding to cover additional costs generated by proposed program(s)</b>						
<i>Describe internal reallocation using Narrative 1 on the following page. Describe new sources of funding using Narrative 2.</i>						
Internal Reallocation	\$3,338,270					
Appropriation						
Special Legislative Appropriation						
Grants and Contracts						
Special Fees						
Tuition						
Differential Tuition (requires Regents approval)						
<b>PROPOSED PROGRAM FUNDING</b>		\$0	\$0	\$0		
<b>TOTAL DEPARTMENT FUNDING</b>	\$3,338,270	\$3,338,270	\$3,338,270	\$3,338,270		
<b>Difference</b>						
Funding - Expense	\$0	\$0	\$0	\$0		

**Part II: Expense explanation**

**Expense Narrative**

*Describe expenses associated with the proposed program.*

The proposed degree replaces current emphases and will not require additional funding.

**Part III: Describe funding sources**

**Revenue Narrative 1**

*Describe what internal reallocations, if applicable, are available and any impact to existing programs or services.*

The proposed degree replaces current emphases and will not require additional funding.

**Revenue Narrative 2**

*Describe new funding sources and plans to acquire the funds.*

The proposed degree replaces current emphases and will not require additional funding.

22 June 2018

**ITEM FOR ACTION**

Utah State University's Department of Nutrition, Dietetics and Food Sciences in the College of Agriculture and Applied Sciences proposes a Bachelor of Science in Food Science in the manner described below.

**EXECUTIVE SUMMARY**

The Department of Nutrition, Dietetics and Food Sciences in the College of Agriculture and Applied Sciences proposes a Bachelor of Science in Food Science.

**RECOMMENDATION**

The President and Provost recommend that the Board of Trustees approve the proposal to offer a Bachelor of Science in Food Science in the College of Agriculture and Applied Sciences.

RESOLUTION  
UTAH STATE UNIVERSITY  
BOARD OF TRUSTEES

WHEREAS, Utah State University's Department of Nutrition, Dietetics and Food Sciences in the College of Agriculture and Applied Sciences proposes a Bachelor of Science in Food Science, and

WHEREAS, The proposed degree will offer students with a more focused and recognizable degree, and

WHEREAS, The proposal has been approved by the academic dean, the Educational Policies Committee, and the USU Faculty Senate, and

WHEREAS, The proposal has been approved by the President and Provost of Utah State University;

NOW THEREFORE BE IT RESOLVED, That the Utah State University Board of Trustees hereby approve the proposal to offer a Bachelor of Science in Food Science in the College of Agriculture and Applied Sciences and that notification of this proposal be forwarded to the Utah State Board of Regents of the Utah System of Higher Education.

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RESOLUTION APPROVED BY THE BOARD OF TRUSTEES

DATE: \_\_\_\_\_

## Utah System of Higher Education Program Description - Full Template

### Section I: The Request

Utah State University requests approval to offer the following Baccalaureate degree(s): Bachelor of Science in Food Science effective Fall 2018. This program was approved by the institutional Board of Trustees on .

### Section II: Program Proposal

#### Program Description

*Present a complete, formal program description.*

This request is to establish a Bachelor of Science (BS) Food Science degree to replace the current Food Science emphasis area within the BS Nutrition, Dietetics and Food Sciences. The curriculum for the proposed BS Food Science degree will be exactly the same as for the current Food Science emphasis area following four year degree plan found in the USU course catalog: [http://catalog.usu.edu/preview\\_program.php?catoid=12&poid=9618&returnto=3800](http://catalog.usu.edu/preview_program.php?catoid=12&poid=9618&returnto=3800)

#### Consistency with Institutional Mission

*Explain how the program is consistent with the institution's Regents-approved mission, roles, and goals (see mission and roles at [higheredutah.org/policies/policyr312](http://higheredutah.org/policies/policyr312)) or, for "out of mission" program requests, the rationale for the request.*

The proposed BS Food Science will replace the current Food Science emphasis of the BS in Nutrition, Dietetics and Food Sciences that is a long-established degree offering at Utah State University.

### Section III: Needs Assessment

#### Program Rationale

*Describe the institutional procedures used to arrive at a decision to offer the program. Briefly indicate why such a program should be initiated. State how the institution and the USHE benefit by offering the proposed program.*

There are several reasons for the proposed change. The first reason for a separate BS Food Science degree is that the current Food Science emphasis within the BS Nutrition, Dietetics and Food Sciences is substantially independent and does not share a core curriculum with the other emphasis areas. The independence and separation of the current Food Science emphasis area is evidenced in that it is separately approved by the Institute of Food Technologists. The second reason for the request for a separate degree is to allow better advising and tracking of students and graduates. The final reason for the request for a separate degree is to offer a degree that is more focused and recognizable to students and stakeholders across the state and region, and degree separation will enhance marketing the proposed degree to specific targeted groups of potential students.

#### Labor Market Demand

*Provide local, state, and/or national labor market data that speak to the need for this program. Occupational demand, wage, and number of annual openings information may be found at sources such as Utah DWS Occupation Information Data Viewer ([jobs.utah.gov/jsp/wi/utalmis/gotoOccinfo.do](http://jobs.utah.gov/jsp/wi/utalmis/gotoOccinfo.do)) and the Occupation Outlook Handbook ([www.bls.gov/oco](http://www.bls.gov/oco)).*

Job Outlook: According to the Bureau of Labor Statistics, Employment of agriculture and food scientists is projected to grow 7 percent from 2016 to 2026, as fast as the average for all occupations. Employment of agricultural and food scientists is projected to grow as research into agricultural production methods and techniques continues and median pay is almost \$70,000 per year. (see: <https://www.bls.gov/ooh/life-physical-and-social-science/agricultural-and-food-scientists.htm>)

In the state of Utah, this occupation is expected to experience about average employment growth. The need for replacements, rather than business expansion, is projected to make up the majority of job openings in the coming decade. (see: <https://>

### **Student Demand**

*Provide evidence of student interest and demand that supports potential program enrollment. Use Appendix D to project five years' enrollments and graduates. Note: If the proposed program is an expansion of an existing program, present several years enrollment trends by headcount and/or by student credit hours that justify expansion.*

Student demand for this proposed BS Food Science degree is expected to rise as changing from an emphasis area in the current degree to a standalone degree will increase the visibility of the individual program. Modest growth will be accommodated within the resources currently available in the department.

### **Similar Programs**

*Are similar programs offered elsewhere in the USHE, the state, or Intermountain Region? If yes, identify the existing program(s) and cite justifications for why the Regents should approve another program of this type. How does the proposed program differ from or compliment similar program(s)?*

The proposed degree will replace the current emphasis and will not introduce additional overlap across programs in USHE.

### **Collaboration with and Impact on Other USHE Institutions**

*Indicate if the program will be delivered outside of designated service area; provide justification. Service areas are defined in [higheredutah.org/policies/policy315/](https://higheredutah.org/policies/policy315/). Assess the impact the new program will have on other USHE institutions. Describe any discussions with other institutions pertaining to this program. Include any collaborative efforts that may have been proposed.*

The proposed degree will replace the current emphasis and will not offer additional collaboration or impact other USHE institutions.

### **External Review and Accreditation**

*Indicate whether external consultants or, for a career and technical education program, program advisory committee were involved in the development of the proposed program. List the members of the external consultants or advisory committee and briefly describe their activities. If the program will seek special professional accreditation, project anticipated costs and a date for accreditation review.*

The proposed degree will continue to be approved by the Institute of Food Technologists as is the current emphasis that it is replacing.

## **Section IV: Program Details**

### **Graduation Standards and Number of Credits**

*Provide graduation standards. Provide justification if number of credit or clock hours exceeds credit limit for this program type described in R401-3.11, which can be found at [higheredutah.org/policies/R401](https://higheredutah.org/policies/R401).*

120 credits required

## Admission Requirements

*List admission requirements specific to the proposed program.*

The proposed degree will replace the current emphasis and requirements for admission will remain unchanged as found in the University Catalog: <http://www.usu.edu/degrees/index.cfm?id=128>

## Curriculum and Degree Map

*Use the tables in Appendix A to provide a list of courses and Appendix B to provide a program Degree Map, also referred to as a graduation plan.*

## Section V: Institution, Faculty, and Staff Support

### Institutional Readiness

*How do existing administrative structures support the proposed program? Identify new organizational structures that may be needed to deliver the program. Will the proposed program impact the delivery of undergraduate and/or lower-division education? If yes, how?*

The proposed degree will replace the current emphasis and will not require any adjustments to administrative or organizational structure of the institution.

### Faculty

*Describe faculty development activities that will support this program. Will existing faculty/instructors, including teaching/graduate assistants, be sufficient to instruct the program or will additional faculty be recruited? If needed, provide plans and resources to secure qualified faculty. Use Appendix C to provide detail on faculty profiles and new hires.*

The proposed degree will replace the current emphasis and will be supported by existing faculty.

### Staff

*Describe the staff development activities that will support this program. Will existing staff such as administrative, secretarial/clerical, laboratory aides, advisors, be sufficient to support the program or will additional staff need to be hired? Provide plans and resources to secure qualified staff, as needed.*

The proposed degree will replace the current emphasis and will be supported by existing staff.

### Student Advisement

*Describe how students in the proposed program will be advised.*

The proposed degree will replace the current emphasis and will utilize the current advising provided through the Student Services of the College of Agriculture and Applied Sciences.

### Library and Information Resources

*Describe library resources required to offer the proposed program if any. List new library resources to be acquired.*

The proposed degree will replace the current emphasis and will utilize the current library and information resources of Utah State University.

## **Projected Enrollment and Finance**

*Use Appendix D to provide projected enrollment and information on related operating expenses and funding sources.*

## **Section VI: Program Evaluation**

### **Program Assessment**

*Identify program goals. Describe the system of assessment to be used to evaluate and develop the program.*

The proposed degree will replace the current emphasis and will follow the assessment plan currently in place for the emphasis.

That plan can be found at: <https://ndfs.usu.edu/assessment>

### **Student Standards of Performance**

*List the standards, competencies, and marketable skills students will have achieved at the time of graduation. How and why were these standards and competencies chosen? Include formative and summative assessment measures to be used to determine student learning outcomes.*

The proposed degree is replacing the current emphasis and will require existing student standards of performance for the emphasis. The learning objectives and course map for the current emphasis can be accessed at: <https://ndfs.usu.edu/assessment>



## Appendix A: Program Curriculum

List all courses, including new courses, to be offered in the proposed program by prefix, number, title, and credit hours (or credit equivalences). Indicate new courses with an X in the appropriate columns. The total number of credit hours should reflect the number of credits required to be awarded the degree.

For variable credits, please enter the minimum value in the table for credit hours. To explain variable credit in detail as well as any additional information, use the narrative box at the end of this appendix.

		Course Number	NEW Course	Course Title	Credit Hours
General Education Courses (list specific courses if recommended for this program on Degree Map)					
General Education Credit Hour Sub-Total					21
Required Courses					
<input type="radio"/>	<input type="radio"/>	CHEM 1210		Principles of Chemistry I	4
<input type="radio"/>	<input type="radio"/>	CHEM 1215		Chemical Principles Laboratory I	1
<input type="radio"/>	<input type="radio"/>	CHEM 1220		Principles of Chemistry II (BPS)	4
<input type="radio"/>	<input type="radio"/>	CHEM 1225		Chemical Principles Laboratory II	1
<input type="radio"/>	<input type="radio"/>	CHEM 2300		Principles of Organic Chemistry	3
<input type="radio"/>	<input type="radio"/>	CHEM 2315		Organic Chemistry Laboratory I	1
<input type="radio"/>	<input type="radio"/>	CHEM 3700		Introductory Biochemistry	3
<input type="radio"/>	<input type="radio"/>	CHEM 3710		Introductory Biochemistry Laboratory	1
<input type="radio"/>	<input type="radio"/>	BIOL 1610		Biology I	3
<input type="radio"/>	<input type="radio"/>	BIOL 1615		Biology I Laboratory	1
<input type="radio"/>	<input type="radio"/>	BIOL 3300		General Microbiology	4
<input type="radio"/>	<input type="radio"/>	CMST 2110		Interpersonal Communication (BHU)	3
<input type="radio"/>	<input type="radio"/>	STAT 2000		Statistical Methods	3
<input type="radio"/>	<input type="radio"/>	PHYS 2110		General Physics - Life Sciences	4
<input type="radio"/>	<input type="radio"/>	MATH 1050		College Algebra	4
<input type="radio"/>	<input type="radio"/>	MATH 1060		Trigonometry	2
<input type="radio"/>	<input type="radio"/>	MATH 1210		Calculus I (QL)	4
<input type="radio"/>	<input type="radio"/>	PSC 4600		Cereal Science (DSC/QI)	3
<input type="radio"/>	<input type="radio"/>	NDFS 1010		Chocolate Science, History and Society (BPS)	3

