DFCM

Division of Facilities
Construction & Management

Third Quarter 2014

Efficiency *Accountability* *Proficiency*

The Construction Management section of DFCM is responsible for all aspects of constructing state facilities after buildings are approved and funded by the Utah State Legislature. Architectural programming, selection of a private sector architect or engineer, awarding construction bids, conducting value engineering, overseeing the design and construction of the facility, and establishing substantial completion date are just some of the team responsibilities. Left to right: *Back row:* Tim Christensen, Taylor Maxfield, Matthias Mueller, Lucas Davis, Kurt Baxter, Craig Wessman, Dwight Palmer, Brian Bales. *Front row:* Matt Boyer, Jim Russell, Mike Ambre, Chris Ottley, Wayne Smith, Rick James, Darrell Hunting, Dave McKay, John Burningham.

Photo: Bruce Whittington

CHANGES LEAD TO DFCM MILESTONE!

In late August I had the opportunity to attend Senator Mike Lee's Solutions Summit Round Table focusing on federal regulatory impacts on Utah's real estate and construction industries with the goal to supply possible solutions to negative federal regulations impacting our industry. What hit me half way through the discussions was the complete lack of accountability of government agencies to the tax payer. Every point brought up involved a lack of accountability. The Division of Facilities Construction and Management is a government agency. In our minds we here at DFCM should be held accountable for our performance by you the tax payer and more importantly, our stakeholders. If you are successful we are successful!

As many of you know, DFCM is conducting intensive changes to our procedures, policies and rules. No one enjoys change. Why not just go with the status quo? Why change??? The goal is simple. We want to be held accountable. We want the tax payer to know DFCM is held to a higher standard. We want to be able to show you how we add value to our partners, customers, stakeholders, and the State of Utah.

Over the last ten months we interviewed hundreds of our stakeholders and employees to identify the stakeholder's perception of DFCM. You all provided the input. We took your input and crafted a way forward and we would like to share the ongoing changes.

Internally, the concentration has been on accountability and consistency - both on the individual and division levels. The key to successfully executing a program is a clear governance structure, which ensures a clear picture of performance. Governance is defined as the process of developing, communicating, implementing, monitoring, and assuring the policies, procedures, organizational structures, and practices associated with a given program. In other words governance is oversight and control. DFCM lacked the baselines, data, and inputs to even create a blurred picture of our performance. We were blind. We went to work and now have the beginnings of a very effective performance reporting program targeting program scope, budget, schedules, stakeholder expectations, risks, procurements, and close outs. We are systematically developing performance metrics for each of these focus areas. Examples are customer surveys to track our project and project manager performance, critical path project schedules for our improvement projects to track project durations, a project close out check list to drive and track project close out, a cost tracking process to ensure projects stay on budget, and reporting processes which ensure our processes are adhered to.

Most importantly we implemented the use of AIM, a project management program. AIM allows us to track the data and tie the data into performance evaluations. DFCM is now accountable and the incoming results are staggering. **This year DFCM closed out 396 projects - an all-time record!!** This compares to 215 in 2013, 275 in 2012, and 260 in 2011 and computes to a whopping 57% overall improvement. Non state funded fee revenue jumped 53%. These improvements cannot be attributed to a sole source but rather was a coordinated team effort to improve.

We thank you for your input and ask for your patience as we continue change for the better. ***- Josh Haines, Director, DFCM***

TEAMING FOR IMPROVEMENT

DFCM Teams with Our Stakeholders to Revamp Standards, Selection and Evaluation Processes.

DFCM would like to thank you all for participating in the four Committees set up to review and recommend changes to improve DFCM's procedures, processes, and standards. We have made incredible progress and the ideas brought forward by you were beyond anything we anticipated. Quite frankly we thought we had some good ideas prior to the committee meetings; however, the ideas you, our private sector teammates, brought to the table were creative and innovative.

