



**Office of the City Auditor**

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**Report to the City Council  
City of San José**

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**AN AUDIT OF DEPARTMENT  
OF TRANSPORTATION'S  
EFFORTS TO SECURE FEDERAL  
HIGHWAY BRIDGE  
REPLACEMENT AND  
REHABILITATION (HBRR)  
FUNDS**

**The Department Of Transportation  
Improvements During The Course Of Our  
Audit And Other Possible Improvements  
Could Secure An Indeterminate, But  
Potentially Significant Amount Of Federal  
Funding And Interest Earnings On Future  
City Bridge Replacement And Rehabilitation  
Projects**

**The Department Of Transportation Can  
Improve The Timeliness Of Its Billings To  
CALTRANS**

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**Report 07-04  
May 2007**

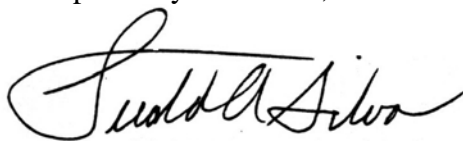
May 4, 2007

Honorable Mayor and Members  
of the City Council  
200 East Santa Clara Street  
San Jose, CA 95113

Transmitted herewith is a report on *An Audit Of Department Of Transportation's Efforts To Secure Federal Highway Bridge Replacement And Rehabilitation (HBRR) Funds*. This report is in accordance with City Charter Section 805. An Executive Summary is presented on the blue pages in the front of this report. The City Administration's response is shown on the yellow pages before the appendices.

This report will be presented to the *Public Safety, Finance & Strategic Support Committee* at its May 17, 2007, meeting. If you need any additional information, please let me know. The City Auditor's staff members who participated in the preparation of this report are Mike Edmonds and Greg Elliott.

Respectfully submitted,



Gerald A. Silva  
City Auditor

finaltr  
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## Executive Summary

In accordance with the City Auditor's 2006-07 Audit Workplan, we reviewed the Department of Transportation's efforts to secure Federal Highway Bridge Replacement and Rehabilitation (HBRR) Program funds to reduce the City of San José's (City) share of costs to build these transportation projects. We conducted this audit in accordance with generally accepted government auditing standards and limited our work to those areas specified in the Objectives, Scope, and Methodology section of this report.

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### Finding I

#### **The Department Of Transportation Improvements During The Course Of Our Audit And Other Possible Improvements Could Secure An Indeterminate, But Potentially Significant Amount Of Federal Funding And Interest Earnings On Future City Bridge Replacement And Rehabilitation Projects**

The Highway Bridge Replacement and Rehabilitation Program (HBRR) provides Federal funds to rehabilitate or replace bridges that are unsafe because of structural deficiencies, physical deterioration, or functional obsolescence. Deficient highway bridges eligible for replacement or rehabilitation must be over waterways, other topographical barriers, other highways, or railroads. The Federal share of HBRR projects is 80 percent and the local government's share is 20 percent. However, our analysis of four HBRR projects revealed that the City received less than the optimum level of Federal funding. Specifically, we identified opportunities for the City to receive additional reimbursements for the following cost items:

- Preliminary and construction engineering;
- Overhead;

- Environmental mitigation; and
- Contract change orders.

Furthermore, not maximizing Federal reimbursements also costs the City interest revenues. During the course of our audit, the DOT made several improvements to increase the level of Federal funding the city receives for HBRR projects. The DOT's improvements, coupled with City Auditor-recommended improvements, already secured an additional \$2,450,754 in HBRR funding for the City in February 2006. Finally, the DOT improvements and other possible improvements could secure an indeterminate, but potentially significant amount of Federal funding and interest earnings on future HBRR projects that have yet to be funded. To ensure the optimum level of reimbursement on future HBRR projects, the DOT should take steps to ensure that it receives the optimum level of reimbursement for preliminary and construction engineering costs, overhead cost, environmental mitigation costs, and construction contract change order costs. Furthermore, the DOT should seek additional funding from CALTRANS when the contract award is significantly less than the anticipated project costs.

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## RECOMMENDATIONS

We recommend that the Department of Transportation:

- |                          |  |
|--------------------------|--|
| <b>Recommendation #1</b> | <b>Develop procedures to ensure that its preliminary engineering and construction engineering cost estimates are based on the maximum Federal reimbursement allowed for these cost items. (Priority 2)</b> |
| <b>Recommendation #2</b> | <b>Prepare and submit an indirect cost rate proposal to CALTRANS for approval. (Priority 3)</b>  |
| <b>Recommendation #3</b> | <b>Include environmental mitigation costs in its estimates when applying for Federal funds. (Priority 2)</b>   |
| <b>Recommendation #4</b> | <b>Seek guidance from CALTRANS on how best to estimate, account for, and obtain reimbursement for environmental mitigation costs. (Priority 2)</b>   |

We recommend that the Department of Transportation:

**Recommendation #5**      **Follow CALTRANS' prescribed process for obtaining reimbursement for construction contract change orders. (Priority 2)**

**Recommendation #6**      **Submit a revised E-76 form and finance letter to CALTRANS if the award amount is significantly less than the anticipated project costs. (Priority 2)**

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**Finding II      The Department Of Transportation Can Improve The Timeliness Of Its Billings To CALTRANS**

For most Federal- and State-funded transportation projects, the local agency pays for the costs of the projects up-front and then obtains reimbursement for the Federal and State share of the project costs. To obtain reimbursement for Highway Bridge Rehabilitation and Repair (HBRR) projects, the City invoices the California Department of Transportation (CALTRANS) for the Federal and State share of the projects' costs. To maximize cash flow and interest earnings, the Department of Transportation (DOT) should submit billings regularly and in a timely manner. CALTRANS allows the City to submit billings for project costs on a monthly basis. During our review of six HBRR projects, one of which is not complete, we found that the DOT did not submit invoices to CALTRANS in a timely manner. We estimate that the City could earn about \$376,000 on future HBRR projects by improving its billing practices. In addition, we found that the DOT was slow in invoicing the Santa Clara Valley Water District (SCVWD) for its share of the costs of an HBRR project.

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**RECOMMENDATIONS**

We recommend that the Department of Transportation:

**Recommendation #7**      **Establish procedures to bill CALTRANS for reimbursement of project costs on a monthly basis. (Priority 2)**



We recommend that the Department of Public Works:

**Recommendation #8**

**Establish procedures to bill the Santa Clara Valley Water District for reimbursement of project costs within the timeframe as specified in the cost-sharing agreements. (Priority 2)**

# Introduction

In accordance with the City Auditor's 2006-07 Audit Workplan, we reviewed the Department of Transportation's efforts to secure Federal Highway Bridge Replacement and Rehabilitation (HBRR) Program funds to reduce the City of San José's (City) share of costs to build these transportation projects. We conducted this audit in accordance with generally accepted government auditing standards and limited our work to those areas specified in the Objectives, Scope, and Methodology section of this report.

The City Auditor's Office thanks both the Department of Transportation and the Department of Public Works for their time, information, insight, and cooperation during the audit process.

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## **Background** *Program Overview*

The City's 2007-2011 Capital Improvement Plan (CIP) includes \$228 million worth of transportation projects. The Department of Transportation (DOT) partners with the City's Public Works Department (DPW) to plan, design, and construct transportation projects. The DPW provides engineering, construction management, and inspection services for the Capital Improvement Program. However, the DOT is ultimately responsible for planning, developing, operating, and maintaining transportation facilities, services, and related systems which contribute to the livability and economic health of the City. According to the Traffic Capital Project Tracking System, both the DOT and DPW have an outstanding record for completing transportation projects on time and within budget. In 2005-06, out of 59 projects that were completed, 93 percent were delivered on time and 88 percent within budget.

The sources of funding for the transportation projects in the 2007-2011 CIP are as follows: Building and Structure Construction Taxes and Construction Excise Taxes (\$119.9 million), Federal, State, and local grants (\$62.8 million), General Fund contributions (\$12.8 million), developer contributions (\$9.2 million), other agency payments (\$0.9 million), and interest income (\$22.2 million).