		Course Number	NEW Course	Course Title	Credit Hours
Choose of the following courses:					
<input type="radio"/>	<input type="radio"/>				
<input type="radio"/>	<input type="radio"/>	NDFS 1020		Science and Application of Human Nutrition (BLS)	3
<input type="radio"/>	<input type="radio"/>	NDFS 1250		Sanitation and Safety	3
<input type="radio"/>	<input type="radio"/>	NDFS 3110		Food, Technology, and Health (DSC)	3
<input type="radio"/>	<input type="radio"/>	NDFS 5020		Meat Technology and Processing	3
<input type="radio"/>	<input type="radio"/>	NDFS 5025		Meat Technology and Processing Laboratory	1
<input type="radio"/>	<input type="radio"/>	NDFS 5030		Dairy Technology and Processing	3
<input type="radio"/>	<input type="radio"/>	NDFS 5040		Dairy Foods Processing Laboratory	1
<input type="radio"/>	<input type="radio"/>	NDFS 5100		Sensory Evaluation of Foods (QI)	3
<input type="radio"/>	<input type="radio"/>	NDFS 5110		Food Microbiology (CI)	3
<input type="radio"/>	<input type="radio"/>	NDFS 5111		Food Microbiology Laboratory	1
<input type="radio"/>	<input type="radio"/>	NDFS 5250		Occupational Experience in Nutrition and Food Sciences	2
<input type="radio"/>	<input type="radio"/>	NDFS 5500		Food Analysis (QI)	4
<input type="radio"/>	<input type="radio"/>	NDFS 5560		Food Chemistry	4
<input type="radio"/>	<input type="radio"/>	NDFS 5920		Food Product Development (CI)	3
<input type="radio"/>	<input type="radio"/>	NDFS 5510		Food Laws and Regulations	2
<b>Required Course Credit Hour Sub-Total</b>					<b>91</b>
<b>Elective Courses</b>					
<input type="radio"/>	<input type="radio"/>	Any Elective		Students may choose any elective courses	8
Choose of the following courses:					
<input type="radio"/>	<input type="radio"/>				
<input type="radio"/>	<input type="radio"/>				
<b>Elective Credit Hour Sub-Total</b>					<b>8</b>
<b>Core Curriculum Credit Hour Sub-Total</b>					<b>120</b>

### Program Curriculum Narrative

*Describe any variable credits. You may also include additional curriculum information.*

## Degree Map

Degree maps pertain to undergraduate programs ONLY. Provide a degree map for proposed program. Degree Maps were approved by the State Board of Regents on July 17, 2014 as a degree completion measure. Degree maps or graduation plans are a suggested semester-by-semester class schedule that includes prefix, number, title, and semester hours. For more details see <http://higheredutah.org/pdf/agendas/201407/TAB%20A%202014-7-18.pdf> (Item #3).

Please cut-and-paste the degree map or manually enter the degree map in the table below.

<b>First Year Fall</b>	<b>Cr. Hr.</b>	<b>First Year Spring</b>	<b>Cr. Hr.</b>
CHEM 1210 - Principles of Chemistry I	4	CHEM 1220 - Principles of Chemistry II (BPS)	4
CHEM 1215 - Chem I Lab	1	CHEM 1225 - Chem II Lab	1
MATH 1050 - College Algebra (QL)	4	MATH 1060 - Trigonometry	2
NDFS 1010 - Chocolate (BPS)	3	NDFS 1020 - Science App Nutrition (BLS)	3
BSS Course	3	ENGL 1010 - Intro Writing (CL1)	3
		BAI Course	3
<b>Total</b>	<b>15</b>	<b>Total</b>	<b>16</b>
<b>Second Year Fall</b>	<b>Cr. Hr.</b>	<b>Second Year Spring</b>	<b>Cr. Hr.</b>
CHEM 2300 - Principles of Organic Chemistry	3	CHEM 3700 - Intro Biochemistry	3
CHEM 2315 - Organic Chem Lab	1	CHEM 3710 - Intro Biochem Lab	1
MATH 1210 - Calculus	4	STAT 2000 - Statistical Methods (QI)	3
BIOL 1610 - Biology I	3	NDFS 1250 - Sanitation and Safety	3
BIOL 1615 - Biology I Lab	1	BCA Course	3
NDFS 3110 - Food, Tech, and Health (DSC)	3	ENGL 2010 - Intermediate Writing (CL2)	3
<b>Total</b>	<b>15</b>	<b>Total</b>	<b>16</b>
<b>Third Year Fall</b>	<b>Cr. Hr.</b>	<b>Third Year Spring</b>	<b>Cr. Hr.</b>
NDFS 5020 - Meat Technology	3	NDFS 5100 - Sensory Eval Food (QI)	3
NDFS 5025 - Meat Tech lab	1	NDFS 5110 - Food Microbiology (CI)	3
NDFS 5560 - Food Chemistry	4	NDFS 5111 - Food Micro Lab	1
BIOL 3300 - Microbiology	4	NDFS 5500 - Food Analysis (QI)	4
PHYS 2110 - Physics for Life Sciences	4	PSC 4600 - Cereal Science (QI)	3
<b>Total</b>	<b>16</b>	<b>Total</b>	<b>14</b>
<b>Fourth Year Fall</b>	<b>Cr. Hr.</b>	<b>Fourth Year Spring</b>	<b>Cr. Hr.</b>
DHA Course	3	NDFS 5510 - Food Laws and Regulations	2
NDFS 5030 - Dairy Technology and Process	3	CMST 2110 - Interpersonal Comm (BHU)	3
NDFS 5040 - Dairy Tech Lab	1	DSS Course	3
NDFS 5920 - Food Prod Dev	3	Electives	5
NDFS 5250 - Occupational Experiences	2		
Elective Course	3		
<b>Total</b>	<b>15</b>	<b>Total</b>	<b>13</b>

### Appendix C: Current and New Faculty / Staff Information

#### Part I. Department Faculty / Staff

*Identify # of department faculty / staff (headcount) for the year preceding implementation of proposed program.*

	# Tenured	# Tenure -Track	# Non -Tenure Track
Faculty: Full Time with Doctorate	13	4	1
Faculty: Part Time with Doctorate			
Faculty: Full Time with Masters			15
Faculty: Part Time with Masters			
Faculty: Full Time with Baccalaureate			
Faculty: Part Time with Baccalaureate			
Teaching / Graduate Assistants	////	////	
Staff: Full Time			17
Staff: Part Time			10

#### Part II. Proposed Program Faculty Profiles

*List current faculty within the institution -- with academic qualifications -- to be used in support of the proposed program(s).*

	First Name	Last Name	Tenure (T) / Tenure Track (TT) / Other	Degree	Institution where Credential was Earned	Est. % of time faculty member will dedicate to proposed program.	If "Other," describe
<b>Full Time Faculty</b>							
	Karin	Allen	T	PhD	Utah State University	5	
	Luis	Bastarrachea	TT	PhD	University of Massachusetts	45	
	Jeff	Broadbent	T	PhD	Utah State University	5	
	Charles	Carpenter	T	PhD	University of Wisconsin - Madison	5	
	Silvana	Martini	T	PhD	University of La Plata, Argentina	45	
	Donald	McMahon	T	PhD	Utah State University	30	
	Brian	Nummer	T	PhD	Clemson University	20	
	Marie	Walsh	T	PhD	North Carolina State University	40	
	Robert	Ward	T	PhD	University of California - Davis	45	
	Sulaiman	Matarneh	TT	PhD	Virginia Tech University	45	
<b>Part Time Faculty</b>							

#### Part III: New Faculty / Staff Projections for Proposed Program

*Indicate the number of faculty / staff to be hired in the first three years of the program, if applicable. Include additional cost for these faculty / staff members in Appendix D.*

	# Tenured	# Tenure -Track	# Non -Tenure Track	Academic or Industry Credentials Needed	Est. % of time to be dedicated to proposed program.

	# Tenured	# Tenure -Track	# Non -Tenure Track	Academic or Industry Credentials Needed	Est. % of time to be dedicated to proposed program.
Faculty: Full Time with Doctorate				No new faculty or staff required.	
Faculty: Part Time with Doctorate					
Faculty: Full Time with Masters					
Faculty: Part Time with Masters					
Faculty: Full Time with Baccalaureate					
Faculty: Part Time with Baccalaureate					
Teaching / Graduate Assistants					
Staff: Full Time					
Staff: Part Time					

## Appendix D: Projected Program Participation and Finance

### Part I.

*Project the number of students who will be attracted to the proposed program as well as increased expenses, if any. Include new faculty & staff as described in Appendix C.*

Three Year Projection: Program Participation and Department Budget						
	Year Preceding Implementation	New Program				
		Year 1	Year 2	Year 3	Year 4	Year 5
<b>Student Data</b>						
# of Majors in Department	253	260	270	285	295	300
# of Majors in Proposed Program(s)	////	30	35	40	45	50
# of Graduates from Department	51	53	55	58	60	63
# Graduates in New Program(s)	////	7	8	10	10	10
<b>Department Financial Data</b>						
	Department Budget					
	Year Preceding Implementation (Base Budget)	Year 1	Year 2	Year 3		
		Addition to Base Budget for New Program(s)	Addition to Base Budget for New Program(s)	Addition to Base Budget for New Program(s)		
<i>Project additional expenses associated with offering new program(s). Account for New Faculty as stated in Appendix C, "Faculty Projections."</i>						
<b>EXPENSES – nature of additional costs required for proposed program(s)</b>						
<i>List salary benefits for additional faculty/staff each year the positions will be filled. For example, if hiring faculty in year 2, include expense in years 2 and 3. List one-time operating expenses only in the year expended.</i>						
Personnel (Faculty & Staff Salary & Benefits)	\$3,177,123	\$0	\$0	\$0		
Operating Expenses (equipment, travel, resources)	\$161,147	\$0	\$0	\$0		
Other:						
<b>TOTAL PROGRAM EXPENSES</b>	////	\$0	\$0	\$0		
<b>TOTAL EXPENSES</b>	\$3,338,270	\$3,338,270	\$3,338,270	\$3,338,270		
<b>FUNDING – source of funding to cover additional costs generated by proposed program(s)</b>						
<i>Describe internal reallocation using Narrative 1 on the following page. Describe new sources of funding using Narrative 2.</i>						
Internal Reallocation	\$3,338,270					
Appropriation						
Special Legislative Appropriation						
Grants and Contracts						
Special Fees						
Tuition						
Differential Tuition (requires Regents approval)						
<b>PROPOSED PROGRAM FUNDING</b>	////	\$0	\$0	\$0		
<b>TOTAL DEPARTMENT FUNDING</b>	\$3,338,270	\$3,338,270	\$3,338,270	\$3,338,270		
<b>Difference</b>						
Funding - Expense	\$0	\$0	\$0	\$0		

**Part II: Expense explanation**

**Expense Narrative**

*Describe expenses associated with the proposed program.*

The proposed degree replaces a current emphasis and will not require reallocation or additional funding.

**Part III: Describe funding sources**

**Revenue Narrative 1**

*Describe what internal reallocations, if applicable, are available and any impact to existing programs or services.*

The proposed degree replaces a current emphasis and will not require additional funding.

**Revenue Narrative 2**

*Describe new funding sources and plans to acquire the funds.*

The proposed degree replaces a current emphasis and will not require reallocation or additional funding.

22 June 2018

**ITEM FOR ACTION**

Utah State University's Department of Nutrition, Dietetics and Food Sciences in the College of Agriculture and Applied Sciences proposes a Bachelor of Science in Nutrition Science in the manner described below.

**EXECUTIVE SUMMARY**

The Department of Nutrition, Dietetics and Food Sciences in the College of Agriculture and Applied Sciences proposes a Bachelor of Science in Nutrition Science.

**RECOMMENDATION**

The President and Provost recommend that the Board of Trustees approve the proposal to offer a Bachelor of Science in Nutrition Science in the College of Agriculture and Applied Sciences.



RESOLUTION  
UTAH STATE UNIVERSITY  
BOARD OF TRUSTEES

WHEREAS, Utah State University's Department of Nutrition, Dietetics and Food Sciences in the College of Agriculture and Applied Sciences proposes a Bachelor of Science in Nutrition Science, and

WHEREAS, The proposed degree will offer students with a more focused and recognizable degree, and

WHEREAS, The proposal has been approved by the academic dean, the Educational Policies Committee, and the USU Faculty Senate, and

WHEREAS, The proposal has been approved by the President and Provost of Utah State University;

NOW THEREFORE BE IT RESOLVED, That the Utah State University Board of Trustees hereby approve the proposal to offer a Bachelor of Science in Nutrition Science in the College of Agriculture and Applied Sciences and that notification of this proposal be forwarded to the Utah State Board of Regents of the Utah System of Higher Education.

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RESOLUTION APPROVED BY THE BOARD OF TRUSTEES

\_\_\_\_\_  
DATE:

## Utah System of Higher Education Program Description - Full Template

### Section I: The Request

Utah State University requests approval to offer the following Baccalaureate degree(s): Bachelor of Science - Nutrition Science effective Fall 2018. This program was approved by the institutional Board of Trustees on .

