FORM GEN. 160

CITY OF LOS ANGELES
INTER-DEPARTMENTAL CORRESPONDENCE

0160-01545-0000

Date: August 4, 2010

To: City Council

From: Miguel A. Santana, City Administrative Officer
Gerry F. Miller, Chief Legislative Analyst

Subject: **SIXTH STREET VIADUCT IMPROVEMENT PROJECT – FINANCIAL PLAN**

Summary
At it July 29, 2010 meeting, the Seismic Governance Committee considered a report from the Bureau of Engineering relative to the Financial Plan for the Sixth Street Viaduct Improvement Project (SSVIP). Based on that report, the City Administrative Office and Chief Legislative Analyst are transmitting joint recommendations to enable the City to complete the demolition and replacement of the Sixth Street Viaduct over the Los Angeles River.

The Sixth Street Viaduct (City No. 1275, State No. 53C1880), a reinforced concrete structure with steel arches over the Los Angeles River, is a historical landmark built in 1932. The bridge is one of California's longest bridges in a high population zone, spanning more than 3,600 feet. It also serves as an important transportation east-west corridor, linking Boyle Heights and downtown Los Angeles by carrying two lanes of traffic in each direction over the Los Angeles River, Santa Ana Freeway, several railroad tracks and surface streets. The viaduct is composed of three independent structures: the reinforced concrete west portion, the central steel arch section over the Los Angeles River, and the reinforced concrete east portion. The portion of the bridge spanning over the I-5 Freeway is owned by Caltrans.

The Sixth Street Viaduct suffers from a condition known as Alkali Silica Reactivity (ASR) which weakens the concrete strength and limits the ability to retrofit the bridge to current standards. The bridge is listed on Caltrans' mandatory seismic retrofit list and analyses performed indicate that this bridge has a 70 percent probability of failure, as compared to a standard of 10 percent, during a 7.0 magnitude earthquake within the next 50 years. This probability of failure increases every year. There are no known methods to reverse or stop ASR and if nothing is done to mitigate the ASR impact, the concrete elements will crumble and fall apart. No other bridge in the City has this severe condition and it is imperative that the City replace the bridge structure.

Project Scope and Budget
Since 2001, the Bureau of Engineering (BOE) has undertaken various preliminary activities related to the SSVIP, including community outreach, environmental analysis, planning and geotechnical studies. In addition to these activities, the project site was visited by the California Transportation Commission on September 9, 2009 to understand the issues related to the bridge structure and review the ASR impact on the structure.

The scope of the project includes: design, demolition of the existing bridge, associated right of way acquisitions and construction of a replacement bridge. The project is anticipated to take six years from certification of the environmental documents, through design, right of way acquisition, construction and beneficial occupancy. The total cost estimate for the SSVIP is $359.3 million. The source of funds for the project includes the following:

- $316.8 million (88%) – Federal Highway Bridge Program
- $38.3 million (11%) – State Proposition 1B, Local Bridge Seismic Retrofit Program
- $4.2 million (1%) - City of Los Angeles (Proposition G & Proposition C)

The federal and state monies are allocated on an annual, reimbursement basis. The annual allocations contain specific dollar caps associated with distinct project phases, i.e., right of way, design, and construction. As a general rule, the federal government will reimburse right of way costs at $20 million per year and the State will match this with $2.5 million per year. For construction costs, the federal reimbursement will increase to $50 million per year with a state match of $6.4 million. The City's annual costs for the project, however, are expected to exceed these amounts, which will require gap and front-funding. Therefore, it is recommended that the Council approve the use of Advanced Construction Authority (AC) process, as described below, for the construction of the SSVIP and utilize MICLA for the necessary gap financing needs.

Advance Construction Authority (AC)

The process known as Advance Construction Authority (AC) allows local jurisdictions to commit funds in advance of federal and state budget authority. In order to take advantage of this process, the City must apply to Caltrans and demonstrate sufficient funds to cover project costs until federal reimbursements are available. Not only will limiting the City's work to match the federal and state funding amounts increase the total project cost, it is infeasible during the construction phase. In order for the City to complete the project in a timely and cost-effective manner, as well as take advantage of the low local match requirement, it will be necessary for the City to use the AC process.

The City's expenses related to the MICLA expenses (principal, cost of issuance and debt service) are allowable federal and state grant expenditures. This means that the City will eventually be fully reimbursed for these costs. The risk to the City of undertaking AC is that if federal funds are not provided, it would be necessary for the City to identify up to $359 million to complete the project or cancel the project. It is unlikely that the federal government would not provide the funding they have committed to this project, however, the timing and nature of a new federal surface transportation bill makes the receipt of the City's funds uncertain. A new federal transportation bill should be in place before the award of the construction contract for the bridge, however, it is possible that reauthorization will not take place until after the 2012 elections. Financial risk to the City could be mitigated if the award of the bridge construction contract occurs after Congress approves a new reauthorization of Federal surface transportation funding, although reimbursements would still lag behind expected expenditures. Staff recommends that the City Engineer be required to obtain Council authority before executing the construction contract for this project.

It is possible that additional federal dollars would be available annually and, if awarded to the City, could reduce the amount of the MICLA budget for this project. The City's financial exposure and need for MICLA funding may also be reduced if the City is awarded federal monies that are unspent by other jurisdictions. These additional federal monies are known as Additional Obligation Authority (OA) and the amount available annually ranges from $20 million

to $200 million statewide. This year, the amount of OA available for the SSBRP may be as high as $95 million and may be granted to the City if all our environmental documents are completed by August 2010.

In order for the SSVIP to move forward, Caltrans has requested that the City's governing body approve the use of local AC and the funding source, such as MICLA, as a cash flow source for the yearly project expenses that exceed the federal and state annual reimbursements. The City would assume responsibility for the project costs until all yearly state and federal allocations have been disbursed. As the project progresses, project budget authority responsibility shifts from the City to the federal funding until the federal and state monies fully fund the project. Other jurisdictions such as San Francisco, San Diego and Long Beach also have large-scale bridge replacement projects that are being constructed through the AC process.