To decipher where DFCM is today let's review where DFCM was one year ago. As the new DFCM management team our goal was to identify what needed improvement, develop a correction action plan, execute the necessary changes, and control and monitor progress. To initiate the change management process we turned to you, our stakeholders, and began a comprehensive interview process to identify the areas DFCM needed to improve. If you recall many of you were somewhat reluctant to be critical, however, as the interviews progressed our organizational weaknesses became apparent and the direction we needed to go became more defined. In particular it was identified our internal and external processes, procedures, and standards had not been updated or improved for many years. As a management team we had many opinions on how to proceed (all of which were undoubtedly correct) but we concluded our best approach would be to consult with you, our stakeholders, to delineate a way forward as a TEAM. To do so we approached the AIA, ABC, ACEC, and AGC and asked if they would help organize four committees to review, discuss and recommend changes.

Your response was more than impressive and in early March the work began. The Committees were assigned the following topics:

Committee I: Architectural and Engineering Fee Schedules. The objective was to update the fee schedule, provide a means and method to incentivize the Design Team while providing a management tool for DFCM and our customers to better control project success, and to define complexity factors.

DFCM Teams with Our Stakeholders to Revamp Standards, Selection and Evaluation Processes

OUTCOME: The fee schedule was broken out to include engineering and architectural fixed fee schedules. Complexity factors were fixed by building type and will be negotiated on a project basis by scope and consultant requirements. The Base Project Team was defined, and additional members needed will be negotiated on a project by project basis. A Customer Satisfaction Incentive of 1% of project cost was added to the standard fee, to be awarded on successful completion of predefined milestone evaluations by DFCM and the Customer. Liquidated Damages clauses were added to standard contract language, and the evaluation process for rating performance was defined and tied to specific milestones. This provided the State of Utah a method of ensuring accountability and successful projects while incentivizing the design team.

Committee II: BIM Standards. DFCM had no clear policy on BIM yet we felt we could help lead the way forward on the utilization of BIM statewide if we could define a policy.

OUTCOME: Rather than create a DFCM standard policy, DFCM will adopt the AIA Standards. This Standard allows for a minimum standard and a process to adjust requirements on a building by building or customer by customer basis. More importantly this allows DFCM to base future standards on AIA adjustments to reflect changes in the industry.

Committee III: Design and Energy Standards. Our design standards were cumbersome and outdated. Our energy standard, while good, primarily relied on LEED or sustainability. We want to lead the nation in the energy sector by moving one step past LEED by creating a standard based on performance and efficiency.

OUTCOME: Specialists from landscaping, water conservation, air quality, building envelopes, commissioning, plumbing, mechanical, electrical, structural, roofing energy, and architecture reviewed our design and energy standards and worked together to create a phenomenal energy standard and a flexible design standard. LEED will still be available for use to the Universities if needed but the costs associated will be paid for by the user.

Committee IV: CMGC Fee Schedule, Selection and Evaluation Processes. DFCM and our customers felt we were not always getting value from the CMGC delivery method. The objective was to institute a fixed fee schedule and to provide a means and method to incentivize the Construction Team while providing a management tool for DFCM and our customers to better control project success by transferring additional risk to the contractor. The selection process was often perceived as a "beauty contest" verses a value based selection. Our goal was to ensure the Project Team, who brings the most value, is selected.

The Evaluation Process lacked defined measurement tools - our goal was to define objective ways to measure success.

OUTCOME: A fixed fee schedule approach was developed which locked in the fees based on the size and scope of the project. The new fixed fees schedule is based on project actuals over a 7 year period. In addition we will hold one percent of the fees at risk as a Customer Satisfaction Incentive to be awarded on successful completion of predefined milestone evaluations by DFCM and the Customer through the project life cycle. The selection process was revolutionized by creating a system which measures and compares the value of the proposed project teams, companies, and project management approach. The CSI evaluation process was tied directly into the customer satisfaction incentive and a report card was created which defines the deliverables needed for project success.

In conclusion, the Committees were a great example of how a TEAM approach can add value to all our stake holders, DFCM and the State of Utah. Accountability was dramatically increased while Customer Service incentives were created to empower DFCM and the Customer to expect the best from our projects. More importantly, this Teaming approach led to immediate buy-in by all. Each Committee had representatives from our subcontractors, engineering and architectural firms, customers, and contracting firms. We are now continuing to address additional topics and if you are interested in participating please contact us. Many thanks to the AIA, AGC, ACEC, ABC.