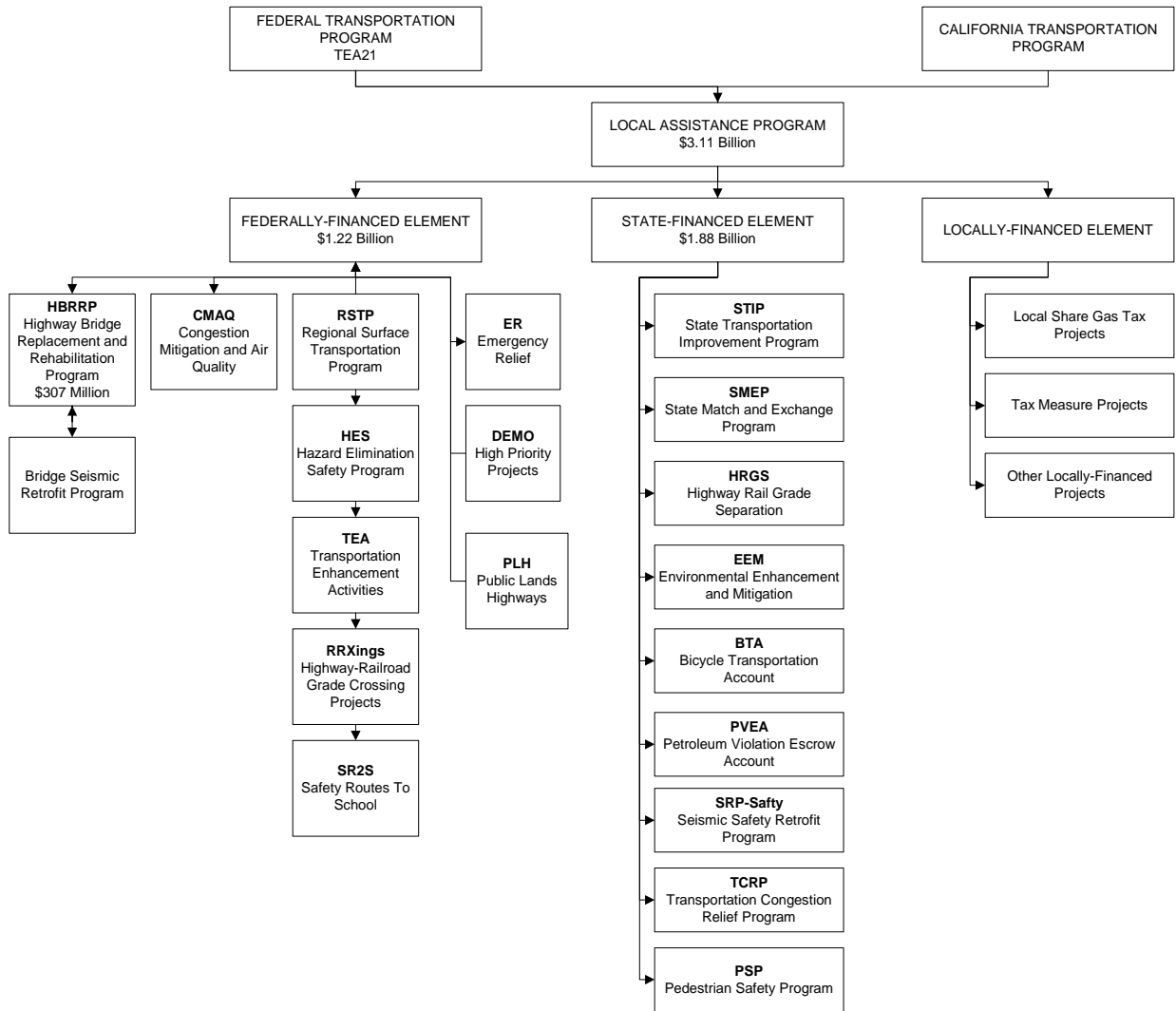
As noted above, Federal, State, and local grants are a significant source of funds for the City's transportation projects, accounting for \$62.8 million, or 28 percent of the revenues, used to pay for the City's transportation projects.

Transportation Planning, one of four divisions within the DOT, works with other City divisions and departments as well as with regional transportation agencies to secure funding from other agencies for City transportation projects and programs.

*Funding  
Authorization  
Process*

The Transportation Equity Act for the 21<sup>st</sup> Century (TEA21) grants over \$1 billion of Federal funds to local agencies annually. The Federal Highway Administration (FHWA) oversees these funds through a Federal-aid Highway Program (FAHP). Overall, the FAHP is divided into various funding categories and/or programs with eligibility requirements. The FHWA in turn has delegated responsibility and accountability, by a stewardship agreement, to the State Transportation Agency, CALTRANS. CALTRANS' Local Assistance Program oversees more than \$3 billion annually from various Federal and State programs specifically designed to assist the transportation needs of local agencies including the City of San José. CALTRANS' District Local Assistance Engineer (DLAE) is the City's liaison. Exhibit 1 shows the Federal and State organizational responsibilities for TEA21.

**Exhibit 1 Federal And State Organizational Responsibilities For TEA21**



CALTRANS is responsible for assuring adherence to Federally-required procedures and standards for those steps of the project that can not be fully delegated to local agencies. These steps include authorization to proceed; Federal funds obligation; agreement, execution, and approval of environmental documents; right of way documents; and payments from the State Controller and others. CALTRANS also provides assistance to local agencies in interpreting regulations, manuals, and guidelines. However, the City is responsible for all remaining aspects of the project.

Specifically, the City is

- Accountable for how it spends Federal funds on eligible projects;
- Responsible for following program guidelines and procedures; and
- Responsible for requesting CALTRANS funding approval for certain participating costs.

A Master Agreement is required whenever the City uses Federal or State funds. In the Master Agreement, the City agrees to comply with all Federal and State laws, regulations, and policies and procedures relative to the design, right of way acquisition, construction, and maintenance of the completed project. The supplement to the Master Agreement (Supplement) formalizes the financial responsibilities and provisions for a specific Federal-aid or State-funded project. The Supplement identifies the types and amounts of Federal, State, and local funds used to finance the locally-sponsored project. Special clauses in the Supplement define State or local responsibilities for providing project funds. CALTRANS manages the Supplement and local agencies must conform to all State statutes, regulations, and procedures, including those set forth in the Local Assistance Procedures Manual (LAPM), Local Assistance Procedures Guidelines (LAPG), the Office of Management and Budget (OMB) Circular A-87, and all Title 23 Federal requirements.

*City's Role In  
Securing Grants*

By policy, the Federal Government divides discretionary grant money regionally among the various programs. Since the City competes for these funds, Division staff serves on a regional scoring committee as representatives of the City. Those projects the scoring committee approves are further debated at the Metropolitan Transportation Commission (MTC) once every three years. Prior to Federal approval, the MTC approves all regional and Statewide projects for submittal to both the State Transportation Improvement Program (STIP) and Federal Transportation Improvement Program (FTIP). From these accepted project listings, DOT staff apply for grants. The City is eligible for the following kinds of Federal funds:

- Statewide pools of Federal-aid Highway Bridge Replacement and Rehabilitation Program (HBRR), Hazard Elimination Safety Program (HES), and Safety Routes to School Program (SR2S);

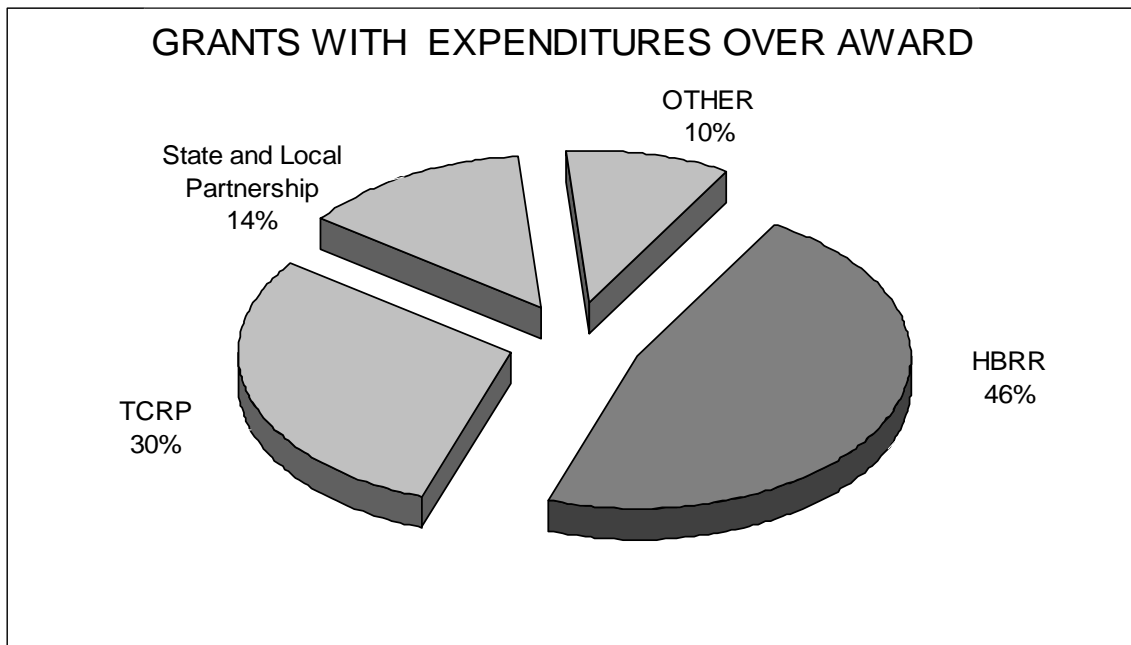
- High Priority Demonstration Projects;
- Local Federal-aid Regional Transportation Planning Agency (RTPA) and Metropolitan Planning Organization (MPO);
- State Transportation Improvement Program (STIP) funds; and
- Traffic Congestion Relief Program (TCRP).

*Federal  
Participation*

The Federal Government, through CALTRANS, pays the City when work is completed and the City submits reimbursement requests. Generally, Federal reimbursement is limited to a maximum of 80 percent of the participating project costs. On many projects, eligible participating costs include both direct and indirect costs associated with preliminary engineering, right-of-way, construction, construction engineering, and contingency costs. The remaining 20 percent of the project funding may be either State or local funds. Typically, the City must initiate a Federal-aid project using its own money and then can receive monthly cash reimbursements for the Federal share of the project's cost.