MICLA Authority

As stated above, by approving the financial plan, the City is committing to cash flow project expenditures until annual federal and state reimbursements are available. The cash flow mechanism proposed is the issuance of up to $72.4 million in MICLA over the life of the project. This MICLA issuance falls into the City's 7.5 percent ceiling debt category because the issuance has dedicated funding repayment sources. The City has sufficient capacity within this category to proceed with the issuance. This MICLA issuance will not affect the City's self-imposed five percent ceiling on non-voter approved debt because, as noted above, the City's expenses related to the MICLA are allowable federal and state grant expenditures. It is estimated that, over the next six years, interest costs of $14 million will be financed by the General Fund and later reimbursed by the federal and state funding sources.

It is recognized that the MICLA requirement for this project is a significant commitment from the City. While there are a number of other capital projects that have been deferred because MICLA funding for these projects was suspended, the SSVIP is a high priority project with only a small portion of local funding required. It is important to note that the deferred capital projects were subject to the City's six percent ceiling on non-voter approved debt, which created additional General Fund debt. The MICLA authority recommended for this project will not be a long-term General Fund obligation.

BOE and their financial consultant prepared the following chart that shows annual anticipated project expenses, planned federal and state reimbursements, MICLA cash flow required and projected MICLA repayments:

Fiscal Year	Anticipated Expenses	Available Reimbursements	MICLA Cashflow Required	MICLA Payback
Prior yrs	$ 15.3	$ 15.3	$ 0.0	$ 0.0
2011	$ 41.0	$ 27.6	$ 13.4	$ 0.0
2012	$ 29.0	$ 27.6	$ 1.4	$ 0.0
2013	$ 21.8	$ 22.6	$ 0.0	$ 0.8
2014	$ 89.9	$ 73.4	$ 30.6	$ 14.1
2015	$ 75.0	$ 56.5	$ 18.5	$ 0.0
2016	$ 65.0	$ 56.5	$ 8.5	$ 0.0
2017	$ 11.2	$ 56.5	$ 0.0	$ 45.3
2018	$ 11.1	$ 23.3	$ 0.0	$ 12.2
Total	$ 359.3	$ 359.3	$ 72.4	$ 72.4

The tentative MICLA drawdown schedule assumes MICLA is used to fund project invoices and that federal and state reimbursements are processed and received within four months. The reimbursements would then be used to cash flow subsequent project invoices on a revolving basis until the annual federal and state reimbursement limits are reached. Once the annual reimbursements are exhausted, the City would use MICLA to cover additional invoices until the beginning of the next federal and state fiscal year when new annual allocations would be available.

RECOMMENDATIONS:

That the Council, subject to the approval of the Mayor:

1. AUTHORIZE the City Engineer to execute and submit an Advanced Construction Process financial plan for the Sixth Street Viaduct Improvement Project to the appropriate federal and state authorities for approval;

2. AUTHORIZE the issuance of up to $72.4 million in MICLA financing to cash flow the Sixth Street Bridge Project with the understanding that all of the City's costs related to this financing will be fully reimbursable from federal and state grants;

3. INSTRUCT the City Engineer to provide monthly updates on the status of this project to the Seismic Governance Committee and require a specific authorizing action by the City Council before each phase of the project is undertaken and prior to the award of the construction contract for this project.

FISCAL IMPACT

Use of $72.4 million in MICLA funding will require that the General Fund initially cash flow the interest costs associated with this transaction. The anticipated interest cost of $14 million is included in the total estimated cost of the project of $359.3 million. The project's federal and state grant funding sources will fully reimburse the City for these MICLA costs. In the unlikely event that a new federal transportation bill is not approved, the City would be responsible for either completing or canceling the project. We recommend that the City Engineer obtain City Council authority to award the construction contract for this project so that we can be assured that a new Federal surface transportation bill has been authorized by Congress by the construction award date.

Attachments:
6th Street Viaduct Seismic Improvement Project Initial Financial Plan
Bureau of Engineering Report-Authority to Issue Financing for the Replacement of the 6th Street Viaduct over the Los Angeles River-dated May 27, 2010.

MAS:GFM:LEH:MSR:05110002

CITY OF LOS ANGELES
INTER-DEPARTMENTAL CORRESPONDENCE

Date: May 27, 2010

To: Seismic Governance Committee
Ray Ciranna, Interim City Administrative Officer, Chair
Gerry F. Miller, Chief Legislative Analyst
Gary Lee Moore, City Engineer

From: Julie Sauter, Program Manager
Bridge Improvement Program
Bureau of Engineering

Subject: 6th Street Viaduct Seismic Improvement Project – Financial Plan and Recommendations for Project Financing

AUTHORITY TO ISSUE FINANCING FOR THE REPLACEMENT OF THE 6TH STREET VIADUCT OVER THE LOS ANGELES RIVER (BRIDGE NO. 53C-1880) AND THE 6TH STREET OVERCROSSING, WHICH IS A PORTION OF THE US 101 HOLLYWOOD FREEWAY (BRIDGE NO. 53-0595).

RECOMMENDATIONS

That the Seismic Governance Committee approve and recommend that the City Council:

1. Authorize up to $72.4 million of MICLA short term bonds to cover the anticipated cumulative annual federal and state funding allocation shortfalls for the project. The principle of these bonds as well as the issuance and interest costs, estimated at $14.0 million will be reimbursed by federal Highway Bridge Program (HBP) funds, matched by state Proposition 1B Local Bridge Seismic Retrofit Account (LBSRA) funds;
2. Approve the Advanced Construction funding plan shown in Table 1, "Project Funding Plan with Advanced Construction Authority by Phase". This table shows how Caltrans will approve funding for each phase of the project (i.e. ROW or Construction) and then allocate future years' funding through an "Advanced Construction Authority" mechanism. This authority also allows the City to qualify for the reimbursement of bond costs.