- Josh Haines, Director, DFCM

FACILITIES MANAGEMENT

Emergency Preparedness

It's that time of year again. What do I mean by that? Emergency preparedness time. As many of you know, DFCM plays a vital role in the State's emergency response for facilities. We are generally first on the scene to evacuate and assess our buildings as well as being called upon to repair, replace or find a new location if needed.

In order to prepare for situations like this, our Facilities Group goes through training continually to be better prepared in case of an emergency. Some of that training includes CPR, AED, CERT and AC-20 training. These are specifically targeted to help us first responders, as well as to protect our staff through awareness training to prevent additional tragedies. This training allows us to be better prepared to assist agencies with evacuating their facilities safely, responding in an emergency with first responder medical needs, and determining if a building is safe to occupy.

To assist with major emergencies the internal service fund has developed a program called FDRP. This is an Access database that houses critical information for each of the state managed facilities. This application contains check in sheets for employees and buildings and includes critical information that may be used to track and evaluate staffing and buildings on a large scale to determine status and critical needs for the agency during a crisis. With recent changes to this database, all coordinators, supervisors and ISF management conducted a joint tabletop exercise. This exercise helped bring awareness to all of the new Complex Managers as well as those that were familiar with the program and showed new changes

The FDRP program was created to assist during major emergencies and grants access to critical information for each of the managed facilities under the Internal Service Fund's responsibility.

within the database. Each Facility Coordinator was given specific scenarios for their complex in which they had to navigate through the program and create reports. This tabletop exercise was another successful venture in preparing those that participated to be able to respond to potential hazards, emergencies and possible disasters.

These types of trainings are beneficial and help ingrain the information in our memories; however it always leads to the question, "Are you prepared?" This question is difficult to answer. All of us will have circumstances in which we will be able to help very well, but we'll also have circumstances that will affect us mentally to the point that we won't be able to respond. Do each of you know what those triggers may be for you? I ask this to help you better prepare yourself mentally to be able to deal with that scenario personally and professionally. Does it mean you will be able to? It does not.

So have you done what you can to prepare yourself personally and professionally?

- Jake Jacobson,
Facilities Program Manager

DFCM & OSHA:

NATIONAL SAFETY STAND-DOWN

Fall prevention topics were the focus for Okland Construction's Tool Kit Meeting June 3rd at the University of Utah School of Dentistry's Noorda Oral Health Sciences Building. Two extensible and articulating boom platforms are visible in the background. The U of U site was just one of more than 20 DFCM projects that participated in OSHA'S National Fall Prevention Stand-Down.

In support of Safety in Utah, DFCM participated in OSHA's National Safety Stand-Down on June 3rd. DFCM Director Josh Haines urged all projects to STAND DOWN at 11:00 am in a united effort to raise awareness of preventing fall hazards in construction. All project teams were asked to review fall prevention topics such as ladder safety, scaffolding safety, and roofing safety with all workers on their sites. All of the DFCM project sites participated in the Stand-Down with attendance exceeding 500 construction employees.

According to OSHA's website, fatalities caused by falls from elevation continue to be a leading cause of death for construction workers, accounting for 269 of the 775 construction fatalities recorded in 2012. **Those deaths were preventable.** Fall prevention safety standards were among the top 10 most frequently cited OSHA standards, during fiscal year 2012.

A Safety Stand-Down is a voluntary event for employers to talk directly to employees about "Fall Hazards" and to reinforce the importance of "Fall Prevention." Construction companies conduct a Safety Stand-Down by stopping work and providing a focused toolbox talk on a safety topic such as ladder safety, fall protection equipment, or scaffolds safety. The meeting provides information to workers about hazards, protective methods, and the company's safety policies, goals and expectations. OSHA'S goal this year was to have over 25,000 employers and 500,000 workers hold a Stand-Down and if that goal was met, they would have touched almost 1 out of 10 construction workers in the country.

