

AGENDA OF THE UTAH STATE BUILDING BOARD

Thursday, May 21, 2009
Utah State Capitol East Building
Room E220
Salt Lake City, Utah
9:00am

- (Action) 1. **Approval of Minutes of April 8, 2009** Tab 1
- (Action) 2. **Five Year Review of Administrative Rule R23-3 (Planning and Programming for Capital Projects)**..... Tab 2
- (Action) 3. **Five Year Review of Administrative Rule R23-29 (Across the Board Delegation)** Tab 3
- (Action) 4. **Approval of Design and Construction of New Building at Corrections for Utah State Library, Library for the Blind and Disabled Recording Program** Tab 4
- (Action) 5. **Raising the High Performance Building Rating System (HPBRS) Standards to a Minimum of LEED Silver Certification with Additional DFCM Design Criteria for Targeted New Construction in State Owned Buildings**..... Tab 5
- (Action) 6. **Administrative Reports for University of Utah and Utah State University** Tab 6
- (Information) 7. **Administrative Reports for DFCM** Tab 7

Notice of Special Accommodation During Public Meetings - In compliance with the Americans with Disabilities Act, individuals needing special accommodations (including auxiliary communicative aids and services) during this meeting should notify Shannon Elliott 538-3261 (TDD 538-3260) at least three days prior to the meeting.

This information and all other Utah State Building Board information is available on DFCM web site at <http://buildingboard.utah.gov>

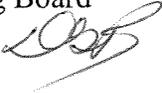


Utah State Building Board

Jon M. Huntsman, Jr.
Governor

4110 State Office Building
Salt Lake City, Utah 84114
Phone (801) 538-3018
Fax (801) 538-3267

MEMORANDUM

To: Utah State Building Board
From: David G. Buxton 
Date: May 21, 2009
Subject: **Approval of Minutes of April 8, 2009**

Attached for your review and approval are the meeting minutes of the Utah State Building Board meeting held April 8, 2009.

DGB:SLE

Attachment

Utah State Building Board



MEETING

April 8, 2009

MINUTES

Utah State Building Board Members in attendance:

Larry Jardine, Chair
Cyndi Gilbert
Wilbern McDougal
Mel Sowerby
Manuel Torres

DFCM and Guests in attendance:

Gregg Buxton	Division of Facilities Construction & Management
Kurt Baxter	Division of Facilities Construction & Management
Shannon Elliott	Division of Facilities Construction & Management
Dana Edwards	Division of Facilities Construction & Management
John Harrington	Division of Facilities Construction & Management
Jeff Wrigley	Division of Facilities Construction & Management
LaPriel Dye	Division of Facilities Construction & Management/AGO
John Sparano	AIA Utah
Chris Coutts	Architectural Nexus
Sarah Parris	BNA Consulting
Gerald McKenzie	BHB Engineers
Pat Gleason	Calder Richards
Marion Cook	Colvin Engineering
Rick Stock	Dunn Associates
Keri Hammond	EDA Architects
Cynthia Cook	FFKR Architects
Jennifer Sasich	MHTN Architects
Keith Davis	Human Services
Peggy Grusendorf	Human Services/Utah State Hospital
Kendall Johnson	Human Services/Utah State Hospital
Dan Clark	State Parks
Bryan Wilmot	Utah Correctional Industries
Brent Petersen	Davis Applied Technology Center
Bob Askerlund	Salt Lake Community College
David Tanner	Southern Utah University
John McNary	University of Utah
Ben Berrett	Utah State University

Darrell Hart
Jim Michaelis
Kevin Hansen

Utah State University
Utah Valley University
Weber State University

On Wednesday, April 8, 2009, the Utah State Building Board held a regularly scheduled meeting in the Utah State Capitol, Room C250, Salt Lake City, Utah. Chair Larry Jardine called the meeting to order at 9:00am.

APPROVAL OF MINUTES OF JANUARY 7, 2009, AND FEBRUARY 2, 2009.....

Chair Jardine sought a motion on the minutes of January 7, 2009, and February 2, 2009.

MOTION: Manuel Torres moved to approve the meeting minutes of January 7 and February 2, 2009. The motion was seconded by Steve Bankhead and passed unanimously.

ALLOCATION OF FY 2010 CAPITAL IMPROVEMENT FUNDS.....

DFCM received approximately \$55.6 million for capital improvement projects for FY2010, which included the restoration of \$15 million cut by special session. This is an approximate 50% decrease in funding over last year's capital improvements. In an attempt to narrow the list, DFCM identified HVAC, structural, electrical, infrastructure, and life safety as the top priorities for this year's capital improvements.

Kurt Baxter also distributed the Summary of Replacement Costs of Facilities vs. Share of FY2010 Capital Improvement Funding. This handout identified the percentage of higher education versus state agencies. Mr. Baxter also distributed the Summary of Capital Improvement Funding FY2006-FY2010. This document indicated that funding has remained fairly consistent over the last five years. Also distributed were the FY2010 Capital Improvement Recommendations and the FY2009 Capital Improvement Cuts and FY2010 Restoration.

Mr. Baxter also distributed a status report for the FY2009 Capital Improvement Projects which showed the rate of completion for the projects. Approximately 95% of the 133 projects were completed, which does not include the postponed projects. Of the remaining seven projects, five will be bid out in the next two weeks.

Chair Jardine sought a motion of the FY2009 Capital Improvement Recommendations.

MOTION: Manuel Torres moved to approve the FY2009 Capital Improvement Recommendations. The motions was seconded by Steve Bankhead and passed unanimously.

APPROVAL OF CAPITAL IMPROVEMENT PROJECTS THROUGH FEDERAL MITIGATION COMMISSION

DFCM recommended that the Building Board review the request from the Department of Wildlife Resources to use Federal Stimulus funds from the Utah Reclamation Mitigation and Conservation Commission to fund three projects.

The Utah Mitigation Commission is a federal agency charged with enacting and providing major funding for mitigation measures designed to offset the adverse effects of the Central Utah Project. The Commission has provided the majority of the construction funding for the reconstruction of several state fish culture facilities over the last several years including the Kamas, Fountain Green, and Whiterocks Hatcheries.

The Mitigation Commission will fully fund the following projects:

1. Covered storage structure at the Springville Regional Office. This building will conceptually be 1000sf and consist of four to five individual bays. The estimated cost is \$150,000.
2. Raceway covers at Whiterocks Hatchery. The estimated cost is \$1,000,000.
3. Expansion of the warm-water, recirculating system into the adjoining space and replace an existing Quonset hut associated with junesucker culture at the Springville facility. They currently receive federal funds for the junesucker program and this would help expand the program. The estimated cost is \$450,000.

Kurt Baxter stated Building Board approval was required to do improvements on state property. The Mitigation Commission will fully fund the projects, but any future O&M may increase slightly.

MOTION: Mel Sowerby moved to approve the use of Federal stimulus funds by the Mitigation Commission to fund the covered storage structure at the Springville Regional Office, raceway covers at Whiterocks Hatchery, and the expansion of the warm-water, recirculating system at Springville Hatchery and replace an existing Quonset hut. The motion was seconded by Manuel Torres and passed unanimously.

☐ REALLOCATION OF FY2009 CAPITAL IMPROVEMENT FUNDS FOR THE COLLEGE OF EASTERN UTAH.....

DFCM recommended that the Building Board review the request from the College of Eastern Utah to reallocate FY2009 Capital Improvement funds to an FY2010 Capital Improvement project.

The Building Board previously approved the Art Center Re-roofing project for FY2009 which was subsequently put on hold during the Special Legislative session in September 2008. Since that time, problems with the Music Building steam lines have been discovered. CEU and DFCM agree that these steam lines are a top priority for FY2010. The project manager felt some patching could be done on the Art Center and the re-roofing project could be postponed for two more years. DFCM recommended that funding for the

Art Center Re-roofing project be transferred to the FY2010 Music Building Steam Line Repair project. The transfer is approximately \$130,000.

MOTION: Manuel Torres moved to approve the \$130,000 reallocation for the College of Eastern Utah from the FY2009 Art Center Re-roofing to the FY2010 Music Building Steam Line Repair project. The motion was seconded by Steve Bankhead and passed unanimously.

☐ REALLOCATION OF FY2009 CAPITAL IMPROVEMENT FUNDS FOR THE DEPARTMENT OF ENVIRONMENTAL QUALITY.....

DFCM recommended the Building Board approve authorization to reallocate funds from the FY2009 Carriage House to the FY2010 DEQ Shell Space Build Out. The Building Board previously approved \$1.75 million for repairs to the Governor's Carriage House in FY2009, which was subsequently put on hold during the 2008 Special Legislative Session. After further inspection, it has been determined that the project could be delayed for one to two years with a few minor repairs. The remaining funds would be used to finish the DEQ Build Out at the Multi-Agency Office Building.

Steve Bankhead felt this was an appropriate reallocation and suggested that the Carriage House be completed with possible private funds and not tax appropriated funds.

MOTION: Mel Sowerby moved to approve the reallocation from the FY2009 Carriage House to the FY2010 DEQ Shell Space Build Out. The motion was seconded by Wilbern McDougal and passed unanimously.

☐ REALLOCATION OF DRAPER ADMINISTRATION/MAINTENANCE BUILDING HVAC SYSTEM IMPROVEMENTS

DFCM recommended the Building Board review the request to reallocate \$150,000 of FY2009 Capital Improvement funds from the Draper Administration/Maintenance Building HVAC System Improvements to the FY2010 Orange Street CCC Grease Trap Replacement.

The Draper Administration/Maintenance Building HVAC System Improvements were put on hold during the 2008 Special Legislative session. DFCM has since determined that the existing cooling system at the administration building has three to five years of useful life left. The work in the maintenance building was done from a separate funding source. The Department of Corrections feels that the Orange Street CCC Grease Trap Replacement is a higher priority now and wished to reallocate the \$150,000 to that project.

MOTION: Mel Sowerby moved to approve the reallocation of \$150,000 from the FY2009 Draper Administration/Maintenance Building HVAC System Improvements to the FY2010 Orange Street CCC Grease Trap

Replacement. The motion was seconded by Steve Bankhead and passed unanimously.

❑ ADMINISTRATIVE REPORT FOR UNIVERSITY OF UTAH AND UTAH STATE UNIVERSITY

Kenneth Nye, University of Utah, distributed the FY2009 Capital Improvement Performance Report for Projects Managed by the University of Utah. Each year, the University is asked to provide a report on the projects delegated to the University and whether they have been completed or under contract. This year, the University had 25 projects not including the projects cut due to funding. Of those 25 projects, all of them were currently completed or under construction, or the design/study is underway.

Mr. Nye provided the administrative report for the period of December 15, 2008, to March 20, 2009. There were seven design agreements, two programming/planning agreements, and three study/other agreements awarded for the period. Mr. Nye noted that the International Synthetic Turf Field and Running Track has a \$13,000 design agreement which was awarded directly to Losee Architects as required by the donor who is funding the project. This is consistent with the State Procurement Code.

There were also eight remodeling contracts and one site improvement contract awarded for the same period. One item of note was the Rice Eccles Stadium Field Replacement which was awarded to Field Turf on a sole source basis in order to maintain the same feel for the players as they are now accustomed to at Rice Eccles, as well as in the Eccles Indoor Practice Facility. This also generates substantial savings in avoiding the potential need to replace the base system under the turf in order to install or obtain warranty for a different turf product.

There were increases to the Contingency Reserve Fund due to amounts budgeted for contingency for capital improvement projects funded in FY09. There was a decrease to the Contingency Reserve Fund for the Park Building Exterior Renovations in the amount of \$66,196.74 to cover additional costs to repair and restore terra cotta pieces in the cornice. It is anticipated that the total draws from contingency will be close to the amount budgeted.

MOTION: Steve Bankhead moved to accept the administrative report for the University of Utah. The motion was seconded by Manuel Torres and passed unanimously.

Ben Berrett, Utah State University, stated 100% of the capital improvement projects were underway and three projects will be completed once spring semester is finished.

Mr. Berrett provided the administrative report for the period of December 11, 2008, to March 18, 2009. There were eight professional contracts and 12 construction contracts awarded for the period. Six projects closed during the period adding approximately \$59,000 to the project reserve fund.

MOTION: Wilbern McDougal moved to approve the administrative report of Utah State University. The motion was seconded by Mel Sowerby and passed unanimously.

APPROVAL FOR STATE FACILITY ENERGY EFFICIENCY FUND LOAN APPLICATION FOR DEPARTMENT OF HUMAN SERVICES, UTAH STATE DEVELOPMENTAL CENTER FACILITY

Jeff Wrigley, DFCM, stated the Utah State Developmental Center project would be funded out of the State Facility Energy Efficiency Fund. The estimated \$170,000 would include expanding a building automation system that will expand into four buildings. This will also include other energy efficiency measures such as replacing some lighting and installing occupancy sensors in the new administration building, the old administration building, the Heather Lodge and the rose warehouse building. These buildings were chosen because the buildings are on 24 hours a day, but they are only occupied four days a week. The estimated payback is approximately 2.2 years and the projected annual cost savings is \$15,820.

MOTION: Mel Sowerby moved to approve the State Facility Energy Efficiency Fund Loan Application for the Department of Human Services, Utah State Developmental Center. The motion was seconded by Steve Bankhead and passed unanimously.

ADMINISTRATIVE REPORT FOR DFCM

Kurt Baxter provided the administrative report for the period of December 8, 2008, to March 18, 2009. There were 38 architect/engineering agreements awarded and 38 construction contracts awarded for the period.

There were several decreases to the Contingency Reserve Fund. Mr. Baxter highlighted the CUCF 192 Bed Pod Expansion which had the budgeted contingency returned to the project due to most of the project funding being cut in HB3 for FY09 Supplemental Appropriations. He also highlighted the CUCF New 288 Bed Facility which had a transfer of \$139,175 for a change order that covered unknowns and various omissions. The Unified Health Lab Facility had a transfer of \$122,458 to cover change orders six and seven, both of which covered various omissions.

Gregg Buxton provided a legislative update and stated the Legislature took away \$35 million of capital improvement funding for AR&I. DFCM lost four FTE positions and lost eleven positions through reduction in force to help balance the budget.

DFCM will face some code issues with SB11 where the legislature will now approve the building codes instead of the Building Code Commission. Since the codes will not be approved until the end of the session, it has created some confusion for the architects and DFCM to know which code to follow.

A bill was passed this year regarding impact fees which will make things a little more clear as to what the state will pay for impact fees. DFCM will do some training summits throughout the state which will allow the cities to be treated fairly. Previously the state did not pay impact fees and this bill clarified that the state will pay some specific fees and the justification of the costs. Since impact fees vary through each community throughout the state, it has been difficult to budget for those impact fees.

HB300 removed the statutory requirements of holding the funding for capital improvements at 1.1% for 2009 and 2010. In 2011 it will automatically go back to at least .9% if the economy has not sustained itself. There is approximately a \$1.2 billion assessment need and we have about a \$287 million immediate need and only \$57 million was funded this year.

Mr. Buxton encouraged all agencies and institutions to review their priorities and put the money to the best use at their facilities. He felt the next two years would be tight financially.

Gregg Buxton provided an update on the capital development projects. There was \$116 million bonded this year for a number of projects throughout the state. Mountainlands will start this year as will Ogden Weber ATC. The State Hospital was not funded again this year.