DISCUSSION

Background

The Sixth Street Viaduct Seismic Improvement Project is funded with state and federal funds, with a local City of Los Angeles match. The total project cost is estimated at $359.3 million, which includes financing costs. The City is contributing $4 million of the total project cost as

local match. The funding plan has been incorporated into the project's required Financial Plan[1]. The Financial Plan needs to be submitted before the project secures its environmental Record of Decision, anticipated in October 2010. Caltrans has approved the total funding for the project with federal HBP funds matched by state Proposition 1B LBSRA funds. These funds are stretched out over a longer time period than the project's cash flow requires. Therefore, the City will need to finance a portion of the cash flow to keep the project on schedule.

Funding Plan

The following charts show the project costs and the funding plan. These assumptions, including the need to finance the cash flow, as described in the next section, are included in the Project's Financial Plan.

Chart 1: Project Costs

PROJECT PHASE	COST (escalated)
PA & ED (Project Approval and Environmental Doc)	$ 15,316,356
Final Design (Plans, Spec. & Estimates)	10,000,000
ROW (Right of Way)	81,833,000
Financing Costs	2,890,395
Detour and Demo of Existing Viaduct	12,548,466
Reconstruction of Viaduct	210,506,290
CE (Construction Support)	15,145,000
Financing Costs	11,086,247
Total Project Cost	$ 359,325,754

[1] The Draft Financial Plan for the Sixth Street Viaduct Seismic Improvement Project has been prepared in accordance with federal requirements and consistent with FHWA Financial Plan Guidance. Federal Highway Administration (FHWA) issued a Memorandum *"Project Financial Plan Requirements under SAFETEA-LU"* which directed every state Department of Transportation (DOT) and public agency receiving federal highway funds to prepare Project Financial Plans for projects between $100 and $500 million in accordance with the FHWA Financial Plan Guidance issued May 2000 and updated on January 2007. This plan must be accepted by Caltrans before the project's environmental plan can be certified.

Chart 2: Project Funding Plan

Fund No.	Fund Title	Dept. No.	Acc't. No.	Total
	Federal Highway Bridge Program (HBP) Funds			**$ 304.4 million**
	State Proposition 1B Bridge Seismic (LBSRA) Funds			**$ 36.7 million**
	City Matching Funds – Prop. C Line Item, CIEP and Prop. G Seismic Bond			**$ 4.0 million**
	Other State Funds			**$ 0.2 million**
	Reimbursement of Bond Financing Costs (Federal HBP with State Prop 1B LBSRA match)			**$ 14.0 million**
	Total, Funding			**$ 359.3 million**

Financing Needs

The following sections discuss:

- The federal and state funding allocation shortfalls and how they would be mitigated with MICLA bonds;
- A way to accelerate state and federal funding and thereby reduce MICLA bonds needs;
- The monthly invoice reimbursement assumptions; and
- Advanced Construction Authority (AC).

Federal and State Funding Allocation Shortfalls and Need for MICLA Bonds: Caltrans has agreed to program full funding for the 6th Street Viaduct Project, but stretched out over a longer time period. This allocation plan does not fit the Project's cash flow needs but fully funds the project over time. In order to keep the Project on schedule, the City would need to issue bonds (i.e. MICLA) in the early years of the project and be paid back by the federal and state funds in the later years of the project.

The federal guidelines allow the federal HBP grant, matched by Proposition 1B funds, to pay back the bonds proceeds as well as the issuance and interest costs.[2]

[2] States and public agencies can now receive Federal-aid reimbursements for a wide array of debt-related costs incurred in connection with an eligible debt financing instrument, such as a bond, note, certificate, mortgage, or lease, the proceeds of which are used to fund a project eligible for assistance under Title 23. The issuer may be a state, political subdivision, or a public authority.

The $72.4 million the City will need in MICLA bonds is the gap between the required funding and the yearly reimbursement as follows and shown in Chart 4:

- The annual gaps in funding are projected to be $13.4 million in 2011, $1.4 million in 2012, $30.6 million in 2014, $18.5 in 2015 and $8.5 million in 2016, for a total of $72.4 million.
- The projected payback would be $0.7 million in 2013, $14 million in 2014, $45.4 million in 2017 and $12.2 million in 2018, for a total of $72.4 million.

Chart 5 shows when the MICLA bonds would be used and the assumed interest costs that would be reimbursed. For this analysis, 5% interest costs, or a total of $14 million, were conservatively assumed for MICLA bonds. The actual interest and issuance costs would be reimbursed by state (Prop. 1B) and federal (HBP) funds.

Ability to Accelerate Funds from Caltrans: Caltrans has restricted the funding each year to the amounts listed in Table 2. But, each year, the City has potential to request additional funds that other jurisdictions are unable to use. The overall state and federal funding for the 6th Street Viaduct project would not increase, but the amounts per year could be accelerated. If the City successfully petitioned and received these funds, then the City could potentially reduce the amount of MICLA funding it would need to borrow. The City will still need the authority for the $72 million of MICLA bonds and will monitor the actual cash needs on a quarterly basis.

Monthly Invoice Reimbursement Delays: For the funds that will be available each year according to Caltrans, staff has conservatively assumed that the reimbursement of monthly invoices will be delayed by four months each during the Right-of-Way (ROW) phase and three months each during the Construction phase. The Public Works Trust Fund will be used, up to a maximum balance at any time of $10 million, to cover any potential delays in invoice reimbursements.

Advanced Construction Authority (AC): Table 1 shows how all of the funding is authorized by Caltrans on a phase by phase (ROW, construction, etc.) basis. It also reflects how the 6th Street Viaduct project is listed in the Federal Transportation Improvement Program (FTIP).