During the last 10 years, the DOT has overseen 61 grant-awarded projects to the City totaling \$80 million. We found that 21 grant-awarded projects had grant expenditures in excess of the total grant award amounts. According to DOT records, the expenditures on these projects exceeded their award amounts by over \$21 million. Federal Highway Bridge Replacement (HBRR) projects represented about 46 percent of the \$21 million in expenditures that exceeded Federal award amounts. We focused our review on HBRR projects because they were by far the largest percentage of the \$21 million in expenditures that exceeded Federal award amounts as shown in Exhibit 2.

**Exhibit 2      Percentage Of The \$21 Million In Expenditures In Excess Of Federal Award Amounts By Type Of Projects**



*Highway Bridge Replacement And Rehabilitation Program (HBRR) Overview*

The purpose of the HBRR Program is to replace or rehabilitate significantly important bridges that are unsafe because of structural deficiencies, physical deterioration, or functional obsolescence. The HBRR regulations also allow for multiple bridge preservation work. Additionally, the HBRR Program serves a broader category of projects such as collectors and local roads. Since 2001, the Transportation Equity Act (TEA21) has increased available HBRR Program funds to the State of California by 20 percent. In addition, local agencies can now incur up to \$10 million in HBRR funds per project.

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**Objectives, Scope, And Methodology**

The primary objective of our audit was to evaluate whether the City secured the optimum level Federal Highway Bridge Replacement and Rehabilitation (HBRR) Program funds to reduce the City's cost of these transportation projects. We focused our review on the HBRR projects because, as noted earlier, the HBRR projects accounted for 46 percent of the expenditures exceeding their award amounts. The scope of our review was projects completed during the five-year period from July 1998 through June 2003. During this period, the City had either received Federal authorization to proceed, was

constructing, or had completed six HBRR-funded projects. Another audit objective was to assess whether the City was billing CALTRANS in a timely manner to ensure it maximized its cash flow and interest earnings. Furthermore, we calculated the amount of interest revenues the City would have received if it had billed CALTRANS in a more timely manner.

To achieve our audit objectives, we:

- Interviewed both DPW and DOT staff;
- Interviewed the California Department of Transportation (CALTRANS) staff;
- Reviewed the work DOT staff performed to determine if the City was making full use of available grant funding; and
- Determined if the City was collecting HBRR grant funds as quickly as possible.

We also surveyed other jurisdictions regarding their grant-funded projects. We reviewed database information from the DOT'S Capital Improvement Program (CIP) Database team, the City's Financial Management System (FMS), DPW project management files, and DOT's Grant Inventory database files. We obtained a copy of the Grant Inventory database as of June 30, 2003, and performed numerous analytical tests. We compared the database to other sources of information including the local Federal Bridge Program-Active HBRR Projects, Projects with No Activity Report, Detail Apportions, HBRR-Final Vouchered Projects and the DPW project management files. We also reviewed Federal regulations, and met with representatives of CALTRANS to clarify regulatory requirements pertaining to the HBRR Program. We did not perform testing on the adequacy of the general and specific controls over data entry, including passwords and database access.

To determine if the City obtained the optimum level of funding for projects, we developed and analyzed cost and reimbursement information on four completed bridge replacement projects that received HBRR funding. We determined the total cost of projects by obtaining annual project cost information from the Financial Management System (FMS) by project cost categories. We then classified and totaled these costs according to the following Federal cost reimbursement cost categories: preliminary design, right-of-



way, construction engineering, construction, environmental mitigation, overhead, and change orders. For each project, we compared the actual reimbursement the City received for each cost category to the optimum level of reimbursement based on Federal reimbursement guidelines.

Our estimate of the optimum project reimbursement was based on the assumption that the City accurately estimated the construction cost of the projects and would have received 80 percent of the actual cost of construction. Furthermore, we assumed that the City should receive up to the maximum allowable costs for preliminary engineering (25 percent of the actual construction cost) and construction engineering (15 percent of the actual construction cost). Finally, we assumed that the City claimed and received reimbursement for all allowable project costs such as environmental mitigation costs and overhead costs. For these costs, we assumed that the City would receive 80 percent of the costs that were actually charged to the HBRR projects.

Our analysis was somewhat limited because it is not possible to classify and estimate the project costs by Federal reimbursement cost category with exact precision. Therefore, the results of our analysis should only be viewed as an estimate of optimum project cost reimbursements. However, in our opinion, our estimates of project costs are reasonably accurate. It should be noted the DOT and the DPW in each case, was successful in obtaining grants for very challenging and complex projects, including longer, wider, and relocated bridges than those that originally existed.

To calculate the effect of untimely billings, we calculated the amount of interest revenues the City would have received if it had billed on a monthly basis versus the amount of interest revenues that it earned based on its actual billings. For the monthly billing calculation, we assumed that the City would bill for 80 percent of all costs incurred on each project phase up to the amount authorized for that phase. For the City's actual billings, we used the actual reimbursements the City received on the projects. For both calculations, we then assumed that the City would invest the reimbursements received in the City's Pooled Investments and would realize the annual rate of interest earnings on these investments. Furthermore, we included the effects of monthly compounding of interest in our calculation of the total interest revenues.

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**Major  
Accomplishments  
Related To This  
Program**

In Appendix B, the Director of the Department of Transportation informs us of the Highway Bridge Replacement and Rehabilitation Program's accomplishments.

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## **Finding I**

### **The Department Of Transportation Improvements During The Course Of Our Audit And Other Possible Improvements Could Secure An Indeterminate, But Potentially Significant Amount Of Federal Funding And Interest Earnings On Future City Bridge Replacement And Rehabilitation Projects**

The Highway Bridge Replacement and Rehabilitation Program (HBRR) provides Federal funds to rehabilitate or replace bridges that are unsafe because of structural deficiencies, physical deterioration, or functional obsolescence. Deficient highway bridges eligible for replacement or rehabilitation must be over waterways, other topographical barriers, other highways, or railroads. The Federal share of HBRR projects is 80 percent and the local government's share is 20 percent. However, our analysis of four HBRR projects revealed that the City received less than the optimum level of Federal funding. Specifically, we identified opportunities for the City to receive additional reimbursements for the following cost items:

- Preliminary and construction engineering;
- Overhead;
- Environmental mitigation; and
- Contract change orders.

Furthermore, not maximizing Federal reimbursements also costs the City interest revenues. During the course of our audit, the DOT made several improvements to increase the level of Federal funding the city receives for HBRR projects. The DOT's improvements, coupled with City Auditor-recommended improvements, already secured an additional \$2,450,754 in HBRR funding for the City in February 2006. Finally, the DOT improvements and other possible improvements could secure an indeterminate, but potentially significant amount of Federal funding and interest earnings on future HBRR projects that have yet to be funded. To ensure the optimum level of reimbursement on future HBRR projects, the DOT should take steps to ensure that it receives the optimum

level of reimbursement for preliminary and construction engineering costs, overhead cost, environmental mitigation costs, and construction contract change order costs. Furthermore, the DOT should seek additional funding from CALTRANS when the contract award is significantly less than the anticipated project costs.

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**HBRR Program**

The Highway Bridge Replacement and Rehabilitation Program (HBRR) provides Federal funds to rehabilitate or replace bridges that are unsafe because of structural deficiencies, physical deterioration, or functional obsolescence. Deficient highway bridges eligible for replacement or rehabilitation must be over waterways, other topographical barriers, other highways, or railroads. HBRR funds may be used for:

- Total replacement of a structurally-deficient or functionally-obsolete highway bridge or any public road with a new facility constructed in the same general traffic corridor;
- Rehabilitation that is required to restore the structural integrity of a bridge on any public road, as well as rehabilitation work necessary to correct major safety defects;
- Replacement of low-water crossings; and
- Bridge painting and bridge railing replacement.

The Federal share of HBRR projects is limited to a maximum of 80 percent and the local government's share is at least 20 percent.

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**Cost Reimbursement Process**

For most Federal and State-funded transportation projects, the local agency pays for the cost of projects up-front and then obtains reimbursement for the Federal and State share of the project costs. To obtain reimbursement for transportation projects, the DOT submits invoices to CALTRANS requesting payment for the Federal and State share of project costs incurred. Specifically, the DOT submits an invoice to the CALTRANS Accounting Center in Sacramento for review, processing, and payment. After review and processing, CALTRANS normally issues a payment within 25 days of receipt of the invoice.

For the purpose of authorizing Federal reimbursement, projects are divided into three phases: Preliminary Engineering, Right of Way, and Construction. CALTRANS must authorize the City to proceed with and incur costs for each of these project phases, usually at different times of a project.

The project phases and any limitations on reimbursements are described below.

*Preliminary Engineering*

Eligible preliminary engineering costs include all location, design, and related work preparatory to advancing the project to construction. For HBRR projects, the preliminary engineering costs are generally limited to the greater of \$75,000, or 25 percent of construction cost.

*Right Of Way*

Eligible right of way costs include the preparation of right of way plans, economic studies and other related preliminary work, appraisal for parcel acquisition, review of appraisals, payments for real property acquired, preparation for and the trial of condemnation cases, management of properties acquired, furnishing of relocation assistance, and other labor expenses.

