

Executive Summary

In 1997 the Division of Facilities Construction and Management established an in-house Statewide Roofing and Paving Program. Previously roofing and paving needs had been coordinated through private-sector consultants. The program has been successful in expanding services to state agencies and maintaining important state assets. This change has resulted in the following.

- An increase in the number of roofing and paving services provided
- An increase in the number of projects completed
- A decrease in administrative program costs
- The development of a partnership with Utah Correctional Industries (UCI)
- A decrease in design costs

These reductions in cost are estimated to have saved DFCM and the State of Utah nearly one million dollars over the past two years.

The quality of service provided has been recognized by state agencies using the roofing and paving services. Representatives from several agencies and institutions throughout the state have written letters commending the improved programs and the services offered. These letters are attached and provide an insight into the strides that have been taken since 1997.

Program Description

Prior to 1997 the Division of Facilities Construction and Management (DFCM) within the State of Utah's Department of Administrative Services (DAS) contracted out the coordination of the state's roofing and paving needs to private sector consultants. In 1997 the programs were brought in-house and expanded to meet the needs of state agencies more effectively. Two employees, a Program Manager and Roofing Specialist, were hired to implement the roofing program by providing inspections, technical support, and project management. One Program Manager was hired to coordinate new paving and paving repairs throughout the state. During the past three years this change has resulted in a marked improvement in the services provided to state agencies and the number of projects completed, as well as a decrease in overall program costs.

Current Objectives

The mission of DFCM Roofing and Paving Programs is to ensure that the state's roofing and paving assets are designed, constructed, and maintained to meet programmatic needs and to minimize life cycle costs. Current objectives include.

- Providing expert review of new construction systems
- Providing effective preventive maintenance to achieve full life expectancy
- Using inmate labor

- Reducing the cost of design by evaluating the need for architects and consultants
- Minimizing the duplication of efforts among state agencies
- Producing quality construction combined with effective maintenance to minimize life cycle costs

To fulfill these objectives DFCM conducts in-house design, promotes preventive maintenance practices, relies upon a partnering effort with Utah Correction Industries (UCI) and provides an emergency repair service available to all agencies occupying state-owned buildings. Each of these activities will be described in greater detail in subsequent portions of this justification.

Cost Savings

Program Costs

In 1999 administrative costs for the roofing program were four percent while in 1998 administrative costs were approximately five percent. In 1996, the last full year in which a private-sector contractor coordinated the roofing program, the administrative costs were 7%. Clearly since DFCM has begun the in-house coordination of these programs, administrative costs have decreased significantly. The Division has realized savings of over \$300,000 in the past two years due to the decrease in these costs.

Prior to 1997 a paving consultant was retained to coordinate a small number of paving projects each year. Other paving projects were managed by a variety of state agencies and DFCM project managers. Due to the number of sources providing project management services, no accurate assessment of administrative costs can be identified during this time period. However, paving administrative costs for the past two years have been approximately five percent.

DFCM has been able to decrease costs primarily through two ways – a close partnership with UCI and in-house design.

Partnership with UCI

While UCI began providing roofing and paving services almost ten years ago, the program has been used extensively only since 1997. UCI's mission is to reduce recidivism by providing job skills training opportunities to inmates in Utah prisons. This mission is accomplished by allowing inmates to work and learn new skills. To further this mission, UCI, in partnership with DFCM, created training programs for inmates. The training enables inmates to learn marketable roofing and paving skills that will increase their ability to find employment when they are released.

During its partnership with DFCM the number of UCI crews have increased from one to three, enabling significantly more inmates to participate in this program.

The crews have a skill base able to apply shingle, single ply, and metal roofing systems and are sent out to all roofing projects for which they are suited. Crews also perform crack-seal services for the paving program. UCI's costs on DFCM's projects are substantially lower than other roofing and paving contractors because of the reduced wages paid to inmates, as well as the elimination of DFCM's bidding costs. Currently, UCI is used whenever possible. In 1999 UCI completed approximately fifteen percent of the total number of roofing projects for the year and twenty-eight percent of the total number of paving projects. This partnership with UCI has resulted in lower program and construction costs.