At the time of the authorization for each phase, Caltrans will allocate the first year's funding and then show the subsequent years' funding as "Advanced Construction Authority" or "AC". Caltrans then allocates funds on a year by year basis until all funds are allocated.

Advanced Construction Authority (AC) is a way for Caltrans to program the full, multiyear funding commitments for the project while allocating funds on a year to year basis. It does not

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This change to the Federal-aid program was codified into permanent highway law as an amendment to Section 122 of Title 23 U.S.C. Bond-related costs now eligible for Federal-aid reimbursement include interest payments, retirement of principal, and any other cost incidental to the sale of an eligible bond issue.

The FHWA guidance states that the project must be approved as a Federal-aid debt-financed (bond, certificate, note, or other debt instrument) project in order to receive payments for eligible debt-related costs under section 122. With the approval of the 6th St. Financial Plan, Caltrans will approve the project as a Federal-aid debt-financed project.

require more City MICLA funds nor does it change the funding plan in Table 2. This authority does allow the City to qualify for the reimbursement of any MICLA bond issuance and interest costs.

In the unlikely event that the state or federal government would no longer have a transportation funding program, then Caltrans could not allocate the future years' funding for the project. In that case, the City would have the option to defer or cancel the project.

Timeline

The Finance Plan, which includes the assumptions for financing, must be submitted to and accepted by Caltrans prior to the certification of the 6th Street Viaduct Project environmental document, anticipated in October 2010. The Draft Financial Plan has been submitted to Caltrans for their review and Caltrans has prepared a draft approval letter. The Caltrans approval letter will be finalized once the City approves the recommendations in this report for financing and Advanced Construction Authority.

Attachments:

Attachment A:

- Table 1, Project Funding Plan with Advanced Construction Authority by Phase
- Table 2, Summary of cash flow and financing needs – costs and funding by fiscal year.
- Table 3, Right-of-Way financing needs
- Table 4, Construction financing needs

Attachment B:

- 6th Street Viaduct Seismic Improvement Project Fact Sheet

c: Councilmember Jose Huizar
A. Cubas / P. Habib – CD14
J. Koo / D. Weintraub – BOE
J. Gibson / P. Smith – CLA
M. Cardenas / L. Hancock – CAO

Chart 4: Annual Funding Shortfalls and Reimbursement Schedule

Annual Funding Shortfalls and Reimbursements ($ in 000's)									
Fiscal Year	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	Total
Shortfalls	$ (13,401)	$ (1,401)		$ (30,551)	$ (18,503)	$ (8,503)			$ (72,359)
Reimbursements			$ 766	$ 14,036			$ 45,346	$ 12,211	$ 72,359

Chart 5: Recommended City of LA Financing to Keep 6th Street Viaduct Project on Schedule

Recommended City of LA Financing by Project Phase ($ in 000's)									
Project Phase	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	Total
ROW									
MICLA Bond Issue (July)	$ 13,401								$ 13,401
Interest Costs	670	670	670	670	-	-	-	-	2,680
MICLA Bond Issue (July)		1,401							1,401
Interest Costs		70	70	70	-	-	-	-	210
Total Bond Proceeds-ROW	13,401	1,401	-	-	-	-	-	-	14,802
Total Interest Costs-ROW	670	740	740	740	-	-	-	-	2,890
Construction									
MICLA Bond Issue (July)				30,551					30,551
Interest Costs				1,528	1,528	1,528	1,528	-	6,110
MICLA Bond Issue (July)					18,503				18,503
Interest Costs					925	925	925	925	3,701
MICLA Bond Issue (July)						8,503			8,503
Interest Costs						425	425	425	1,275
Total Bond Proceeds-CON	-	-	-	30,551	18,503	8,503	-	-	57,557
Total Interest Costs-CON	-	-	-	1,528	2,453	2,878	2,878	1,350	11,086
ROW and Construction									
Total Bond Proceeds	$ 13,401	$ 1,401	$ -	$ 30,551	$ 18,503	$ 8,503	$ -	$ -	$ 72,359
Total Interest Costs	$ 670	$ 740	$ 740	$ 2,268	$ 2,453	$ 2,878	$ 2,878	$ 1,350	$ 13,977

Table 1: Programmed Costs and Funding Sources

Phase Summary	Fiscal Year 2007-08 & Prior	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	Beyond	Total
PE	$ 16,000,000	$ 9,316,356	$ -	$ -	$ -	$ -	$ -	$ -	$ 25,316,356
ROW	-	-	-	84,723,395	-	-	-	-	84,723,395
Construction and CE	-	-	-	-	-	-	249,286,003	-	249,286,003
Total -->	$ 16,000,000	$ 9,316,356	$ -	$ 84,723,395	$ -	$ -	$ 249,286,003	$ -	$ 359,325,754

Fund Source Summary	Fiscal Year 2007-08 & Prior	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	Beyond	Total
Fed $	$ 12,800,000	$ 7,453,085	$ (6,000,000)	$ 28,853,000	$ 20,000,000	$ 20,000,000	$ 65,005,622	$ 170,692,893	$ 316,804,605
Local Match	3,200,000	1,863,271	(853,000)	7,126,561	(2,591,212)	(2,591,212)	20,178,538	(22,115,675)	4,218,271
LSSRP Bond	-	-	-	2,591,212	2,591,212	2,591,212	8,422,167	22,115,675	38,310,878
Local AC	-	-	6,853,000	45,152,622	(20,000,000)	(20,000,000)	155,687,276	(170,692,893)	-
Total -->	$ 16,000,000	$ 9,316,356	$ -	$ 84,723,395	$ -	$ -	$ 249,286,003	$ -	$ 359,325,754