Projects that were funded this year included the following:

- Utah Schools for the Deaf and Blind Building Purchase
- Salt Lake Community College Digital Design Center
- Mountainland ATC Northern Utah County Campus Building
- University of Utah School of Business Building
- Ogden Weber ATC Health Technology Building
- Utah National Guard Upgrades and Repairs to Armories
- Dixie State College Centennial Commons Building Design
- Southern Utah University Gibson Science Center
- Utah Valley University Health Science Building Design

Gregg Buxton stated \$100 million of the bond may not be issued until October which may affect some projects and the timing of building. The bonding for USTAR that was authorized a few years ago is just now being issued.

ADJOURNMENT

MOTION: Mel Sowerby moved to adjourn at 9:59am. The motion was seconded by Manuel Torres and passed unanimously.

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Utah State Building Board

Jon M. Huntsman, Jr.
Governor

4110 State Office Building
Salt Lake City, Utah 84114
Phone (801) 538-3018
Fax (801) 538-3267

MEMORANDUM

To: Utah State Building Board
From: David G. Buxton 
Date: May 21, 2009
Subject: **Five Year Review of Administrative Rule R23-3 (Planning and Programming for Capital Projects)**

Recommendation

DFCM recommends that the Building Board authorize DFCM to file a continuance of Rule R23-3 with the Division of Administrative Rules.

Background

Administrative Rules has a process where rules are reviewed every five years and a determination must be made whether to continue the Rule. A copy of the current Rule requested for continuation will be available at the meeting. DFCM may present amendments to this Rule in the future.

DGB:KFB:sle



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MEMORANDUM

To: Utah State Building Board
From: David G. Buxton 
Date: May 21, 2009
Subject: **Five Year Review of Administrative Rule R23-29 (Across the Board Delegation)**

Recommendation

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Background

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DGB:KFB:sle



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MEMORANDUM

To: Utah State Building Board
From: David G. Buxton 
Date: May 21, 2009
Subject: **Approval of Design and Construction of New Building at Corrections for Utah State Library, Library for the Blind and Disabled Recording Program**

Recommendation

DFCM recommends that the Building Board consider a request for the Utah State Library for the construction of a new building at the Draper Prison Complex.

Background

For over 20 years, the Department of Corrections (DOC) and the Utah State Library have operated a joint program to create sound recordings for the blind and disabled. The inmates read and record material used by library patrons. The current recording facility at the Prison is outdated, overcrowded and lacks air-conditioning. The Utah State Library is proposing to fund a new building, which will be exclusively used for this program. The capital budget estimate for the project is approximately \$600,000. The DOC will be responsible for maintenance and O&M for the life of the building.

DGB:KFB:sle

Attachment



STATE OF UTAH

JON M. HUNTSMAN, Jr.
Governor

GARY R. HERBERT
Lieutenant Governor

DEPARTMENT OF COMMUNITY AND CULTURE
PALMER DEPAULIS
Executive Director

STATE LIBRARY DIVISION
DONNA JONES MORRIS
Division Director/State Librarian

April 22, 2009

State Building Board
c/o Mr. Gregg Buxton, Director
DFCM
4110 State Office Bldg.
Salt Lake City, Utah 84114

Dear Board Members:

The Utah State Library (USL), Program for the Blind and Disabled request the management and support from DFCM for the Reading for the Blind program at the State Prison. The current facility used for recording for the blind, by inmates is inadequate in square feet and in the lack of cooling. The recording program has been and is staffed by inmates for over twenty years and is often evaluated as one of the most successful rehabilitative jobs for inmates. USL provides supervisory staff, equipment for recording, and much more.

USL has been working with Corrections for several months planning how best to have space within the corrections facilities to meet the needs of the recording program and provide a positive work experience for inmates. Corrections and USL have determined that a new building should be constructed where recordings can be made. USL will provide funding for a new building for the cooperative project and funding to cover the cost of architectural and engineering plans, not to exceed \$50,000. The new space is to be for the sole use of the Utah State Library, Library for the Blind and Disabled in cooperation with Corrections. Ongoing costs of O and M and any other building repairs will be the responsibility of Corrections. USL will assume responsibility for replacement of equipment inside the building necessary to conduct the program.

Please let me know if you have any questions. I look forward to working with you on this project.

Respectfully submitted,

Donna Jones Morris
State Librarian/Division Director

Cc: Palmer DePaulis
Tim Parkinson



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Salt Lake City, Utah 84114
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MEMORANDUM

To: Utah State Building Board
From: David G. Buxton 
Date: May 21, 2009
Subject: **Raising the High Performance Building Rating System (HPBRS) Standards to a Minimum of LEED Silver Certification with Additional DFCM Design Criteria for Targeted New Construction in State Owned Buildings**

Recommendation

DFCM recommends that the Building Board approve raising HPBRS standards to a minimum of LEED Silver Certification with additional DFCM design criteria for targeted new construction in state owned buildings. Some smaller projects such as UDOT maintenance structures would not be impacted by this change.

Background

The HPBRS has been in effect for three years and raised the standard for energy efficiency and sustainability for new construction in state owned buildings. Originally DFCM did not adopt LEED as a standard but elected to establish their own standards for new construction because the state wanted to put more focus on energy efficiency and water conservation measures. LEED v3 2009 was launched on April 27, 2009 and now surpasses the state's building goals of energy efficiency and water conservation. LEED certification is a nationally accepted standard that covers all aspects for the development and construction process.

This new standard will raise the bar on new construction for state owned buildings in Utah and is a major step in moving the state forward as a leader in energy efficiency and sustainability.

Attached are revised design criteria documents incorporating LEED Silver Certification with the additional DFCM design criteria for targeted new construction in state owned buildings.

DGB:CL:sle

Attachments

5.0 HIGH PERFORMANCE BUILDING RATING SYSTEM (CURRENT)

5.1 General

- A. This section defines a High Performance Building Rating System for Buildings except Low-Rise Residential Buildings.
- B. If required by contract, a building shall comply with the Prerequisites (Section 5.5) and Energy Requirements (Section 5.6), and scores with 20 points or more with the Sustainability Credits (Section 5.7).

5.2 Definitions

“Agency” is any state agency, board, commission, department, or division.

“Designer” is the architect(s), engineer(s), and other professionals responsible for the building design.

“Institution” means the University of Utah, Utah State University, Southern Utah University, Weber State University, Snow College, Dixie State College of Utah, College of Eastern Utah, Utah Valley State College, Salt Lake Community College, Utah College of Applied Technology, and any other university or college which may be established and maintained by the state.

“Low-Rise Residential Buildings” means single-family houses, multi-family buildings of three stories or less above grade, and manufactured houses.

“Life-cycle costs” means the sum of the present values of investment costs, capital costs, installation costs, energy costs, operating costs, maintenance costs, and disposal costs, over the lifetime of the project, product, or measure.

“Life-cycle cost-effective” means the life-cycle costs of a product, project, or measure are estimated to be equal to or less than the base case (i.e., current or standard practice or product).

5.3 Referenced Standards and Codes.

The design shall comply with all applicable Standards and Codes at the time submitted to the State Building Official, including but not limited to:

ANSI/ASHRAE Standard 52.2, Method of Testing General Ventilation Air-Cleaning Devices for Removal Efficiency by Particle Size

ANSI/ASHRAE Standard 55, Thermal Environmental Conditions for Human Occupancy

ANSI/ASHRAE Standard 62, Ventilation for Acceptable Indoor Air Quality.

ANSI/ASHRAE/IESNA Standard 90.1, Energy Standard for Buildings Except Low-Rise Residential Buildings, including Appendix G.

Illuminating Engineering Society of North America, *IESNA Lighting Handbook*.

U.S. Green Building Council, *Leadership in Energy & Environmental Design for New & Major Renovations (LEED-NC)*.

5.4 Design and Technology Charrette

- A. DFCM may conduct a Design and Technology Charrette with the designers to review the requirements of the standard and strive for an integrated design of energy efficiency and environmental measures. In addition, the charrette shall also consider sustainable site design including:
- (1) Natural shade to reduce heat island effect from parking lots and landscaping areas;
 - (2) Shielded or reduced parking and façade lighting to reduce night sky pollution;
 - (3) Reuse of existing building to conserve our resources;
 - (4) Avoiding sewer and waterway contamination;
 - (5) Use local building materials and products to support local economy and reduce the environmental impacts from transportation;
 - (6) Encourage the use of public transportation;
 - (7) Protect wet-lands and green spaces; and
 - (8) Provide recycling center.

5.5 Prerequisites

- A. Fundamental Building Systems Commissioning. DFCM may engage a Commissioning Agent that is not an individual directly responsible for project design or employed by one of the designers. Commissioning Agent shall ensure that fundamental building components are installed and calibrated to operate as intended.
- B. Life-Cycle Cost Analysis. Designer shall use life-cycle cost analysis in making decisions about their investments in products, services, construction, and other projects to lower the State Government's costs and to reduce energy and water consumption.
- C. CFC Reduction in HVAC and Refrigeration Equipment. Designer shall select HVAC and refrigeration equipment without chlorofluorocarbons (CFC) based refrigerants.
- D. Ventilation Systems. Designer shall provide mechanical ventilation system according to Standard 62. Mechanical ventilation system shall have the capability

to operate continuously during occupancy and designed not to be easily shut-down or otherwise defeated, such as blocked registers.

- E. Drainage Systems. Designer shall design surface grades, storm drainage system, HVAC system, and other systems to avoid accumulation of standing water around or in the building.
- F. Landscape and Irrigation Systems. Designer shall design landscape and irrigation systems according to DFCM Guidelines for Landscape & Irrigation Standard.
- G. Fundamental Lighting Design. Designer shall design the lighting system according to IESNA Lighting Handbook.
- H. Mold Prevention during Construction. Contractor shall ensure porous type building materials, such as wood, insulation, paper, and fabric, is kept dry to prevent the growth of mold and bacteria. Materials that have been affected by mold shall be abated or replaced. Building insulation that is damp or wet for 72 hours shall be replaced.
- I. Filtration Media Replacement before Occupancy. Contractor shall ensure that filtration media is replaced before occupancy.
- J. Thermal Comfort. Designer shall ensure that thermal comfort requirements are met according to Standard 55. Exceptions:
 - (1) Winter humidification is not required;
 - (2) Summer dehumidification is not required; and
 - (3) Upper temperature limit in natural ventilated buildings is not required.

5.6 Energy Efficiency Requirements:

- A. Energy Performance. DFCM may select an integrated system of components to reduce source energy use what is required by Standard 90.1.
 - (1) DFCM shall engage an Energy Specialist with 3 years of experience with hourly energy modeling. Energy Specialist is not an individual directly responsible for project design or employed by one of the designers. Energy specialist shall perform the energy analysis according to Appendix G of Standard 90.1. Energy Specialist shall prepare report according to DFCM template and shall specify which energy efficiency measure should be commissioned. Energy Specialist shall consider reducing energy use in each major categories: 1) lighting, 2) cooling, 3) heating, 4) pumps/cooling tower, 5) internal loads, and 6) external loads. Energy specialist should also consider the following technologies:
 - a. Daylighting;
 - b. Natural ventilation;

- c. Evaporative cooling;
- d. Demand-controlled ventilation using CO2 or occupancy sensors;
- e. Green roof;
- f. Ground source heat pumps;
- g. Spectrally selective glazings;
- h. Underfloor air distribution;
- i. Radiant cold beam system; and
- j. Displacement ventilation system.

(2) Commissioning Agent shall ensure the selected energy efficiency measures are installed and calibrated to operate as intended.

B. Small Buildings Prescriptive Energy (Optional). For nonresidential buildings with 3 floors or less and 75,000 square feet or less, Designer may substantially design the Building Envelope, Lighting System, HVAC system, and Service Water Heating system according to the recommended performance levels shown in Tables 1 through 4 in compliance with Standard 90.1.

Table 1 – Small Buildings Prescription Energy Option: Building Envelope⁽⁴⁾

Category	Component	Recommendation
Roof	Insulation entirely above deck	R-20 continuous insulation and Energy-Star® rated surface
	Metal building	R-13 + R-19
	Attic and other	R-38
	Single rafter (insulated flat or vaulted ceilings)	R-38 + R-5 continuous insulation
Walls	Mass (HC > 7 Btu/ft2) ⁽¹⁾	R-11.4 continuous insulation
	Metal building	R-13+R-13
	Steel framed	R-13+ R-7.5 continuous insulation
	Wood frame and other	R-13 + R-3.8 continuous insulation
	Below-grade walls	R-7.5 continuous insulation
Floors	Mass	R-10.4 continuous insulation
	Steel framed:	R-30
	Wood framed and other	R-30
Slab	Unheated	None ⁽²⁾
	Heated	R-10 for 36 in.
Doors	Swinging	U-0.70
	Non-swinging	U-0.50
Vertical Glazing	Window-to-wall ratio (WWR)	40% maximum
	Overall thermal transmittance	U-0.42
	Shading Coefficient	SC-0.40 ⁽³⁾
	Exterior sun control (S, E, W only)	Projection Factor-0.5 ⁽⁵⁾
	Low-e coating	Emittance < 0.05
Orientation	$(A_{north} * SC_{north} + A_{south} * SC_{south}) > (A_{east} * SC_{east} + A_{west} * SC_{west})$	Area (A) and Shading Coefficient (SC) of the Window
Skylight	Percent of roof area	3% maximum
	Overall thermal transmittance	U-0.69
	Overall solar heat gain coefficient	SC-0.42

⁽¹⁾ Fully grouted CMU walls or 6 inch concrete walls qualify for a mass wall.

⁽²⁾ R-10 for 24 in. located in counties of Box Elder, Cache, Carbon, Daggett, Duchesne, Morgan, Rich, Summit, Uintah, and Wasatch.

⁽³⁾ SC-0.44 for glazing located on the street side of the street level with continuous overhang with projection factor of 0.5 (S, E, W only).

⁽⁴⁾ Reference documents: ASHRAE *Advanced Energy Design Guide for Small Office Buildings* and Standard 90.1.

⁽⁵⁾ Projection Factor = (Horizontal Projection) / (Height Above Sill)

Table 2 – Small Buildings Prescription Energy Option: Lighting

Category	Component	Recommendation
Interior Lighting	Lighting power density (LPD)	10% Savings over Standard 90.1
	Premium T8 lamps	≥ 3100 Lumens
	Premium T8 ballasts	BF ≤ 0.8
	Window daylighting controls	Dim within 12 ft of windows
	Skylight daylighting controls	Dim within 8 ft of skylight
	Occupancy sensors	Auto-off in non-24 hour rooms
	Ceiling reflectance	80%
	Wall and partitions reflectance	70%
	High or low bay lighting	High or low bay T5 ⁽¹⁾ fixtures

⁽¹⁾ In semi-heated or unheated spaces, use pulse start metal halide.