*Construction*

Eligible construction costs include the actual cost to construct the project, including demolition of buildings or major obstruction that is part of the physical construction of the project. Construction engineering costs are eligible construction costs. These costs include supervision and inspection activities, testing materials incorporated into construction, checking shop drawings, and measurements needed for the preparation of pay estimates. For HBRR projects, reimbursable construction engineering costs are limited to 15 percent of construction costs.

We should note that the City may not obtain the maximum Federal reimbursement rate of 80 percent on all projects because preliminary engineering costs are limited to the greater of \$75,000, or 25 percent of construction cost, and construction engineering is limited to 15 percent of construction cost.

During the timeframe of our review, the DOT undertook six major HBRR projects. The six projects are as follows: The Oakland Road Bridge at Oakland Creek (Oakland Road Bridge), Wooster Avenue-Silver Creek Bridge-Wooster Avenue Bridge (Wooster Avenue Bridge), the Foxworthy Avenue Bridge (Foxworthy Avenue Bridge), the Trimble Road Bridge at the Guadalupe River (Trimble Road Bridge), the

Hedding Street Bridge at the Guadalupe River (Hedding Street Bridge), and Willow Glen Way Bridge at Coyote Creek (Willow Glen Way Bridge). Each of these projects is briefly described below.

*Oakland Road Bridge*

The Oakland Road Bridge project widened the bridge over Coyote Creek from two lanes to six lanes. The original bridge over the Coyote Creek was built in 1931 and had only two lanes. The bridge replacement provided for increased traffic demand and increased the seismic resistance. CALTRANS approved the project in 1993 and it was completed in 1999 at a total cost of \$5.77 million. The Federal HBRR Program provided \$2.87 million for the project.

*Trimble Road Bridge*

The Trimble Road Bridge project doubled the width of the bridge to allow for six lanes of traffic. The original bridge was built in 1961 and was a bottle-neck for traffic. The funding for the Trimble Road Bridge project was originally designated for the construction of the Winfield Boulevard Bridge in South San Jose. The source of funding for this project was the Federal Surface Transportation Program instead of HBRR funds. In 1995, when the Winfield Boulevard Bridge project was discontinued, CALTRANS allowed the City to use the funds to pay for the Trimble Road Bridge project. The project was completed in 2002, at a cost of \$4.47 million. The City received \$2.88 million in Federal funding to complete this project.

*Wooster Avenue Bridge*

The Wooster Avenue Bridge replaced the existing 24-foot long bridge over Lower Silver Creek. The original bridge was constructed in 1957. CALTRANS authorized the project in 1993 and it was completed in 2003 at a cost of \$3.06 million. The City received \$1.2 million in HBRR funding. In addition, the Santa Clara Valley Water District (SCVWD) also provided \$548,000 in funding because the channel was lengthened for future flood control purposes.

*Foxworthy Avenue Bridge*

The Foxworthy Avenue Bridge project replaced the bridge at Hillsdale Avenue at the Guadalupe River. The new bridge is located about 600 feet north of an older bridge. In addition to the bridge replacement, the project also widened the channel for future flood control purposes. The funding for this project came from the City of San José (\$629,289), the SCVWD (\$403,926), KB Homes (\$587,000), and the Federal HBRR Program (\$1,680,000). The bridge has been open to traffic and pedestrians since January 2002.

*Willow Glen Way  
Bridge*

The Willow Glen Way Bridge project is replacing a bridge at Willow Glen Way across the Guadalupe River. CALTRANS approved the replacement to meet seismic standards. In addition, the project also widened the river channel for future flood control purposes. In contrast to the other projects, the SCVWD is the lead agency on this project. The project is being funded with contributions from the City, SCVWD, and the HBRR Program. This project is currently under construction.

*Hedding Street  
Bridge*

The Hedding Street Bridge project replaced the existing Hedding Street Bridge over the Guadalupe River and constructed a new bridge across the widened Guadalupe River channel. The project includes a river overlook feature which allows for the viewing of the river area by pedestrians along Hedding Street. Although the original Hedding Street Bridge was considered deficient with respect to its roadway width, seismic resistance, and load carrying capacity, the amount of reimbursement received was limited to an allocation of funds from CALTRANS based on the cost to rehabilitate the bridge. The City and the SCVWD chose to replace the bridge and agreed to share the costs to lengthen and widen the bridge. The bridge replacement provided for increased traffic demand and increased the seismic resistance. CALTRANS approved the project in 1994 and it was completed in 1996 at a total cost of \$7,099,815. The Federal HBRR Program provided only \$757,602 for the project and the SCVWD provided \$4,255,500.

We analyzed four of the six projects to determine whether the City received the optimum level of Federal funding to offset the City's cost for these projects. We did not include the Willow Glen Way Bridge project and the Hedding Street Bridge project in our analysis. During the timeframe of our review, the Willow Glen Way Bridge project was not completed. Thus, we did not include it in our analysis. In addition, we did not include the Hedding Street Bridge project in our analysis because the scope of the project was significantly beyond a bridge repair and rehabilitation project.

Exhibit 3 is a summary of the City Auditor's analysis of four HBRR Projects to determine the City's share of the total project costs.



**Exhibit 3 Summary Of The City Auditor's Analysis Of Four HBRR Projects To Determine The City's Share Of The Total Project Costs**

	Oakland Road	Wooster Avenue	Foxworthy	Trimble Road	TOTAL
<b>Project Cost</b> <i>Actual Project Cost</i>	\$5,774,289	\$3,063,297	\$ 3,545,215	\$4,466,515	\$ 16,849,316
<b>Revenue Sources</b>					
<u>Federal</u> <i>HBRR Contribution</i>	\$2,874,028	\$1,202,020	\$ 1,680,000	\$2,880,000	\$ 8,636,048
<u>Local</u> <i>City of San José</i>	\$2,900,261	\$1,313,040	\$ 874,289	\$1,586,515	\$ 6,674,105
<i>Santa Clara Valley Water District</i>	\$ -	\$ 548,237	\$ 403,926	\$ -	\$ 952,163
<i>Developer's Contribution</i>			\$ 587,000		\$ 587,000
<b>Total Local Revenue</b> <i>Local Share of Project Costs</i>	\$2,900,261	\$1,861,277	\$ 1,865,215	\$1,586,515	\$ 8,213,268
	50%	61%	53%	36%	49%
<i>City Share of Project Costs</i>	50%	43%	25%	36% <sup>1</sup>	40%

As Exhibit 3 above shows, the costs for the four completed HBRR projects totaled \$16.8 million and the Federal reimbursement on these projects totaled over \$8.6 million. In addition, the City received about \$1 million in contributions from the SCVWD and \$587,000 in contributions from a developer. Thus, the City's share of the projects' costs totaled nearly \$6.7 million, almost 40 percent of the total cost of these projects. The City's share of the cost of these projects varied from project to project. The City's percentage share of the project costs ranged from 25 percent on the Foxworthy Avenue Bridge project to 50 percent on the Oakland Road Bridge project. Moreover, the City's share of the project costs was lower on two projects because the City received contributions from the SCVWD.

<sup>1</sup> The Trimble Road project was based on a fixed amount of Surface Transportation Program (not HBRR) funding which limited the amount of grant reimbursement.

According to the DOT, the projects we reviewed were relatively complex projects for the City. For instance, on the Oakland Road Bridge project, the City replaced a two-lane bridge with a six-lane bridge. According to DOT staff, this bridge required a more complicated design and higher level of preliminary engineering than was initially planned. According to the DOT, this required special staging of the construction because it required the closure of a major road. Finally, DOT staff also noted that property owners imposed a number of requirements so that the construction would not affect their businesses. These complexities can significantly increase the cost of the projects beyond what is initially planned and make it more difficult to obtain the optimum level of reimbursement.

DOT staff also believes that it was creative in obtaining other monies to help fund the projects. For instance, on two of the four projects in our analysis, the DOT was able to partner with the SCVWD to obtain funding for these projects. In addition, the DOT was able to partner with the SCVWD to share in the costs of the Hedding Street Bridge project and the Willow Glen Way Bridge project. As noted earlier, we did not include these two projects in our analysis.

As noted on Exhibit 3, the DOT succeeded in obtaining Federal funding for the Trimble Road Bridge project by convincing CALTRANS to switch the funding from one project to another. Even though it was a bridge replacement project, the Trimble Road Bridge project was funded through the Surface Transportation Program. The funds for this project were originally programmed for the Winfield Road extension in South San Jose. Because of public opposition to the project, the planned extension was cancelled. However, since the funding was obtained through a source other than the HBRR grant, it limited the City's ability to obtain more than the initial allocation of \$2,880,000 in STP funding.

As a result of these efforts, the DOT was successful in obtaining reimbursements for a high percentage of the construction costs of the projects. Moreover, in several instances, the DOT was successful in obtaining funding to not only replace but increase the capacity of the bridges. For example, on the Oakland Road Bridge project, the City was successful in obtaining HBRR funding to replace an existing two-lane bridge with a six-lane bridge.

