2011 Innovations Awards Application

DEADLINE: MARCH 28, 2011

ID # (assigned by CSG): 2011- ____________________

Please provide the following information, adding space as necessary:

State: ___ Utah ______________

Assign Program Category (applicant): Government Operations and Technology/Telecommunications (Use list at end of application)

1. Program Name: Remote Video Construction Pilot Program
2. Administering Agency: Department of Administrative Services/Division of Facilities Construction and Management
3. Contact Person (Name and Title) Gregg Buxton, Director of DFCM
4. Address State Office Building, Suite 4110, PO Box 141160, Salt Lake City, UT 84114-1160
5. Telephone Number (801) 538-3261
6. FAX Number (801) 538-9694
7. E-mail Address gbuxton@utah.gov
9. Please provide a two-sentence description of the program. “Remote Video Construction Pilot Program” which adapts the Utah Educational Network (UEN) video conferencing technology along with the Internet is Utah’s newest wave in construction management. While video conferencing is not new, it is a new and efficient way of doing more with less with live action from a specialized on-site camera.
10. How long has this program been operational (month and year)? Fully operational since July, 2009. Note: the program must be between 9 months and 5 years old on March 28, 2011 to be considered.
11. Why was the program created? What problem[s] or issue[s] was it designed to address? Our motive was to create a more cost effective program for construction management, thus reducing the cost of state-wide travel to construction job sites and providing more efficient use of time for project managers. Our goal was to do more with less, improving the agency’s green footprint by reduced travel, and gaining real-time efficiency through visual discussion and observation via the remote field camera at the job site.
12. Describe the specific activities and operations of the program in chronological order.
This program began with four DFCM employees who rose to the challenge of creating a facility that could change the way we do business and provided in-house design and construction management in lieu of hiring a general contractor. Each employee had their individual assignments and coordinated their efforts simultaneously to accomplish their tasks.

Deputy Director, Lynn Hinrichs was the designer and decision maker for the various functionality and design issues on the project. He instructed Project Manager, Lucas Davis on the steps needed to get the project electronics designed and construction procured. Originally the vision was very simplistic, but Lynn recommended a solution that would work long term for our Division. This involved tearing down a wall and incorporating two rooms into one, installing a table that would work with the projection system and providing cabinets for the control systems and pathways between these systems. This saved a significant amount of money and allowed us to complete the work in record time. Lynn became a driving force to complete this project on schedule with his innovative ideas and exceptional leadership abilities.

Gordon Jensen, our IT specialist spearheaded the technical aspects of this project. Over a period of time, Gordon identified the basic technology requirement. As he reviewed the possible vendors on state contract he found a shortfall with what was available and what was needed. However, with Gordon’s experience in technology, he knew if what you need isn’t available today, just wait a few weeks/months and it will be there to meet or exceed your requirements. During this time Gordon met with a group using and managing the State’s UEN (Utah Education Network) which provides distant learning classrooms throughout the state to bring faculty and students together from remote locations. This high quality, high speed fiber network (private internet) would provide the needed backbone infrastructure for DFCM’s new remote video construction project management system. From here Gordon selected and configured the needed components, issued the purchase order and tracked the delivery schedule to ensure that all equipment was delivered before the fiscal year end where the budget dollars had been allocated. His expertise in this area saved over $2,400 on the best pricing and ensured on-time delivery. Gordon manages all the required interfaces with DTS and UEN, from networking, to data flow, to firewall access, to wiring, to accessing and joining the components to the UEN.

Project Manager, Lucas Davis coordinated the remodel of the conference room. This involved in-house conference room scope/design, A/V system design by Spectrum Engineering, bidding the millwork and it’s construction, conference room remodeling (demolition, patching, painting, trim, touch up, etc.), furnishing purchases, the bidding of A/V equipment and installation, etc. Lucas’ part required daily involvement and supervision of multiple contractors and scheduling to make sure we hit our deadline. He demonstrated extraordinary management skills for his project with insight and excellent attention to detail.

Facility Manager, Brian Bales conducted extensive research in the feasibility of a wireless audio-video system that would fit with our DFCM budget. He found the perfect cameras with capabilities beyond our expectations. Brian was a team player in every aspect of this undertaking. His effective communication and willingness to accept difficult assignments aided the group in completing the project.

The State of Utah now has a state of the art video conferencing facility that makes project management more cost effective thanks to this excellent team of employees. They executed their plan and worked tirelessly to facilitate the construction all in a timely and efficient manner. There were unexpected problems as with every construction project but this group worked together beautifully to resolve issues and make this idea a reality.

13. Why is the program a new and creative approach or method?
While video conferencing is not new, it is a new and efficient way to manage construction projects with less money via live action from a specialized on-site camera. Governor Herbert said, “As far as we can tell, no other state in the union is using this technology in construction management.”