Table 3 – Small Buildings Prescription Energy Option: HVAC

Category	Component	Recommendation
HVAC	Air Conditioner (< 65,000 Btu/hr)	15 SEER
	Air Conditioner (≥ 65,000 Btu/hr and < 135,000 Btu/hr)	11.0 EER and 11.4 IPLV
	Air Conditioner (≥ 135,000 Btu/hr and < 240,000 Btu/hr)	10.8 EER and 11.2 IPLV
	Air Conditioner (> 240,000 Btu/hr)	10.0 EER and 10.4 IPLV
	Air Conditioner Water or Evaporatively Cooled	14.0 EER
	Heat Pumps (< 65,000 Btu/hr)	13 SEER (Cooling) 8.0 HSPF (Heating, Split System) 7.5 HSPF (Heating, Single System)
	Heat Pumps (≥ 65,000 Btu/hr and < 135,000 Btu/hr)	11.0 EER and 11.4 IPLV (Cooling) 3.4 COP (Heating, 47° OSA) 2.4 COP (Heating, 17° OSA)
	Heat Pumps (≥ 135,000 Btu/hr and < 240,000 Btu/hr)	10.8 EER and 11.2 IPLV
	Heat Pumps (> 240,000 Btu/hr)	10.0 EER and 10.4 IPLV
	Air Conditioner Water or Evaporative Cooled	14.0 EER
	Water-source heat pump	14.0 EER (Cooling) 4.6 COP (Heating)
	Semi-cooled spaces	Direct or Indirect Evaporative Cooling (< 25,000 cfm)
	Gas furnace (≤ 225,000 Btu)	80% AFUE or Et (Single Package AC) 90% AFUE or Et (Split AC)
	Gas furnace (> 225,000 Btu)	80% Ec
Boiler	Hot Water Boiler (≤ 300,000 Btu)	90% AFUE
Motors	All pump and fan motors (≥ 1 hp)	NEMA Premium Efficiency Motors
Economizer	Air conditioners and heat pumps (single package)	Cooling capacity > 54,000 Btu
Ventilation	Outdoor air dampers	Motorized control
Duct	Friction rate	0.08 in. w.c. per 100 feet
	Sealing	Sealing class B
	Insulation level	R-6

Table 4 – Small Buildings Prescription Energy Option: Service Water Heating

Category	Component	Recommendation
Service Water Heating	Gas storage	90% Et
	Gas instantaneous	0.81 EF or 81% Et
	Electric storage 12 kW	EF > 0.99 – 0.0012 x Volume
	Pipe insulation	1 in. (diameter < 1.5 in.) 1.5 in. (diameter > 1.5 in.)

5.7 Sustainability Credits

A. Daylighting Credits

(1) Daylighting. Designer shall use daylight as the primary lighting system for 40 to 90 percent of the space, excluding copy rooms, storage areas, mechanical, laundry, and other low occupancy support areas. Daylight zones shall have a minimum Daylight Factor of 2 percent and a maximum illumination of 200 footcandles. “Daylight Factor” means the ratio of interior to exterior illumination. Design shall lower peak and annual cooling loads compared to a building meeting Standard 90.1.

a. The Commissioning Agent shall ensure the daylighting control system is installed and calibrated to operate as intended.

- 2 points Daylighting in 40 percent of the space.
- 3 points Daylighting in 52 percent of the space.
- 4 points Daylighting in 62 percent of the space.
- 5 points Daylighting in 74 percent of the space.
- 6 points Daylighting in 90 percent of the space.

B. Energy Credits

(1) Evaporative Cooling. Designer shall select the evaporative cooling system to reduce mechanical cooling by 15 percent based on calculation method of Appendix G, Standard 90.1. Design the HVAC controls to turn off the evaporative cooling system whenever the indoor humidity level exceeds 60 percent. It should be integrated with the air economizer system and mechanical cooling system:

a. The Commissioning Agent shall ensure the evaporative cooling system is installed and calibrated to operate as intended.

- 2 points Evaporative cooling system.

(2) Demand-Controlled Ventilation using CO2 Sensors. Designer shall select the ventilation system to have a means to automatically reduce outside air intake using CO2 Sensors according to Standard 62.

a. The Commissioning Agent shall ensure the Demand-Controlled Ventilation system is installed and calibrated to operate as intended.

1 points Demand-controlled ventilation system.

- (3) Underfloor Air Distribution. Designer shall provide an underfloor air distribution system with ceiling return or equivalent air displacement system, excluding copy rooms, storage areas, mechanical, laundry, and other low occupancy support areas.

2 points Underfloor air distribution system.

C. Renewable Energy Credits

- (1) Renewable Energy. Designer shall select on-site renewable energy such as photovoltaic, wind, geothermal, and fuel cells utilizing biogas to reduce source energy use.

2 point 5 percent reduction in source energy use.

3 points 12 percent reduction in source energy use.

4 points 22 percent reduction in source energy use.

5 points 34 percent reduction in source energy use.

6 points 50 percent reduction in source energy use.

D. Indoor Air Quality Credits

- (1) Low-Emitting Materials. Designer shall select adhesives and sealants, paints and coatings, carpet, and composite woods with low-emitting materials.

1 point Select adhesives and sealants that meet USGBC LEED™ - NC, Credit 4.1, requirements.

1 point Select paints and coatings that meet USGBC LEED™ - NC, Credit 4.2, requirements.

1 point Select carpets that meet USGBC LEED™ - NC, Credit 4.3, requirements.

1 point Select composite woods that meet USGBC LEED™ - NC, Credit 4.4, requirements.

- (2) Pollutant Source Control. Designer shall design the HVAC system to vent pollution sources, minimize cross-contamination of chemical pollutants, avoid dust and microbial growth, and install rated filtration media.

1 point Install source ventilation system to vent pollution sources such as copy rooms, chemical storage rooms, janitorial rooms, food preparation spaces, and other polluting activities. Install separation walls that extend to the structure to prevent cross-contamination.

1 point Design HVAC system to avoid areas where mold and dust can accumulate, such as return plenums and fibrous ductwork.

1 point Select MERV rated filters of 11 or greater according to Standard 52.2.

- (3) Construction Indoor Air Quality Management Plan. Contractor shall ensure that Volatile Organic Compounds (VOC), dust, oils, and odors have been contained and removed before occupancy.
 - a. Prior to installation of materials and products that emits VOC or odors, allow materials and products to off-gas in a well ventilated staging area. Remove any oil films and dust.
 - b. During installation of materials and products that emits VOC or odors, use HVAC fans, open windows, or temporary fans to continuously ventilate the area until emissions dissipate, and protect porous materials with polyethylene vapor retarders.
 - c. During dust producing activities (such as drywall installation and finishing), protect HVAC fans and ductwork from accumulating dust by turning off the fans and cover air grilles, registers, and other duct openings. Use temporary fans to ventilate the space.
 - d. Prior to operating HVAC system, vacuum dust that has accumulated in HVAC fans, plenums, and ductwork with HEPA vacuum and remove any oil films from metal surfaces.
 - e. Prior to substantial completion, vacuum carpet and other soft surface with HEPA vacuum.
- 1 point Construction Indoor Air Quality Management Plan
 1 point Prior to occupancy and after Substantial Completion, flush building for 15 days with 100 percent outside air.

E. Commissioning and Training Credits

- (1) Additional Commissioning. Commissioning Agent shall ensure the building is designed, constructed, and calibrated to operate as intended. Implement the following additional commissioning tasks beyond the Prerequisites Fundamental Commissioning requirements:
 - a. Review and provide recommendations on the design document prior to issuing the construction documents.
 - b. Review the contractor submittals relative to the systems being commissioned.
 - c. Develop Recommissioning Plan to schedule commissioning activities to assure the building is continuously tuned to optimize performance.
- 2 points Additional commissioning.

F. Acoustics Credits

- (1) Improve Acoustical Performance. Designer shall design work spaces to provide acoustic levels that limit excess noise from exterior sources, HVAC systems, and other sources.

- 1 point Acoustical level of 36 to 40 dBA background, and 0.6 second reverberating times or less.
- 2 points Acoustical level of 35 dBA background or less, and 0.6 second reverberating times or less.

G. Sustainable Material Credits

- (1) Recycled Content. Designer shall select building products that have incorporated recycled-content in major materials from the Construction Products category of the US Environmental Protection Agency (EPA) Comprehensive Procurement Guidelines. Major materials include parking areas, floor, roof, partition, walls, or serving a structural function throughout the building.

- 1 point Four to seven major materials with recycled-content.
- 2 points Eight or more major materials with recycled-content.

H. Waste Reduction Credits

- (1) Site Waste Reduction. Contractor shall ensure that construction waste, demolition, and land clearing waste are recycled, composted, and salvaged. "Recycle Rate" is the ratio of recycled waste (by weight) to total waste (by weight).

- 1 point Recycle Rate of 50 to 74 percent.
- 2 points Recycle Rate of 75 percent or greater.

I. Water Reduction Credits

- (1) Water Efficient Fixtures and Appliances. Designer shall select water-efficient, fixtures and appliances with maximum flow shown below:

- a. Sensor faucet, 0.5 gpm
- b. Showerhead, 1.5 gpm
- c. Sensored flushometer toilet, 1.1-1.3 gpf, or dual flush valve
- d. Waterless or ultra-low flow urinal, 0.5 lpf

- 2 points Water efficient fixtures and appliances.

J. Performance Measurement and Verification Credits

- (1) Building Performance Monitoring on Multi-Building Campus. On a multi-building campus, agencies and institutions shall meter each energy type for each building. Energy type includes electricity, natural gas,

central chilled water, central heating water, and central steam. The energy management system shall the capability to monitor and log sub-metering energy use and electrical demand. Provide sub-meter water use on landscaping and other irrigation strategies.

1 point Building performance monitoring on multi-building campus.

(2) System Performance Monitoring. Designer shall provide continuous metering equipment for the following equipment performance shall the capability to monitor and log equipment performance:

- a. Lighting system (kWh and kW)
- b. Motor loads >20 hp (kWh and kW)
- c. Variable speed drive operation
- d. Chiller efficiency or chiller plant efficiency (i.e. chiller, cooling tower and pumps)
- e. Air and water economizer operation
- f. On variable volume system, supply air static pressure and volume
- g. Boiler efficiency or boiler plant efficiency (i.e. boiler and pumps)
- h. Process loads (kWh and kW)

1 point System performance monitoring.

K. Innovation in Design

(1) The Director of DFCM, based on justified recommendations by the Energy Manager, may award up to 4 additional points for exceptional energy or environmental measures not specifically address in the rating system.

1 to 4 points Exceptional energy or environmental measures.

5.8 Submittals

A. DFCM shall establish letter templates to document compliance with the High Performance Building Rating System used by the designers, contractors, agencies, institutions, commissioning agents, and energy specialists.

5.0 HIGH PERFORMANCE BUILDING RATING SYSTEM (PROPOSED)

5.1 General

- A. This section defines a High Performance Building Rating System for Buildings.
- B. If required by contract, a building shall comply with the High Performance Requirements in this section.

5.2 Definitions

“Agency” is any state agency, board, commission, department, or division.

“Designer” is the architect(s), engineer(s), and other professionals responsible for the building design.

“Institution” means the University of Utah, Utah State University, Southern Utah University, Weber State University, Snow College, Dixie State College of Utah, College of Eastern Utah, Utah Valley State College, Salt Lake Community College, Utah College of Applied Technology, and any other university or college which may be established and maintained by the state.

“Life-cycle costs” means the sum of the present values of investment costs, capital costs, installation costs, energy costs, operating costs, maintenance costs, and disposal costs, over the lifetime of the project, product, or measure.

“Life-cycle cost-effective” means the life-cycle costs of a product, project, or measure are estimated to be equal to or less than the base case (i.e., current or standard practice or product).

5.3 Referenced Standards and Codes.

The design shall comply with all applicable Standards and Codes at the time submitted to the State Building Official, including but not limited to:

ANSI/ASHRAE Standard 52.2, Method of Testing General Ventilation Air-Cleaning Devices for Removal Efficiency by Particle Size

ANSI/ASHRAE Standard 55, Thermal Environmental Conditions for Human Occupancy

ANSI/ASHRAE Standard 62, Ventilation for Acceptable Indoor Air Quality.

ANSI/ASHRAE/IESNA Standard 90.1, Energy Standard for Buildings Except Low-Rise Residential Buildings, including Appendix G.

Illuminating Engineering Society of North America, IESNA Lighting Handbook.

U.S. Green Building Council, Leadership in Energy & Environmental Design for New & Major Renovations (LEED-NC).

5.4 Requirements

- A. The project must meet all DFCM Design Standards.
- B. The project must achieve a LEED Silver certification.
- C. The project must specifically achieve the following credits in the LEED rating system unless otherwise excepted by the Director:
 - (1) WE Credit 1.1: Water Efficient Landscaping: Reduce by 50%
 - (2) EA Credit 3 Enhanced Commissioning
 - (3) EQ Credit 3.1 Construction IAQ Management Plan: During Construction
 - (4) EQ Credit 4.1: Low-Emitting Materials: Adhesives and Sealants
 - (5) EQ Credit 4.2: Low-Emitting Materials: Paints and Coatings
- D. The project team must hold a sustainability charrette that is at minimum approximately 3 hours of dedicated time. The charrette shall be completed during the Schematic Document Phase if the project is a CMGC or Design/Bid/Build delivery. The charrette shall be completed during the programming phase and incorporated into the program documents if there is any chance that it shall be a Design-Build delivery. The charrette must be attended by the following team members at minimum:
 - (1) DFCM Project Manager
 - (2) DFCM Energy Program Director
 - (3) Architect team
 - (4) Mechanical and Electrical Engineering team
 - (5) Energy Consultant team
 - (6) User Group Member or Building Occupants
 - (7) General Contractor (if hired)
 - (8) Commissioning Agent (if hired)
 - (9) Facility Management Personnel
- E. The Charrette shall cover the following topics at minimum:
 - (1) Targets and strategies for reducing energy consumption via building orientation and envelope, and via occupant behavior, and building systems

- (2) Site analysis as it relates to ecological impact to surrounding areas
- (3) Target for an overall building EUI (Energy Use Index)
- (4) Strategies for reducing water consumption
- (5) Spaces and activities most benefited from daylighting and daylighting controls
- (6) Methods for reducing single occupant car commuting to the building
- (7) Methods for building processes to reduce consumption and waste of resources during and after construction.

F. The project must model the building systems to analyze and make selections based on life-cycle cost. High Performance Buildings are to be built to a 50 year life-cycle. Analysis should include the following costs:

- (1) Initial Costs—Purchase, Acquisition,
- (2) Construction Costs
- (3) Fuel Costs and Energy costs
- (4) Operation, Maintenance, and Repair Costs
- (5) Replacement Costs
- (6) Residual Values—Resale or Salvage Values or Disposal Cost
- (7) Finance Charges—Loan Interest Payments if applicable
- (8) Non-Monetary Benefits or Cost

Life Cycle cost can be calculated by using the Building Life-Cycle Cost Program that is available for download from the Federal Energy Management Program (http://www.l.eere.energy.gov/femp/information/download_blcc.html) or by following equation: $LCC = I + Repl - Res + E + W + OM\&R + O$

Where:

LCC = Total LCC in present-value (PV) dollars of a given alternative

I = PV investment costs (if incurred at base date, they need not be discounted)

Repl = PV capital replacement costs

Res = PV residual value (resale value, salvage value) less disposal costs

E = PV of energy costs

W = PV of water costs

OM&R = PV of non-fuel operating, maintenance and repair costs

O = PV of other costs (e.g., contract costs for ESPCs or UESCs)

G. An energy model shall be completed to demonstrate the building design performance relative to a code compliant building. Methods for modeling shall

follow those outlined by the LEED reference guide. Unless otherwise approved by the Director, the energy model must include an analysis of evaporative cooling technology and the model must include an analysis of daylighting control technology. It must also give the modeled EUI in Kbtu/sf.