### Section II: Program Proposal

#### Program Description

*Present a complete, formal program description.*

This request is to establish a Bachelor of Science (BS) Nutrition Science degree to replace the current Nutrition Science emphasis area within the BS Nutrition, Dietetics and Food Sciences. The curriculum for the proposed BS Nutrition Science degree will be exactly the same as for the current Nutrition Science emphasis area following four year degree plan found in the USU course catalog: [http://catalog.usu.edu/preview\\_program.php?catoid=12&poid=10327&returnto=3800](http://catalog.usu.edu/preview_program.php?catoid=12&poid=10327&returnto=3800). This proposal also includes adding emphasis areas under Nutrition Science in Pre-Health professions and in Sport Nutrition.

#### Consistency with Institutional Mission

*Explain how the program is consistent with the institution's Regents-approved mission, roles, and goals (see mission and roles at [higheredutah.org/policies/policyr312](http://higheredutah.org/policies/policyr312)) or, for "out of mission" program requests, the rationale for the request.*

The proposed BS Nutrition Science will replace the current Nutrition Science emphasis of the BS in Nutrition, Dietetics and Food Sciences that is a long-established degree offering at Utah State University.

### Section III: Needs Assessment

#### Program Rationale

*Describe the institutional procedures used to arrive at a decision to offer the program. Briefly indicate why such a program should be initiated. State how the institution and the USHE benefit by offering the proposed program.*

There are several reasons for the proposed change. The first reason for a separate BS Nutrition Science degree is that the current Nutrition Science emphasis within the BS Nutrition, Dietetics and Food Sciences is substantially independent and does not share a core curriculum with the other emphasis areas. The independence and separation of the current Nutrition Science emphasis area is evidenced in that it is not accredited/approved by the organizations that accredit/approve the other emphasis areas within the program including the Accreditation Council for Education in Nutrition and Dietetics and the Institute of Food Technologists. The second reason for the request for a separate degree is to allow better advising and tracking of students and graduates. The final reason for the request for a separate degree is to offer a degree that is more focused and recognizable to students and stakeholders across the state and region, and degree separation will enhance marketing the proposed degree to specific targeted groups of potential students.

#### Labor Market Demand

*Provide local, state, and/or national labor market data that speak to the need for this program. Occupational demand, wage, and number of annual openings information may be found at sources such as Utah DWS Occupation Information Data Viewer ([jobs.utah.gov/jsp/wi/utalmis/gotoOccinfo.do](http://jobs.utah.gov/jsp/wi/utalmis/gotoOccinfo.do)) and the Occupation Outlook Handbook ([www.bls.gov/oco](http://www.bls.gov/oco)).*

Job Outlook: According to the Bureau of Labor Statistics, Employment of dietitians and nutritionists is projected to grow 14 percent from 2016 to 2026, faster than the average for all occupations. The role of food in preventing and treating diseases, such as diabetes, is now well known. More dietitians and nutritionists will be needed to provide care for patients with various medical conditions and to advise people who want to improve their overall health (see: <https://www.bls.gov/ooh/Healthcare/>

[Dietitians-and-nutritionists.htm](#))

In the state of Utah, this occupation is expected to experience faster than average employment growth with a moderate volume of annual job openings. Business expansion, as opposed to the need for replacements, will provide the majority of job openings in the coming decade. Dietitians and nutritionists who have earned advanced degrees or certification in a specialty area may enjoy better job prospects (see: <https://jobs.utah.gov/jsp/utalmis/#/occupation/29-1031.00/report>)

### **Student Demand**

*Provide evidence of student interest and demand that supports potential program enrollment. Use Appendix D to project five years' enrollments and graduates. Note: If the proposed program is an expansion of an existing program, present several years enrollment trends by headcount and/or by student credit hours that justify expansion.*

Student demand for this proposed BS Nutrition Science degree is expected to rise as changing from an emphasis area in the current degree to a standalone degree will increase the visibility of the individual program. Modest growth will be accommodated within the resources currently available in the department. The two emphasis areas, Pre-Health and Sports Nutrition, reflect the predominant interests of students and expertise of faculty members.

### **Similar Programs**

*Are similar programs offered elsewhere in the USHE, the state, or Intermountain Region? If yes, identify the existing program(s) and cite justifications for why the Regents should approve another program of this type. How does the proposed program differ from or compliment similar program(s)?*

The proposed degree will replace the current emphasis and will not introduce additional overlap across programs in USHE.

### **Collaboration with and Impact on Other USHE Institutions**

*Indicate if the program will be delivered outside of designated service area; provide justification. Service areas are defined in [higheredutah.org/policies/policyr315/](http://higheredutah.org/policies/policyr315/). Assess the impact the new program will have on other USHE institutions. Describe any discussions with other institutions pertaining to this program. Include any collaborative efforts that may have been proposed.*

The proposed degree will replace the current emphasis and will not offer additional collaboration or impact other USHE institutions.

### **External Review and Accreditation**

*Indicate whether external consultants or, for a career and technical education program, program advisory committee were involved in the development of the proposed program. List the members of the external consultants or advisory committee and briefly describe their activities. If the program will seek special professional accreditation, project anticipated costs and a date for accreditation review.*

The proposed degree will not have any external review or accreditation similar to the current emphasis that it is replacing.

## Section IV: Program Details

### Graduation Standards and Number of Credits

*Provide graduation standards. Provide justification if number of credit or clock hours exceeds credit limit for this program type described in R401-3.11, which can be found at [higheredutah.org/policies/R401](http://higheredutah.org/policies/R401).*

120 credits required. Other graduation standards remain the same as the current emphasis in Nutrition Science.

### Admission Requirements

*List admission requirements specific to the proposed program.*

The proposed degree will replace the current emphasis and requirements for admission will remain unchanged as found in the University Catalog: <http://www.usu.edu/degrees/index.cfm?id=128>

### Curriculum and Degree Map

*Use the tables in Appendix A to provide a list of courses and Appendix B to provide a program Degree Map, also referred to as a graduation plan.*

## Section V: Institution, Faculty, and Staff Support

### Institutional Readiness

*How do existing administrative structures support the proposed program? Identify new organizational structures that may be needed to deliver the program. Will the proposed program impact the delivery of undergraduate and/or lower-division education? If yes, how?*

The proposed degree will replace the current emphasis and will not require any adjustments to administrative or organizational structure of the institution.

### Faculty

*Describe faculty development activities that will support this program. Will existing faculty/instructors, including teaching/graduate assistants, be sufficient to instruct the program or will additional faculty be recruited? If needed, provide plans and resources to secure qualified faculty. Use Appendix C to provide detail on faculty profiles and new hires.*

The proposed degree will replace the current emphasis and will be supported by existing faculty.

### Staff

*Describe the staff development activities that will support this program. Will existing staff such as administrative, secretarial/clerical, laboratory aides, advisors, be sufficient to support the program or will additional staff need to be hired? Provide plans and resources to secure qualified staff, as needed.*

The proposed degree will replace the current emphasis and will be supported by existing staff.

## **Student Advisement**

*Describe how students in the proposed program will be advised.*

The proposed degree will replace the current emphasis and will utilize the current advising provided through the Student Services of the College of Agriculture and Applied Sciences.

## **Library and Information Resources**

*Describe library resources required to offer the proposed program if any. List new library resources to be acquired.*

The proposed degree will replace the current emphasis and will utilize the current library and information resources of Utah State University.

## **Projected Enrollment and Finance**

*Use Appendix D to provide projected enrollment and information on related operating expenses and funding sources.*

## **Section VI: Program Evaluation**

### **Program Assessment**

*Identify program goals. Describe the system of assessment to be used to evaluate and develop the program.*

The proposed degree will replace the current emphasis and will follow the assessment plan currently in place for the emphasis. That plan can be found at: <https://ndfs.usu.edu/assessment>

### **Student Standards of Performance**

*List the standards, competencies, and marketable skills students will have achieved at the time of graduation. How and why were these standards and competencies chosen? Include formative and summative assessment measures to be used to determine student learning outcomes.*

The proposed degree is replacing the current emphasis and will require existing student standards of performance for the emphasis. The learning objectives and course map for the current emphasis can be accessed at: <https://ndfs.usu.edu/assessment>

## Appendix A: Program Curriculum

List all courses, including new courses, to be offered in the proposed program by prefix, number, title, and credit hours (or credit equivalences). Indicate new courses with an X in the appropriate columns. The total number of credit hours should reflect the number of credits required to be awarded the degree.

For variable credits, please enter the minimum value in the table for credit hours. To explain variable credit in detail as well as any additional information, use the narrative box at the end of this appendix.

		Course Number	NEW Course	Course Title	Credit Hours
General Education Courses (list specific courses if recommended for this program on Degree Map)					
General Education Credit Hour Sub-Total					24
Required Courses					
<input type="radio"/>	<input type="radio"/>	CHEM 1210		Principles of Chemistry I	4
<input type="radio"/>	<input type="radio"/>	CHEM 1215		Chemical Principles Laboratory I	1
<input type="radio"/>	<input type="radio"/>	CHEM 1220		Principles of Chemistry II (BPS)	4
<input type="radio"/>	<input type="radio"/>	CHEM 1225		Chemical Principles Laboratory II	1
<input type="radio"/>	<input type="radio"/>	CHEM 2310		Organic Chemistry I	4
<input type="radio"/>	<input type="radio"/>	CHEM 2315		Organic Chemistry Laboratory I	1
<input type="radio"/>	<input type="radio"/>	CHEM 3700		Introductory Biochemistry	3
<input type="radio"/>	<input type="radio"/>	CHEM 3710		Introductory Biochemistry Laboratory	1
<input type="radio"/>	<input type="radio"/>	MATH 1050		College Algebra	4
<input type="radio"/>	<input type="radio"/>	MATH 1060		Trigonometry	2
<input type="radio"/>	<input type="radio"/>	MATH 1210		Calculus I (QL)	4
<input type="radio"/>	<input type="radio"/>	STAT 2000		Statistical Methods	4
<input type="radio"/>	<input type="radio"/>	BIOL 1610		Biology I	3
<input type="radio"/>	<input type="radio"/>	BIOL 1615		Biology I Laboratory	1
<input type="radio"/>	<input type="radio"/>	BIOL 1620		Biology II (BLS)	3
<input type="radio"/>	<input type="radio"/>	BIOL 1625		Biology II Laboratory	1
<input type="radio"/>	<input type="radio"/>	BIOL 2320		Human Anatomy	4
<input type="radio"/>	<input type="radio"/>	BIOL 2420		Human Physiology	4
<input type="radio"/>	<input type="radio"/>	NDFS 1020		Science and Application of Human Nutrition (BLS)	3
<input type="radio"/>	<input type="radio"/>	NDFS 3600		Medical Terminology for Health Care Professionals	2
<input type="radio"/>	<input type="radio"/>	NDFS 4020		Advanced Nutrition	3
<input type="radio"/>	<input type="radio"/>	NDFS 4080		Community Nutrition	3
<input type="radio"/>	<input type="radio"/>	NDFS 5210		Advanced Public Health Nutrition	3
<input type="radio"/>	<input type="radio"/>	NDFS 5230		Communication of Current Topics in Nutrition (CI)	3
<input type="radio"/>	<input type="radio"/>	NDFS 5400		Nutritional Neuroscience	3
<input type="radio"/>	<input type="radio"/>	NDFS 5410		Nutrient Gene Interactions	3
<input type="radio"/>	<input type="radio"/>	NDFS 3020		Nutrition and Human Performance	2
<input type="radio"/>	<input type="radio"/>	NDFS 5310		Fundamentals of Nutrition Research	3
Choose _____ of the following courses:					
<input type="radio"/>	<input type="radio"/>				
<input type="radio"/>	<input type="radio"/>				

	Course Number	NEW Course	Course Title	Credit Hours
<b>Required Course Credit Hour Sub-Total</b>				77
Elective Courses				
<input type="radio"/>	<input type="radio"/>	Elective Courses	Students who do not select an emphasis take electives or minor	19
Choose _____ of the following courses:				
<input type="radio"/>	<input type="radio"/>			
<input type="radio"/>	<input type="radio"/>			
<b>Elective Credit Hour Sub-Total</b>				19
<b>Core Curriculum Credit Hour Sub-Total</b>				120

Can students complete this degree without emphases?  Yes or  No

	Course Number	NEW Course	Course Title	Credit Hours
Name of Emphasis:			Pre-Health	
<input type="radio"/>	<input type="radio"/>	CHEM 2320	Organic Chemistry II	3
<input type="radio"/>	<input type="radio"/>	CHEM 2325	Organic Chemistry II Laboratory	1
<input type="radio"/>	<input type="radio"/>	BIOL 3060	Genetics (OI)	4
<input type="radio"/>	<input type="radio"/>	BIOL 3300	General Microbiology	4
<input type="radio"/>	<input type="radio"/>	PHYS 2110	General Physics - Life Sciences I	4
<input type="radio"/>	<input type="radio"/>	PHYS 2120	General Physics - Life Sciences II (BPS)	4
<b>Emphasis Credit Hour Sub-Total</b>				20
<b>Total Number of Credits to Complete Program</b>				140
Remove this emphasis				

	Course Number	NEW Course	Course Title	Credit Hours
Name of Emphasis:			Sports Nutrition	
<input type="radio"/>	<input type="radio"/>	NDFS 3020	Nutrition and Physical Performance	2
<input type="radio"/>	<input type="radio"/>	NDFS 5320	Advanced Sports Nutrition	3
<input type="radio"/>	<input type="radio"/>	NDFS 5300	Advanced Micronutrients	2
<input type="radio"/>	<input type="radio"/>	PEP 2000	Introduction and History of Physical Education	2
<input type="radio"/>	<input type="radio"/>	PEP 3250	Anatomical Kinesiology	3
<input type="radio"/>	<input type="radio"/>	PEP 4100	Exercise Physiology	4
<input type="radio"/>	<input type="radio"/>	PEP 5100	Fitness Assessment and Exercise Programs	4
<b>Emphasis Credit Hour Sub-Total</b>				20
<b>Total Number of Credits to Complete Program</b>				140

	Course Number	NEW Course	Course Title	Credit Hours
	Remove this emphasis			

**Program Curriculum Narrative**

*Describe any variable credits. You may also include additional curriculum information.*

Students can complete the degree without an emphasis area. Students who select one of the two emphasis areas would replace elective courses (or minor) with the additional emphasis area courses. The degree map below is for the nutrition science degree without an emphasis area.