PE Summary	Fiscal Year 2007-08 & Prior	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	Beyond	Total
Fed $	$ 12,800,000	$ 7,453,085	$ (6,000,000)	$ 8,853,000					$ 21,106,085
Local Match	3,200,000	1,863,271	(853,000)						4,210,271
LSSRP Bond									-
Local AC			6,853,000	(6,853,000)					-
Total -->	$ 16,000,000	$ 9,316,356	$ -	$ -	$ -	$ -	$ -	$ -	$ 25,316,356

ROW Summary	Fiscal Year 2007-08 & Prior	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	Beyond	Total
Fed $				$ 20,000,000	$ 20,000,000	$ 20,000,000	$ 15,005,622		$ 75,005,622
Local Match				7,126,561	(2,591,212)	(2,591,212)	(1,944,137)		-
LSSRP Bond				2,591,212	2,591,212	2,591,212	1,944,137		9,717,773
Local AC				55,005,622	(20,000,000)	(20,000,000)	(15,005,622)		-
Total -->	$ -	$ -	$ -	$ 84,723,395	$ -	$ -	$ -	$ -	$ 84,723,395

Construction Summary	Fiscal Year 2007-08 & Prior	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	Beyond	Total
Fed $							$ 50,080,000	$ 170,692,893	$ 220,692,893
Local Match							22,115,675	(22,115,675)	-
LSSRP Bond							6,478,030	22,115,675	28,593,105
Local AC							170,692,898	(170,692,898)	-
Total -->	$ -	$ -	$ -	$ -	$ -	$ -	$ 249,286,003	$ -	$ 249,286,003

Local AC: Local Advanced Construction Authority

Data replicated from Caltrans summary of 2008/9-2013/14 Highway Bridge Program, dated 3/24/2010.

This chart is the Caltrans Federal Transportation Improvement Program (FTIP) listing for this project.

Attachment A

6th Street Viaduct Project Financial Charts

Table 2: 6th Street Viaduct Project Cash Flow and Financing Requirements

PHASE	Fiscal Year 2007-08 & Prior	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	Total
PA/ED (Proj Approval and Envir Doc)	$ 8,438,785	$ 2,763,245	$ 4,114,326	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 15,316,356
Final Design (PS&E)	-	-	-	5,000,000	5,000,000	-	-	-	-	-	-	10,000,000
Subtotal, PA/ED and PS&E —>	8,438,785	2,763,245	4,114,326	5,000,000	5,000,000	-	-	-	-	-	-	25,316,356
ROW (Right of Way)	-	-	-	36,000,000	24,000,000	21,833,000	-	-	-	-	-	81,833,000
ROW Financing Costs	-	-	-	-	-	-	2,890,395	-	-	-	-	2,890,395
Subtotal, ROW —>	-	-	-	36,000,000	24,000,000	21,833,000	2,890,395	-	-	-	-	84,723,395
CONSTRUCTION COST (CON)												
Detour and Demo of Existing Viaduct	-	-	-	-	-	-	12,548,466	-	-	-	-	12,548,466
Reconstruction of Viaduct	-	-	-	-	-	-	70,000,000	70,000,000	60,000,000	10,506,290	-	210,506,290
CE (Construction Support)	-	-	-	-	-	-	4,500,000	5,000,000	5,000,000	645,000	-	15,145,000
Construction Financing Costs	-	-	-	-	-	-	-	-	-	-	11,086,247	11,086,247
Subtotal, Construction and CE—>	-	-	-	-	-	-	87,048,466	75,000,000	65,000,000	11,151,290	11,086,247	249,286,003
Total Project & Financing Costs	$ 8,438,785	$ 2,763,245	$ 4,114,326	$ 41,000,000	$ 29,000,000	$ 21,833,000	$ 89,938,861	$ 75,000,000	$ 65,000,000	$ 11,151,290	$ 11,086,247	$ 359,325,754

FUNDING	Fiscal Year 2007-08 & Prior	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	Total
Highway Bridge Program (HBP) - PA/ED/PS&E	$ 6,751,828	$ 2,210,596	$ 3,291,461	$ 4,426,500	$ 4,426,500	$ -	$ -	$ -	$ -	$ -	$ -	$ 21,106,885
Highway Bridge Program (HBP) - ROW	-	-	-	20,000,000	20,000,000	20,000,000	12,446,755	-	-	-	-	72,446,755
Highway Bridge Program (HBP) - Construction	-	-	-	-	-	-	50,000,000	50,000,000	50,000,000	50,000,000	10,678,244	210,678,244
Highway Bridge Program (HBP) - Financing Costs	-	-	-	-	-	-	2,558,867	-	-	-	9,814,654	12,373,521
Subtotal, HBP Funds —>	6,751,828	2,210,596	3,291,461	24,426,500	24,426,500	20,000,000	65,005,622	50,000,000	50,000,000	50,000,000	20,492,898	316,804,605
Prop 1B Local Bridge Seismic Retrofit- ROW	-	-	-	2,598,870	2,598,870	2,598,870	1,845,504					9,642,115
Prop. 1B Local Bridge Seismic Retrofit- Const							6,241,306	6,497,175	6,497,175	6,497,175	1,232,811	27,065,643
Prop 1B Local Bridge Seismic Retrofit- Financing Costs	-	-	-	-	-	-	331,528	-	-	-	1,271,593	1,603,121
Subtotal, Prop 1B Funds —>	-	-	-	2,598,870	2,598,870	2,598,870	8,418,339	6,497,175	6,497,175	6,497,175	2,504,404	38,310,878
Other State Funds	200,000	-	-	-	-	-	-	-	-	-	-	200,000
City Matching Funds	1,487,757	552,649	822,865	573,500	573,500	-	-	-	-	-	-	4,010,271
												-
Total Funding	$ 8,438,785	$ 2,763,245	$ 4,114,326	$ 27,598,870	$ 27,598,870	$ 22,598,870	$ 73,423,961	$ 56,497,175	$ 56,497,175	$ 56,497,175	$ 23,297,302	$ 359,325,754
Local Bonds	-	-	-	13,401,130	1,401,130	-	30,551,291	18,502,825	8,502,825	-	-	72,359,200
Payback of Local Bonds	-	-	-	-	-	765,870	14,036,390	-	-	45,345,885	12,211,055	72,359,200
Cumulative Balance	$ -	$ -	$ -	$ 13,401,130	$ 14,802,260	$ 14,036,390	$ 30,551,291	$ 49,054,116	$ 57,556,941	$ 12,211,056	$ 1	$ 1
Project Costs	8,438,785	2,763,245	4,114,326	41,000,000	29,000,000	21,833,000	87,048,466	75,000,000	65,000,000	11,151,290	-	345,349,112
Financing Costs-Interest Only*	-	-	-	-	-	-	2,890,395	-	-	-	11,086,247	13,976,642
Total Project & Financing Costs	$ 8,438,785	$ 2,763,245	$ 4,114,326	$ 41,000,000	$ 29,000,000	$ 21,833,000	$ 89,938,861	$ 75,000,000	$ 65,000,000	$ 11,151,290	$ 11,086,247	$ 359,325,754