- H. The facility must be equipped with meters or submeters to measure the individual facility's energy consumption on an ongoing basis in a format that allows the consumption data to be entered into the Energy Star Portfolio Manager Program.

5.5 Submittals

- A. Design team shall submit the Charrette Summary, Life Cycle Cost Analysis, LEED submittals and Submittal Comments, Commissioning Report, and the Energy Analysis to document compliance with these High Performance Building Requirements.

Revision to the Current Version of the High Performance Building Rating Standard

The States High Performance Building Rating Standard (HPBRS) was implemented to increase energy efficiency and sustainability in State facilities. It is a simple document with many prescriptive measures. Although fairly successful, over the initial implementation phase it has become clear that the standard needs revision to make the program more effective. Updates are part of maintaining any standard whether they be for a building code or in-house guideline. Sustainability and energy cost avoidance have also become a more pressing issue in the recent past and it makes sense to evaluate the rating system tool relative to current markets and goals within the State.

Issues with the Current Standard

- Parts of the HPBRS need revision. An example of which would be where the standard references other resources that have not been developed as anticipated like the EPA's list for materials containing recycled content. Standards and resources referenced should be well researched and established with defined processes and time lines for evaluation, similar to an ASHRAE standard.
- The HPBRS is only applicable to commercial buildings. The standard does not address residential type facilities, schools and interior projects etc.
- Energy performance can be a low priority and skirted altogether because there is no minimum threshold for performance beyond a typical building complying with code and other DFCM standards.
- The State needs to re-evaluate what it deems a *high* performance building so that meeting the HPBRS exceeds typical building methods.
- Many widely used strategies for building sustainability are not currently addressed by the HPBRS such as sustainable material sources, habitat preservation and alternative transportation.
- Documentation for the HPBRS is clunky, not web interactive nor is it easy to share among team members to help facilitate an integrated compliance process.
- Some local building professionals are familiar with the HPBRS standard, however there is a learning curve each time we hire a designer who has not completed a project using the standard. DFCM is currently responsible for creating and maintaining training for the Standard.
- Time for research to keep a standard up to date is necessary to maintain a standard; currently this is not easy to schedule. Ongoing input from other sources is also difficult to coordinate and congeal into a new standard.
- Some of the prescriptive measures for water and energy efficiency are not desirable or applicable to all project types; enforcing prescriptive criteria has reduced flexibility to use creative strategies to solve problems.

Current Economic and Market Issues:

In the past few years the market has evolved and many building concepts, building owners and designers have a strong focus on energy efficiency and sustainable design. More products have evolved to allow options that increase building occupant health and energy efficiency with little or no premium added. Recycled content materials are also becoming standard options and more easily sourced.

Changes in the market may be the result of heightened awareness to issues related to lower performance buildings, such as high energy or water costs, poorly lit or day lit spaces, and indoor pollutants. These changes may also be partially attributed to other building standards that have evolved nationally, the most widely being accepted and used being the LEED (Leadership in Energy and Environmental Design) Rating System. How DFCM incorporates these market changes in industry standard should be addressed.

Some points to consider:

- 1) As better products become main stream and do not pose any significant additional cost, there is no need to keep them optional. For example, low VOC paints are the better quality paints currently on the market, are readily available through the majority of suppliers. Should these be optional when so many options for compliance exist?
- 2) When there is an industry standard, maintained by a third party, and widely accepted, is it more beneficial for the state to adopt this standard as opposed to spending money to develop and maintain their own? ASHRAE and IESNA Standards are good examples of when we let a third party develop industry standards to which we design. It would be a large expense to a State entity to get input from as many engineers and building industry professional as would an organization like ASHRAE or the ICC when developing new standards or codes.
- 3) As State energy goals ramp up we must keep our standards in step with these goals. How often does DFCM want to develop and update their standards internally?

Why LEED is Widely Accepted as a Standard and Why the State Should Consider Adoption as Part of the High Performance Building Requirements?

LEED for New Construction is a standard created by the United States Green Building Council and used to provide a rating for the sustainable successfulness of a facility. It is a program that emerged before the High Performance Building Rating System was in place and has since evolved through several versions since its inception.

Main Reasons Why and Why Now...

- LEED v3 2009 will launch April 27, 2009, and will include a regional approach & adjustments, priorities are energy efficiency, water conservation and CO2 emissions reductions.
- Local Professional Design community trained on LEED, and accepts as the standard of measurement. Cost to certify has come down.
- Industry standard that covers all aspects of the development and construction process
- Define “Green Building” by establishing a common standard of measurement
- This program can be implemented when costs of projects are under budget.
- We need to be the leader in the State
- LEED is a program that is recognized by the public both locally and nationally and so it can readily communicate the State’s goals.

People in the Workforce Already Understand LEED and Know How to Use It:

- More than 81,000 people have passed the exam to become LEED Accredited Professionals. (they understand the rating system)
- There are over 2000 certified projects
- There are over 17,000 registered projects
- Designers, builders and subs oftentimes have already learned the method and have invested staff and resources into streamlining these processes, which likely result in decreased overhead costs as no training is necessary.
- Local and federal governments are using it as a standard. See appendix A for a complete list. The GSA is one government entity who is now using LEED after evaluating several programs for applicability, stability, objectivity, and availability. They reference several reasons that the LEED program stands out are because it:
 - Is applicable to all GSA project types
 - Tracks quantifiable aspects of sustainable design and building performance
 - Is verified by trained professionals
 - Has a well-defined system for incorporating updates; and
 - Is the most widely used rating system in the U.S. market
- Church organizations such as the LDS Church are using LEED as a way to measure and quantify the environmental responsibility of their buildings.

- This program is accepted because it is achieved by a 3rd party review of documentation of each of the measures in the categories listed below:

Sustainable Site
Water Efficiency
Energy and Atmosphere
Materials and Resources
Indoor Environmental Quality
Innovation in Design

It Aligns with DFCM HPBRS Mission and Provides a Matrix for Measurement

- In many ways, the HPBRS intentions align with a LEED credit; **strategies** for compliance are the major difference.
- LEED is performance based, not prescriptive. For example all LEED V3 buildings must reduce water consumption 20% above typical standard and perform at least 10% better than ASHRAE 90.1 2007 (most recent energy code), leaving strategies up to design teams for creative problem solving at the best cost to the State. This strategy for compliance also provides a measurable outcome as opposed to a prescriptive measure in which savings are not quantified.
- LEED V3 weights credits that relate to energy efficiency and reduced pollution from transportation; it also has regional credits that emphasize water and energy conservation.

We Don't Have to Maintain It

- The USGBC website is constantly developing and evolving tools to help facilitate successful projects. Successful strategies are collected from across the country and shared to others. The web based tracking tool is helpful to design teams as they assign roles and responsibilities and track progress.
- LEED is constantly undergoing review on a national basis for improvement with input from hundreds of building professionals. It's most recent revision puts more emphasis on water and energy efficiency surpassing the State's standard.
- Some parts of LEED are not addressed by the HPBRS such as all the LEED credits related to sustainable site development. As new strategies for achieving high performance buildings evolve the LEED guidelines will be updated to include these options.

We Benefits from Moving to LEED 2009

- Recognition for LEED buildings both locally & nationally
- Promote integrated, whole building design practices
- Increased first costs will be mitigated by lower operational costs. Studies indicate operational savings are ten times greater than first costs
- Best value to the State, money well spent, Lowest overall cost
- Use resources more efficiently
- Healthier environments which contributes to increased productivity and improved employee health and comfort

We Can Afford It

- While costs are lower, and contracts are more competitive than in previous years, it is a good time to implement a new program.
- LEED certification can be achieved without adding significant cost to a project above what we are funding for the HPBRS. We currently reserve 1.5% of a project budget to fund incremental costs of high performance building components. We also currently add a complexity factor to design fees in the order of 0.25% for additional work by the design firm.
- DFCM already implements components of LEED that typically increase the first-cost of a building, such as commissioning and energy efficiency. These items are done to achieve long term savings to the State.
- A LEED building has not been shown to cost more than a non-LEED building. Design goals and other factors appear to drive project costs independently from a LEED certification. (see following cost analysis graphs)

Fees for LEED

Registration is a flat fee paid up front at the time of registration. The rates are as follows:
USGBC Members: \$450 Non-Members: \$600 (DFCM is currently a member)

Certification Fees range from \$1750 for buildings less than 50,000 sf to \$22500 for buildings over 500,000 sf.

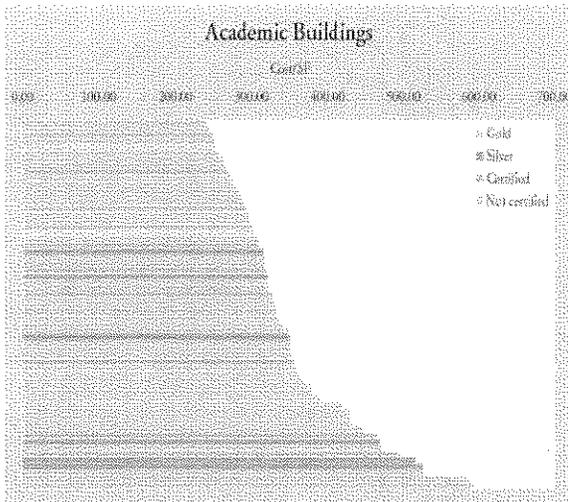
LEED V3 links

<http://www.usgbc.org/DisplayPage.aspx?CMSPageID=1970> General Info

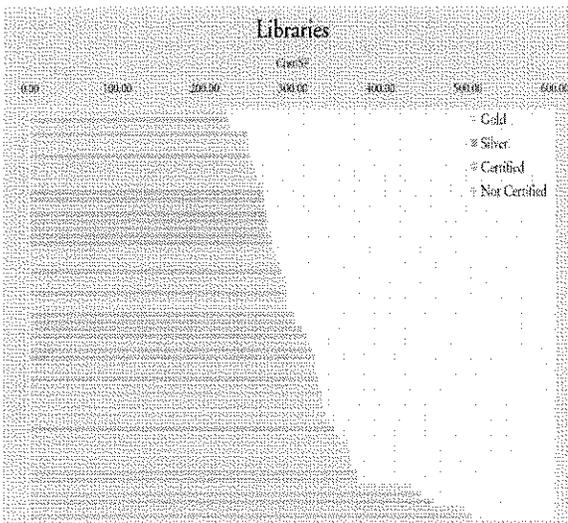
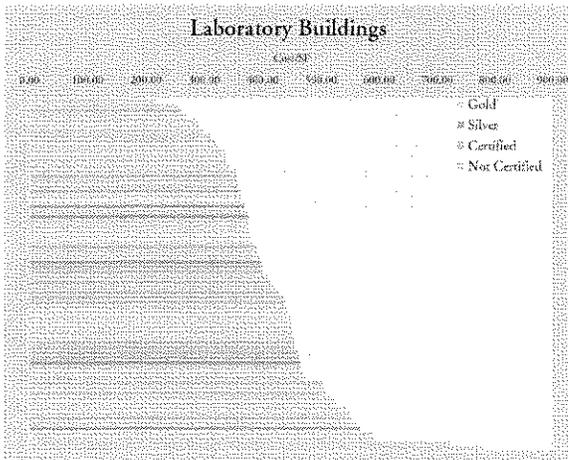
<http://www.usgbc.org/DocumentDownload.aspx?DocumentID=5575> FAQ's

<http://www.usgbc.org/ShowFile.aspx?DocumentID=5546> Rating System

- Improve air & water quality and reduced solid waste
- LEED certification ensures compliance
- Most costs are already included in HPBRS



- In an academic, lab and library buildings LEED certifications did not correlate with being more or less expensive than non-LEED projects. graphs taken from a Davis Langdon study “The Cost of Green Revisited”)



Appendix A: State Initiatives

State of Arizona: On Friday, Feb 11, 2005, Governor Janet Napolitano signed Executive Order #2005-05 requiring all state-funded buildings to achieve LEED Silver certification. The Executive Order also requires newly constructed state-funded buildings to incorporate renewable energy. This makes the state the first governmental entity in Arizona to adopt a mandatory green building standard. Executive Order: http://www.governor.state.az.us/eo/2005_05.pdf

Contact: Mick Dalrymple, Desert Moon Productions, Inc. (602) 321-7265; md@desertmooninc.com.

State of Arkansas: On February 25, 2005 Governor Huckabee signed [HB 2445](#) encouraging all state agencies to use green design strategies, including LEED. The bill also creates the Office of Sustainability with the Arkansas Department of Environmental Quality and the Legislative Task Force on Sustainable Building Design and Practices which is to meet and continue to review, discuss and advise on issues related to sustainable building design.

Contact: Mark Robertson, MESA Landscape Architects, Inc., (501) 372-6092; marobertson@mesainc.net
Martha Jane Murray, The Wilcox Group, (501) 666-4546; mmurray@thewilcoxgroup.com

State of California: On September 23, 2008, Governor Schwarzenegger signed [AB 1389](#), which requires the Department of Housing and Urban Community Development to review relevant green building guidelines when preparing proposed building standards for submittal to the California Building Standards Commission. Additionally, the Department should consider proposing as mandatory building standards those green building features determined by the Department to be cost effective and feasible to promote greener construction.

On July 17, 2008, the California Building Standards Commission passed the [California Green Building Standards Code](#), which aims to reduce water and energy use in buildings through landscaping, appliance efficiency, building design, and the use of recycled materials. The code is voluntary through 2009 at which time it becomes mandatory. The Code is written so as to not preempt more stringent local policies.

Governor Schwarzenegger signed [Executive Order #S-20-04](#) on December 14, 2004, requiring the design, construction, and operation of all new and renovated state-owned facilities to be LEED Silver. The state is pursuing LEED for New Construction for its projects and the Silver certification level, and LEED for Existing Buildings certification for existing facilities.

Green California: <http://www.green.ca.gov/default.htm>

Contact: Dan Burgoyne, State of California, Department of General Services; (916) 376-5010; daniel.burgoyne@dgs.ca.gov

State of Colorado: On April 16, 2007, Governor Bill Ritter signed [Senate Bill 51](#) into law requiring any new or renovated building whose total project cost includes 25 percent or more in state funds to be designed and built to a high performance green building standard. The new law requires the State Architect to select an independent third-party certification program, such as LEED. The project must achieve the highest level performance certification possible, which is determined by calculating whether the increased initial costs can be recouped from decreased operational costs within 15 years.

Contact: Rod Vanderwall, Office of the State Architect; (303) 866-6110; Rod.Vanderwall@state.co.us

On July 15, 2005, Governor Owens signed [Executive Order # D005 05](#) adopting LEED for Existing Buildings and incorporating LEED for New Construction practices for all state buildings. The order also creates a Colorado Greening Government Coordinating Council to develop and implement conservation policies.

Contact: Angie Fyfe, Governor's Energy Office 303-866-2059; angie.fyfe@state.co.us

State of Connecticut: On June 4, 2007, Governor Rell signed [House Bill 7432](#), stating that not later than January 1, 2008, the Secretary of the Office of Policy and Management, after consulting with the State's commissioners of public works, environmental protection and public safety, shall adopt, in accordance with the provisions of chapter 54 of the general statutes, regulations for buildings consistent with or exceeding LEED Silver for new commercial construction and major renovation projects, or an equivalent standard, and thereafter update such regulations as the secretary deems necessary.