## Degree Map

Degree maps pertain to undergraduate programs ONLY. Provide a degree map for proposed program. Degree Maps were approved by the State Board of Regents on July 17, 2014 as a degree completion measure. Degree maps or graduation plans are a suggested semester-by-semester class schedule that includes prefix, number, title, and semester hours. For more details see <http://higheredutah.org/pdf/agendas/201407/TAB%20A%202014-7-18.pdf> (Item #3).

Please cut-and-paste the degree map or manually enter the degree map in the table below.

<b>First Year Fall</b>	<b>Cr. Hr.</b>	<b>First Year Spring</b>	<b>Cr. Hr.</b>
CHEM 1210 Chem I	4	CHEM 1220 BPS Chem II (BPS)	4
CHEM 1215 Chem I Lab	1	CHEM 1225 Chem II Lab	1
MATH 1050 College Algebra (QL)	4	MATH 1060 Trigonometry	2
NDFS 1020 Human Nutr (BLS)	3	ENGL 1010 Intro Writing (CL1)	3
BHU Course	3	BAI Course	3
		STAT 2000 Statistical Methods (QI)	4
<b>Total</b>	<b>15</b>	<b>Total</b>	<b>17</b>
<b>Second Year Fall</b>	<b>Cr. Hr.</b>	<b>Second Year Spring</b>	<b>Cr. Hr.</b>
BIOL 1610 Biology I	3	BIOL 1620 Biology II (BLS)	3
BIOL 1615 Biology I Laboratory	1	BIOL 1625 Biology II Laboratory	1
CHEM 2310 Organic Chem I	4	CHEM 3700 Intro Biochem	3
CHEM 2315 Organic Chem Lab I	1	CHEM 3710 Intro Biochem Lab	1
MATH 1210 Calculus I (QL)	4	BCA Course	3
BSS Course	3	ENGL 2010 Inter Writing (CL2)	3
<b>Total</b>	<b>16</b>	<b>Total</b>	<b>14</b>
<b>Third Year Fall</b>	<b>Cr. Hr.</b>	<b>Third Year Spring</b>	<b>Cr. Hr.</b>
NDFS 4020 Advanced Nutrition	3	BIOL 2320 Human Anatomy	4
NDFS 4080 Community Nutrition	3	NDFS 3600 Medical Terminology	2
DSS Course	3	DHA Course	3
BIOL 2420 Human Physiology	4	Elective or Emphasis area courses	6
Elective or Emphasis area course	3		
<b>Total</b>	<b>16</b>	<b>Total</b>	<b>15</b>
<b>Fourth Year Fall</b>	<b>Cr. Hr.</b>	<b>Fourth Year Spring</b>	<b>Cr. Hr.</b>
NDFS 5400 Nutritional Neuroscience	3	NDFS 5210 Adv Public Health Nutrition	3
NDFS 3020 Nutrition and Human Performance	2	NDFS 5230 Comm Curr Topics in Nutrition (CI)	3
NDFS 5310 Fundamentals of Nutrition Research	3	NDFS 5410 Nutrient Gene Interactions (CI)	3
Elective or Emphasis area courses	6	Elective or Emphasis area courses	4
<b>Total</b>	<b>14</b>	<b>Total</b>	<b>13</b>

### Appendix C: Current and New Faculty / Staff Information

#### Part I. Department Faculty / Staff

Identify # of department faculty / staff (headcount) for the year preceding implementation of proposed program.

	# Tenured	# Tenure -Track	# Non -Tenure Track
Faculty: Full Time with Doctorate	13	4	1
Faculty: Part Time with Doctorate			
Faculty: Full Time with Masters			15
Faculty: Part Time with Masters			
Faculty: Full Time with Baccalaureate			
Faculty: Part Time with Baccalaureate			
Teaching / Graduate Assistants			
Staff: Full Time			17
Staff: Part Time			10

#### Part II. Proposed Program Faculty Profiles

List current faculty within the institution -- with academic qualifications -- to be used in support of the proposed program(s).

	First Name	Last Name	Tenure (T) / Tenure Track (TT) / Other	Degree	Institution where Credential was Earned	Est. % of time faculty member will dedicate to proposed program.	If "Other," describe
<b>Full Time Faculty</b>							
	Carrie	Durward	TT	PhD	Pennsylvania State Univeristy	15	
	Korry	Hintze	T	PhD	North Dakota State University	45	
	Michael	Lefevere	T	PhD	University of California - Davis	30	
	Ron	Munger	T	PhD	University of Washington - Seattle	40	
	Heidi	Wengreen	T	PhD	Utah State Univeristy	60	
	Mateja	Roskos	TT	PhD	Utah State University	50	
	Marlene	Graf	Other	MS	Utah State University	50	
	Natalie	Norris	Other	MS	University Utah	50	
	Clara	Cho	TT	PhD	University of Toronto	40	
<b>Part Time Faculty</b>							

#### Part III: New Faculty / Staff Projections for Proposed Program

Indicate the number of faculty / staff to be hired in the first three years of the program, if applicable. Include additional cost for these faculty / staff members in Appendix D.

	# Tenured	# Tenure -Track	# Non -Tenure Track	Academic or Industry Credentials Needed	Est. % of time to be dedicated to proposed program.
Faculty: Full Time with Doctorate				No new faculty or staff required.	
Faculty: Part Time with Doctorate					

	# Tenured	# Tenure -Track	# Non -Tenure Track	Academic or Industry Credentials Needed	Est. % of time to be dedicated to proposed program.
Faculty: Full Time with Masters					
Faculty: Part Time with Masters					
Faculty: Full Time with Baccalaureate					
Faculty: Part Time with Baccalaureate					
Teaching / Graduate Assistants	////	////			
Staff: Full Time					
Staff: Part Time					

## Appendix D: Projected Program Participation and Finance

### Part I.

*Project the number of students who will be attracted to the proposed program as well as increased expenses, if any. Include new faculty & staff as described in Appendix C.*

Three Year Projection: Program Participation and Department Budget						
	Year Preceding Implementation	New Program				
		Year 1	Year 2	Year 3	Year 4	Year 5
<b>Student Data</b>						
# of Majors in Department	253	260	270	285	295	300
# of Majors in Proposed Program(s)	////	60	65	70	75	75
# of Graduates from Department	51	53	55	58	60	63
# Graduates in New Program(s)	////	12	13	14	16	19
<b>Department Financial Data</b>						
	Department Budget					
	Year Preceding Implementation (Base Budget)	Year 1	Year 2	Year 3		
		Addition to Base Budget for New Program(s)	Addition to Base Budget for New Program(s)	Addition to Base Budget for New Program(s)		
<i>Project additional expenses associated with offering new program(s). Account for New Faculty as stated in Appendix C, "Faculty Projections."</i>						
<b>EXPENSES – nature of additional costs required for proposed program(s)</b>						
<i>List salary benefits for additional faculty/staff each year the positions will be filled. For example, if hiring faculty in year 2, include expense in years 2 and 3. List one-time operating expenses only in the year expended.</i>						
Personnel (Faculty & Staff Salary & Benefits)	\$3,177,123	\$0	\$0	\$0		
Operating Expenses (equipment, travel, resources)	\$161,147	\$0	\$0	\$0		
Other:						
<b>TOTAL PROGRAM EXPENSES</b>	////	\$0	\$0	\$0		
<b>TOTAL EXPENSES</b>	\$3,338,270	\$3,338,270	\$3,338,270	\$3,338,270		
<b>FUNDING – source of funding to cover additional costs generated by proposed program(s)</b>						
<i>Describe internal reallocation using Narrative 1 on the following page. Describe new sources of funding using Narrative 2.</i>						
Internal Reallocation	\$3,338,270					
Appropriation						
Special Legislative Appropriation						
Grants and Contracts						
Special Fees						
Tuition						
Differential Tuition (requires Regents approval)						
<b>PROPOSED PROGRAM FUNDING</b>	////	\$0	\$0	\$0		
<b>TOTAL DEPARTMENT FUNDING</b>	\$3,338,270	\$3,338,270	\$3,338,270	\$3,338,270		
<b>Difference</b>						
Funding - Expense	\$0	\$0	\$0	\$0		

**Part II: Expense explanation**

**Expense Narrative**

*Describe expenses associated with the proposed program.*

The proposed degree replaces a current emphasis and will not require additional funding.

**Part III: Describe funding sources**

**Revenue Narrative 1**

*Describe what internal reallocations, if applicable, are available and any impact to existing programs or services.*

The proposed degree replaces a current emphasis and will not require additional funding.

**Revenue Narrative 2**

*Describe new funding sources and plans to acquire the funds.*

The proposed degree replaces a current emphasis and will not require additional funding.

22 June 2018

**ITEM FOR ACTION**

Utah State University's Department of Computer Science in the College of Engineering proposes a Master of Science in Data Science in the manner described below.

**EXECUTIVE SUMMARY**

The Department of Computer Science in the College of Engineering proposes a Master of Science in Data Science.

**RECOMMENDATION**

The President and Provost recommend that the Board of Trustees approve the proposal to offer a Master of Science in Data Science in the College of Engineering.

RESOLUTION  
UTAH STATE UNIVERSITY  
BOARD OF TRUSTEES

WHEREAS, Utah State University's Department of Computer Science in the College of Engineering proposes a Master of Science in Data Science, and

WHEREAS, The proposed degree will help satisfy the rapid growth in the demand of computer scientists who specialize in data science, and

WHEREAS, The proposal has been approved by the academic dean, the Educational Policies Committee, and the USU Faculty Senate, and

WHEREAS, The proposal has been approved by the President and Provost of Utah State University;

NOW THEREFORE BE IT RESOLVED, That the Utah State University Board of Trustees hereby approve the proposal to offer a Master of Science in Data Science in the College of Engineering and that notification of this proposal be forwarded to the Utah State Board of Regents of the Utah System of Higher Education.

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RESOLUTION APPROVED BY THE BOARD OF TRUSTEES

DATE: \_\_\_\_\_

# Utah System of Higher Education Program Description - Full Template

## Section I: The Request

Utah State University requests approval to offer the following Master's degree(s): Master of Science in Data Science effective Fall 2018. This program was approved by the institutional Board of Trustees on .

## Section II: Program Proposal

### Program Description

*Present a complete, formal program description.*

Academic and industry researchers are increasingly using data-driven methods to build models of complex systems for forecasting, prediction, risk management, or strategic decision-making. As evidence of a trend in research, in 2012, the White House announced the first "Big Data Research and Development Initiative" spanning NSF, DoD, NIH, DARPA, DoE, and USGS. As summarized by one report from the White House Big Data Initiative, the demand for data scientists is becoming more acute "as the collection, storage, and analysis of data continues on an upward and seemingly boundless trajectory, fueled by increases in processing power, the cratering costs of computation and storage, and growing number of sensor technologies embedded in devices of all kinds." see Big Data: Seizing Opportunities, Preserving Values. In 2011 a McKinsey report estimated there would be 140,000 to 190,000 unfilled positions of U.S. data science and analytics experts by 2018. For companies like Google, Facebook, LinkedIn, Amazon, and Walmart data science is becoming integrated into their business models. They are investing heavily in large-scale data analytics and the software needed to extract information from massive datasets.

The demand for data scientists motivates the underlying objectives of this program: to prepare the students through cross-disciplinary training to develop innovative software solutions that improve the efficiency and scope of data science tools.

Students obtaining a Master of Science in Data Science will be able to:

1. Develop innovative software solutions that improve the efficiency and scope of data science tools.
2. Apply existing programming tools, languages, and algorithms to build, clean and process large datasets as efficiently as possible.
3. Understand how to successfully work with multidisciplinary teams to identify and construct computational solutions to solve problems from a diversity of domains within Utah industries and departments and research centers throughout USU.
4. Understand how to expand the functionality of state-of-the-art high-performance data science software.  
Students completing the Master of Data Science program will thus be prepared to compete in the modern job market. USU currently has no Computer Science MS degree in Data Science. To satisfy the needs of students, prospective employers, and communities, the CS department proposes to offer a Master of Science in Data Science that will be offered as a Plan A MS degree only.