* Financing costs (interest and issuance costs) from local bonds/financing will be reimbursed by HBP funds, matched by Prop. 1B funds; assumes 5% APR (issuance costs not calculated but actual costs would be reimbursed).

Table 3: 6th Street Viaduct Project Cash Flow and Financing Requirements - ROW
Reimbursement Turnaround Scenario: 4-Months

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Invoice Period	Month	Project Cost Monthly	Project Cost Annual	MICLA Interest Cost Only	MICLA Interest Cost Annual	Total Project & MICLA Interest Cost Monthly	Total Project & MICLA Interest Cost Annual	MICLA Proceeds	MICLA Payback	HBP/Prop 1B Reimbursement Monthly	Project Costs Balance	PWTF Loan Balance
1	Oct-2010	$ 3,000,000				$ 3,000,000		$ 13,401,130	$ -		10,401,130	-
2	Nov-2010	3,000,000				3,000,000					7,401,130	-
3	Dec-2010	3,000,000		167,514		3,167,514					4,233,616	-
4	Jan-2011	3,000,000	start RW			3,000,000					1,233,616	-
5	Feb-2011	3,000,000				3,000,000				3,000,000	1,233,616	-
6	Mar-2011	3,000,000		167,514		3,167,514				2,000,000	1,066,102	-
7	Apr-2011	3,000,000				3,000,000				3,167,514	1,233,616	-
8	May-2011	3,000,000				3,000,000				3,000,000	1,233,616	-
9	Jun-2011	3,000,000		167,514		3,167,514				3,000,000	1,066,102	-
10	Jul-2011	3,000,000				3,000,000				3,167,514	1,233,616	-
11	Aug-2011	3,000,000				3,000,000				3,000,000	1,233,616	-
12	Sep-2011	3,000,000	36,000,000	167,514	670,056	3,167,514	38,670,056			1,233,842	(670,056)	670,056
13	Oct-2011	2,000,000				2,000,000		1,401,130		4,903,672	3,634,746	-
14	Nov-2011	2,000,000				2,000,000				3,000,000	4,634,746	-
15	Dec-2011	2,000,000		185,028		2,185,028				3,000,000	5,449,718	-
16	Jan-2012	2,000,000				2,000,000				2,167,514	6,617,232	-
17	Feb-2012	2,000,000				2,000,000				2,000,000	6,617,232	-
18	Mar-2012	2,000,000		185,028		2,185,028				2,000,000	6,432,203	-
19	Apr-2012	2,000,000				2,000,000				2,185,028	6,617,232	-
20	May-2012	2,000,000				2,000,000				2,000,000	6,617,232	-
21	Jun-2012	2,000,000		185,028		2,185,028				342,655	4,774,859	-
22	Jul-2012	2,000,000				2,000,000					2,774,859	-
23	Aug-2012	2,000,000				2,000,000					774,856	-
24	Sep-2012	2,000,000	24,000,000	185,028	740,113	2,185,028	24,740,113				(1,410,168)	1,410,169
25	Oct-2012	1,819,417				1,819,417				10,627,401	6,797,815	-
26	Nov-2012	1,819,417				1,819,417				2,000,000	6,978,398	-
27	Dec-2012	1,819,417		185,028		2,004,445				2,000,000	6,973,954	-
28	Jan-2013	1,819,417				1,819,417				2,185,028	7,339,585	-
29	Feb-2013	1,819,417				1,819,417				1,819,417	7,339,585	-
30	Mar-2013	1,819,417		185,028		2,004,445				1,819,417	7,154,537	-
31	Apr-2013	1,819,417				1,819,417				2,004,445	7,339,585	-
32	May-2013	1,819,417				1,819,417				743,162	6,263,311	-
33	Jun-2013	1,819,417		185,028		2,004,445					4,258,866	-
34	Jul-2013	1,819,417				1,819,417					2,439,449	-
35	Aug-2013	1,819,417				1,819,417					620,032	-
36	Sep-2013	1,819,417	21,833,000	185,028	740,113	2,004,445	22,573,113		$785,870		(2,150,282)	2,156,282
37	Oct-2013					-				10,543,394	8,393,111	-
38	Nov-2013					-				1,819,417	10,212,528	-
39	Dec-2013			185,028		185,028				1,819,417	11,846,916	-
40	Jan-2014					-				2,004,445	13,851,361	-
41	Feb-2014					-				-	13,851,361	-
42	Mar-2014			185,028		185,028				-	13,666,333	-
43	Apr-2014					-				185,028	13,851,361	-
44	May-2014					-				-	13,851,361	-
45	Jun-2014			185,028		185,028				-	13,666,333	-
46	Jul-2014					-				185,028	13,851,361	-
47	Aug-2014					-				-	13,851,361	-
48	Sep-2014		-	185,028	740,113	185,028	740,113		$14,096,390	-	(378,057)	378,057
49	Oct-2014									185,028	(185,029)	185,029
50	Nov-2014									-	(185,029)	185,029
51	Dec-2014									-	(185,029)	185,029
52	Jan-2015									185,028	(0)	0
53	Feb-2015									-	(0)	0
54	Mar-2015									-	(0)	0
	TOTAL		$ 81,833,000	$ 81,833,000	$ 2,890,395	$ 2,890,395	$ 84,723,395	$ 84,723,395	$ 14,882,260	$ 14,882,260	$ 84,723,395	n/a	n/a

