

Program # 91016 - Bridge Engineering

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Priority: Thriving Economy Lead Agency: Community Services

Program Offer Type: Existing Operating Program Contact: Stan Ghezzi

Related Programs: 91015, 91017, 91019

Program Characteristics:

Executive Summary

This program is entrusted with improving and prolonging the County's long term investment in its 6 Willamette River Bridges and 24 other bridge structures. The Willamette River crossings consist of 4 movable bridges (Hawthorne, Morrison, Burnside and Broadway) and 2 fixed structures (Sellwood and Sauvie Island). Bridge Engineering works closely with Bridge Maintenance and Operations as well as Road Engineering on a variety of projects and issues.

Program Description

Bridge Engineering is composed of engineers, engineering technicians and support personnel. They provide planning, engineering and construction project management for preservation of structural, mechanical, electrical and corrosion protection (paint) systems of the County's bridges. Most design and construction work is performed by outside contractors with direction and oversight provided by Bridge Engineering personnel. Projects are identified and prioritized in the Transportation Capital Improvement Program to match available funds. Bridge Engineering works with other County, state and federal agencies to secure funding from state and federal sources.

The primary focus of Bridge Engineering is the 6 Willamette River Bridges, of which most are classified as historic structures and some are approaching 100 years in age. The 4 drawbridges are complex structures with complicated mechanical and electrical systems to allow them to be raised and lowered.

Program Justification

Approximately 200,000 buses, trucks, passenger vehicles and thousands of bicycles and pedestrians cross the Willamette River on County owned bridges every day, making it one of two most important components of the regional transportation system (roads being the other). Without the Willamette River Bridges, travel between east and west Multnomah County would be nearly impossible. Equally important are the number of commercial and tourist ships that travel the Willamette River which require reliable operations of the County's draw spans. Bridge Engineering supports the 'Thriving Economy' primary factor of an 'Established Regional Infrastructure' by providing the design, and administrative oversight of improvements and enhancements of the bridges. The free movement of commodities and goods that these transportation systems provide has a significant positive impact upon the regional economy. Due to the age and complex nature of these bridges, the Transportation Capital Improvement Program identifies \$330 million in Willamette River Bridge maintenance improvements and enhancements that are needed during the next 20 years. Bridge Engineering is responsible for the planning, engineering and management of these projects.

This program supports 'Resilient Businesses' through efforts to target MWESB certified businesses paying living wages for work on Capital Projects. In addition to being a vital link in the transportation system, the historic and symbolic nature of the Willamette River Bridges contributes to a 'Vibrant Community'. This program also contributes to a 'Safe Community' through maintenance activities, lighting projects and a network of security cameras.

Performance Measures

Measure Type	Primary Measure	Previous Year Actual (FY04-05)	Current Year Purchased (FY05-06)	Current Year Estimate (FY05-06)	Next Year Offer (FY06-07)
Output	Dollar value of Capital Improvements	10,911,227	10,562,290	10,562,290	17,314,568
Outcome	Percent of project milestones met	100%	100%	100%	100%
Quality	Percent of cost growth	0%	0%	0%	0%

Performance Measure - Description

Dollar value of Capital Improvements includes County, State and Federal contributions. The % of sheduled milestones met for all construction projects measures the ability to control workflow and provide completed projects to the public. Goal is 90%. The % of cost growth is the total project cost at completion compared to the total project cost estimated at the time the construction contract was awarded. This measures the ability to control project cost during construction. Goal is 0% growth.

Legal/Contractual Obligation

Multnomah County is required to maintain and operate its drawbridges in accordance with the River and Harbor Act of 1894, federal regulations (USC 117.750), U.S. Cost Guard regulations (CFR Title 33), State Law (ORS 382.305), 1984 IGA with the City of Portland as amended in 1989, and HB 2041 Section 3a.

Revenue/Expense Detail

	Proposed General Fund	Proposed Other Funds	Proposed General Fund	Proposed Other Funds	
Program Expenses	2006	2006	2007	2007	
Personnel	\$0	\$2,025,900	\$0	\$2,469,549	
Contracts	\$0	\$1,098,016	\$0	\$1,596,000	
Materials & Supplies	\$0	\$81,750	\$0	\$86,155	
Internal Services	\$0	\$465,482	\$0	\$456,662	
Cash Transfer	\$0	\$0	\$0	\$300,000	
Subtotal: Direct Exps:	\$0	\$3,671,148	\$0	\$4,908,366	
Administration	\$0	\$0	\$82,790	\$0	
Program Support	\$0	\$0	\$0	\$22,000	
Subtotal: Other Exps:	\$0	\$0	\$82,790	\$22,000	
Total GF/non-GF:	\$0	\$3,671,148	\$82,790	\$4,930,366	
Program Total:	\$3,67	1,148	\$5,01 <mark>3,156</mark>		
Program FTE	0.00	0.00	0.00	23.02	
Program Revenues					
Indirect for dep't Admin	\$23,371	\$0	\$31,101	\$0	
Fees, Permits & Charges	\$0	\$0	\$0	\$100,000	
Intergovernmental	\$0	\$1,400,000	\$0	\$1,600,000	
Other / Miscellaneous	\$0	\$2,271,148	\$0	\$3,208,366	
Program Revenue for Admin	\$0	\$0	\$213	\$22,000	
Total Revenue:	\$23,371	\$3,671,148	\$31,314	\$4,930,366	

Explanation of Revenues

Revenue for this program comes entirely from gas taxes and vehicle registrations that are collected by the state and distributed based on an intergovernmental agreement that specifies the amount to be allocated to Bridge Capital. These are dedicated funds and can only be used for bridges. These funds are used to leverage federal and state dollars to provide a greater benefit to the County. On most capital projects this leverage provides at least 10 federal and/or state dollars for each County dollar spent on Multnomah County Bridges.

Significant Program Changes

Last year this program was: #90018, Bridge Engineering & Operations

In FY07 the Bridge Section will oversee the construction of the new Sauvie Island Bridge. At \$44 million, this multi-year transportation project is the most expensive ever managed by Multnomah County. Simultaneously, this program will be managing the construction phase of the Burnside Bridge Main Span rehabilitation. This is the 4th most expensive County project ever at \$9 million.