To earn a Master of Science of Data Science degree, students must:

- Take at least 30 credits in total.
- Take at least five core Computer Science or Statistics courses. Among the five courses, at least three courses should be at the 6000 level.
- Actively participate in the new Incubator course (CS 5830/6830). This class will help enhance research efforts in Data



Science, provide students real-world experience in working with domain experts to produce proof-of-concept data science applications, and bring together CS data science students with students from across campus working on applied data science research.

- Take six research credits.
- Take additional multidisciplinary courses with their major professor's approval.

### Consistency with Institutional Mission

*Explain how the program is consistent with the institution's Regents-approved mission, roles, and goals (see mission and roles at [higheredutah.org/policies/policyr312](http://higheredutah.org/policies/policyr312)) or, for "out of mission" program requests, the rationale for the request.*

The mission of Utah State University is to be one of the nation's premier student-centered land grant and space grant universities by fostering the principle that academics come first; by cultivating diversity of thought and culture; and by serving the public through learning, discovery, and engagement. The Master of Science in Computer Science program proposed here will advance these objectives, not only within the Computer Science Department, but also throughout the University and across Utah. Students trained under this program will gain valuable skills that are in high demand and contribute to the growing high-tech economy in Utah, particularly across the Wasatch front. This year, the university has begun a "big data" initiative with new faculty lines introduced across several colleges, including Education, Natural Resources, Business, Ag, Science, and Engineering. Computer Science will play a pivotal role in this effort because computer scientists research, design and implement the software and algorithms that make these "big data" systems work.

## Section III: Needs Assessment

### Program Rationale

*Describe the institutional procedures used to arrive at a decision to offer the program. Briefly indicate why such a program should be initiated. State how the institution and the USHE benefit by offering the proposed program.*

A new Master of Science program is required to satisfy the rapid growth in the demand for computer scientists who specialize in data science. A new MS program is required rather than a limited expansion of the existing general computer science MS because data science requires a distinct program of a variety of fundamental and multidisciplinary courses and an extensive set of specialized computer science skills. The Computer Science department has laid the groundwork for this initiative over the last three years with one new faculty hire (Dr. Douglas Galarus) and one new adjunct faculty (Dr. Rakesh Kaundal) in data science, machine learning and data mining. This new program will help unify research efforts across campus and complement the new Master of Data Analytics program in Statistics and Business. Whereas the current program is a technical, research-based degree with a Computer Science focus, the Masters of Data Analytics program is a professional program focused on data management and the application of analytics tools to support organizational decision making.

### Labor Market Demand

*Provide local, state, and/or national labor market data that speak to the need for this program. Occupational demand, wage, and number of annual openings information may be found at sources such as Utah DWS Occupation Information Data Viewer ([jobs.utah.gov/jsp/wi/utalmis/gotoOccinfo.do](http://jobs.utah.gov/jsp/wi/utalmis/gotoOccinfo.do)) and the Occupation Outlook Handbook ([www.bls.gov/oco](http://www.bls.gov/oco)).*

There is a significant imbalance between the supply and the demand for Data Scientists. Glassdoor report ([www.glassdoor.com](http://www.glassdoor.com)) ranks Data Scientist as the "Best Job in America for 2016" based on career opportunities, the number of open data science jobs and average salaries earned by data scientists. According to this site, the nationwide average Data Scientist earns \$113,000 compared to \$63,500 for the average software engineer. The *McKinsey Global Institute* estimates that by 2018, the U.S will need an additional 140,000 to 190,000 individuals with data science skills. Both Bloomberg Business week (see [Help Wanted: Black Belts in Data](#)) and the Wall Street Journal ([New Report Puts Numbers on Data Scientist Trend](#)) have more recently reported starting salaries for well-qualified data scientists in excess of \$200K ([As Tech Booms, Workers Turn to Coding for Career Change](#)). Bloomberg additionally cites summer internships for students that are currently paying \$6000-\$10000 per month.

## Student Demand

*Provide evidence of student interest and demand that supports potential program enrollment. Use Appendix D to project five years' enrollments and graduates. Note: If the proposed program is an expansion of an existing program, present several years enrollment trends by headcount and/or by student credit hours that justify expansion.*

The classes offered in the existing graduate program with a Data Science emphasis have the highest enrollments compared to other classes. These include CS 5800: Databases - 56 students, CS 6800: Advanced databases - 60 students, CS 5665: Introduction to Data Science - 32 students, and CS 6675: Advance Data Science and Mining - 23 students. Based on the market research quoted above, a high student demand is anticipated for this program.

## Similar Programs

*Are similar programs offered elsewhere in the USHE, the state, or Intermountain Region? If yes, identify the existing program(s) and cite justifications for why the Regents should approve another program of this type. How does the proposed program differ from or compliment similar program(s)?*

In 2014 the University of Utah initiated a "big data certificate" offered by the Computing Department. The certificate requires students to take five core classes in Advanced Algorithms, Database Systems, Data Mining, Machine Learning and Visualization. The department now offers a Big Data Masters (MS in Computing) and a Big Data Ph.D. (Ph.D. in Computing) (<http://www.cs.utah.edu/bigdata/>). The MS program extends the certificate requirements for a plan A specialization to include three electives and a thesis. The Ph.D. requires a Ph.D. dissertation.

The proposed Data Science program will complement the UoU's program by taking a multidisciplinary approach where data science faculty from other departments (strengthened by the cluster hire process) work directly with CS faculty and students to develop solutions to real problems, facilitated by a new incubator course. This applied approach fits well with USU's land-grant mission.

## Collaboration with and Impact on Other USHE Institutions

*Indicate if the program will be delivered outside of designated service area; provide justification. Service areas are defined in [higher.utah.org/policies/policy315/](http://higher.utah.org/policies/policy315/). Assess the impact the new program will have on other USHE institutions. Describe any discussions with other institutions pertaining to this program. Include any collaborative efforts that may have been proposed.*

The proposed Data Science program will not be delivered outside of the designated service area. It should not have an adverse impact on other USHE institutions due to its multidisciplinary nature and the magnitude of the target population. It is anticipated that many of the program participants will come from other closely-related and application-specific fields.

## External Review and Accreditation

*Indicate whether external consultants or, for a career and technical education program, program advisory committee were involved in the development of the proposed program. List the members of the external consultants or advisory committee and briefly describe their activities. If the program will seek special professional accreditation, project anticipated costs and a date for accreditation review.*

There are no accreditation requirements for this program. However, the CS department's industrial advisory board will periodically evaluate the curriculum and student success.

## Section IV: Program Details

### Graduation Standards and Number of Credits

*Provide graduation standards. Provide justification if number of credit or clock hours exceeds credit limit for this program type described in R401-3.11, which can be found at [higher.utah.org/policies/R401](http://higher.utah.org/policies/R401).*

Students must complete 30 credit hours as detailed below in Appendix A. All students will complete a Plan A MS which

includes the completion of a Thesis that will be reviewed by their committee.

## Admission Requirements

*List admission requirements specific to the proposed program.*

A bachelors degree in Computer Science or closely related field. Coursework in basic Statistics (equivalent to STAT 3000).

## Curriculum and Degree Map

*Use the tables in Appendix A to provide a list of courses and Appendix B to provide a program Degree Map, also referred to as a graduation plan.*

## Section V: Institution, Faculty, and Staff Support

### Institutional Readiness

*How do existing administrative structures support the proposed program? Identify new organizational structures that may be needed to deliver the program. Will the proposed program impact the delivery of undergraduate and/or lower-division education? If yes, how?*

The department's graduate programs organization is well positioned to handle the extra administrative load this new program will entail. Currently, the Associate Department Head oversees the graduate program of approximately 60 MS students and 30 PhD students. Effective oversight by the CS faculty will be sufficient to cover the administration during initial growth of this new program. The undergraduate program is experiencing rapid growth and has recently hired two new instructors to teach undergraduate courses full time to cover the extra classes required. No adverse effects on the quality of the undergraduate program are anticipated due to this new MS program. Indeed, it is expected that the addition of 5000 level classes in data science related topics will improve the readiness of the graduating undergraduate students.

### Faculty

*Describe faculty development activities that will support this program. Will existing faculty/instructors, including teaching/graduate assistants, be sufficient to instruct the program or will additional faculty be recruited? If needed, provide plans and resources to secure qualified faculty. Use Appendix C to provide detail on faculty profiles and new hires.*

Two CS faculty members have developed and offered three graduate courses in data science: CS 5800: Introduction to Database Systems, CS 6800: Advanced Database Systems, and CS 5665: Introduction to Data Science. One faculty member has offered to teach CS 6665: Data Mining. The CS department has hired one new faculty member in 2017 so that CS 6890: Special Topics in Data Science, can be offered along with other relevant new courses to be developed. The department is committed to hiring an additional teaching faculty for undergrad courses to free up teaching duties for research faculty. Mr. Erik Falor was hired in Fall 2017 to teach six undergrad courses per year.

### Staff

*Describe the staff development activities that will support this program. Will existing staff such as administrative, secretarial/clerical, laboratory aides, advisors, be sufficient to support the program or will additional staff need to be hired? Provide plans and resources to secure qualified staff, as needed.*

No additional staff will be required for this program.

### Student Advisement

*Describe how students in the proposed program will be advised.*

Students in the new program will be advised by their major professor and committee.

## **Library and Information Resources**

*Describe library resources required to offer the proposed program if any. List new library resources to be acquired.*

No additional library and information resources will be required. Existing library resources plus those available on the web are sufficient to fully support the program.

## **Projected Enrollment and Finance**

*Use Appendix D to provide projected enrollment and information on related operating expenses and funding sources.*

## **Section VI: Program Evaluation**

### **Program Assessment**

*Identify program goals. Describe the system of assessment to be used to evaluate and develop the program.*

As part of our graduate program assessment, the CS department is working with the USU Office of Analysis, Assessment, and Accreditation to develop an accreditation processes for the CS graduate program based on best practices developed by the Northwest Commission of Colleges and Universities. This process will be applied to the Data Science program.

### **Student Standards of Performance**

*List the standards, competencies, and marketable skills students will have achieved at the time of graduation. How and why were these standards and competencies chosen? Include formative and summative assessment measures to be used to determine student learning outcomes.*

The field of Data Science is inherently interdisciplinary. As such, students will be expected to gain competency in the core areas of databases, data mining, big data management, computational modeling, and their application in a diversity of application domains. As appropriate, formative and summative assessment measures for each core competency may include: master exams, class performance, evaluations and assignments, practicum evaluations, group projects, presentations, and software demonstrations.

A very important part of the programs will be the thesis. A minimum of 6 credit hours of work on the thesis is required. A written proposal will be submitted to the student's Supervisory Committee before the student begins working on the thesis. The student will defend the thesis work to his or her supervisory committee and the department as a whole. The quality of the thesis will serve as a crucial metric of the student's success and performance.

## Appendix A: Program Curriculum

List all courses, including new courses, to be offered in the proposed program by prefix, number, title, and credit hours (or credit equivalences). Indicate new courses with an X in the appropriate columns. The total number of credit hours should reflect the number of credits required to be awarded the degree.

For variable credits, please enter the minimum value in the table for credit hours. To explain variable credit in detail as well as any additional information, use the narrative box at the end of this appendix.