Table 4: 6th Street Viaduct Project Cash Flow and Financing Requirements – CONSTRUCTION & CE SUPPORT
Reimbursement Turnaround Scenario: 3-Months

(1) Invoice Period	(2) Month	(3) Project Cost Monthly	(4) Project Cost Annual	(5) MICLA Interest Cost Only	(6) MICLA Interest Cost Annual	(7) Total Project & MICLA Interest Cost Monthly	(8) Total Project & MICLA Interest Cost Annual	(9) MICLA Proceeds	(10) MICLA Payback	(11) HBP/Prop 1B Reimbursement Monthly	(12) Project Costs Balance	(13) PWTF Loan Balance
1	Dec-2013	$ 8,704,847		381,891		$ 9,086,738		$ 37,551,321	$ -		21,484,553	-
2	Jan-2014	8,704,847				8,704,847					12,759,707	-
3	Feb-2014	8,704,847				8,704,847					4,054,860	-
4	Mar-2014	8,704,847		381,891		9,086,738				9,086,738	4,054,860	-
5	Apr-2014	8,704,847				8,704,847				8,704,847	4,054,860	-
6	May-2014	8,704,847				8,704,847				8,704,847	4,054,860	-
7	Jun-2014	8,704,847		381,891		9,086,738				9,086,738	4,054,860	-
8	Jul-2014	8,704,847				8,704,847				8,704,847	4,054,860	-
9	Aug-2014	8,704,847				8,704,847				8,704,847	4,054,860	-
10	Sep-2014	8,704,847	87,048,465	381,891	1,527,565	9,086,738				9,086,738	4,054,860	-
11	Oct-2014	6,250,000				6,250,000		31,502,025		8,704,847	25,612,531	-
12	Nov-2014	6,250,000				6,250,000				8,704,847	27,457,378	-
13	Dec-2014	6,250,000		613,176		6,863,176				9,086,738	25,890,939	-
14	Jan-2015	6,250,000				6,250,000				6,250,000	29,830,939	-
15	Feb-2015	6,250,000				6,250,000				6,250,000	29,830,939	-
16	Mar-2015	6,250,000		613,176		6,863,176				6,863,176	28,830,939	-
17	Apr-2015	6,250,000				6,250,000				5,935,143	28,495,683	-
18	May-2015	6,250,000				6,250,000					22,245,683	-
19	Jun-2015	6,250,000		613,176		6,863,176					15,382,506	-
20	Jul-2015	6,250,000				6,250,000					9,132,506	-
21	Aug-2015	6,250,000				6,250,000					2,882,506	-
22	Sep-2015	6,250,000	75,000,000	613,176	2,452,706	6,863,176					(3,980,270)	3,980,270
23	Oct-2015	5,416,667				5,416,667		18,302,595		36,823,210	38,227,897	-
24	Nov-2015	5,416,667				5,416,667				6,250,000	32,860,431	-
25	Dec-2015	5,416,667		719,462		6,136,129				6,863,176	40,567,479	-
26	Jan-2016	5,416,667				5,416,667				3,462,759	35,633,601	-
27	Feb-2016	5,416,667				5,416,667					33,216,935	-
28	Mar-2016	5,416,667		719,462		6,136,129					27,080,808	-
29	Apr-2016	5,416,667				5,416,667					21,664,139	-
30	May-2016	5,416,667				5,416,667					16,247,473	-
31	Jun-2016	5,416,667		719,462		6,136,129					10,111,344	-
32	Jul-2016	5,416,667				5,416,667					4,694,678	-
33	Aug-2016	5,416,667				5,416,667					(721,989)	721,989
34	Sep-2016	5,416,667	65,000,000	719,462	2,877,847	6,136,129					(6,858,117)	6,858,117
35	Oct-2016	929,274				929,274				38,497,175	48,729,784	-
36	Nov-2016	929,274				929,274					47,782,509	-
37	Dec-2016	929,274		719,462		1,648,736					46,133,774	-
38	Jan-2017	929,274				929,274					45,202,499	-
39	Feb-2017	929,274				929,274					44,273,225	-
40	Mar-2017	929,274		719,462		1,648,736					42,624,489	-
41	Apr-2017	929,274				929,274					41,695,215	-
42	May-2017	929,274				929,274					40,765,941	-
43	Jun-2017	929,274		719,462		1,648,736					39,117,205	-
44	Jul-2017	929,274				929,274					38,187,931	-
45	Aug-2017	929,274				929,274					37,258,657	-
46	Sep-2017	929,274	11,151,288	719,462	2,877,847	1,648,736			30,651,291		5,058,630	-
47	Oct-2017					-				19,359,509	24,427,839	-
48	Nov-2017					-				929,274	25,358,613	-
49	Dec-2017			675,141		675,141				1,648,736	26,332,508	-
50	Jan-2018					-				-	26,332,508	-
51	Feb-2018					-				-	26,332,508	-
52	Mar-2018			675,141		675,141			37,005,050	675,141	(675,142)	675,142
53	Apr-2018					-				-	(675,142)	675,142
54	May-2018					-				-	(675,142)	675,142
55	Jun-2018					-				675,141	(0)	0
56	Jul-2018					-				-	(0)	0
57	Aug-2018					-				-	(0)	0
58	Sep-2018				1,350,282	-				-	(0)	0
59	Oct-2018					-				-	(0)	0
60	Nov-2018					-				-	(0)	0
61	Dec-2018					-				-	(0)	0
62	Jan-2019					-				-	(0)	0
63	Feb-2019					-				-	(0)	0
64	Mar-2019					-					(0)	0
65	Apr-2019					-					(0)	0
											(0)	0
TOTAL		$ 238,199,758	$ 238,199,758	$ 11,086,247	$ 11,086,247	$ 249,286,005	$ -	$ 87,355,941	$ 87,355,941	$ 249,286,003	n/a	n/a