Once enacted, these regulations will apply to the following types of projects, provided that they receive \$2 million or more in state funding: a) new state facility construction of \$5 million or more approved and funded on or after January 1, 2008; b) state facility renovations of \$2 million or more approved and funded on or after January 1, 2008; c) new public school construction of \$5 million or more authorized on or after January 1, 2009; and d) public school renovations of \$2 million or more authorized on or after January 1, 2009.

The law also requires the State Building Inspector and the Codes and Standards Committee to revise the State Building Code to meet or exceed LEED Silver for all private buildings constructed after January 1, 2009 of \$5 million or more and for all renovations beginning after January 1, 2010 of \$2 million or more. Exempt from these code requirements are residential buildings of four units or less and certain buildings, as determined by the Institute for Sustainable Energy, where costs may outweigh benefits.

HB 7432 further authorizes \$30 million in state bonds, the sale proceeds of which are to be allocated to fund on-site renewable energy projects in state buildings pursuing LEED certification.

Contact: Bob Maddox; (203) 266-7973; bmaddox@sterlingplanet.com

State of Florida: On June 25, 2008, Governor Crist signed into law [HB 7135](#), requiring all new construction and renovation of state buildings to follow the guidelines of LEED or other green building rating systems, including Green Globes and the Florida Green Building Coalition standards. The bill requires the same of the following public entities in the State of Florida entering design after July 1, 2008: counties, municipalities, school districts, water management districts, state universities, community colleges, and Florida state courts. The bill further requires that all new leases of state-occupied office space must meet Energy Star.

On July 13, 2007, Governor Crist issued [Executive Order #07-126](#) adopting LEED-NC for any new building constructed for or by the State. New construction projects must strive for Platinum certification, the highest level possible. The Executive Order also required the Department of Management Services to implement LEED-EB across all buildings currently owned and operated by the department on behalf of client agencies. In addition, agencies and departments were instructed to only enter into new leasing agreements for office space that meets Energy Star building standards, unless no other viable alternative exists.

The Department of Environmental Protection has committed to administratively working with other state agencies to improve energy diversity, sustainability, efficiency and conservation statewide as part of Florida's [Energy Plan](#), released in January 2006. The commitment includes requiring that all new state government buildings meet the LEED standard.

State of Hawaii: On June 26, 2006, Governor Lingle signed [HB #2175](#), thus requiring each state agency to design and construct buildings to meet the LEED Silver certified level, or a comparable standard. The law applies to all new state-owned construction of 5,000 square feet or greater, including K-12 public schools.

The Hawaii state legislature amended its provisions to Hawaiian counties with [HRS 46 19.6](#), requiring priority processing for all construction or development permits for projects that achieve LEED Silver or equivalent.

State of Illinois: On August 24, 2007, the Illinois State Senate amended the School Construction Law ([Public Act #95-0416](#)) with the governor's approval, directing the Capital Development Board to only issue grants to school projects with LEED for Schools or comparable rating system certification, or to projects that meet the standards set forth by the Capital Development Board's Green Building Advisory Committee.

On August 21, 2007, Governor Blagojevich signed the "The Green Neighborhood Grant Act," becoming the first state to create incentives for LEED for Neighborhood Development. This Act directs the Department of Commerce and Economic Opportunity to fund up to 1.5% of total development costs for up to three (3) applicable neighborhoods per year, funds permitting. Applicable neighborhood developments will have achieved LEED-ND certification.

Contact: Lisa Mattingly, P.E., State of Illinois Capital Development Board; (217) 524-6408; lisa.mattingly@illinois.gov

State of Indiana: On June 28, 2008, Governor Daniels signed [Executive Order 08-14](#), requiring all new state buildings earn LEED Silver certification, the EPA's Energy Star rating, two Globes under the Green Globes rating system, or the equivalent under an ANSI accredited rating system. The EO also requires that all renovations of existing state buildings must follow LEED, Green Globes, or other guidelines.

State of Kentucky: On August 30, 2007, Governor Fletcher signed [HB1](#) into law, a bill that included an addition to KRS 56.776 that would instruct the Finance and Administration Cabinet to use LEED or other rating systems to develop green building incentives for private development in the Commonwealth of Kentucky.

State of Louisiana: On February 12, 2008, the Louisiana Recovery Authority approved a [resolution](#) founding the State and Local Facilities Construction Authority to support public schools in their pursuit of LEED for schools certification or energy efficiency measures. The LRA has allocated \$2.5 million for the creation of this Authority, likely to be operational by January 2009.

State of Maine: Governor John Baldacci issued an [Executive Order](#) in November 2003 directing all new or expanding state buildings to incorporate LEED guidelines provided that standards can be met on a cost-effective basis.

Contact: Wendy Porter; (207) 876-3331

State of Maryland: On April 24, 2008, Governor O'Malley signed the High Performance Building Act into law, requiring all new public construction and major renovation projects of 7,500 sq ft or greater, and intended for occupation, to earn LEED Silver certification or two Green Globes. The High Performance Building Act further requires that MD public schools using state funds earn LEED Silver certification or two Green Globes. The High Performance Building Act further adds that "the State will pay half of any extra costs" incurred in building green public schools.

Maryland's governor issued an Executive Order in October 2001 calling for all capital projects greater than 5,000 square feet to earn LEED certification. The House and Senate passed legislation in April 2005 requiring a green building standard, such as LEED (Silver), be used for state capital projects.

MD Green Building Council contacts:

Sean McGuire, Environmental Design; (410) 260-8727; www.dnr.state.md.us/ed
Steve Gilliss, MD Dept. of General Services; (410) 767-4675; sgilliss@dgs.state.md.us

The state has also approved a green building tax credit for commercial developers:
<http://business.marylandtaxes.com/taxinfo/taxcredit/greenbldg/default.asp>

Contact: Mike Li, Maryland Energy Administration; (410) 260-7183; mli@energy.state.md.us

State of Massachusetts: On April 18, 2007, Governor Deval Patrick signed Executive Order 484, "Leading by Example - Clean Energy and Efficient Buildings." The order instructed all agencies involved in the construction and major renovation projects of over 20,000 square feet to meet LEED certification, incorporating energy performance 20% better than the Massachusetts Energy Code and outdoor water reduction requirements verified by an independent 3rd party commissioning authority.

Contact: Jenna L. Ide; Energy Efficiency & Sustainable Buildings Group; Division of Capital Asset Management; (617) 727-4030; jenna.ide@state.ma.us
Barbra Batshalom, The Green Roundtable; (617) 374-3740; bb@greenroundtable.org

State of Michigan: On April 22, 2005, Governor Granholm signed Executive Order #2005-4 requiring that all state-funded new construction and major renovation projects over \$1,000,000 be built in accordance with LEED guidelines.

State of Minnesota: On May 25, 2007, Governor Pawlenty signed into law the Next Generation Energy Act of 2007 setting a roadmap towards a smarter energy future and requiring utilities provide technical assistance for commercial or residential projects that incorporate green building principles in their construction. Among other provisions, the Act established a goal of 100 commercial buildings achieving LEED or Green Globes certification by December 31, 2010.

State of Nevada: On June 15, 2007 Governor Gibbons approved AB621, amending previous green building tax abatement legislation passed in August, 2006 and June of 2005, making various changes in the provision of tax abatements and exemptions based upon the use of energy and repealing certain prospective energy requirements for public buildings. Companies that had planned construction projects by December of 2005 and received State approval by February 2007 will not be affected by the change. AB621 creates a three tiered property tax exemption plan, with a maximum of 35% for any private building achieving LEED Silver certification or higher, excluding single-family homes and residential structures three stories or fewer. AB621 also removes sales tax exemptions for products or materials used in the construction of eligible buildings.

On August 16, 2006, the Nevada Commission on Economic Development adopted the process and resolution to allow property tax abatement to any private building achieving LEED Silver certification or higher, excluding single-family homes and residential structures three stories or fewer.

On June 17, 2005 Governor Guinn signed AB3 requiring all state funded buildings be LEED Certified or higher in accordance with LEED or an equivalent standard. During each biennium, at least two occupied public buildings whose construction will be sponsored or financed by the State of Nevada must be designated as a demonstration project and be equivalent to a LEED Silver or higher certification, or an equivalent standard. The bill also provides tax abatements for property which has an eligible LEED Silver building and tax exemptions for products or materials used in the construction of a LEED Silver building.

Contact: Lance Kirk, Lucchesi Galati Architects; (702) 263-7111; ljkirk@lgainc.com

State of New Jersey: On January 13, 2008, Governor Corzine signed Senate Bill 843 into law, requiring all new state-owned buildings of 15,000 square feet or greater to earn LEED Silver certification or equivalent as determined by state authorities.

In July 2002, Governor James E. McGreevey signed into law [Executive Order #24](#), requiring all new school designs to incorporate LEED guidelines. The New Jersey Economic Schools Construction Corporation is encouraging the use of LEED but not requiring certification of new projects built under its \$12 billion public school construction program.

Contact: Andrew Topinka; andrewtopinka@mac.com

State of New Mexico: In April 2007, Gov. Bill Richardson signed [SB543](#) into law. The omnibus bill included a sustainable building tax credit to promote the construction of high performance, green design and construction. The credit applies to LEED for New Construction, Silver and higher; LEED for Existing Buildings, Silver or higher; LEED for Core and Shell, Silver and higher; LEED for Commercial Interiors, Silver or higher; and LEED for Homes, Silver or higher. The credit increases commensurate with the level of LEED certification achieved. The total amount of tax credits shall not exceed an aggregate amount of \$5 million with respect to commercial buildings and an aggregate amount of \$5 million with respect to residential buildings.

On January 16, 2006, Governor Bill Richardson signed [Executive Order #06-001](#) requiring all public buildings over 15,000 ft² to be LEED Silver certified.

Contact: Karen Leigh Cook, President, EECOM, Inc.; (505) 842-9596; karen@ecominc.com

State of New York: On September 29, 2008, Governor Patterson signed [A10684](#), authorizing the New York State Energy Research and Development Authority (NYSERDA) to create and administer a green residential building grant program to encourage the construction of new homes and the renovation of existing homes that follow green building standards and criteria based on LEED for Homes. NYSERDA is authorized to provide incentives to qualified owners. For residential buildings with two or fewer dwelling units, incentives cannot exceed an amount equal to the product of the amount of qualified occupied square footage, not to exceed two thousand square feet, and three dollars and seventy-five cents. For residential buildings with greater than two dwelling units but fewer than six units, incentives cannot exceed an amount equal to the product of the amount of qualified occupied square footage, not to exceed three thousand square feet, and three dollars and seventy-five cents. For residential buildings with at least six dwelling units, incentives cannot exceed an amount equal to the product of the amount of qualified occupied square footage, not to exceed four thousand square feet, and three dollars and seventy-five cents.

On August 28, 2007, the Dormitory Authority, New York State's building and construction agency, announced its commitment to register all new construction and major renovations projects with USGBC beginning in 2008, striving for LEED Silver. View the [press release](#).

Governor Pataki issued [Executive Order #111](#) in June 2001 encouraging but not requiring state projects to incorporate LEED Criteria and seek LEED Certification where possible. New York State Energy Research and Development Authority (NYSERDA) awards incentives and technical assistance to help state agencies achieve the Executive Order objective. NYSERDA also offers incentives for owners and design teams of any privately owned and operated buildings in the state for energy efficiency measures and whole buildings that achieve a LEED rating with at least two points in Energy and Atmosphere Credit 1, Optimizing Energy Performance. NYSERDA's New Construction and Green Buildings Program offers a 10% increase on incentives for energy efficiency measures that reduce the use of electricity if the building achieves LEED plus 2 points in Energy and Atmosphere Credit 1 and a 25% increase in incentives if the building achieves 4 points in Energy and Atmosphere Credit 1. NYSERDA program funds up to \$800,000 per building in Upstate New York and up to \$1.5 million per project in New York City. NYSERDA will also buy down the interest rate on loans (4% below market rate) for energy efficiency measures and measures that assist in attaining a LEED credit. A low-interest loan may cover up to \$1.5 million in energy and green measures.

The [New York State Green Building Tax Credit Program](#) provides an income tax incentive to commercial developments incorporating specific green strategies informed by LEED. New York Green Building Tax Incentive Program:

The New York Executive Order, [Green and Clean State Buildings and Vehicles](#).

Contacts: Craig Kneeland, NYSERDA; (518) 862-1090 ext. 3311; cek@nyserda.org
Charle-Pan Dawson, NYSERDA; 518-862-1090, x.3244 cad@nyserda.org

State of North Carolina: On August 2, 2007, the State of North Carolina enacted [Senate Bill 581](#), formally granting permission to cities and counties to encourage green building practices in their jurisdictions through the use of reduced permitting fees or partial rebates for construction projects that achieve LEED certification or certification from other rating systems.

State of Ohio: On September 27, 2007, the Ohio School Facilities Commission (OSFC) passed [Resolution #07-124](#), approving the incorporation of energy efficiency and sustainable design features into all future and some previously approved school projects. All K-12 public school projects approved by the OSFC are required to meet a minimum of LEED for Schools Silver certification, with strong encouragement to achieve the Gold level. There is additional emphasis on maximizing Energy & Atmosphere credits. The

resolution directs OSFC to cover all LEED registration and certification fees and to provide a supplemental allowance to project budgets for the incorporation of sustainable, green strategies.

Contact: Franklin Brown, Ohio School Facilities Commission; (614) 580-4855; Franklin.Brown@osfc.state.oh.us

State of Oklahoma: On June 3, 2008, Governor Henry signed [HB 3394](#) into law, requiring all state buildings over 10,000 sq ft to follow LEED guidelines or those of Green Globes. Compliance will be measured by the Department of Central Services. This legislation applies to buildings entering the design phase after July 1, 2008.

State of Oregon: A LEED [Business Energy Tax Credit](#) (BETC) is being administered by the state Office of Energy. LEED for New Construction, Core and Shell, or Commercial Interiors projects achieving a minimum Silver certification will be eligible. Projects must also meet certain [technical requirements](#).

Contact: Ann Grim, Oregon Office of Energy; (503) 378-4912

State of Pennsylvania: In July 2005, the Pennsylvania legislature passed [Act 46 of 2005](#) ([House Bill 628](#)), amending school construction reimbursement rates for Pennsylvania Public Schools, specifically providing hundreds of dollars of funding per pupil for public schools within the Commonwealth with proof of LEED Silver certification or higher, or two Green Globes or higher.

Four state funds including the \$20 million Sustainable Energy Fund provide grants, loans and "near-equity" investments in energy efficiency and renewable energy projects in Pennsylvania.

Contact: Maureen Guttman, Governor's Green Government Council; mguttman@state.pa.us

State of Rhode Island: On August 22, 2005, Governor Donald Carcieri signed [Executive Order # 05-14](#) requiring all new construction and renovations of public buildings to meet LEED Silver certification or higher.

State of South Carolina: On June 20, 2007, the South Carolina legislature passed [H3034](#) requiring that all state-owned and state-funded construction greater than 10,000 ft² and any major renovation projects of greater than fifty percent of total building space or value achieve LEED-NC Silver certification or comparable standard. With a focus on energy efficiency, the legislation specifically requires a minimum of four credits earned in Energy & Atmosphere Credit 1, "Optimize Energy Performance."