		Course Number	NEW Course	Course Title	Credit Hours
General Education Courses (list specific courses if recommended for this program on Degree Map)					
<b>General Education Credit Hour Sub-Total</b>					
Required Courses					
<input type="radio"/>	<input type="radio"/>	CS 5800		Introduction to Database Systems	3
<input type="radio"/>	<input type="radio"/>	CS 6800		Advanced Database Systems	3
<input type="radio"/>	<input type="radio"/>	CS 6665		Data Mining	3
<input type="radio"/>	<input type="radio"/>	CS 5665		Introduction to Data Science	3
<input type="radio"/>	<input type="radio"/>	CS 6675		Advanced Data Science and Mining	3
<input type="radio"/>	<input type="radio"/>	CS 5830/6830		Data Science Incubator	3
<input type="radio"/>	<input type="radio"/>	CS 6970		Thesis and Research	6
<input type="radio"/>	<input type="radio"/>				
<input type="radio"/>	<input type="radio"/>				
<input type="radio"/>	<input type="radio"/>				
<b>Required Course Credit Hour Sub-Total</b>					24
Elective Courses					
<input type="radio"/>	<input type="radio"/>			Select 2 of the following courses:	
<input type="radio"/>	<input type="radio"/>	CS 6890		Topics in Computer Science (Special Topics in Data Science)	3
<input type="radio"/>	<input type="radio"/>	CS 6680		Computer Vision: Foundations and Applications	3
<input type="radio"/>	<input type="radio"/>	CS 6600		AI: Advanced Intelligence Systems	4
<input type="radio"/>	<input type="radio"/>	STAT 5810		Topics in Statistics (Introduction to Statistical Computing)	3
<input type="radio"/>	<input type="radio"/>	STAT 6550		Statistical Computing	3
<input type="radio"/>	<input type="radio"/>	STAT 6650		Stat Learning: Multivariate Stat Analysis for Bioinformatics, Data	3
<input type="radio"/>	<input type="radio"/>	CS 6250		Cooperative Work Experience, Graduate	3
<input type="radio"/>	<input type="radio"/>				
<input type="radio"/>	<input type="radio"/>				
Choose 2 of the following courses:					
<input type="radio"/>	<input type="radio"/>				
<input type="radio"/>	<input type="radio"/>				
<b>Elective Credit Hour Sub-Total</b>					6
<b>Core Curriculum Credit Hour Sub-Total</b>					30

## Program Curriculum Narrative

*Describe any variable credits. You may also include additional curriculum information.*

This Plan A program includes 18 hours of core computer science courses that provide the necessary skill set for a data scientist in computer science. CS 5800 and CS 6800 courses cover large data storage and management methods in databases; CS 5665 introduces the fundamental concepts and practices of data science; CS 6665 and CS 6675 include state-of-the-art algorithms and methodologies and their implementation in class projects; CS 6830 applies the "business incubator" model employed in industry and aims to give students real-world experience in working with domain experts to produce proof-of-concept data science applications. This class, which may be repeated, is based on the recent entrepreneurial process of that bring diverse groups of scientists, engineers and business experts together to explore the feasibility of new technologies. In this class, the experts will be researchers, faculty and their students from other departments that are currently working in data science. Teams will be formed based on the application and computational need, and CS students will be assigned to assist in the implementation of the projects. It is anticipated that many of the projects arising from these collaborations will form the Plan A theses topics for Data Science MS students. A student must pursue the Plan A option with the minimum of 30 credit hours, six of which must be thesis hours, designated as CS 6970. These requirements mirror the existing Computer Science MS.

The department will offer special topics classes in Data Science based on advancements in technology, specific research interests of faculty and perceived need. Other than this CS option, only a few possible elective courses are listed. The field of data science and the course offerings within the university are in a state of flux, with many colleges adding new courses covering data science from their perspective. In particular, the Statistics department in the College of Science has developed a data science program and added some new courses. Statistics underlies many of the methods applied in Data Science, and CS students will be directed to take appropriate courses that have been developed or being initiated. There is a different focus for the CS MS Data Science program and the Science/Business MS in Data Analytics program. However, each program will work together and be complementary.

Data Science is multidisciplinary and covers a broad range of problems and methods. The classes listed above as electives are a sampling of possible classes the students may take. Many additional classes in data science related areas are currently being designed and approved. The CS program in Data Science needs to be flexible to customize the degree to the requirements and objectives of each student. This is the underlying reason for the built-in flexibility of classes outside the CS core. In every case, classes outside of the core must be approved by the student's committee and managed using the standard Program of Study process.

**Degree Map**

*Degree maps pertain to undergraduate programs ONLY. Provide a degree map for proposed program. Degree Maps were approved by the State Board of Regents on July 17, 2014 as a degree completion measure. Degree maps or graduation plans are a suggested semester-by-semester class schedule that includes prefix, number, title, and semester hours. For more details see <http://higheredutah.org/pdf/agendas/201407/TAB%20A%202014-7-18.pdf> (Item #3).*

*Please cut-and-paste the degree map or manually enter the degree map in the table below.*





	First Name	Last Name	Tenure (T) / Tenure Track (TT) / Other	Degree	Institution where Credential was Earned	Est. % of time faculty member will dedicate to proposed program.	If "Other," describe
--	------------	-----------	--	--------	---	--	-------------------------

**Part III: New Faculty / Staff Projections for Proposed Program**

*Indicate the number of faculty / staff to be hired in the first three years of the program, if applicable. Include additional cost for these faculty / staff members in Appendix D.*

	# Tenured	# Tenure -Track	# Non -Tenure Track	Academic or Industry Credentials Needed	Est. % of time to be dedicated to proposed program.
Faculty: Full Time with Doctorate	0	1	0		60%
Faculty: Part Time with Doctorate	0	0	0		
Faculty: Full Time with Masters	0	0	0		
Faculty: Part Time with Masters	0	0	0		
Faculty: Full Time with Baccalaureate	0	0	0		
Faculty: Part Time with Baccalaureate	0	0	0		
Teaching / Graduate Assistants			4		100%
Staff: Full Time	0	0	0		
Staff: Part Time	0	0	0		

## Appendix D: Projected Program Participation and Finance

### Part I.

*Project the number of students who will be attracted to the proposed program as well as increased expenses, if any. Include new faculty & staff as described in Appendix C.*

Three Year Projection: Program Participation and Department Budget						
	Year Preceding Implementation	New Program				
		Year 1	Year 2	Year 3	Year 4	Year 5
<b>Student Data</b>						
# of Majors in Department	630	674	721	771	825	883
# of Majors in Proposed Program(s)		5	10	20	30	40
# of Graduates from Department	84	89	96	102	110	117
# Graduates in New Program(s)		0	5	10	20	30
<b>Department Financial Data</b>						
	Department Budget					
	Year Preceding Implementation (Base Budget)	Year 1	Year 2	Year 3		
		Addition to Base Budget for New Program(s)	Addition to Base Budget for New Program(s)	Addition to Base Budget for New Program(s)		
<i>Project additional expenses associated with offering new program(s). Account for New Faculty as stated in Appendix C, "Faculty Projections."</i>						
<b>EXPENSES – nature of additional costs required for proposed program(s)</b>						
<i>List salary benefits for additional faculty/staff each year the positions will be filled. For example, if hiring faculty in year 2, include expense in years 2 and 3. List one-time operating expenses only in the year expended.</i>						
Personnel (Faculty & Staff Salary & Benefits)	\$287,348	\$81,747	\$81,747	\$81,747		
Operating Expenses (equipment, travel, resources)		\$0				
Other: Teaching Assistantship	\$0	\$23,200	\$23,200	\$23,200		
<b>TOTAL PROGRAM EXPENSES</b>		\$104,947	\$104,947	\$104,947		
<b>TOTAL EXPENSES</b>	\$287,348	\$392,295	\$392,295	\$392,295		
<b>FUNDING – source of funding to cover additional costs generated by proposed program(s)</b>						
<i>Describe internal reallocation using Narrative 1 on the following page. Describe new sources of funding using Narrative 2.</i>						
Internal Reallocation	\$222,156	\$81,747	\$81,747	\$81,747		
Appropriation	\$65,192					
Special Legislative Appropriation						
Grants and Contracts						
Special Fees						
Tuition						
Differential Tuition (requires Regents approval)		\$23,200	\$23,200	\$23,200		
<b>PROPOSED PROGRAM FUNDING</b>		\$104,947	\$104,947	\$104,947		
<b>TOTAL DEPARTMENT FUNDING</b>	\$287,348	\$392,295	\$392,295	\$392,295		
<b>Difference</b>						
Funding - Expense	\$0	\$0	\$0	\$0		

## Part II: Expense explanation

### Expense Narrative

*Describe expenses associated with the proposed program.*

The expenses associated with this program would be development and maintenance of the program, additional teaching coursework, Graduate Teaching Assistantship to help the instructor in the courses, and advising graduate students. At least 4 courses will be offered each year. Four GTA's will be hired to help out with the additional courses. No additional cost is expected for office space or additional operating expenses to run this MS Data Science program, as the degree program will not at full capacity initially.

## Part III: Describe funding sources

### Revenue Narrative 1

*Describe what internal reallocations, if applicable, are available and any impact to existing programs or services.*

Most of our current faculty will be helping out with this degree. Refer to Appendix C (Part II) for detailed allocation. They will assist in the development and maintenance of this program. Faculty members are already teaching some of these CS classes and serving on committees, so this should not have too big of an impact on them, other than there might be more students. In addition, a search for three faculty members is underway to fill 3 open positions. One of these three faculty members is expected to teach a special topics class in Data Science or CS6665 Data Mining. The department successfully recruited one faculty member (Dr. John Edwards) in January 2018. Dr. Edwards will contribute to teach CS5830/CS6830 Data Science Incubator and CS6665 Data Mining.

A cluster hire specifically in Data Science is underway University-wide. Faculty are being hired over a diversity of colleges and departments to support USU's new emphasis in Data Science. Computer Science has been allocated one of these positions to support the proposed MS DS program specifically. One faculty member (Dr. Douglas Galarus) was hired in Fall 2017 as the effort of the cluster hire. Dr. Galarus taught the existing Data Science class (CS5665 Introduction to Data Science) in Fall 2017 and will continue teaching this class regularly in Fall semesters. He will teach CS6675 Advanced Data Science and Mining in Spring 2019.

### Revenue Narrative 2

*Describe new funding sources and plans to acquire the funds.*

Four GTA's will be paid using the differential tuition collected on the 4 courses. Their nonresident tuition will be waived through RGS nonresident tuition waiver.

22 June 2018

**ITEM FOR ACTION**

**RE:** Real Property Disposal

The proposed real property disposal described below is submitted to the Utah State University Board of Trustees for review and approval. The President and Vice President for Business and Finance have reviewed the request and recommend approval.

**EXECUTIVE SUMMARY**

Utah State University (USU) desires approval to dispose of .07 acres of property located at approximately 550 North and 650 East, Logan, Utah. The property is .07 acres in size (3,047 square feet) and is located west of the USU Caine Home as illustrated in Exhibit A.

USU purchased the property in 1975 from the May Swenson family. The Warranty Deed and Real Estate Purchase Contract do not list any use restrictions for the property.

The proposed selling price is based on the appraisal report recently obtained by USU which concluded a current fair market value of \$25,000. The property will be sold to an adjacent property owner who needs additional property to provide parking for student housing.

**RECOMMENDATION**

The President and Vice President for Business and Finance recommend that the Board of Trustees approves the real property disposition located at approximately at 550 North and 650 East, Logan, Utah.

**RESOLUTION  
UTAH STATE UNIVERSITY  
BOARD OF TRUSTEES**

WHEREAS, Utah State University (USU) desires approval to dispose of .07 acres of property located at approximately 550 North and 650 East, Logan, Utah; and

WHEREAS, The property is .07 acres in size (3,047 square feet) and is located west of the USU Caine Home as illustrated in Exhibit A; and

WHEREAS, USU purchased the property in 1975 from the May Swenson family; and

WHEREAS, The Warranty Deed and Real Estate Purchase Contract do not list any use restrictions for the property; and

WHEREAS, The proposed selling price is based on the appraisal report recently obtained by USU which concluded a current fair market value of \$25,000; and

WHEREAS, The property will be sold to an adjacent property owner who needs additional property to provide parking for student housing; and

WHEREAS, The President and Vice President for Business and Finance recommend that the Board of Trustees approves the real property disposition located at approximately at 550 North and 650 East, Logan, Utah:

NOW, THEREFORE, BE IT RESOLVED, That the USU Board of Trustees hereby approves the real property disposition located at approximately at 550 North and 650 East, Logan, Utah.

=====

RESOLUTION APPROVED BY THE USU BOARD OF TRUSTEES:

\_\_\_\_\_  
Date

**EXHIBIT A**



-  Property Disposal
-  USU Property

**ITEM FOR ACTION**

**RE: Real Property Acquisition**

The real property acquisition described below is submitted to the Utah State University Board of Trustees for review and approval. The President and Vice President for Business and Finance have reviewed the request and recommend approval.

**EXECUTIVE SUMMARY**

Utah State University (USU) desires approval for the acquisition of a parcel of land and water shares located at approximately 100 West 8700 North, Richmond, Utah for forage production. The property is 40 acres and adjoins a 78-acre parcel of ground that USU owns as illustrated in Exhibit A.

USU will obtain an independent appraisal to establish fair market value of the property. The property and 38 shares of water will be purchased for the fair market value with School of Veterinary Medicine funds that are available within the College of Agriculture.

Growth in the equine academic and research programs at the South Farm in Wellsville, Utah necessitates the need for additional land; therefore, it has been determined to expand the programs by utilizing land currently used for forage production and move the displaced forage production to the requested property acquisition in Richmond, Utah. The 40 acres of property being purchased is adjacent to USU owned property in Richmond and will work well with the current forage/crop production at the Richmond farm. Existing farm management and labor can absorb this additional production, and farm equipment is readily available. The additional ground and associated water shares will also enhance irrigation efficiencies to the USU property adjacent to the acquisition.

No funds will be requested from the State to acquire or maintain the land.

**RECOMMENDATION**

The President and Vice President for Business and Finance recommend that the Board of Trustees approves the real property acquisition located at approximately 100 West 8700 North, Richmond, Utah.