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**The Department Of  
Transportation  
Improvements To  
Increase The Level  
Of Federal Funding**

The DOT and the DPW have implemented changes to the City's project delivery system during the course of our audit. Specifically, the DOT is developing a Grant Process Manual. In addition, DOT staff has attended CALTRANS-sponsored training. According to DOT and DPW staff, they believe that the relocation to the New City Hall has allowed them to better coordinate their work on capital projects. In addition, the DOT and the DPW have reorganized to improve the delivery of transportation programs and projects. Further, the DOT grant management process has improved by the adoption of procedures for grant management, cost estimating, and project delivery.

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**Other  
Improvements To  
Increase The Level  
Of Federal Funding**

In addition to the DOT improvements, we identified additional possible improvements to exceed the level of Federal funding for future City HBRR projects. These projects are specific to:

- Preliminary and construction engineering;
- Overhead;
- Environmental mitigation; and
- Contract change orders.

We describe below the opportunities to obtain more Federal funding for the different cost items.

*Preliminary  
Engineering And  
Construction  
Engineering*

The HBRR Program allows reimbursement for preliminary engineering costs, including all design and related work preparatory to advancing the project to construction. The reimbursement amount for preliminary engineering is limited to the greater of \$75,000 or 25 percent of the construction cost.

According to DOT staff, they have not included final design costs in their preliminary engineering estimates. Consequently, the DOT did not request or receive reimbursement for these costs on the four completed HBRR projects we reviewed. To ensure that the City obtains maximum reimbursement for preliminary engineering costs, the DOT needs to develop procedures to ensure that preliminary design and construction engineering estimates are based on the maximum reimbursement allowed for these items. These costs include

supervision and inspection activities, testing materials incorporated into construction, checking shop drawings, and measurements needed to verify contractors' invoices.

To ensure that the City obtains maximum reimbursement for construction engineering costs, the DOT needs to develop estimates based on the maximum reimbursement allowed for these items.

As of 2005, the DOT and the DPW have been using the DOT's Transportation Grant Guidebook, CALTRAN'S Program Manuals, and the City Council adopted cost estimating policy to ensure that the City obtains the maximum reimbursement for preliminary engineering and construction engineering costs for all grant funded projects.

We recommend that the Department of Transportation:

**Recommendation #1**

**Develop procedures to ensure that its preliminary engineering and construction engineering cost estimates are based on the maximum Federal reimbursement allowed for these cost items. (Priority 2)**

*Overhead Costs*

The City may include indirect costs when seeking reimbursement of Federal-aid Highway projects, as well as State-funded projects, for work authorized and costs incurred after June 9, 1998. We should note that any completed project with a Final Report of Expenditures is not eligible for retroactive indirect cost reimbursement.

Indirect costs are those that the City incurs for common or joint purposes. These costs benefit more than one cost objective. The City may not allocate a cost to a Federal award as an indirect cost if any other costs were incurred for the same purpose, in like circumstances, and the City had assigned these costs to a Federal award as a direct cost. Because there is no universal rule for classifying certain costs as either direct or indirect, it is essential that the City treat each item of cost consistently in like circumstances, either as a direct or an indirect cost.

In order to receive reimbursement for indirect costs, the City must prepare and submit an indirect cost rate proposal and related documentation to support the indirect cost to

CALTRANS. Once CALTRANS remits an approval letter and CALTRANS' Audits and Investigations Unit has notified the City that it has accepted the approval, the City may claim reimbursement for indirect costs.

Generally, the following costs are allowable as indirect costs: Printing, Computer Services, Conference & Training, Auto, Travel/Local Mileage, Transit Tickets, Meeting Room Rentals, Office Supplies, Equipment Rental, Equipment Maintenance & Repair, Mailing & Postage, Communications, Insurance, Subscriptions/Library, Personnel Recruitment, Public Hearings, County Auditor, Law Library, Parking, Other Maintenance, Janitorial Services, Clippings/Newswire Services, Utilities, Storage Rental, Advertisement/Legal Notices, Advisory Committees, Miscellaneous Expense, Equipment less than \$300, Independent Audit Fees, Memberships, Special Events, and ADA Special Services.

Although the City's indirect costs are substantial and reimbursable, the City had not claimed any Federal reimbursement for these costs on the HBRR projects we reviewed.

To ensure that the City recoups some of these overhead costs, the DOT should develop an indirect cost rate proposal and submit it to CALTRANS for approval. Once we informed DOT staff about the recommendation to submit an indirect cost rate proposal, it made inquiries with CALTRANS on the procedures to receive reimbursements for indirect costs. The District 4-Local Assistance Office was unable to answer staff's questions and directed staff to contact CALTRANS' headquarters office in Sacramento. DOT staff working with the City's Finance Department is still in the process of obtaining the necessary information to establish an indirect cost rate proposal.

We recommend that the Department of Transportation:

**Recommendation #2**

**Prepare and submit an indirect cost rate proposal to CALTRANS for approval. (Priority 3)**

*Environmental  
Mitigation Costs*

The HBRR Program allows for reimbursement for environmental mitigation costs associated with the environmental impacts of a project. Specifically, the HBRR Program allows for reimbursement of the following environmental mitigation activities: 1) mitigation that is accomplished within the scope of the project; 2) plant establishment and monitoring up to two years and longer to allow permanent establishment of plants; and 3) setting up an escrow account to fund plant establishment.

We found that DOT officials were not aware that the HBRR Program reimbursed local agencies for environmental mitigation costs incurred. Thus, the DOT has not attempted to obtain any reimbursements for HBRR project environmental mitigation costs.

To ensure that the City obtains reimbursement for environmental mitigation costs, the DOT needs to include mitigation costs in its estimates when applying for Federal funds for HBRR projects.

All recent HBRR grant funded projects including three recently approved seismic retrofit projects include estimates for environmental mitigation costs as appropriate.

We recommend that the Department of Transportation:

**Recommendation #3****Include environmental mitigation costs in its estimates when applying for Federal funds. (Priority 2)**

To obtain Federal funding for environmental mitigation costs, the DOT will need to modify how it accounts for these costs. The Oakland Road Bridge HBRR project was the only project that we reviewed in which the City specifically charged for environmental mitigation costs. Generally, the City budgets and accounts for these costs on a pooled basis. For instance, the 2007-2011 Capital Improvement Program has budgeted \$530,000 for environmental mitigation costs on projects already completed that continue to incur future environmental mitigation costs. To obtain reimbursement for future environmental mitigation costs, the DOT will need to estimate and account for these costs on a project-by-project basis. In our

opinion, the DOT should seek guidance from CALTRANS on how best to estimate, account for, and obtain reimbursement for these costs.

We should note that for the three seismic retrofit projects, DOT and DPW staff are working closely with CALTRANS staff in obtaining guidance on how best to ensure reimbursement for all costs associated with environmental mitigation.

We recommend that the Department of Transportation:

**Recommendation #4**

**Seek guidance from CALTRANS on how best to estimate, account for, and obtain reimbursement for environmental mitigation costs. (Priority 2)**

*Construction  
Contract Change  
Orders*

CALTRANS allows local agencies to be reimbursed for construction contract change orders that are within the scope of the project. We found that the City has not routinely obtained reimbursement for contract change orders.

CALTRANS allows for local agencies to obtain reimbursement for construction contract change orders. Specifically, Chapter 16, "Administer Construction Contracts," Section 16.13 of the LAPM delegates decision making regarding change orders to local agencies. If the project is budgeted as a lump sum item in the Federal State Transportation Improvement Program, the City needs to contact CALTRANS to ensure sufficient funds are available for change orders. If the project is identified as a line item in the FSTIP, the local agency must obtain authorization from CALTRANS and the regional transportation agency.

To ensure that the City is reimbursed for construction contract change orders, the DOT should follow CALTRANS' prescribed process for obtaining reimbursement for construction contract orders.

According to DOT officials, as part of its Grant Funded Projects Guidebook, project managers are instructed to request reimbursement for all eligible expenses, including construction contract change orders, and to obtain authorization from CALTRANS prior to initiating change order work.

We recommend that the Department of Transportation:

**Recommendation #5**

**Follow CALTRANS' prescribed process for obtaining reimbursement for construction contract change orders. (Priority 2)**

**Department Of Transportation Staff Need To Take Other Steps To Increase Federal Funding For HBRR Projects**

In addition to the recommendations noted above, we identified that DOT staff needs to follow CALTRANS' established processes to submit revised E-76 forms and finance letters to CALTRANS when the City knows award amounts are significantly less than anticipated HBRR project costs.

*Submit Revised E-76 Forms And Finance Letters To CALTRANS When The City Knows The Award Amounts Are Significantly Less Than Anticipated HBRR Project Costs*

Besides developing better estimates, the City needs to inform CALTRANS when it knows its estimates are not correct. CALTRANS has established a process to allow local agencies to submit revised estimates. The Local Agency Procedures Manual (LAPM) states that if at any time during construction, the project cost is expected to overrun, a revised detail estimate or modification is required from what was previously under agreement. Changes can be accomplished by updating item costs, supplemental work, and contingencies. The City's project managers are responsible for ensuring that the available funds are not exceeded. An assessment of financial status must show that the existing contingency balance will prove insufficient to complete the project within the approved contract scope.

If additional funds are needed to complete the project within the project scope, CALTRANS must authorize any additional funding. To obtain authorization for additional funding, the City must submit a revised project estimate (E-76) and a revised finance letter to CALTRANS for its approval.