OSHA encouraged participation from trade associations, employers, federal, state and local governmental agencies, professional societies, institutes, and consumer/labor-management interest organizations, sub- and independent contractors. OSHA partnered with key groups to assist with the effort, including the National Institute for Occupational Safety and Health (NIOSH), OSHA approved State Plans, State consultation programs, the Center for Construction Research and Training (CPWR), the American Society of Safety Engineers (ASSE), the National Safety Council, and the OSHA Training Institute (OTI) Education Centers. - ***Rocío Briceño***

CONSTRUCTION TRADES MEET & GREET

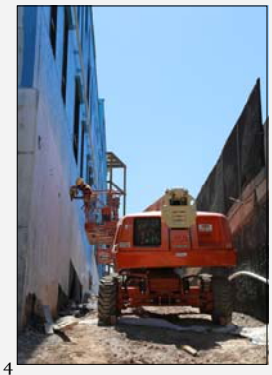
The Associated General Contractors of Utah (AGC), American Council of Engineering Companies (ACEC of Utah), American Institute of Architects (AIA), and Associated Builders & Contractors of Utah (ABC) welcomed construction leaders from DFCM and the public education system (K-12) at the first Construction Trades Meet & Greet May 15 at the AGC headquarters in Salt Lake City.

More than 400 construction industry experts attended the unique networking event and exchanged information on current and future construction issues.

According to the AGC website, nearly 500 of Utah's small to large construction firms turn to them for the industry's leading services and representation. "As the largest, and only statewide commercial construction trade association, AGC of Utah sets the benchmark by providing business opportunities, education, training, resources, and advocacy for our members while advancing sound public policy for the construction industry." *(Additional Photos: Back Page)*

Photo: Rocío Briceño

Construction Trades Meet & Greet: left to right: Troy Thompson (Vice President, Okland Construction), Richard Thorn, (President/CEO, AGC of Utah), Heather Wilson (Executive Director, AIA Utah), Kim Hood (Executive Director, State of Utah - Dept. of Administrative Services), Josh Haines (Director, DFCM), Michael Smith, (Executive Director, ACEC of Utah).



Photos: Rocío Briceño (4)

Practical Applications: *Left:* An all terrain boom lift with chock-blocks in place - a requirement when lifts are on an incline; *Center:* On a "Franco" aerial platform, workers hoist a pallet of block to stage it for installation. Lanyards and full body harnesses are required due to the removal of the handrail. *Right:* Employees installing a parapet cap using a full body harness for safety on the lower roof, Level 3, of the University of Utah School of Dentistry. Retractable blocks are hooked off to davits.

EMERGENCY MANAGEMENT AND DFCM

Approximately 90% of Utah's population lives in active earthquake zones. Large earthquakes are possible anywhere in Utah, but they are most likely in a "seismic belt" about 100 miles wide extending north-south along the Wasatch Front and through Richfield to Cedar City and St. George. It is predicted that if a 7.5 Richter Magnitude quake were to occur in the Salt Lake City area, there would be a loss of life in excess of 7,000 and $18 billion would be lost to physical damage in loss of jobs and economic activity.

Although a major earthquake is by far the most devastating event, other emergencies are also possible. Localized events from nature such as tornados, high winds and flooding or technological and terrorist attacks are also a possibility.

DFCM's primary responsibilities in case of a disaster are:

- Oversee structural inspections of State-owned facilities.
- Assist with locating and contracting for repair, demolition, or stabilization of buildings or facilities designated by State and local government as immediate hazard.
- Assist with providing engineering, contracting and real estate expertise.
- Assist with providing qualified inspection personnel for State buildings as well as requests by local jurisdictions.

In order to meet mandated Federal and State emergency response directives, DAS and DFCM have developed a "Continuity of Operations Plan" (COOP).
The objectives of the COOP are:

- Ensure the continuous performance of DFCM essential functions.
- Identify and relocate to alternate sites as it becomes necessary.
- Identify and designate principals and support staff.
- Facilitate decision-making for executing the plan.
- Ensure coordination of resources during disruption to operations as soon as possible.
- Mitigate threats to essential facilities and building equipment.

In case of an emergency declared by the Utah Division of Emergency Management, the DFCM representative in the State Emergency Response Team (SERT) will meet in the Emergency Operations Center along with other SERT members from State agencies. The SERT representative will receive requests for DFCM services as needed. The requests will then be sent to DAS/DFCM management team to respond.

With the understanding that Utah is in a seismically active zone and that our population is concentrated in areas of greatest hazard, the DFCM mission is to build new buildings in accordance with the most current buildings codes available. As existing unreinforced masonry buildings are remodeled or reroofs are taking place, some remediation is taking place. As funds become available, DFCM is working to make sure that State employees and the public who visits State buildings are safe in emergency situations.