**RESOLUTION  
UTAH STATE UNIVERSITY  
BOARD OF TRUSTEES**

WHEREAS, Utah State University (USU) desires approval for the acquisition of a parcel of land and water shares located at approximately 100 West 8700 North, Richmond, Utah for forage production; and

WHEREAS, The property is 40 acres and adjoins a 78-acre parcel of ground that USU owns as illustrated in Exhibit A; and

WHEREAS, USU will obtain an independent appraisal to establish fair market value of the property; and

WHEREAS, The property and 38 shares of water will be purchased for the fair market value with School of Veterinary Medicine funds that are available within the College of Agriculture; and

WHEREAS, Growth in the equine academic and research programs at the South Farm in Wellsville, Utah necessitates the need for additional land; therefore, it has been determined to expand the programs by utilizing land currently used for forage production and move the displaced forage production to the requested property acquisition in Richmond, Utah; and

WHEREAS, The 40 acres of property being purchased is adjacent to USU owned property in Richmond and will work well with the current forage/crop production at the Richmond farm; and

WHEREAS, Existing farm management and labor can absorb this additional production, and farm equipment is readily available; and

WHEREAS, The additional ground and associated water shares will also enhance irrigation efficiencies to the USU property adjacent to the acquisition; and

WHEREAS, No funds will be requested from the State to acquire or maintain the land; and

WHEREAS, The President and Vice President for Business and Finance recommend that the Board of Trustees approves the real property acquisition located at approximately 100 West 8700 North, Richmond, Utah:

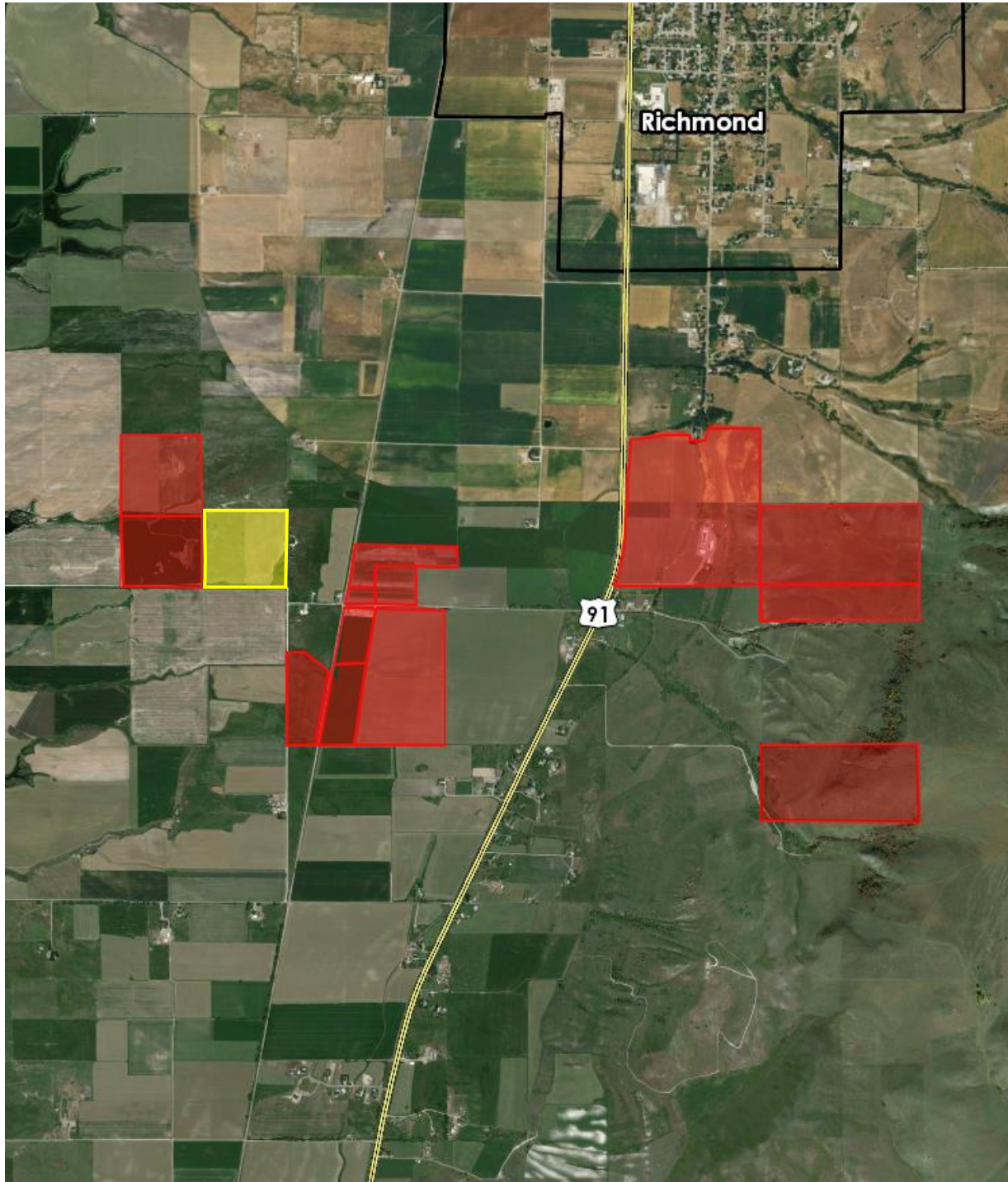
NOW, THEREFORE, BE IT RESOLVED, That the USU Board of Trustees hereby approves the real property acquisition located at approximately 100 West 8700 North, Richmond, Utah.

=====  
RESOLUTION APPROVED BY THE USU BOARD OF TRUSTEES:

\_\_\_\_\_  
Date



**EXHIBIT A**



-  Property Acquisition
-  USU Property

**ITEM FOR ACTION**

**RE:** Request to Approve Construction of a Horse Barn, a Non-State Funded Project

Details of the request to construct a horse barn, a non-state funded project described below are submitted for the Utah State University Board of Trustees' review and approval. The President and Vice President for Business and Finance have reviewed the request and recommend approval.

**EXECUTIVE SUMMARY**

Utah State University desires approval to construct a new horse barn, a non-state funded project, located at the South Farm.

The new facility will provide additional stall space for the emerging needs of the growing equine program and provide USU the capability to host horse show competitions that will showcase the program and recruit students.

The proposed facility is a 20,000 square-foot, metal building that contains a pre-manufactured system that will require site work to complete the electrical, plumbing distribution, and heating requirements. Additionally, utilities services will need to be run and concrete laid. The estimated cost of the building is \$1.8 million and will be funded with funds available within the School of Veterinary Medicine. No funds will be requested from the State for construction, capital improvements, or operations and maintenance.

**RECOMMENDATION**

The President and Vice President for Business and Finance recommend that the Board of Trustees approve the request to construct a horse barn, a non-state funded project.

**RESOLUTION  
UTAH STATE UNIVERSITY  
BOARD OF TRUSTEES**

WHEREAS, Utah State University desires approval to construct a new horse barn, a non-state funded project, located at the South Farm, and

WHEREAS, The new facility will provide additional stall space for the emerging needs of the growing equine program and provide USU the capability to host horse show competitions that will showcase the program and recruit students, and

WHEREAS, The proposed facility is a 20,000 square-foot, metal building that contains a pre-manufactured system that will require site work to complete the electrical, plumbing distribution, and heating requirements, and

WHEREAS, Utilities services will need to be run and concrete laid, and

WHEREAS, The estimated cost of the building is \$1.8 million and will be funded with funds available within the School of Veterinary Medicine, and

WHEREAS, No funds will be requested from the State for construction, capital improvements, or operations and maintenance, and

WHEREAS, The President and Vice President for Business and Finance recommend that the Board of Trustees approve the request to construct a horse barn, a non-state funded project:

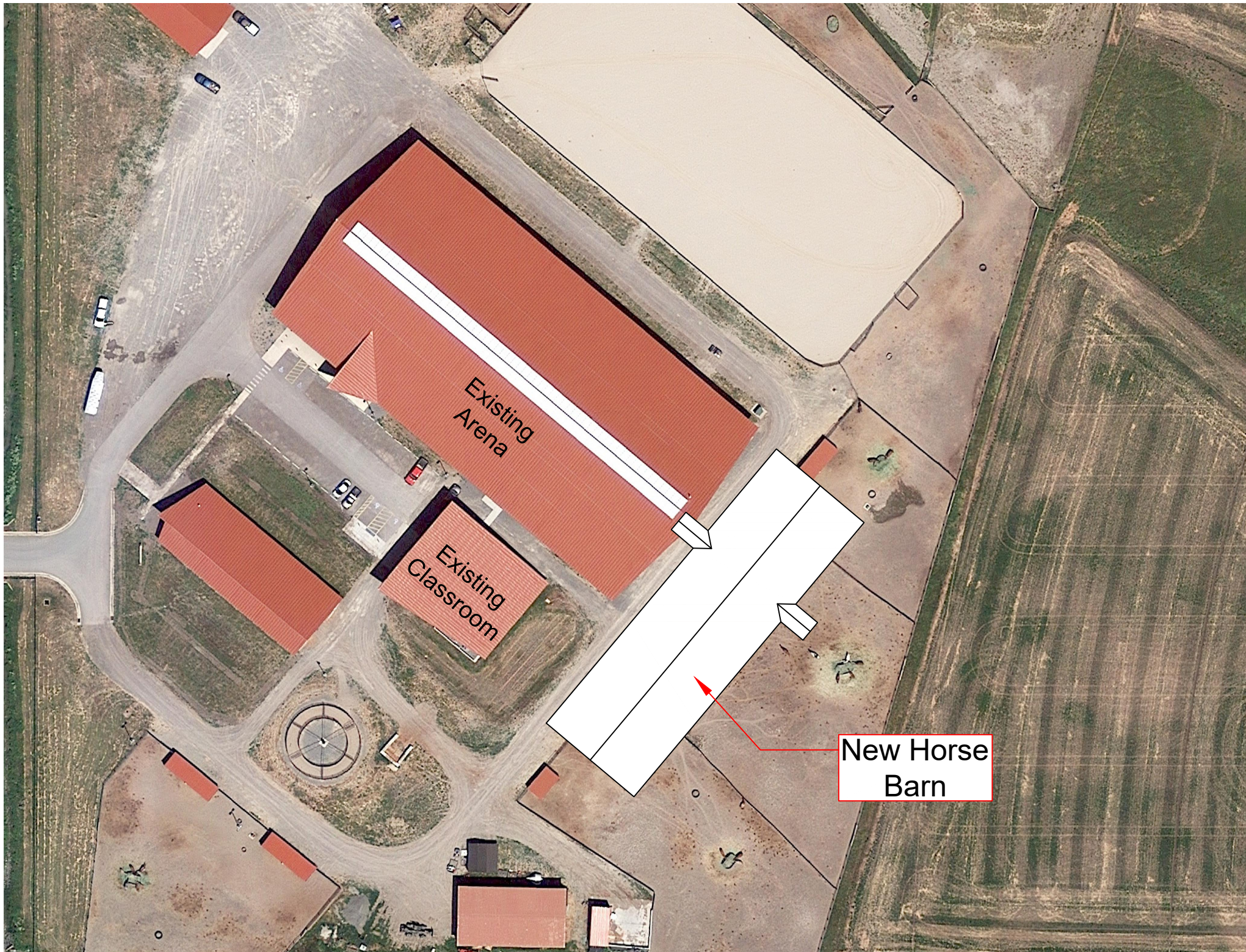
NOW, THEREFORE, BE IT RESOLVED, That the USU Board of Trustees hereby approves the request to construct a horse barn, a non-state funded project.

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RESOLUTION APPROVED BY THE USU BOARD OF TRUSTEES:

---

Date



Existing  
Arena

Existing  
Classroom

New Horse  
Barn

22 June 2018

### **ITEM FOR ACTION**

**RE:** Capital Development Priority List for Fiscal Year 2019-20

The Utah State University Capital Development Priority List for Fiscal Year 2019-20 is submitted to the Board of Trustees for consideration. The Capital Development Priority List has received the appropriate administrative review and approval.

### **EXECUTIVE SUMMARY**

#### **STATE FUNDED REQUESTS**

Utah State University is allowed to submit one project for ranking by the Board of Regents Capital Development Prioritization (CDP) process. The priority for this year is the Center for Languages and Cultures.

#### **NON-STATE FUNDED REQUESTS**

Utah State University will submit the Information Technology Services Building, Mountain View Residence Hall Replacement, and the Blanding Professional Career and Technical Education Lab non-state funded projects for approval by the Board of Regents, Building Board, Legislature.

#### **FIVE-YEAR PLAN**

The 5-Year Plan is included for information only.

Operation and Maintenance (O&M) costs will be requested at the appropriate time on the projects that qualify to receive maintenance funding.

### **RECOMMENDATION**

The President and Vice President for Business and Finance recommend that the Utah State University Capital Development Priority List for Fiscal Year 2019-20 be approved as presented.