To obtain additional funding when projects' costs exceed authorized funding, we recommend that the Department of Transportation:

**Recommendation #6**

**Submit a revised E-76 form and finance letter to CALTRANS if the award amount is significantly less than the anticipated project costs. (Priority 2)**

*Early DOT Implementation Of A Report Recommendation Has Already Secured An Additional \$2,450,754 In HBRR Funding For The City*

During the course of our audit, we met with DOT staff to discuss cost overruns on the ongoing Willow Glen Way Bridge project and we advised them to follow CALTRANS procedures that allow the City to submit to CALTRANS revised E-76 forms and finance letters to obtain additional HBRR funding for the City when award amounts are significantly less than anticipated HBRR project costs. The DOT subsequently re-submitted a revised E-76 form and finance letter to CALTRANS. As a result, in February 2006, the DOT successfully secured an additional \$2,450,754 in HBRR grants for the Willow Glen Way Bridge project. This is now the standard procedure for all current and future transportation grant funded projects.

Not obtaining all available Federal funds results not only in the loss of Federal monies but also the loss of interest due to the City using its own funds to pay for the costs for these projects.

*The DOT Improvements Coupled With Recommended Improvements Could Secure An Indeterminate, But Potentially Significant Amount Of Federal Funding And Interest Earnings On Future Bridge Projects*

The DOT anticipates beginning a new series of bridge replacement and rehabilitation projects. In our opinion, by implementing the recommendations in this report, along with changes it has made to improve capital project delivery, the City should be better positioned to obtain the optimum level of Federal funding for these future projects.

The DOT anticipates working on a number of additional bridge repair and rehabilitation projects in the future that should qualify for HBRR funding. CALTRANS rates bridges to determine which bridges are eligible for replacement or repair. CALTRANS inspects and assigns a Sufficiency Rating (SR) to each bridge based upon its condition. Currently, bridges that have a SR of 50 or less can qualify for replacement. Bridges with a SR of 50 to 80 may qualify for repair.

The City currently has 23 bridges in San Jose that have a SR of less than 80. In addition, San Jose has three bridges with a SR rating below 50. Of these three bridges, two have relatively low traffic and are not likely to receive funding to replace them. However, a bridge over Penitencia Creek at Noble Avenue, which was built in 1915 and has a SR of 47.2, is likely to be replaced in the near future.

Besides the Penitencia Creek and Noble Avenue Bridge, the DOT is attempting to seek replacement funding for several other bridges in the City that have SRs above 50 but less than 80. Specifically, in 2006-07, the DOT intends to contract with a consulting firm to assist the City in obtaining HBRR funds to replace bridges that currently have SRs above 50 but less than 80.

DOT officials provided us with the bridge replacement projects most likely to be funded in the future and the cost estimate to replace these bridges. The DOT estimated that the total cost to repair or replace the five bridges most likely to be funded in the near future is \$18,000,000. However, in addition to the replacement projects, the City has several other bridges that qualify for seismic upgrades with HBRR funding. The current budgeted cost for these seismic upgrades is \$924,000. The total estimated cost for the five replacement projects and the three rehabilitation projects is \$18,924,000. These projects and their budgeted costs are shown in Exhibit 4.

**Exhibit 4      The DOT Estimate Of Potential Future Bridge Replacement And Rehabilitation Projects With Estimated Project Costs**

<b>Estimated Future HBRR Replacement Project Cost</b>	
Penitencia Creek at Noble Ave	\$2,000,000
Coyote Creek at Santa Clara Street	4,000,000
Los Gatos Creek at San Carlos Street	4,000,000
Upper Penitencia Creek at North King Road	4,000,000
Coyote Creek at Alma Avenue	4,000,000
<b>Total Estimated Future HBRR Project Cost</b>	<b><u>\$18,000,000</u></b>
<b>Estimated Future HBRR Seismic Retrofit/Rehabilitation Project Cost</b>	
Coyote Creek at Julian	\$359,000
Coyote Creek at Meridian	279,000
Coyote Creek at William Street	286,000
<b>Total Estimated Future Seismic Retrofit Cost</b>	<b><u>\$924,000</u></b>
<b>Total Future HBRR Project Cost</b>	<b><u>\$18,924,000</u></b>

We estimate that DOT improvements and the recommendations in this report could secure an indeterminate, but potentially significant amount of Federal funding on these future HBRR projects.

Finally, we should note that we focused our review exclusively on HBRR projects for which the City received Federal funding. However, the City receives other Federal grant monies for transportation projects. Therefore, by implementing the recommendations in this finding, the DOT should realize additional but indeterminate Federal funding for all Federally-funded projects.

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**CONCLUSION**

The Highway Bridge Replacement and Rehabilitation Program (HBRR) provides Federal funds to rehabilitate or replace bridges that are unsafe because of structural deficiencies, physical deterioration, or functional obsolescence. Deficient highway bridges eligible for replacement or rehabilitation must be over waterways, other topographical barriers, other highways, or railroads. The Federal share of HBRR projects can be as high as 80 percent and the local government's share at least 20 percent. Specifically, we found that the City can improve upon:

- Obtaining the optimum level of Federal funds for preliminary engineering and construction engineering;
- Obtaining reimbursement for overhead costs;
- Obtaining reimbursement for environmental mitigation costs; and
- Consistently obtaining reimbursement for construction contract change orders.

Early DOT implementation of a report recommendation has already secured an additional \$2,450,754 in HBRR funding for the City. More importantly, we estimate that DOT improvements and our recommended improvements could secure for the City an indeterminate, but potentially significant amount of Federal funding and interest earnings. Further, DOT staff needs to take other steps to increase Federal funding for HBRR projects.

Finally, we should note that we focused our review exclusively on HBRR projects for which the City received Federal funding. However, the City receives other Federal grant monies for transportation projects. Therefore, by implementing the recommendations in this finding, the DOT should realize additional but indeterminate Federal funding for all Federally-funded projects.

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## RECOMMENDATIONS

We recommend that the Department of Transportation:

- Recommendation #1**      **Develop procedures to ensure that its preliminary engineering and construction engineering cost estimates are based on the maximum Federal reimbursement allowed for these cost items. (Priority 2)**
- Recommendation #2**      **Prepare and submit an indirect cost rate proposal to CALTRANS for approval. (Priority 3)**
- Recommendation #3**      **Include environmental mitigation costs in its estimates when applying for Federal funds. (Priority 2)**
- Recommendation #4**      **Seek guidance from CALTRANS on how best to estimate, account for, and obtain reimbursement for environmental mitigation costs. (Priority 2)**
- Recommendation #5**      **Follow CALTRANS' prescribed process for obtaining reimbursement for construction contract change orders. (Priority 2)**
- Recommendation #6**      **Submit a revised E-76 form and finance letter to CALTRANS if the award amount is significantly less than the anticipated project costs. (Priority 2)**

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## Finding II

# The Department Of Transportation Can Improve The Timeliness Of Its Billings To CALTRANS

For most Federal- and State-funded transportation projects, the local agency pays for the costs of the projects up-front and then obtains reimbursement for the Federal and State share of the project costs. To obtain reimbursement for Highway Bridge Rehabilitation and Repair (HBRR) projects, the City invoices the California Department of Transportation (CALTRANS) for the Federal and State share of the projects' costs. To maximize cash flow and interest earnings, the Department of Transportation (DOT) should submit billings regularly and in a timely manner. CALTRANS allows the City to submit billings for project costs on a monthly basis. During our review of six HBRR projects, one of which is not complete, we found that the DOT did not submit invoices to CALTRANS in a timely manner. We estimate that the City could earn about \$376,000 on future HBRR projects by improving its billing practices. In addition, we found that the DOT was slow in invoicing the Santa Clara Valley Water District (SCVWD) for its share of the costs of an HBRR project.

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**Cost  
Reimbursement  
Process**

As noted above, for most Federal- and State-funded transportation projects, the local agency pays for the cost of projects up-front and then obtains reimbursement for the Federal and State share of the project costs. To obtain reimbursement for transportation projects, the DOT submits invoices to CALTRANS requesting payment for the Federal and State share of project costs incurred. Specifically, the DOT submits an invoice to the CALTRANS Accounting Center in Sacramento for review, processing, and payment. After review and processing, CALTRANS normally issues a payment within 25 days of the receipt of the invoice.

The DOT needs to bill on a frequent and consistent basis in order to maximize cash flow and interest earnings for the City. CALTRANS allows local agencies to submit invoices for reimbursement of project costs on a monthly basis. By way of contrast, the DOT's stated internal policy is to submit invoices on a quarterly basis.

**The Department Of  
Transportation Has  
Not Billed  
CALTRANS In A  
Timely Manner**

During our review, we found that the DOT does not bill CALTRANS in a timely manner. Specifically, for the six Highway Bridge Repair and Rehabilitation (HBRR) projects we reviewed, the DOT did not routinely submit either monthly or quarterly invoices to CALTRANS to obtain reimbursement for costs incurred. Based on our examination of 29 invoices for 6 HBRR projects, we found that the DOT invoiced CALTRANS an average of only 5 invoices per project. In fact, the DOT billed for most (an average of 82 percent) of the grant award amount in a single billing for each of the projects we reviewed. Moreover, we found that the DOT billed for 73 percent of the grant award amount after the beneficial use date for the project.<sup>2</sup> For example, the DOT issued only five invoices for the Wooster Avenue Bridge project. Of the total grant award of \$1.2 million, the DOT billed for \$1.15 million dollars after the beneficial use date of the project.