- Enzo Calfa, Building Code Official

Photo: Courtesy UGS

State of Utah Roofing Program

The Roofing Program was established in the late 1990's by DFCM to consolidate the management of the various roofing needs and to increase the efficiency of the maintenance and repair of roofs on state buildings. Over the years, this program has been a resource for the roof warranty information and a guide for best roofing practices.

Today the Roofing Program serves over 8,500+ buildings for various agencies throughout the State. Over the past five years, the roofing program has averaged 230 leak repair / maintenance requests resulting in over $164,000+ on maintenance and repair work. Over 80% of these repairs are a result from some sort of physical damage to the roof. These damages can be very costly to the building and the agency as it can cause operational disruptions as well. The majority of these roof damages can be prevented. Simple care when working on a roof is invaluable. Roof damage can be the result of things such as; tree limbs growing or abrading against the roof during wind; damage from other trades such as dropped tools or fasteners from HVAC, IT, or electricians; improperly fastened equipment; or lack of routine maintenance. In roofing, the expression "an ounce of prevention is worth a pound of cure" never was more true.

Agencies should perform a routine evaluation of their roof twice a year during the Spring & Fall. During these evaluations, they should inspect for clogged drains, loose debris on the roof, dried out sealants around flashings, detached membrane seams, physical damage, and overall conditions. If they notice something that does not appear as it should, or if the agency has a question about an item or condition that they have observed, then they should contact the roofing program by e-mailing the request to dfcmroof@utah.gov. In the request, the requestor should include a point of contact, telephone number for said contact, the Risk ID Number or State Property Number, description of the issue, and any roof / warranty information that they may have on record. This same process should be used if your roof develops a leak. Once your e-mail has been received one of the office staff, currently Gail Youngblood, will research any relevant roof information DFCM has in order to send out a contractor to assist in resolving the issue. The dispatched roofing contractor will make the necessary repairs as needed, and provide the DFCM Roofing Program with a brief evaluation report to assist DFCM in the future management of the roof.

- Matt Boyer, Improvement Project Manager

The Roofing Program continues to best serve its agencies across the State through:

- **Updated roofing design guidelines & practices**
- **Working with roofing manufacturers, contractors, and design professionals to identify best practices**
- **Pre-installation meetings where the DFCM Roofing Manager meets with the contractor to review installation practices & expectations – typically new construction**
- **Final roof inspections on new construction projects before substantial completion**
- **Improved record management through the use of an electronic document management system**
- **Warranty signs – DFCM currently requires a metal sign be installed at all roof access points displaying your roof warranty information. No more lost paper work to worry about.**
- **Providing a central point to work with contractors and roofing manufacturers to resolve warranty issues**
- **Provide maintenance, leak repair, and inspection service as needed.**

DFCM Construction Field Manager:
The Value of Opening Communications with Agencies

Darrell Hunting's career with DFCM began in 2000 as a Roofing Specialist. His expertise led to promotions as Improvement Project Manager, Development Project Manager and to his current position as the Construction Field Manager.

"My role as Construction Field Manager is to ensure customer needs are being met. You will find me in the field, meeting with our customers."

Clockwise from bottom left: *Darrell Hunting and Improvement Project Manager Mike Ambre inspect the work on the Governor's Mansion West Entry Upgrades Project; Darrell Hunting visiting a job site; Capital Development Project Manager Dave McKay, Darrell Hunting and Jacobsen Construction's Scott Weyland review the Capitol Tile Project at the Utah State Capitol. Replacement of the tile will continue through 2015; Key project updates are discussed at the construction progress meetings with the architects, structural engineers, general contractors, and DFCM facilities coordinators.*

DFCM Construction Field Manager Darrell Hunting opens communication with agencies' and institutions' field project managers for success

Agency Communication: I am DFCM's liason in the construction field to assist with open communication on our projects. Project site visits, agency/project manager meetings and open communications assist me in creating trust with our agency partners. Agencies know I am always available to assist them and that DFCM understands and appreciates their role in this process.

