

#### Program # 91016 - Bridge Engineering

Version 4/05/2007 s

Priority: Thriving Economy Lead Agency: Community Services

Program Offer Type: Existing Operating Program Contact: Ian Cannon

**Related Programs:** 91013A, 91015, 91017, 91019

**Program Characteristics:** 

### **Executive Summary**

This program is entrusted with improving and prolonging the County's long term investment in its six Willamette River Bridges and 24 other bridge structures. The Willamette River crossings consist of four movable bridges (Hawthorne, Morrison, Burnside and Broadway) and two 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 six Willamette River Bridges, of which most are classified as historic structures and some are approaching 100 years in age. The four 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 for work on Capital Projects. This will result in approximately 300 living wage jobs in FY08. 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		Previous Year Actual	Current Year Purchased	Current Year Estimate	Next Year Offer
Туре	Primary Measure	(FY05-06)	(FY06-07)	(FY06-07)	(FY07-08)
Output	Dollar value of Capital Improvements	17,122,465	17,314,568	14,761,137	16,023,647
Outcome	Percent of project milestones met	100.0%	100.0%	100.0%	100.0%
Quality	Percent of cost growth	0.0%	0.0%	3.0%	0.0%

#### **Performance Measure - Description**

Dollar value of Capital Improvement includes County, State and Federal contributions. The % of scheduled 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% increase).

## **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. Coast 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	2007	2007	2008	2008
Personnel	\$0	\$2,469,549	\$0	\$2,314,552
Contracts	\$0	\$1,596,000	\$0	\$2,155,000
Materials & Supplies	\$0	\$86,155	\$0	\$118,949
Internal Services	\$0	\$456,662	\$0	\$444,698
Cash Transfer	\$0	\$300,000	\$0	\$500,000
Unappropriated & Contingency	\$0	\$0	\$0	\$0
Subtotal: Direct Exps:	\$0	\$4,908,366	\$0	\$5,533,199
Administration	\$82,790	\$0	\$71,664	\$0
Program Support	\$0	\$22,000	\$0	\$25,000
Subtotal: Other Exps:	\$82,790	\$22,000	\$71,664	\$25,000
Total GF/non-GF:	\$82,790	\$4,930,366	\$71,664	\$5,558,199
Program Total:	\$5,013,156		\$5,629,863	
Program FTE	0.00	23.02	0.00	21.50
Program Revenues				
Indirect for dep't Admin	\$31,101	\$0	\$32,588	\$0
Fees, Permits & Charges	\$0	\$100,000	\$0	\$633,199
Intergovernmental	\$0	\$1,600,000	\$0	\$2,000,000
Other / Miscellaneous	\$0	\$3,208,366	\$0	\$2,900,000
Program Revenue for Admin	\$213	\$22,000	\$4,368	\$25,000
Total Revenue:	\$31,314	\$4,930,366	\$36,956	\$5,558,199

## **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: #91016, Bridge Engineering