State of South Dakota: On March 17, 2008 Governor Rounds signed into law [SB 188](#), establishing leadership in public buildings by requiring all new construction and major renovations of state-owned buildings costing at least \$500K and greater than 5,000 square feet to earn LEED Silver, two Green Globes or a comparable standard.

State of Virginia: On March 04, 2008 Governor Kaine signed into law HB 239, amending and reenacting Section 58.1-3221.2 of the Code of Virginia thus declaring energy efficient buildings to be a separate class of taxation from other real property. The amended code provides for localities in the Commonwealth to levy equal or lesser taxes on energy efficient buildings, as defined in the code as meeting the performance standards of LEED, Energy Star, Green Globes or EarthCraft.

On April 5, 2007 Gov. Tim Kaine signed [Executive Order 48](#), "Energy Efficiency in State Government," which set out to reduce non-renewable energy purchases and increase overall energy savings.

As part of instituting the energy saving goals, the order instructs all state agencies and institutions constructing state-owned facilities over 5,000 gross square feet in size, and renovations of such buildings valued at 50% of the assessed building value, shall be designed and constructed consistent with the energy performance standards at least as stringent as LEED or EPA's Energy Star rating.

In addition, the order instructs the Commonwealth to encourage the private sector to adopt energy-efficient building standards by giving preference when leasing facilities for state use to facilities meeting LEED or Energy Star.

State of Washington: On April 8, 2005, Governor Gregoire approved [Chapter 39.35D](#) of the Revised Code of Washington, "High-Performance Public Buildings," requiring all projects over 5,000 square feet receiving capital funds after July 1, 2006 to be certified to the LEED Silver standard. The code also requires that all K-12 schools be certified to the LEED Silver standard or built to comply with the Washington Sustainable Schools Protocol as of July 1, 2007.

In addition, the code required all affordable homes receiving money from the state's Housing Trust Fund after July 1, 2008, to be built in compliance with the Evergreen Standard for Affordable Housing. By 2009, all new construction projects and major renovations receiving Washington State funds will be built to a green standard.

The Dept. of Corrections has made LEED Silver a requirement and certification is also required for buildings larger than 5,000 sq ft.

Community Colleges, Dept. of General Administration, The Evergreen State College, and several other smaller agencies have made LEED Silver the standard for design and construction, however certification is not required.

New Energy Life Cycle Cost Analysis Guidelines (ELCCA) went into effect January 2005 requiring that all new and remodeled public projects over 25,000 square feet in Washington State to submit a completed scorecard reflecting an attempt at LEED Silver. Project teams are permitted to submit an alternative means for scoring their efforts in sustainable building as approved by WA State Dept. of General Administration.

Department of General Administration green building webpage: www.ga.wa.gov/eas/green

Contact: Stuart Simpson, Green Building Advisor, Dept. of General Administration; (360) 902-7199 Ssimpso@GA.WA.GOV

Contact: Patricia Jatzcek, Office of the Superintendent for Public Instruction (OSPI); (360) 725-4973; patricia.jatzcak@k12.wa.us

State of Wisconsin: On April 11, 2006, Governor Jim Doyle signed [Executive Order 145](#) Relating to Conserve Wisconsin and the Creation of High Performance Green Building Standards and Energy Conservation for State Facilities and Operations. The Executive Order directs the Department of Administration to establish and adopt guidelines based on LEED for New Construction and LEED for Existing Buildings within 6 months. Any project that requests LEED certification as part of the initial project request will be supported by Department of Administration.

Contact: Sherrie Gruder, University of Wisconsin-Extension, Solid & Hazardous Waste Education Center; (608) 262-0398; gruder@engr.wisc.edu



Utah State Building Board

Jon M. Huntsman, Jr.
Governor

4110 State Office Building
Salt Lake City, Utah 84114
Phone (801) 538-3018
Fax (801) 538-3267

MEMORANDUM

To: Utah State Building Board
From: David G. Buxton 
Date: May 21, 2009
Subject: **Administrative Reports for University of Utah and Utah State University**

Attached for your review and approval are the administrative reports for the University of Utah and Utah State University.

DGB:SLE

Attachments



Office of the Vice President
For Administrative Services

May 1, 2009

Mr. Gregg Buxton, Director
Division of Facilities Construction and Management
4110 State Office Building
Salt Lake City, UT 84114

Subject: U of U Administrative Reports for May 2009 Building Board Meeting.

Dear Gregg:

The following is a summary of the administrative reports for the U of U for the period 3/20/09 to 5/1/09. Please include this in the packet for the May 20 Building Board Meeting.

Professional Services Agreements (Page 1)

The Professional Services Agreements awarded during this period consist of:
4 Design Agreements, 2 Programming/Planning Agreement, 0 Study/Other Agreements.

No significant items.

Construction Contracts (Page 2)

The Construction Contracts awarded during this period consist of:
0 New Space Contracts, 0 Remodeling Contracts, 1 Site Improvement Contracts.

No significant items.

Report of Project Reserve Fund Activity (Page 3)

Increases:

These transfers move the remaining balances in these projects into the Project Reserve per state requirements. These projects have now been closed.

Decreases:

None.

Associate Vice President Facilities Management
1795 East South Campus Dr Rm 219
V. Randall Turpin University Services Building
Salt Lake City, UT 84112-9404
(801) 581-6510
FAX (801) 581-6081

Gregg Buxton, Director
May 1, 2009
Page 2

Report of Contingency Reserve Fund (Page 4)

Increases:

Project#13049, HEB North Bldg, Replace Fire Alarm and Sprinkler System.

This increase is to return funds previously transferred from Contingency Reserve that were not needed.

Decreases:

Project #20013, HPEB Emergency Generator Replacement.

This transfer of \$20,000 covers the cost of renting a temporary generator for a longer period than originally anticipated. The extension was due to delays in the delivery of replacement equipment.

Representatives from the University of Utah will attend the Building Board meeting to address any questions the Board may have.

Sincerely,



Kenneth E. Nye, Director
Facilities Management Business Services

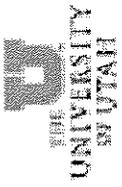
Enclosures

cc: University of Utah Trustees
Mike Perez
Gregory L. Stauffer



**Professional Services Agreements
Awarded From March 20, 2009 to April 30, 2009**

Item Number	Project No.	Project Name	Firm Name	Project Budget	Contract Amount
Design					
1	20114	Data Center Medical Records Storage	Edwards and Daniels Architects	\$1,787,716	\$49,500
2	20143	Bldg. 525, Level A, Remodel Inpatient Pharmacy	Architectural Nexus	\$2,738,800	\$44,000
3	20147	Student Services Bldg Glazing - Structure Repair	Architectural Nexus	\$441,462	\$16,125
4	20150	0550 CNC Biplane Remodel	FFKR Architects	\$2,345,600	\$152,120
Programming/ Planning					
5	20109	Data Center Improvement to Building- Programming	EYP Mission Critical Facilities, Inc.	\$9,646,792	\$216,803
6	20146	Bldg 888 7T Schematic Design	Lord, Aeck and Sargent, Inc.	\$16,500	\$14,500
Study/ Other					



**Construction Contracts
Awarded From March 20, 2009 to April 30, 2009**

Item Number	Project No.	Project Name	Firm Name	Design Firm	Project Budget	Contract Amount
		Construction - New Space				
		Construction - Remodeling				
		Construction - Site Improvement				
1	20144	Demolition of Mines and Military Science	Gramoll Construction		\$1,335,579	\$717,354



University Of Utah
Report Of Project Reserve Fund Activity
For the Period of March 19, 2009 to April 30, 2009

PROJECT NUMBER	PROJECT TITLE	TRANSFER AMOUNT	DESCRIPTION FOR CONTINGENCY TRANSFER	% OF CONSTR. BUDGET
	BEGINNING BALANCE	277,186.66		
	INCREASES TO PROJECT RESERVE FUND:			
12647	UMFA, Price Museum Bldg, Basement Storage	779.50	Transferred remaining balance to project reserve	0.15%
13049	HEB, North Bldg, Replace Fire Alarm and Sprinkler System	9,127.22	Transferred remaining balance to project reserve	0.57%
20004	Student Services Bldg Replace Fire Detection System	288.37	Transferred remaining balance to project reserve	0.16%
12691	HEB N, Upgrade Cold Water System	1,191.92	Transferred remaining balance to project reserve	0.73%
12623	West Institute, Replace Fire Alarm	3,701.88	Transferred remaining balance to project reserve	1.10%
12362	Energy/Minerals Research Lab (EMRL) HVAC System Upgrade	241.80	Transferred remaining balance to project reserve	0.02%
	DECREASES TO PROJECT RESERVE FUND:			
	CURRENT BALANCE OF PROJECT RESERVE:	292,517.35		



University Of Utah
Report Of Contingency Reserve Fund Activity
For the Period of March 19, 2009 to April 30, 2009

PROJ. NO.	DESCRIPTION	CURRENT TRANSFERS	TOTAL TRANSFERS FROM CONTINGENCY	% OF CONSTR. BUDGET	PROJECT STATUS
	BEGINNING BALANCE	2,592,580.26			
13049	INCREASES TO CONTINGENCY RESERVE FUND HEB, North Bldg, Replace Fire Alarm and Sprinkler System	18,358.67	156,915.44	9.74%	Complete
	DECREASES TO CONTINGENCY RESERVE FUND				
	NEW CONSTRUCTION				
20013	REMODELING HPEB Emergency Generator Replacement	(20,000.00)	20,000.00	8.40%	Construction
	ENDING BALANCE 01-00341-7000-05107	2,590,938.93			



29 April 2009

David G. Buxton, Director
Division of Facilities Construction
and Management
State Office Building Room 4110
PO Box 141160
Salt Lake City, Utah 84114-1163

Dear Gregg:

SUBJECT: USU Administrative Reports for May 2009 Building Board Meeting

The following is a summary of the administrative reports for USU for the period 03/18/09 to 04/29/09:

Professional Contracts, 4 contracts issued (Page 1)

No significant items.

Construction Contracts, 2 contracts issued (Page 2)

Comments are provided on the report.

Report of Contingency Reserve Fund (Page 3)

No significant items. Comments are provided on the report.

Report of Project Reserve Fund Activity (Page 4)

Two projects closed adding \$15,265.93 to the Project Reserve Fund.

Current Delegated Projects List (Pages 5-6)

Of USU's 64 current projects, 10 are Complete, 25 Substantially Complete, 22 in Construction, 5 in the Design/Study phase, 1 on Hold, and 1 Pending.

Representatives from Utah State University will attend the Building Board meeting to address any questions the Board may have.

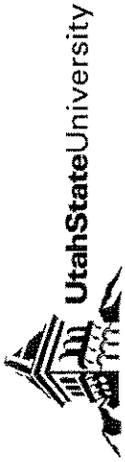
Sincerely,



Fred R. Hunsaker
Interim Vice President for
Business and Finance

FRH/jm

c: Gregory L. Stauffer
Darrell E. Hart
Ben R. Berrett
Stanley G. Kane



Office of the Vice President for Business and Finance
 1445 Old Main Hill
 Logan, UT 84322-1445

Professional Contracts Awarded From 03/18/09 to 04/29/09

Contract Name	Firm Name	A/E Budget	Fee Amount	Comments
1 USTAR Biofuels Outdoor Facility (Innovation Campus)	JUB Engineers	\$32,000.00	\$24,100.00	
2 Roosevelt Child Lab Remodel/Bookstore Storefront	AJC Architects	\$23,762.00	\$23,070.00	
MISCELLANEOUS CONTRACTS				
3 UWRL Hydraulics Laboratory	Reeder Welding Services	\$8,000.00	\$1,000.00	Inspections
4 Building 86C/Wind Tunnel Replacement (Structures Lab)	Reeder Welding Services	\$2,300.00	\$800.00	Inspections



Office of the Vice President for Business and Finance

1445 Old Main Hill
Logan, UT 84322-1445

Construction Contracts Awarded From 03/18/09 to 04/29/09

Project	Firm Name	Design Firm	Const Budget	Contract Amt	Comments
1 Campus Wide Medium Voltage Upgrade FY10	Tec Electric	Intermountain Consumer Professional Engineers	\$599,056.00	\$31,078.00	Conduit installation under 1400 North/Excavation
2 USTAR Biofuels Outdoor Facility (Innovation Campus)	Bailey Construction	JUB Engineers	\$396,055.00	\$2,500.00	Preconstruction/design phase of CM/GC contract



Office of the Vice President for Business and Finance
 1445 Old Main Hill
 Logan, UT 84322-1445

Report of Contingency Reserve Fund

From 03/18/09 to 04/29/09

Project Title	Current Transfers	Total Transfers To (From) Contingency	% to Construction Budget	Project Status	% Completed (Paid)
BEGINNING BALANCE	\$538,034.50				
INCREASES TO CONTINGENCY RESERVE FUND					
None					
DECREASES TO CONTINGENCY RESERVE FUND					
Water Lab Fire Lane Access/Bridges (Change order)	(24,502.53)	(29,637.53)	3.64%	Construction	73%
Building Commissioning (Change orders)	(9,517.25)	(21,536.87)	11.20%	Substantial Completion	94%
DDC Controls for VAV Boxes (Change orders)	(5,379.98)	(11,776.62)	10.22%	Substantial Completion	99%
Emergency Generators FY09 (Change orders)	(1,402.89)	(9,840.04)	21.87%	Substantial Completion	93%
Campus Safety Lighting 2-3 (Project support)	(637.00)	(4,429.20)	2.03%	Substantial Completion	98%
ENDING BALANCE	\$496,594.85				



Office of the Vice President for Business and Finance
 1445 Old Main Hill
 Logan, UT 84322-1445

Report of Project Reserve Fund Activity

From 03/18/09 to 04/29/09

Project Title	Transfer Amount	Description	% of Construction Budget
BEGINNING BALANCE	\$345,069.38		
INCREASES TO PROJECT RESERVE FUND			
Military Science ROTC Renovation	7,998.59	Close project	11.90%
Animal Science Window Replacement	7,267.34	Close project	2.43%
DECREASES TO PROJECT RESERVE FUND			
None			
ENDING BALANCE	\$360,335.31		



UtahStateUniversity

Office of the Vice President for Business and Finance
 1445 Old Main Hill
 Logan, UT 84322-1445