14. What were the program’s start-up costs? (Provide details about specific purchases for this program, staffing needs and other financial expenditures, as well as existing materials, technology and staff already in place.)
We spent approximately $105,000 total for the project. This included room remodeling, millwork and cabinetry as well as technical equipment such as microphones, display monitors, cameras, network infrastructure, etc. Our management staff has been easily trained to use this equipment.

15. What are the program’s annual operational costs?
We use the state owned UEN Network, therefore the only annual costs include 2 phone lines at $672 a year and 2 network connections at $648 a year. This total amounts to $1,320 per year total for operational costs. Note: both of these costs are internal costs paid to other state agencies for those services. There are no other on-going costs.

16. How is the program funded? The initial construction costs of $105,000 originated from excess funds left over from our yearly budget in 2009. The yearly operating costs of $1,320 are now part of our IT budget.

17. Did this program require the passage of legislation, executive order or regulations? If YES, please indicate the citation number. No, however we did have to use our funds before the end of the fiscal year.

18. What equipment, technology and software are used to operate and administer this program?
CDW Government Inc. - Plasma TV's $3,899
IVCi - Tanberg equipment $28,987
CompView Inc. - installation of A/V equipment $48,912
Precision Mill & Fixture, Inc. - oak cabinets & podium $7,564
DFCM Maint new lights & ballasts $267
Chavez LLC - remodeling $10,220
Spectrum Engineer - services $5,000

19. To the best of your knowledge, did this program originate in your state? If YES, please indicate the innovator’s name, present address, telephone number and e-mail address.
Yes, this is the first time this technology has been used for construction management as far as we know. Gregg Buxton, the DFCM Director had the vision of utilizing these technology components to effect a solution that would increase efficiency in our business operation. Contact information above.

20. Are you aware of similar programs in other states? No
If YES, which ones and how does this program differ?

21. Has the program been fully implemented? Yes
If NO, what actions remain to be taken?

22. Briefly evaluate (pro and con) the program’s effectiveness in addressing the defined problem[s] or issue[s]. Provide tangible examples.
Having a centralized office that oversees approximately $1.5 billion in construction in a large geographical area has traditionally required extensive travel for the project management staff. While we recognize that eliminating all physical site visits during construction is not prudent, we have found that we have been able to cut them in half effectively, thereby significantly reducing the travel costs budgeted for the project, not just from our staff, but other team member as well. Additionally, we have found that the principals or more senior staff with the organizations that we work with are more available to participate in a now local venue for the meeting, without having to drive or fly all day to a particular site, which has benefitted the project being managed.

23. How has the program grown and/or changed since its inception?
At the beginning of the program, contractors were skeptical about using this procedure for on-site inspections and walk-throughs, however they are now very enthused about this program. Because of our success we plan to purchase additional cameras in the future in order to expand this program. We now keep a spreadsheet which records the savings from our use of this remote video conferencing facility. It documents man-hour, travel and per diem savings for each meeting.

24. What limitations or obstacles might other states expect to encounter if they attempt to adopt this program?
We recognize that our situation may be somewhat unique, with how our organization is set up to manage work across the state for user groups that include campus’ that have an established fiber optic network, which is a central component of our strategy. This technology will work over the internet, but picture quality will diminish with smaller bandwidth capacity. As a building is completed and walls are enclosed, signal strength also diminishes unless additional antennas are employed. In this situation, we have also effectively used a recordable camera for the job-site superintendent to use and present playbacks during the video meeting that follows.
CSG reserves the right to use or publish in other CSG products the information provided in this application. If your agency objects to this policy, please advise us in a separate attachment.
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Program Categories and Subcategories

Use these as guidelines to determine the appropriate Program Category for your state’s submission and list that program category on page one of this application. Choose only one.

Infrastructure and Economic Development
- Business/Commerce
- Economic Development
- Transportation

Government Operations and Technology
- Administration
- Elections
- Information Systems
- Public Information
- Revenue
- Telecommunications

Health & Human Services
- Aging
- Children & Families
- Health Services
- Housing
- Human Services

Human Resources/Education
- Education
- Labor
- Management
- Personnel
- Training and Development
- Workforce Development

Natural Resources
- Agriculture
- Energy
- Environment
- Environmental Protection
- Natural Resources
- Parks & Recreation
- Water Resources

Public Safety/Corrections
- Corrections
- Courts
- Criminal Justice
- Drugs
- Emergency Management
- Public Safety

Save in .doc or rtf. Return completed application electronically to innovations@csg.org or mail to:
CSG Innovations Awards 2011
The Council of State Governments
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Lexington, KY 40578-1910

Contact:
Nancy J. Vickers, National Program Administrator
Phone: 859.244.8105
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The Council of State Governments
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This application is also available at www.csg.org.