Our management team began monthly and quarterly meetings with the agencies, which provides an opportunity to exchange current information and have one on one interactions with key agency staff members.

The implementation of Customer Satisfaction Surveys for each project allows agencies an opportunity to give DFCM Management input on Project Manager performance and possible improvements needed. The majority of responses have been very positive.

I am attending Facilities Management Internal Service Fund (ISF) Supervisory Staff meetings each month to enable better communication and input from Facility Coordinators. This year Facility Coordinators will manage several projects in their assigned buildings. This should improve project coordination at these facilities.

Project Assignments and Workload: I am responsible for project assignments and workload. With only 16 Project Managers and over 500 active projects at any given time, keeping a manageable workload can be challenging. Working with agencies, I assign Project Managers with specific skill sets to match the needs of their projects. During coordination meetings, it has become apparent that agencies are satisfied with our project management services as well as the Roofing, Paving and Hazmat Programs.

DFCM is also in the process of developing a new Safety Program, which will include OSHA visits to projects sites in a consulting role. This will improve the safety of our project sites for both the contractor and the agencies. DFCM will also develop a minimum standard that contractors must follow on our projects. This may be as simple as safety vests and hard hats requirements on all our projects, but will help agencies identify construction workers in their buildings when construction is taking place in an occupied area.

Communication:
Communicate, communicate, communicate and when you are finished, communicate some more.

- Darrell Hunting,
Construction Field Manager

Photos: Rocio Briceño (5)

UTAH NATIONAL GUARD:

NET ZERO BY 2017-2018

Photos: Rocío Briceño (4)

Utah National Guard Energy Manager Ricy Jones, left, Governor Gary Herbert, Utah National Guard Adjutant General Major Gen. Jeff Burton, and DFCM Director Josh Haines discuss the Utah National Guard's energy-creation program during the official kick-off ceremony July 16 at the Guard's Draper headquarters.

DFCM Director Josh Haines discusses DFCM's role in the energy program.

Department of Administrative Services Deputy Director Rich Amon, DFCM Director Josh Haines, DFCM Energy Director John Harrington, and DFCM Energy Program Specialist Chris Ottley on the roof of the Guard's building which has more than 1,400 new solar panels.

Governor Gary Herbert ceremoniously "Switches the Switch" for Solar Energy Savings with key members of SolarCity, the Utah National Guard, and DFCM.

The Utah National Guard Adjutant General Maj. Gen. Jeff Burton and Governor Gary Herbert "switched the switch" for solar-energy savings at an official ceremony July 16 at the Utah Guard's headquarters in Draper. The Utah National Guard's energy-creation program includes solar and wind power. On the roof of the Guard's headquarters building are more than 1,400 new solar panels that were switched on at the ceremony.

This solar project is one of 10 that are scheduled to be completed this year and are estimated to save more than $10 million over the next 20 years. The installation of solar panels in Draper will be equivalent to powering nearly 50 homes. The Utah National Guard and the State of Utah are leading the way in increasing energy efficiency, reducing energy costs and improving the environment and air quality in Utah.

"These renewable-energy sites will produce electricity for critical functions in our facilities," said Chief Warrant Officer 3 Christopher Swihart, nationwide Energy-Program Manager for the Army National Guard.

Solar projects were funded cooperatively with grants from National Guard Bureau and Rocky Mountain Power and additional funding from the State of Utah Division of Facilities Construction and Management.
The solar project was installed by SolarCity, the nation's largest solar power provider.

- Utah National Guard , Office of Public Affairs

Important Links:

Visit our website **www.dfcm.utah.gov** *for the latest information and valuable resource tools.*

- **Current Projects:**

  Current Bid Projects can be found at:

  http://dfcmrfp.utah.gov/view_all.php

- **Standard Construction Documents & Forms:**

  For information on the bidding process, DFCM Forms and Reference Documents, go to the "Construction Management" tab of our website, select "Standard Construction Documents":

  http://dfcm.utah.gov/2012-09-10-20-25-38.html

- **5-Year Program**

  For the Utah State Building Board 5-Year Building Program For State Agencies and Institutions General Session 2014:

  http://dfcm.utah.gov/UtSBldgBoard/fiveyrprogram/fy2015_5yrplan.pdf

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