In our opinion, the City could improve its cash flow and increase its interest earnings by improving its billing practices on future HBRR projects. To maximize City interest earnings and cash flows in the future, the DOT needs to establish more timely billing procedures. Since CALTRANS allows for billings for cost reimbursement as frequently as monthly, we recommend that the DOT establish procedures to bill for reimbursement of project costs on a quarterly and/or monthly basis, if necessary.

We recommend that the Department of Transportation:

**Recommendation #7**

**Establish procedures to bill CALTRANS for reimbursement of project costs on a quarterly and/or monthly basis, if necessary. (Priority 2)**

We have discussed the billing problems with DOT staff and they have developed procedures to bill CALTRANS in a more timely manner. Specifically, the DOT plans to bill for preliminary engineering costs on a quarterly basis. Moreover, on larger projects, it intends to bill CALTRANS for reimbursement of construction costs on a monthly basis.

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<sup>2</sup> The beneficial use date is when the project becomes functionally operational.

Since 2005, the DOT created a new Transportation Grants Coordinator position to track and monitor the billings of all transportation grant funded projects, and prepare a quarterly status report. This new position is responsible for ensuring that projects are moving forward and project managers are submitting invoices on a quarterly and/or monthly basis, if necessary.

We also found that the DOT did not bill the Santa Clara Valley Water District (SCVWD) in a timely manner for a project in which the City and the SCVWD had a cost-sharing agreement. Specifically, on the Foxworthy Avenue Bridge project, the contract allowed the City to bill the SCVWD within 45 days after the completion of the project.

During our audit, we notified City staff that the City had not billed the SCVWD for its share of the cost of the project. Department of Public Works (DPW) staff informed us that they had just learned from the DOT that they were responsible for billing the SCVWD. Accordingly, the DPW billed the SCVWD \$562,450, albeit 183 days after the project completion date.

Furthermore, we also found that the City did not initially bill the SCVWD for all the costs the agreement allowed. Specifically, the City identified \$95,000 in administrative costs that the DPW should have billed the SCVWD. The City sent an amended bill to the SCVWD to recoup the \$95,000.

Over the past year, the aforementioned Transportation Grants Coordinator has worked directly with the SCVWD on the Willow Glen Way project to meet the billing requirements as specified in the cooperative agreement between the City and the SCVWD. This is a new DOT standard procedure for all transportation grant funded projects that involve cost sharing agreements with other agencies.

We recommend that the Department of Public Works:

**Recommendation #8**

**Establish procedures to bill the Santa Clara Valley Water District for reimbursement of project costs within the timeframe as specified in the cost-sharing agreements. (Priority 2)**



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**CONCLUSION**

The DOT needs to improve the timeliness of its billings to CALTRANS. We estimate that the City could earn about \$376,000 on future HBRR projects by improving its billing practices. In addition, we found that the DOT was slow in invoicing the SCVWD for its share of the cost of an HBRR project and it did not properly bill the SCVWD for its entire share of the cost of the project.

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**RECOMMENDATIONS**

We recommend that the Department of Transportation:

**Recommendation #7**

**Establish procedures to bill CALTRANS for reimbursement of project costs on a monthly basis. (Priority 2)**

We recommend that the Department of Public Works:

**Recommendation #8**

**Establish procedures to bill the Santa Clara Valley Water District for reimbursement of project costs within the timeframe as specified in the cost-sharing agreements. (Priority 2)**

# Memorandum

**TO:** Gerald A. Silva

**FROM:** James R. Helmer

**SUBJECT:** SEE BELOW

**DATE:** May 1, 2007

Approved

*Ray Winer*

Date

*5/1/07*

**SUBJECT: RESPONSE TO “AUDIT OF DEPARTMENT OF TRANSPORTATION’S EFFORTS TO SECURE FEDERAL HIGHWAY BRIDGE REPLACEMENT AND REHABILITATION (HBRR) FUNDS”**

## **BACKGROUND**

The Department of Transportation has reviewed the *Audit of Department of Transportation’s Efforts To Secure Federal Highway Bridge Replacement and Rehabilitation (HBRR) Funds* and we have provided responses to each recommendation.

As we identified in the HBRR Program Accomplishment Memo, DOT has implemented a number of improvements to the HBRR program as a result of organizational and procedural changes made within the last five to six years. Also, as the result of working with the Auditor’s Office over the last two years, additional improvements have been made for which we gratefully thank the Auditor’s staff.

## **RESPONSES TO AUDIT RECOMMENDATIONS**

**Recommendation #1– Develop procedures to ensure that its preliminary engineering and construction engineering cost estimates are based on the maximum Federal reimbursement allowed for these cost items. (Priority 2)**

Written procedures and policies are in place and have been since at least 2005 to ensure that staff is utilizing the DOT Grant Funded Projects Guidebook, Caltrans’ manuals, and the City Council adopted cost estimating policy to ensure that cost estimates provide for the maximum allowable reimbursements.

**Recommendation # 2- Submit an indirect cost rate proposal to CALTRANS for approval. (Priority 2)**

The DOT Grant Funded Projects Guidebook instructs project managers to include both indirect and direct overhead costs in their estimates and request for reimbursement. Staff has been in

contact with Caltrans in establishing an indirect cost rate proposal and is working with the City's Finance Department to obtain the required documentation.

**Recommendations #3- Include environmental mitigation costs in its estimates when applying for Federal funds. (Priority 2)**

The DOT guidebook instructs project managers to now include cost estimates for environmental mitigation costs in their request for grant funding.

**Recommendation #4- Seek guidance from CALTRANS on how best to estimate, account for, and obtain reimbursement for environmental mitigation costs. (Priority 2)**

Project managers, with the assistance of the DOT Grants Coordinator, are working directly with Caltrans on optimizing reimbursements for environmental mitigation costs prior to funding authorization.

**Recommendation #5- Follow CALTRANS' prescribed process for obtaining reimbursement for construction contract change orders. (Priority 2)**

The DOT guidebook instructs project managers to follow the process identified in the Caltrans' manual for obtaining construction contract change orders. Project managers are required to contact Caltrans prior to execution of a change order to obtain funding approval.

**Recommendation # 6 - Submit a revised E-76 form and finance letter to CALTRANS if the award amount is significantly less than anticipated project costs. (Priority 2)**

As recommended by the audit, staff has requested E-76 and finance letter revisions to obtain the maximum allowable reimbursement for the Willow Glen Way Bridge project. This is now the standard procedure for all transportation-related grant funded projects.

**Recommendation #7- Establish procedures to bill CALTRANS for reimbursement of project costs on a monthly basis. (Priority 2)**

The DOT guidebook instructs project managers to bill at least quarterly and, if possible, on a monthly basis. In addition, the DOT Grants Coordinator maintains an inventory of grant fund projects and billing dates to ensure that these timelines are met.

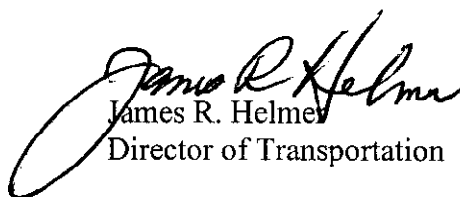
**Recommendation #8- Establish procedures to bill the Santa Clara Valley Water District for reimbursement of project costs within the timeframe as specified in the cost-sharing agreements. (Priority 2)**

The DOT Grants Coordinator is not only responsible for ensuring that project managers bill Caltrans in a timely manner, but that billing of project costs owed by other agencies, such as the Santa Clara Valley Water District, are done in compliance with the cost sharing agreement.

## CONCLUSION

For seven of the eight recommendations cited in the Audit, the Department of Transportation has procedures currently in place that we believe address these audit findings. DOT staff is currently working with Caltrans and the City's Finance Department on Recommendation #2 in an attempt to obtain an indirect overhead rate that can be applied toward future grant funded projects. As mentioned before, DOT has taken a number of measures to improve the Department's HBRR grant program process. We greatly appreciate the Auditor's Office acknowledgment of these measures and we appreciate the efforts made by your office in pointing out other recommendations that have helped us to make further improvements and obtain additional funding.

If you have any questions, please feel free to contact me at 535-3830 or Rene Cordero at 975-3235.