**RESOLUTION  
UTAH STATE UNIVERSITY  
BOARD OF TRUSTEES**

WHEREAS, The Utah Legislature appropriates state funds for the purpose of capital facilities development; and

WHEREAS, Utah State University is required to submit its prioritized recommendation for such projects to the Board of Regents after presentation to the USU Board of Trustees; and

WHEREAS, Utah State University considers all capital facility development requests received from colleges and departments in developing the Capital Development Priority List; and

WHEREAS, The President and Vice President for Business and Finance have reviewed the Capital Development Priority List for Fiscal Year 2019-20 and recommend its approval to the USU Board of Trustees; and

WHEREAS, The USU Board of Trustees has reviewed and given due consideration to the Capital Development Priority List for Fiscal Year 2019-20:

NOW, THEREFORE, BE IT RESOLVED, That the USU Board of Trustees hereby approves the Capital Development Priority List for Fiscal Year 2019-20 as presented.

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RESOLUTION APPROVED BY THE BOARD OF TRUSTEES:

---

Date

**PROPOSED  
Capital Development List  
FY 2020**

<u>Project Name</u>	<u>Approximate Budget</u>
---------------------	---------------------------

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**STATE FUNDED REQUESTS**

Logan

Center for Languages and Cultures	\$24 M.
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**NON-STATE FUNDED PROJECTS**

Logan

Information Technology Services Building	\$5 M. - \$6 M.
--	-----------------

Mountain View Residence Hall Replacement	\$30 M. - \$35 M.
--	-------------------

Blanding

Professional Career and Technical Education Lab	\$700,000 - \$800,000
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# **5-Year Plan**

## **Utah State University**

### **FY 2020**

#### **STATE FUNDED PROJECTS**

##### **Center for Languages and Cultures**

The College of Humanities and Social Sciences (CHaSS) seeks to consolidate all CHaSS departments and programs into buildings in the vicinity of the Ray B. West Building and Old Main. The new Center for Languages and Cultures will consist of 62,500 GSF and will be sited in the area between Ray B. West and Old Main, at the southwest corner of the Quad. The new building will house units of the Department of Languages, Philosophy, and Communication Studies, units of the Department of Sociology, Social Work, and Anthropology, the Anthropology Museum, and Utah Public Radio.

Although enrollment for USU on the main Logan campus has increased significantly overtime, CHaSS has not received significant additional space on campus over the past 15+ years. In addition, portions of the college's programs are currently fragmented in buildings spread across campus. These spaces are inadequate in the type, quality, and quantity of space provided, incompatible with the primary use of the building, and/or at great distances from the rest of the College. The new Center for Languages and Cultures will bring disparate units of the College together into a unified location, creating a much-needed identity and cohesion through anchoring the College in one area of campus. Unifying the College will also create communication, interaction, and collaboration within and between units. Providing high quality laboratories, studios, office areas, and student spaces will attract talented faculty and students to USU's programs. New space will provide adequate space for units that have grown beyond available capacity and will allow departments to function more efficiently, increase their program offerings, and provide room for future growth. In addition, the new building will allow the demolition of the MDLS building (Quonset Hut), a high priority for the university due to its age, sub-standard construction, and poor condition.

Approximate Budget                      \$24,000,000

##### **Ray B. West Renovation**

The Ray B. West building is a 30,000 GSF historic building in need of an extensive renovation to improve safety and functionality. It was built in 1918 on a prominent site on the south side of the Quad. This area is considered the heart of the campus and is highly valued for its historical value, open spaces, and beautiful vistas. The building is occupied primarily by the English Department, within the College of Humanities and Social Sciences and is used for classrooms and office functions.



The renovation will be possible once the Center for Languages and Cultures has been completed. Once the new building has been completed, the English Department will be able to temporarily use the new space while the renovation is underway. Ray B. West will be the permanent home for the English Department once the renovation is complete.

Approximate Budget            \$10,000,000

### **Student Center**

The New Student Center project will provide approximately 250,000 – 300,000 GSF to replace the existing aging Taggart Student Center. It will consolidate several other student programs housed in other buildings on campus. The new Student Center is proposed to replace buildings to the north of the existing building, including the Military Science and Big Blue Parking Terrace. This site sits in the heart of the Student Services District, with prominent street frontage at the west entrance to campus and along 700 North, the main campus circulation corridor. The building will sit opposite the new Aggie Recreation Center and Aggie Legacy Fields, reinforcing and complimenting the student activities taking place in those facilities. Underground parking will be included in the new structure.

Approximate Budget            \$110,000,000

### **Animal Science Renovation**

The existing Animal Science building located on the north side of the Quad is a highly valued historic building. It occupies a major presence on the Quad and has served a variety of functions throughout its life. The building is constructed of un-reinforced masonry and has concrete floors and a timber roof. The roof is structurally deficient and needs to be connected to the walls in a manner that meets current building standards. The building has no air conditioning and occupants struggle during the summer months to keep computers operating. The open stairway is a life safety concern and needs to be addressed.

Approximate Budget            \$15,000,000

### **Health, Physical Education, and Recreation (HPER) Renovation/Addition**

The HPER building was constructed in 1972 and was projected to support a student population of 12,000. The main purpose for the facility is to serve the instructional needs of the Emma Eccles Jones College of Education and Human Services as it prepares students to serve in the areas of physical education, parks and recreation, and other exercise careers. The present on-campus student population is approximately 17,600 and the existing facility is inadequate for the instructional needs of the University, much less the recreational needs of its students. Class scheduling is limited by the space available and recreational use is crowded out by class time. This project adds approximately 80,000 square feet of new space for additional classrooms and labs for exercise physiology and cardiovascular research as well as gymnasias, ball courts, weight

training, and instructional space for rock climbing. In addition, a number of much-needed repairs and upgrades to the existing mechanical systems will be implemented.

Approximate Budget:           \$45,000,000

## **NON-STATE FUNDED PROJECTS**

### **Information Technology Services Building**

A new Information Technology Services Building is needed to consolidate information technology (IT) functions and to free up space in two key buildings that is necessary for growing academic departments.

The building will house the consolidated Information Technology (IT) department. The IT department is currently occupying space in three different buildings, which creates inefficiencies of operation and utilizes valuable space in academic buildings. The building will include office and support space for the Service Desk, ServiceNow, Multimedia and Distance Learning, Enterprise Data Operations, Enterprise Application Development, Database Administration, Websites and Design, Computer Labs, IT & Security Systems, Networking, and the office of the Chief Information Officer. The size of the building will be approximately 18,000 GSF.

Approximate Budget:           \$5,000,000 - \$6,000,000

### **Mountain View Residence Hall Replacement**

The Mountain View Residence Hall replacement project will include demolition of an aging high-rise residence hall on central campus. A new residence hall will replace the beds and provide approximately a five percent increase to accommodate future growth. The existing facility has many structural and code deficiencies and is in need of major upgrades to systems including an elevator replacement. Also, its traditional dormitory style housing is not desirable to the contemporary student body.

The new building will continue to implement replacement projects proposed by the Master Plan for housing replacement in the North Core District of central campus. The site is adjacent to the existing building to be demolished, and will have convenient access to parking, recreation, and dining services.

Approximate Budget:           \$30,000,000 - 35,000,000

### **Blanding Professional Career and Technical Education Lab**

The proposed facility will be a 6,400 square foot, 2-bay metal building constructed on the south end of the Blanding campus near the trucking course, as planned in the new USU Blanding Master Plan. The building's exterior will incorporate elements of concrete and/or masonry to be consistent with the architectural character of campus. The facility will be constructed to provide classroom and laboratory spaces for the Heavy Equipment and Trucking Maintenance courses,

offer laboratory space for similar courses such as HVAC, Plumbing, and Electrical Maintenance, and to allow for future program expansion.

The Heavy Equipment and Trucking Maintenance program is currently housed on the USU Eastern Price campus in a rundown leased building. It is the desire of USU Eastern to terminate the lease agreement and relocate the program to the Blanding campus where other career and technical programs are housed.

Approximate Budget:           \$700,000 - \$800,000

**ITEM FOR ACTION****RE: Utah State University 2018-19 Budgets**

Information related to the Utah State University 2018-19 budgets is submitted to the Board of Trustees for consideration. The budget information has received the appropriate administrative review and approval.

**EXECUTIVE SUMMARY****State Appropriated Line Items**

The total of the 2018-19 state appropriated budget for all line items is \$379,055,900. This budget is based on the following sources of revenue:

<u>Revenue Source</u>	
State Tax Funds	\$219,031,200
Dedicated Credits (Tuition)	154,226,000
All Other Funds	<u>5,798,700</u>
Total	<u>\$379,055,900</u>

**Auxiliary Enterprises**

The total of the 2018-19 Auxiliary Enterprises budgets are:

USU \$44,116,877	USU-Eastern \$2,565,000
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**Service Enterprises**

The total of the 2018-19 Service Enterprises budgets are:

USU \$16,326,212	USU-Eastern \$279,000
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**RECOMMENDATION**

The President and Vice President for Business and Finance recommend that the Board of Trustees approve the Utah State University 2018-19 budgets as presented.





## 2018-19 STATE APPROPRIATED BUDGET

Education & General	\$267,242,800
Veterinary Medicine	5,268,400
O&M	4,071,900
Regional Campuses - Administration	5,279,600
Regional Campuses - Uintah Basin	9,353,200
Regional Campuses - Brigham City	14,235,100
Regional Campuses - Tooele	12,070,700
Agricultural Experiment Station	15,289,800
Utah Water Research Laboratory	3,971,800
Extension	20,439,700
Educationally Disadvantaged	100,000
USU-Eastern - Price Campus	15,360,900
USU-Eastern - Prehistoric Museum	519,400
USU-Eastern - Educationally Disadvantaged	105,000
USU-Eastern - Workforce Education	1,443,400
USU-Eastern - Blanding Campus	4,304,200
<b>TOTAL - ALL LINES</b>	<b>\$379,055,900</b>

### NOTES

Adjusted authorized budget

- Appropriated budget plus:
  - Tuition adjustments (e.g., tuition increases)
  - Adjustments between line items
  - Legislative allocation error corrections



**Auxiliary Enterprises  
2018-19 Operating Budgets**

Budget Category	Bookstores (Multi-campus)	Dining Services	Parking Operations	Student Health Center	Student Housing	Taggart Student Center	University Inn	TOTAL
Budgeted Operating Revenue	\$9,211,570	\$10,509,459	\$2,364,236	\$2,019,350	\$15,663,258	\$2,003,834	\$1,145,180	\$42,916,887
Other Revenue <sup>1</sup>					\$100,000	\$1,099,990		\$1,199,990
Budgeted Expenses (including COGS)	\$8,891,954	\$10,016,658	\$1,174,382	\$2,018,525	\$9,067,101	\$2,059,547	\$1,119,293	\$34,347,460
Budgeted Net Revenue	\$319,616	\$492,801	\$1,189,854	\$825	\$6,696,157	\$1,044,277	\$25,887	\$9,769,417
<u>Budgeted Transfers</u>								
Debt Service		(\$390,178)	(\$447,766)		(\$5,496,414)	\$0		(\$6,334,358)
Other Transfers (Admin. Fee/Capital Exp./Other)	(\$33,634)	(\$75,987)	(\$22,097)		(\$116,750)	(\$29,657)	(\$14,875)	(\$293,000)
Subtotal - Transfers	(\$33,634)	(\$466,165)	(\$469,863)	\$0	(\$5,613,164)	(\$29,657)	(\$14,875)	(\$6,627,358)
Available for Repairs/Replacement <sup>2</sup>	\$285,982	\$26,636	\$719,991	\$825	\$1,082,993	\$1,014,620	\$11,012	\$3,142,059

<sup>1</sup>Other Revenue Source: Student Housing - land grant interest; Taggart Student Center - student building fees

<sup>2</sup>Mandatory transfer for pledged units; non-mandatory transfer for non-pledged units

**Service Enterprises  
2018-19 Operating Budgets**

Budget Category	Distribution Center/Mailing Bureau	Information Technology	Motor Pool	Publication Design & Production	Surplus Property	TOTAL
Budgeted Operating Revenue	\$606,340	\$12,868,760	\$1,465,514	\$1,210,598	\$175,000	\$16,326,212
Budgeted Expenses (including COGS)	\$601,380	\$12,783,571	\$1,453,857	\$1,193,917	\$172,000	\$16,204,725
Budgeted Net Revenue	\$4,960	\$85,189	\$11,657	\$16,681	\$3,000	\$121,487



**USU-Eastern  
Auxiliary Enterprises**

Budget Category	Bookstore	Dining Services	Student Housing	Student Center	TOTAL
Budgeted Operating Revenue	\$200,000	\$1,095,000	\$1,185,000	\$85,000	\$2,565,000
Budgeted Expenses (including COGS)	\$200,000	\$1,070,000	\$950,000	\$60,000	\$2,280,000
Budgeted Net Revenue	\$0	\$25,000	\$235,000	\$25,000	\$285,000

**USU-Eastern  
Service Enterprises**

Budget Category	Mailing Bureau	Telephone Services	Motor Pool	Printing Services	Fuel Tank	TOTAL
Budgeted Operating Revenue	\$21,200	\$50,000	\$185,000	\$21,000	\$1,800	\$279,000
Budgeted Expenses (including COGS)	\$21,000	\$43,000	\$183,000	\$18,000	\$1,600	\$266,600
Budgeted Net Revenue	\$200	\$7,000	\$2,000	\$3,000	\$200	\$12,400