Current Delegated Projects List

04/29/09

Project Number	Project Name	Phase	Project Budget
CAPITAL DEVELOPMENT/IMPROVEMENT			
A12309	Campus Safety Lighting 2-3	Substantial Completion	\$589,727
	Campus Safety Lighting FY07		139,655
A08087	New Well (Industrial Science)	Substantial Completion	342,425
	Well Pump House and Controls		250,000
	Pump House and Equipment		588,635
A08073	HPER Upgrades (Floors, A/C, Locks, Fire Alarms)	Substantial Completion	1,057,583
A12820	Veterinary Science Fume Hood Upgrades	Substantial Completion	500,000
	Fume Hood Upgrades FY07		300,000
	Veterinary Science Mechanical Upgrades		289,057
A08070	Carousel Square Remodel	Substantial Completion	1,984,237
A13216	Agricultural Buildings Relocation	Construction	10,748,411 *
A14526	Utah Botanical Center Wetland Discovery Lab	Substantial Completion	1,732,969
A15262	Bus Turnaround	Substantial Completion	1,435,468
A15868	High Voltage Upgrades FY07	Complete	187,421
A15867	SER Mechanical Upgrade/UPS Replacement	Substantial Completion	945,285
A15871	Auditorium Upgrades (Various Buildings)	Complete	222,427
A15873	Animal Science Window Replacement	Complete	453,427
A15874	Fire Alarm Upgrades FY07 (Various Buildings)	Complete	191,755
A15303	Old Main Hill Landscaping	Substantial Completion	311,613
A15819	Campus Wireless Utility Network	Complete	88,842
A07961	Building 86C/Wind Tunnel Replacement (Structures Lab)	Substantial Completion	889,656
A16409	Housing Cat 6 Data/Wireless Upgrade	Complete	1,131,079
A16970	Health, Life Safety & Code Compliance Projects	Construction	145,576
A16874	Engineering Lab Emergency Lighting Upgrades	Substantial Completion	193,520
A16875	Engineering Lab Fire Alarm (Sprinkler system)	Substantial Completion	349,892
A16967	Fume Hood Upgrades FY08	Substantial Completion	486,650
	A/C & Controls Upgrade FY08		423,375
A16878	Campus-wide Medium Voltage Upgrades	Substantial Completion	682,404
A16873	Fire Alarm Upgrades FY08	Partial Completion	282,051
A16881	CEP Chillers	Construction	1,412,105
A16876	Access Control/Security Systems Upgrades	Construction	188,800
A16871	Classroom Upgrades FY08	Construction	806,798
A16966	Building Commissioning	Substantial Completion	233,076
A16877	CEP Electrical Feed	Equipment order	188,685

A15889	Military Science ROTC Renovation	Complete	71,770
A16968	Campus-wide Ventilation	Substantial Completion	188,932
A16872	Tanner Fountain	Substantial Completion	313,618
A16971	Planning & Design Fund	Design/Study	100,000
A16784	Tooele Campus Master Plan	Complete	63,249
A17575	Brigham City Science Lab Addition	Substantial Completion	2,286,297
A17691	SER Data Center Upgrade/Phase I	Complete	584,450
A17643	Business Building Interior Finishes/Classroom Upgrades Business Building Main Floor Classrooms	Substantial Completion	1,259,685
A16783	UWRL Hydraulics Laboratory	Substantial Completion	500,000
A18156	NFS 248 Remodel	Substantial Completion	1,831,953
A18529	Roosevelt Multi-purpose Room	Substantial Completion	461,382
A18615	Steam Line Replacement to NFS	Complete (Project canceled)	5,095
A18972	Planning & Design Fund FY09	Substantial Completion	933,000
A18973	Health, Life Safety & Code Compliance Projects FY09	Design	100,000
A18728	Campus-wide Sidewalk Replacements	Construction	192,727
A18974	Business Building Cladding/Concrete	Partial Completion	319,900
A18975	Water Lab Fire Lane Access/Bridges	Partial Completion	422,158
A18976	Water Lab Fume Hood Upgrade	Construction	914,547
A18977	Spectrum Outside Air Intake Dampers	Design only/Balance on HOLD/FY09 Cut	113,668
A18978	Tippetts Gallery Lighting/HVAC	Construction	93,200
A18979	DDC Controls for VAV Boxes	Construction	660,450
A18980	CPD Fire Alarm FY09	Substantial Completion	126,977
A18981	Natural Resources Siding	Construction	139,357
A18982	Campus-wide Benches/Trash Receptacles/Urns	Partial Construction/Balance on HOLD/ FY09 Cut	29,632
A18983	Emergency Generators FY09	Construction	118,038
A18984	Eccles Conference Center/Business Walkways	Substantial Completion	57,140
A18985	Miscellaneous Critical Improvements	Project on HOLD/FY09 Cut	0
A18594	Tennis Courts Relocation	Construction	189,393
A18363	Tooele Classrooms Addition	Substantial Completion	656,921
A19843	TSC 3rd Floor HVAC Remodel	Construction	3,608,399
A20091	Military Science Renovation (Psychology Teaching Lab/1st & 2nd Floors)	Construction	611,433
A19028	Roosevelt Child Lab Remodel/Bookstore Storefront	Design only	57,700
A20143	SER Observatory	Design	250,000
A20520	USTAR Biofuels Outdoor Facility (Innovation Campus) (NEW PROJECT)	Construction	265,347
A20557	Campus-wide Medium Voltage Upgrade FY10 (NEW PROJECT)	Construction	500,000
		Partial Construction	614,056
PAVING (STATEWIDE)			
A08076	Miscellaneous Paving	Pending	63,773
TOTAL (64)			<u>\$48,476,851</u>

* Project management delegated to USU.



Utah State Building Board

Jon M. Huntsman, Jr.
Governor

4110 State Office Building
Salt Lake City, Utah 84114
Phone (801) 538-3018
Fax (801) 538-3267

MEMORANDUM

To: Utah State Building Board
From: David G. Buxton 
Date: May 21, 2009
Subject: **Administrative Reports for DFCM**

The following is a summary of the administrative reports for DFCM.

Lease Report (Page 1)

No significant items

Architect/Engineering Agreements Awarded, 27 Agreements Issued (Pages 2 - 3)

No significant items

Construction Contracts Awarded, 42 Contracts Issued (Pages 4 - 7)

Item #3, Parley's DOT Maintenance Station Replacement
DOT is covering the actual construction cost over budget.

Item #19, Matheson Courts Facility ADA Ramp and Stucco Repairs
Item #28, SUU Eng and Technology Bldg Air Handler Replacement
Item #29, DWS Midvale Office Replace Rooftop Air Handler Unit
Project Reserve funds were used to cover these contracts which bid over budget.

Report of Contingency Reserve Fund (Page 8)

Increases

Increase from Decrease change orders and modifications

Decreases, New Construction

University of Utah Marriott Library Renovation

This transfer of \$134,521 covers the State's share of change order #52 for scope changes on additional security provisions at a number of doors, providing the rough-in for the power needed for the AV system, and the mechanical penthouses sealing off.

Multi-Agency Office Building

This transfer of \$104,743 covers change order #4 for various omissions to add back bike lockers, communication conduits, addition of an AV equipment rack, emergency power outlets, and an

acoustical treatment. It also covers scope changes to add sensors to monitor lighting power usage, extend the roof warranty from 15 to 20 years and increase the roofs wind classification.

Decreases, New Construction Continued

Utah State Developmental Center New Housing Units

This transfer of \$45,181 covers change order #8 for various scope changes. These include: toilet partitions and shower rework, backyards lights, changes to satisfy Risk Management, re-work of lavatory countertop per Risk Management, and to modify countertop over the dishwasher.

Decreases, Remodeling

UBATC Vernal Branch Building

This transfer of \$159,212 covers the State's share of change orders #10 – 12 and #13, #15 and some administration costs. Items covered are design errors for the following: overhead crane support columns, mechanical issues, install missing vent pipe in shop building, added high pressure control dampers, add reinforcing to concrete apron, and to add a one hour enclosure at classroom mechanical penthouse. It also includes unknown conditions for additional earthwork and additional geopiers.

Governor's Mansion Carriage House Improvements

This transfer of \$141,050 returns the budgeted contingency previously transferred as these project funds were reallocated at the last Building Board meeting.

Report of Project Reserve Fund Activity (Page 9)

Increases

These items reflect savings on projects that were transferred to Project Reserve per statute.

Decreases

Unified State Lab Facility

This transfer of \$40,129 is to award the final bid package on this project.

DGB:DDW:sll

Attachment

DFCM

Division of Facilities Construction and Management
 4110 State Office Building, Salt Lake City, UT 84114
 Telephone (801) 538-3018 FAX (801) 538-3267

LEASE REPORT From 3/18/09 to 4/28/09

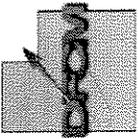
No	Agency/Location	Services	Space Type	Lease Term	Square Feet		Cost/Sq. Ft.		Comment
					Old	New	Old	New	

LEASES

1.	Human Services, Child and Family Services Kanab	Full	Office	5 Yrs.	1,872	2,379	\$12.31	\$15.78	New location for program growth.
2.	Human Services, Child and Family Services Price	Full	Office	1 Yr.	145		\$18.92		Sublease with Workforce Services for program growth.
3.	Public Safety Driver License Randolph	Full	Office	5 Yrs.	200		\$ 0.00		Free space, new location for program growth.

AMENDMENTS

1.	Education Rehabilitation Payson	Full	Office	5 Yrs.	2,978	3,376	\$17.79	\$18.04	Renewal at market, increase in space for program growth.
2.	Education Rehabilitation Salt Lake City	Full	Office	Same	9,484	9,484	\$22.50	\$22.50	Partial change in parking location.



Division of Facilities Construction and Management

4110 State Office Building Salt Lake City, UT 84114

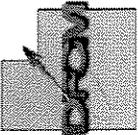
Professional Contracts Awarded From 3/18/2009 To 4/28/2009

Design

<u>Agency</u>	<u>Contract Name</u>	<u>Firm</u>	<u>Type</u>	<u>Budget</u>	<u>Contract Amt</u>
1 DATC	DATC COMPOSITE SPACE REMODEL	VAN BOERUM & FRANK ASSOC INC	DESIGN	\$33,000.00	\$33,000.00
2 SLCC	SLCC RRC SCIENCE AND INDUSTRIES REROOF	PRIOR & ASSOCIATES	DESIGN	\$21,046.00	\$15,000.00
3 SLCC	SLCC RRC DAY CARE CENTER REROOF	PRIOR & ASSOCIATES	DESIGN	\$9,996.00	\$7,500.00
4 COURTS	MATHESON COURTS TILE REPLACEMENT	MHTN ARCHITECTS INC	DESIGN	\$12,601.00	\$10,080.00
5 DHS-OTHER	DHS ECCLES GROUP HOME BASEMENT RENOV/HVAC UPGRADES	HART FISHER SMITH & ASSOCIATES	DESIGN	\$25,000.00	\$25,059.00
6 SLCC	SLCC RRC ADMINISTRATION BUILDING REMODEL	PRIOR & ASSOCIATES	DESIGN	\$27,000.00	\$27,350.00
7 SUU	SUU ELECTRONIC LEARNING CTR 5TH FLOOR REMODEL	SARGENT DESIGN GROUP	DESIGN	\$13,500.00	\$8,500.00
8 UU	UU ALINE WILMONT SKAGGS BIOLOGY BLDG ROOFING	SCOTT P EVANS ARCHITECT&ASSOC	DESIGN	\$29,732.00	\$7,425.00
9 SUU	SUU SHELLED AUDITORIUM COMPLETION	MHTN ARCHITECTS INC	DESIGN	\$34,000.00	\$33,840.00
10 UVSC	UVU GUNTHER TRADES 5TH FLOOR HVAC	STANLEY CONSULTANTS INC	DESIGN	\$163,880.00	\$105,200.00
11 ST HOSP	STATE HOSPITAL KITCHEN GREASE TRAP RELOCATION	VAN BOERUM & FRANK ASSOC INC	DESIGN	\$6,000.00	\$6,000.00
12 UVSC	UVU INTRAMURAL PLAYING FIELDS	KING ENGINEERING INC	DESIGN	\$40,560.00	\$37,500.00
13 UVSC	UVU ATHLETIC TRACK	KING ENGINEERING INC	DESIGN	\$83,200.00	\$68,225.00

Programming/Master Planning

<u>Agency</u>	<u>Contract Name</u>	<u>Firm</u>	<u>Type</u>	<u>Budget</u>	<u>Contract Amt</u>
14 COURTS	OGDEN JUVENILE COURTS PROGRAMMING	VCBO ARCHITECTURE LLC	PROGRAMMI NG	\$30,000.00	\$28,000.00



Division of Facilities Construction and Management

4110 State Office Building Salt Lake City, UT 84114

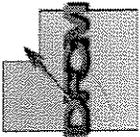
Professional Contracts Awarded From 3/18/2009 To 4/28/2009

Agency	Contract Name	Firm	Type	Budget	Contract Amt
15 COURTS	NEW OGDEN JUVENILE COURTS BUILDING	RMEC ENVIRONMENTAL INC	PROGRAMMI NG	\$20,000.00	\$19,877.00
16 DEAF&BLD	LIBBIE EDWARDS DEAF/BLIND SCHOOL PREDESIGN	AXIS ARCHITECTS	PROGRAMMI NG	\$17,510.00	\$17,510.00

Miscellaneous Services

Agency	Contract Name	Firm	Type	Budget	Contract Amt
17 DFCM	FY10 COST ESTIMATING VARIOUS CAPITAL DEVELOPMENT PRJCTS	GLEN BECKSTEAD	UNCLASS CONSULT	\$20,000.00	\$19,800.00
18 USU	USTAR LIFE SCIENCES RESEARCH CENTER	SUNRISE ENGINEERING INC	INSP OBSERV SER	\$330,000.00	\$145,561.16
19 USU	USU EARLY CHILDHOOD ED RESEARCH CENTER	SUNRISE ENGINEERING INC	INSP OBSERV SER	\$100,000.00	\$93,529.00
20 SNOW	SNOW COLLEGE LIBRARY NEW CONSTRUCTION	WESTERN TECHNOLOGIES INC	INSP OBSERV SER	\$130,605.00	\$85,820.46
21 REGION 2	UDOT PARLEYS MAINT. STATION	CALDWELL RICHARDS SORENSEN	INSP OBSERV SER	\$8,750.00	\$13,457.00
22 DFCM	UTAH SAVING ENERGY INITIATIVE EMPLOYEE BEHAVIOR PROGRAM	NATIONAL ENERGY FOUNDATION	UNCLASS CONSULT	\$35,000.00	\$34,832.00
23 WSU	WSU WOMENS NEW SOFTBALL FIELD	IVIE CODE GROUP INC	INSP OBSERV SER	\$12,750.00	\$7,870.00
24 DRAPR FAC	DRAPER PRISON LINE PEAK FACILITY SECURITY	FORSGREN ASSOCIATES	INSP OBSERV SER	\$24,236.00	\$14,902.54
25 DEAF&BLD	DEAF/BLIND SCHOOL LIBBIE EDWARDS REMODEL SEISMIC EVALUATION	ARW ENGINEERS	UNCLASS CONSULT	\$10,000.00	\$9,000.00
26 UU	UU ECCLES BUSINESS CHOOOL COST AUDITING SERVICES	CONSTRUCTION CONTROL CORP	UNCLASS CONSULT	\$20,000.00	\$18,760.00
27 UU	UU USTAR COST AUDITING SERVICES	CONSTRUCTION CONTROL CORP	UNCLASS CONSULT	\$25,000.00	\$24,045.00

End of Report



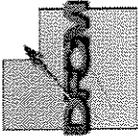
Division of Facilities Construction and Management