In-House Design

Another factor that has dramatically lowered program costs is the use of in-house designs. In 1999 DFCM employees completed almost 80% of designs. Prior to 1997 architects or engineers were contracted with to provide all design services. At times in the past the design fees exceeded the construction portion of the roofing or paving project. While projects involving structural or mechanical changes are still designed by architects or engineers, the elimination of design fees where appropriate has resulted in substantial cost savings.

Typically, design fees are five percent of a project. Given the total construction budgets for the past two years, DFCM estimates that in-house design of projects has saved the state \$680,000.

Duplication of Effort

One of the objectives of the roofing and paving programs is to reduce or eliminate the duplication of effort throughout state government. As a result of DFCM's more effective roofing program, the University of Utah was able to eliminate two FTE's. While DFCM does not realize the cost savings, the state's taxpayers do.

Quantitative Benefits

Number of Projects Completed

Roofing

In the past three years DFCM has completed substantially more roofing and paving than in previous years, as the following graph demonstrates. For example in fiscal year 1995 fifteen roofing projects were completed at a total cost of \$1,858,000. In fiscal year 1996 twelve roofing projects were completed at a total cost of \$1,975,664. However, in 1997, when completed with a total construction budget of \$6,034,125. In 1999 125 roofing projects were completed at a total cost of \$7,238,385. The state benefits from the dramatic increase in

the numbers of projects being completed since deferred maintenance on roofs often result in property damage and greater repair costs.

Paving

As previously indicated, program management of paving projects was performed by a several sources. This makes it difficult to accurately identify the number of paving projects completed. However, in 1997 twenty-six paving projects were completed and in 1996 nineteen projects were completed with capital improvement funds. In 1998 150 projects were completed with a construction budget of \$2,576,664. In 1999 177 projects were completed with a construction budget of \$2,487,749. The increase in the numbers of projects benefits taxpayers with reduced damage to vehicles and easier access to parking.

An additional benefit of consolidating the state's roofing and paving services is that funding prioritization is more effective. With limited funds it is important that the most critical needs are funded. DFCM roofing and paving Program Managers work closely with the Capital Budget Manager to properly identify those projects that are most deserving of improvement funds.

Improved Services

Prior to 1997 agencies occupying state-owned buildings were left on their own to provide or request emergency roof repairs. Either agency staff had to make the repairs themselves or they contracted with a roofing contractor who provided the necessary services. As a result, many repairs were improperly done and/or agencies paid a higher price than necessary for the services they received.

Three years ago DFCM began coordinating emergency roof repairs. Now agencies simply call DFCM and report the location of the problem. DFCM, using a rotating list of pre-approved roofing contractors, sends a contractor out to the building to make necessary repairs. Typically a request for an emergency repair can be responded to and the repair can be completed within twenty-four hours. When questions arise over the contractor's solution or billing, DFCM roofing employees can assist the agencies by providing a technical review. Agencies are no longer left on their own to deal with emergency roofing repairs. Since 1997 DFCM has sent out roofing contractors to respond to almost 700 emergency repairs.

DFCM also has begun exploring new ways of providing its services. The Performance Based Procurement System (PBPS) has been used on a number of roofing and paving projects. This process uses a rating system that considers past performance and value to identify the best contractor for each project. While the Division continues to make adjustments to the PBPS system, alternative methods of contractor selection hold promise to reduce costs and improve the quality of projects. Additionally, DFCM has implemented an on-line

customer service survey to gauge customer response to its roofing and paving programs. Following the completion of its projects, customers are invited to rate DFCM services and provide suggestions for improving them.

Roofing and Paving Program employees also emphasize the need for preventive maintenance to state agencies. They work with agencies to develop the steps needed to care for roofing paving assets. To further this effort, DFCM also holds an annual Roofing and Paving Seminar to train agency representatives on proper preventive maintenance practices and inform them about new and existing industry products.

Relevancy of Use

All states can implement this type of program. While privatization has an important role as governments provide services, some programs, as Utah's Roofing and Paving programs have show, can be more effectively coordinated within government. Highly skilled employees with construction management experience are key to the success of any similar program.