James R. Helme  
Director of Transportation

c: Les White  
Jim Ortbal  
Hans Larsen  
Katy Allen

## APPENDIX A

### DEFINITIONS OF PRIORITY 1, 2, AND 3 AUDIT RECOMMENDATIONS

The City of San Jose's City Administration Manual (CAM) defines the classification scheme applicable to audit recommendations and the appropriate corrective actions as follows:

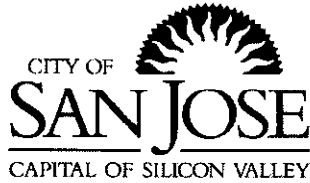
Priority Class <sup>1</sup>	Description	Implementation Category	Implementation Action <sup>3</sup>
1	Fraud or serious violations are being committed, significant fiscal or equivalent non-fiscal losses are occurring. <sup>2</sup>	Priority	Immediate
2	A potential for incurring significant fiscal or equivalent fiscal or equivalent non-fiscal losses exists. <sup>2</sup>	Priority	Within 60 days
3	Operation or administrative process will be improved.	General	60 days to one year

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<sup>1</sup> The City Auditor is responsible for assigning audit recommendation priority class numbers. A recommendation which clearly fits the description for more than one priority class shall be assigned the higher number. (CAM 196.4)

<sup>2</sup> For an audit recommendation to be considered related to a significant fiscal loss, it will usually be necessary for an actual loss of \$25,000 or more to be involved or for a potential loss (including unrealized revenue increases) of \$50,000 to be involved. Equivalent non-fiscal losses would include, but not be limited to, omission or commission of acts by or on behalf of the City which would be likely to expose the City to adverse criticism in the eyes of its citizens. (CAM 196.4)

<sup>3</sup> The implementation time frame indicated for each priority class is intended as a guideline for establishing implementation target dates. While prioritizing recommendations is the responsibility of the City Auditor, determining implementation dates is the responsibility of the City Administration. (CAM 196.4)



# Memorandum

**TO:** Gerald A. Silva

**FROM:** James R. Helmer

**SUBJECT: HBRR PROGRAM  
ACCOMPLISHMENTS**

**DATE:** May 2, 2007

Approved

*Kay Winters*

Date

*5/2/07*

In response to the report *Audit of Department of Transportation's Efforts To Secure Federal Highway Bridge Replacement and Rehabilitation (HBRR) Funds* which was issued to the Department of Transportation on February 8, 2007 for review and comment, we are providing program accomplishments related to the audit recommendations to be included in the final report.

This audit initially began as a Project Cycle Time Audit, and sometime in 2004 was changed into an audit that focused on bridge projects funded through the Federal HBRR program. The projects included as part of this audit are for six bridge projects that were initiated between 1993 and 1996 and completed between 1996 and 2003. The findings and recommendations primarily pertain to issues that were based on practices that occurred over six years ago.

Since at least 2001, there have been significant process improvement efforts and internal reorganizations made by both DOT and Public Works. We acknowledge that since the time the audit was brought to our attention, additional improvements have been made that were recommended by the audit. However, as described below, many of these changes were already in process as a result of project delivery improvement efforts.

DOT and DPW have significantly improved project delivery and grant management procedures and practices. This has been done through a series of changes that were seen at the time as critical for the successful delivery and fiscal management of the transportation projects in the Transportation CSA. These improvements include departmental and staff reorganizations, the creation of two new positions, mandatory and regularly scheduled training, and the establishment of written procedures.

### Accomplishments Related to Audit Recommendations

**Recommendation #1 and #2 – Develop procedures to ensure that its preliminary engineering and construction engineering cost estimates are based on the maximum Federal reimbursement allowed for these cost items and prepare and submit an indirect cost rate proposal to CALTRANS for approval.**

Written procedures and policies have been in place since at least 2005 for all audit recommendations. DOT has completed a Grant Funded Projects Guidebook that has been

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updated regularly over the past two years in response to items brought to our attention as a result of the audit. This guidebook is a supplement to Caltrans' Grant manuals and has been given to all project managers that are involved in grant funded transportation-related projects. It provides project managers with contact information, Caltrans' Manual references, and specific grant requirements for each project phase. Staff is currently utilizing the guidebook, Caltrans' manuals, and the City Council adopted cost estimating policy to ensure that cost estimates provide for the maximum allowable reimbursements.

The DOT Grant Funded Projects Guidebook instructs project managers to include both indirect and direct overhead costs in their estimates and request for reimbursement. Staff has been in contact with Caltrans in establishing an indirect cost rate proposal and is working with the City's Finance Department to obtain the required documentation.

**Recommendations #3, #4, #5 - Include environmental mitigation costs in its estimates when applying for Federal funds, seek guidance from CALTRANS on how best to estimate, account for, and obtain reimbursement for environmental mitigation costs, and follow CALTRANS' prescribed process for obtaining reimbursement for construction contract change orders.**

Because of the audit, project managers are now including cost estimates for environmental mitigation costs and working directly with Caltrans on optimizing reimbursements for both environmental mitigation costs and construction contract change orders. Beginning in 2001, there were many organizational changes that were made in response to the City's need to deliver a large number of capital improvement projects in a timely and cost effective manner. These changes included the formation of the Department of Transportation, the co-location of DOT/DPW staff in the new City Hall, and the creation of the CIP Action Team. This effort has improved overall coordination and communication between the project managers who deliver the projects, the DOT managers who manage the funding and oversee the projects, and Caltrans Local Assistance staff who administer the HBRR grant program.

As a result, all new HBRR grant funded projects include estimates for environmental mitigation costs and project managers have been working directly with Caltrans to ensure reimbursement of both environmental mitigation costs and construction contract change orders.

**Recommendation # 6 - Submit a revised E-76 form and finance letter to CALTRANS if the award amount is significantly less than anticipated project costs.**

Staff was recently successful in accomplishing this recommendation. After the City applied for federal funding for the replacement of the existing structurally deficient two-lane bridge along Willow Glen Way, the Santa Clara Valley Water District partnered with the City in order to ensure that the new bridge was built to accommodate the District's future flood control improvements. Although the initial grant was for a slightly widened two-lane bridge, through the combined efforts of both agencies, a request for a longer bridge that would accommodate a wider channel was approved for grant funding. Prior to award of the construction contract, the bids received for the project were substantially higher than the engineer's estimate. City staff submitted a request for an increase in grant funding and Caltrans agreed to revise the E-76 form

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and amend the finance letter resulting in an additional \$2.4 million in grant funding. As recommended by the audit, this is now the standard procedure for all transportation-related grant funded projects.

**Recommendation #7 and #8 - Establish procedures to bill CALTRANS for reimbursement of project costs on a monthly basis and establish procedures to bill the Santa Clara Valley Water District for reimbursement of project costs within the timeframe as specified in the cost-sharing agreements.**

The establishment of two new key positions within DOT has ensured that grant-funded projects are delivered in a timely and more cost-effective manner. First of all, the creation of a Project Delivery Division Manager with a specific focus on Capital Project Delivery has contributed to the Transportation CSA having the City's best on-time and on-budget track record relative to workload with a current on-time delivery rate of 92%. The establishment of a DOT Grants Coordinator, who provides coordination between Caltrans and City staff and oversight of all grant funded projects, has ensured that all grant funded projects are billed in a timely manner and that all the latest grant procedures are followed.

The DOT Grants Coordinator is also responsible for ensuring that project managers are kept up-to-date on the latest grant information and procedural changes. Since 2005, the Grants Coordinator along with other DOT and DPW staff, have attended Caltrans-sponsored grant training classes. These classes provide staff with an update on the latest process and procedural changes. In addition, the Grants Coordinator conducts internal training sessions at least once a year to train and update in-house staff. Finally, the Grants Coordinator maintains an inventory of all grant-funded projects and conducts quarterly project status update meetings with the project managers to ensure timely grant reimbursement billings. This inventory is also used to ensure timely billing of project costs owed by other agencies, such as the Santa Clara Valley Water District.

### **Accomplishments Related to Exhibit 3**

In response to the four HBRR projects listed in Exhibit 3 of the Audit, it should be noted that these projects were funded under special circumstances and they each had significant complexities that warranted higher local funding shares. In addition, due to City staff's successful negotiation efforts, the City was able to construct projects that provided substantial benefits beyond what was originally intended.

#### **Foxworthy Avenue Bridge**

City staff obtained funding for the construction of new 4-lane bridge on Foxworthy Avenue as replacement to the existing outdated 2-lane bridge at a different location on Hillsdale Avenue.

#### **Trimble Road Bridge**

City staff obtained a fixed-amount federal grant from the STP program (not HBRR) to widen Trimble Road Bridge from 4 to 6 lanes. The grant was obtained through a creative transfer of



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funds from the Winfield Boulevard bridge project that was dropped due to community opposition.

### Oakland Road Bridge

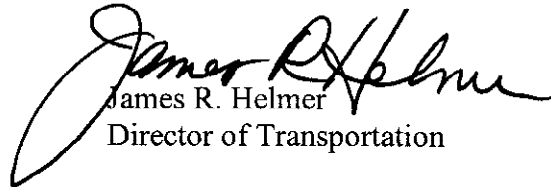
City staff obtained funding for the construction of a new 6-lane bridge to replace a 2-lane bridge. The construction of the bridge involved significant traffic impacts and required mitigations to the nearby golf course.

### Wooster Avenue Bridge

This project involved replacement of a 2-lane bridge at the sole point of access to the "Eggo" Plant. Due to the access issues, the project took multiple years to design and negotiate.

As the City continues to deal with limited funding availability, the reliance on federal and state grant funding will more than likely increase. These improvements that were partly prompted by the audit recommendations and partly the result of the Department's previous efforts, will help achieve the goal of developing, operating, and maintaining a transportation system that contributes to the livability and economic health of the City.

If you have any questions, please feel free to contact me at 535-3830 or Rene Cordero at 975-3235.

  
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