4110 State Office Building Salt Lake City, UT 84114

Construction Contracts Awarded From 3/18/2009 To 4/28/2009

Construction

<u>Agency</u>	<u>Contract Name</u>	<u>Firm</u>	<u>Type</u>	<u>Budget</u>	<u>Contract Amt</u>
1 DNR-OTHER	DNR ADMIN BLDG HVAC SYSTEM REN FURNITURE MOVING	UTAH CORRECTIONAL INDUSTRIES	Const Remodel	\$25,000.00	\$24,050.00
2 DFCM	PROVO REG CENTER EXTERIOR WINDOWS CAULKING	JONES PAINT & GLASS PROVO	Const Remodel	\$99,000.00	\$79,660.00
3 REGION 2	PARLEYS MAINT STATION IMPROVEMENTS	ECKMAN & MITHCHELL CONSTRUCTION	Const Remodel	\$1,683,000.00	\$1,683,000.00
4 DFCM	ST LIBRARY AUDIO VIDEO UPGRADE	WEBB AUDIO VISUAL COMMUNICATION	Const Remodel	\$50,000.00	\$49,924.60
5 YTH CORR	DJJS DECKER LAKE YTH CTR LIGHTING RETROFIT	ADVANCED LIGHTING INC/TOM SOLLIS ELEC	Const Remodel	\$10,000.00	\$10,186.00
6 DFCM	PROVO REG CTR WALL COVERINGS/CARPET REPLACEMENT	ASCENT CONSTRUCTION INC	Const Remodel	\$640,815.00	\$490,100.00
7 PARKS	VERNAL FIELDHOUSE TILE FLOOR REPLACEMENT	ALL WAYS TILE, INC.	Const Remodel	\$150,000.00	\$79,500.00
8 UVSC	UVU WINDOW REPLACEMENT PHASE II	COMPLETE CONTRACTING	Const Remodel	\$300,000.00	\$170,000.00
9 ST HOSP	STATE HOSPITAL SWIMMING POOL REPAIRS	MECHANICAL SERVICE & SYSTEMS I	Const Remodel	\$90,532.00	\$70,131.00
10 DRAPR FAC	DOC DRAPER LONE PEAK FACILITY SECURITY IMPROVEMENTS	GARFF CONSTRUCTION CORP	Const Remodel	\$1,675,000.00	\$1,675,000.00

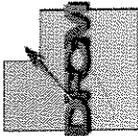


Division of Facilities Construction and Management

4110 State Office Building Salt Lake City, UT 84114

Construction Contracts Awarded From 3/18/2009 To 4/28/2009

<u>Agency</u>	<u>Contract Name</u>	<u>Firm</u>	<u>Type</u>	<u>Budget</u>	<u>Contract Amt</u>
11 OFF-EDUC	STATE LIBRARY CHILLER REPLACEMENT	MECHANICAL SERVICE & SYSTEMS I	Const Remodel	\$218,922.00	\$164,104.00
12 WILDLIFE	OGDEN BAY BOAT STORAGE FACILITY	AVALON CONSTRUCTION	Const Remodel	\$323,000.00	\$303,622.00
13 NG	VERNAL NATL GUARD READINESS CENTER UPGRADE	CULP CONSTRUCTION COMPANY	Const Remodel	\$250,000.00	\$244,600.00
14 NG	SPRINGVILLE NATL GUARD READINESS CENTER UPGRADE	WADE PAYNE CONSTRUCTION INC	Const Remodel	\$550,000.00	\$497,200.00
15 NG	NATL GUARD CAMP WMS BLDG 5170 RENOVATION	CHAD HUSBAND CONSTRUCTION INC	Const Remodel	\$770,000.00	\$756,674.00
16 COURTS	MATHESON COURTS JURY BOX REMODEL PHASE 2	MCCULLOUGH ENGINEERING AND CONTRACTING	Const Remodel	\$191,290.00	\$184,890.04
17 COURTS	MATHESON COURTS ADA RAMP AND STUCCO	BODELL CONSTRUCTION	Const Remodel	\$119,394.00	\$126,675.00
18 CAP PRESV	CPB HOUSE OF REPRESENTATIVE 2ND FLOOR	GLACIER MECHANICAL	Const Remodel	\$36,000.00	\$31,535.64
19 WSU	WSU WOMEN'S SOFTBALL FIELD VENUE	CAMERON CONSTRUCTION	Const Remodel	\$1,275,000.00	\$874,713.00
20 SLCC	SLCC RRC STUDENT CTR STEAM CNTRL VALVES REPLACEMENT	RALPH TYE & SONS INC	Const Remodel	\$121,997.00	\$53,692.00
21 NG	NATL GUARD DRAPER COMPLEX ROOFTOP UNIT IMPROVEMENTS	MECHANICAL SERVICE & SYSTEMS I	Const Remodel	\$300,000.00	\$155,482.00



Division of Facilities Construction and Management

4110 State Office Building Salt Lake City, UT 84114

Construction Contracts Awarded From 3/18/2009 To 4/28/2009

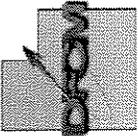
<u>Agency</u>	<u>Contract Name</u>	<u>Firm</u>	<u>Type</u>	<u>Budget</u>	<u>Contract Amt</u>
22 WSU	WSU SOCIAL SCIENCE BLDG 3RD FLOOR REMODEL	C K CONSTRUCTION & SERVICES CORP	Const Remodel	\$194,162.00	\$72,811.00
23 DFCM	HIGHLAND PLAZA NEW CAMERA SYSTEM	SIMPLEX GRINNELL	Const Remodel	\$38,000.00	\$37,580.00

Design/Build

<u>Agency</u>	<u>Contract Name</u>	<u>Firm</u>	<u>Type</u>	<u>Budget</u>	<u>Contract Amt</u>
24 USU	USU BINGAM ENTREPRENEURSHIP/ENERGY RESEARCH	GRAMOLL CONSTRUCTION COMPANY	Design Build	\$20,525,000.00	\$19,000,000.00

Miscellaneous Construction

<u>Agency</u>	<u>Contract Name</u>	<u>Firm</u>	<u>Type</u>	<u>Budget</u>	<u>Contract Amt</u>
25 PARKS	KODACHROME ST PARK PAVING IMPROVEMENTS	HOLBROOK ASPHALT CO	Paving	\$100,500.00	\$83,314.35
26 SUU	ENGINEERING AND TECH AIR HANDLER REPLACEMENT	HARRIS AIR SYSTEMS INC	Mechanical	\$286,000.00	\$317,000.00
27 DWS	DWS ROOFTOP AHU REPLACEMENT	MECHANICAL SERVICE & SYSTEMS I	Mechanical	\$111,233.00	\$120,147.00
28 OFF-EDUC	BOE PARKING LOT MAINTENANCE	MILLER PAVING INC	Paving	\$87,200.00	\$20,928.00
29 DWS	DWS PARKING LOT MAINT	MILLER PAVING INC	Paving	\$71,500.00	\$33,822.00
30 WSU	WSU HEAT EXCHANGER REPLACEMENT	SR MECHANICAL	Mechanical	\$198,990.00	\$172,120.00
31 UVSC	UVU POPE SCIENCE BLDG HVAC	ROCKY MOUNTAIN MECHANICAL	Mechanical	\$14,000.00	\$14,201.00



Division of Facilities Construction and Management
4110 State Office Building Salt Lake City, UT 84114

Construction Contracts Awarded From 3/18/2009 To 4/28/2009

Agency	Contract Name	Firm	Type	Budget	Contract Amt
32 O/WATC	O/W ATC COSMETOLOGY BLDG REROOF	JTS ROOFING INC.	Roofing	\$78,000.00	\$78,470.00
33 REGION I	REGION ONE PAINT SHOP REROOF	REDD ROOFING & CONSTRUCTION CO	Roofing	\$50,068.00	\$43,999.00
34 PARKS	PALISADE ST PARK PAVING IMPROVEMENTS	MORGAN ASPHALT INC	Paving	\$280,000.00	\$274,512.00
35 WSU	WSU COOLING TOWER UPGRADES	SR MECHANICAL	Mechanical	\$139,500.00	\$96,180.00
36 O/WATC	O/W ATC BUSINESS BLDG RE-ROOFING PROJECT	UTAH CORRECTIONAL INDUSTRIES	Roofing	\$128,000.00	\$127,543.13
37 DEVEL CTR	DEVELOPMENTAL CENTER RESIDENCE PAVING	PREFERRED PAVING	Paving	\$17,000.00	\$16,635.00
38 DFCM	CEU PRICE CAMPUS INSTALL 300,000 BTU HOT WATER BOILER	ROBERT JAMES DAVIS DBA:PINNACLE HVAC	Mechanical	\$20,000.00	\$19,400.00
39 YTH CORR	SOUTHWEST UTAH YOUTH CENTER PARKING LOT	BULLOCH DIRT WORKS	Paving	\$209,100.00	\$188,739.00
40 PARKS	GSL MARINA RESTROOM UPGRADE	UTAH CORRECTIONAL INDUSTRIES	Roofing	\$63,000.00	\$37,480.00
41 NG	SPRINGVILLE NATL GUARD ARMORY ASBESTOS ABATEMENT	ROCMONT INDUSTRIAL CORP	Haz Mat Const	\$48,819.00	\$34,250.00
42 UVSC	UVU PE BLDG TARTAN FLOOR HAZMAT ABATEMENT	ROCMONT INDUSTRIAL CORP	Haz Mat Const	\$35,000.00	\$34,335.00
End of Report				42	\$28,548,205.76

DFCM

Division of Construction and Management
 4110 State Office Building Salt Lake City, UT 84144
 Telephone (801) 538-3018 Fax (801) 538-3267

May-09

REPORT OF CONTINGENCY RESERVE FUND

	PROJECT TITLE	GENERAL STATE FUNDS		TRANSPORTATION FUNDS		TOTAL TRANSFERS FROM CONTINGENCY		% TO CONSTR. BUDGET	PROJECT STATUS	% Complete
		CURRENT	TRANSFERS	CURRENT	TRANSFERS	CONTINGENCY	BUDGET			
	<u>BEGINNING BALANCE</u>	5,069,361.91		17,440.53						
	<u>INCREASES TO CONTINGENCY RESERVE FUND</u>									
05050	Dixie College Health Sciences Building	140,373.00	-	-	-	(233,095.50)	-1.46%	Construction	94%	
	<u>DECREASES TO CONTINGENCY RESERVE FUND</u>									
	<u>NEW CONSTRUCTION</u>									
02032	Marriot Library Renovation	(134,520.62)	-	-	-	3,216,473.48	4.47%	Construction	85%	
07268	Multi Agency Office Building	(104,743.46)	-	-	-	213,371.01	0.50%	Construction	37%	
06041	New 192 Bed Expansion	(59,113.41)	-	-	-	574,782.79	3.22%	Construction	100%	
05055	New Housing Unit	(45,180.65)	-	-	-	591,713.85	21.86%	Construction	100%	
07042	Unified Lab Facility	(44,411.00)	-	-	-	347,027.00	1.40%	Construction	38%	
06281	St George Courthouse	(20,241.00)	-	-	-	198,236.28	0.84%	Construction	57%	
06291	UU Neuroscience Research Center	(18,149.37)	-	-	-	67,689.15	0.10%	Construction	7%	
07037	SL County Joint Drivers License/DMV	(8,386.02)	-	-	-	724,507.60	13.21%	Construction	100%	
	<u>REMODELING</u>									
05174	UBATC Vernal Branch Building	(159,212.17)	-	-	-	159,212.17	0.77%	Construction	77%	
07293	DFCM Governor's Mansion Carriage House Improvements	(141,050.00)	-	-	-	-	0.00%	Construction	10%	
07196	UVU Losee Center Remodel Programming/Design	(35,932.47)	-	-	-	35,932.47	0.87%	Construction	37%	
08084	DATC Cosmetology Expansion Area Remodel	(15,186.42)	-	-	-	15,186.42	6.90%	Construction	86%	
07183	DNR Admin Bldg HVAC Renovation	(11,631.95)	-	-	-	11,631.95	0.53%	Construction	35%	
06298	Public Safety Richfield Alternate Dispatch Modifications	(8,668.81)	-	-	-	25,417.08	8.87%	Construction	100%	
07355	UVU Storm Water Drain System	(4,019.00)	-	-	-	4,019.00	0.51%	Construction	0%	
07188	CEU San Juan New Maint Shop Bldg	(3,892.55)	-	-	-	13,633.99	3.50%	Construction	100%	
06317	UVU Science Center Remodel	(1,532.70)	-	-	-	50,477.70	4.10%	Construction	100%	
08046	UBATC Roosevelt Campus Admin/Culinary Remodel	(708.07)	-	-	-	36,224.07	5.21%	Construction	100%	
07029	UDOT Greendale Maint Station Replacement	(522.90)	-	-	-	225,980.71	21.60%	Construction	100%	
08081	Health Medical Examiner Lighting/Generator Upgrade	(348.07)	-	-	-	3,449.21	1.52%	Construction	55%	
06143	Courts Ogden 2nd Dist Crt Fac Hvac/Light/Paint	(89.77)	-	-	-	23,909.55	2.39%	Construction	91%	
	TOTAL	4,392,194.50		17,440.53						

DFCM

Division of Construction and Management
 4110 State Office Building Salt Lake City, UT 84144
 Telephone (801) 538-3018 Fax (801) 538-3267

REPORT OF PROJECT RESERVE FUNDS ACTIVITY

May-09

% of
 Constr.

PROJECT TITLE	STATE FUNDS	DOT FUNDS	DESCRIPTION	Budget
<u>BEGINNING BALANCE</u>	<u>8,612,317</u>	<u>208,649</u>		
<u>INCREASES TO PROJECT RESERVE FUND:</u>				
DIXIE - Russell Taylor Health Sciences	62,225.06		Balance of Construction & IT Budgets	0.35%
DHS/DWS - Bldg Boiler Replacement	51,638.00		Balance of Various Project Budgets	30.81%
DOT - Kamas Maint Station Programming		47,950.00	Project Residual	63.93%
Corrections-Draper Prison Fire Sys Replacements	18,169.00		Balance of Design, Inspection & Insurance Budg	9.15%
DOT - Mtf Fac. Repl Co-Ray-vac Heating Sys	14,326.00		Balance of Various Project Budgets	6.81%
CEU - B Dmitrich Athletic Ctr Shower Repairs	9,981.49		Balance of Various Project Budgets	4.40%
SLCC - Rrc/Jordan Boilers Controls Replace	6,820.00		Balance of Various Project Budgets	4.70%
DABC - S#20 Door Repairs/Replacements	5,551.00		Balance of Construction & Insurance Budgets	19.84%
Agric - Agric Bldg Plumbing Improvements	3,768.24		Balance of Various Project Budgets	2.61%
PS - Richfield Uhp/DTS Alt Dispatch Modification	3,641.31		Balance of Inspection & Insurance Budgets	1.23%
WSU - Telecom/Comp Ctr Hvac/Elec Upgrades	3,524.00		Balance of Inspection & Insurance Budgets	0.64%
USDC - Demolition of Tulip Tree & School	1,676.40		Balance of Design, Inspection & Insurance Budg	0.38%
CEU - San Juan New Maint Shop Bldg	1,409.66		Balance of IT Budget	0.36%
DHS - Moab Reg Ctr HVAC Duct Replacement	1,358.00		Balance of Inspection & Insurance Budgets	0.99%
Corrections - Draper Oquirrh #5 Security Door Improv	784.00		Balance of Inspection & Insurance Budgets	1.15%
<u>DECREASES TO PROJECT RESERVE FUND:</u>				
Health - Unified State Lab Facility	(40,128.50)		To Award Construction Contract	0.16%
<u>ENDING BALANCE</u>	<u>8,757,060</u>	<u>256,599</u>		