Attachment B

6th Street Viaduct Project Fact Sheet

City of Los Angeles
6th Street Viaduct Seismic Improvement Project

PROJECT LOCATION/DESCRIPTION

- Located in a highly urbanized area just east of Downtown Los Angeles.
- Spans (Project length approximately 1 mile)
  - *Hollywood Freeway (US 101)*
  - *Los Angeles River*
  - *Union Pacific, Metrolink and future California High Speed Rail*
  - *Local streets*

ASR deterioration makes 6th Street Viaduct unique in funding priority

FUNDING IS CRITICAL FOR SEISMIC SAFETY

- Viaduct was built in 1932, one of the oldest on system.
- Prop 1B project located in the highest population zone.
- Longest most complex right-of-way Prop 1B project.
- One of the most seismic vulnerable not retrofitted or replaced.
  - *70% probability of failure for a design level earth quake within 50 years and the probability increases every year!*
  - *Severe concrete deterioration from Alkali Silica Reactivity (ASR) continues to weaken the structure!*
  - *Collapse due to seismic vulnerabilities or ASR deterioration will have a major impact on transportation corridors!*
- Roadway geometric deficiencies contribute to on-going traffic accidents.

FUNDING SOURCE	TOTAL (millions)
Federal Highway Bridge Program (HBP) Funds*	$316.7
Prop. 1B Local Bridge Seismic (LBSRA) Funds*	38.4
Other State Funds	0.2
City Matching Funds	4.0
PROJECT FUNDING TOTAL	$359.3

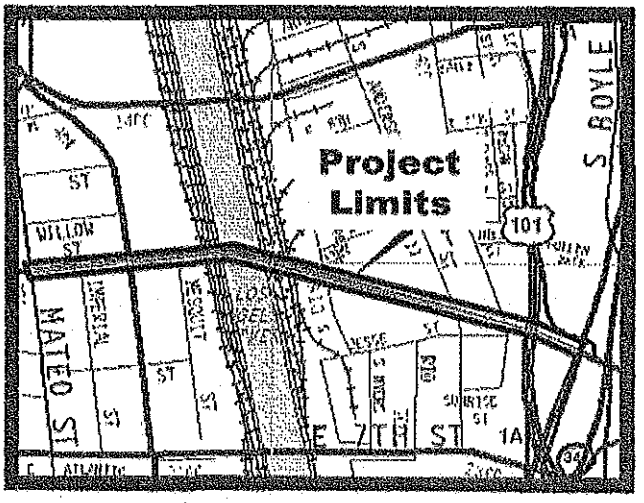
* Includes reimbursement of City financing costs

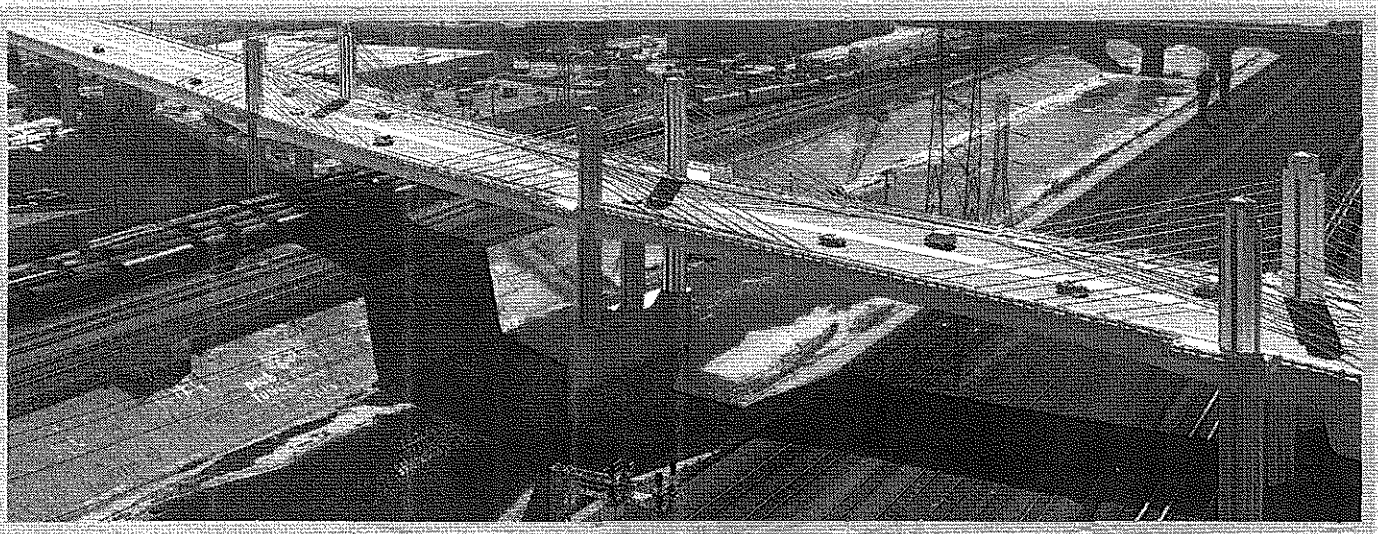
COMMITMENT OF FUNDING ENSURES SEISMIC SAFETY

- The project costs have increased by $104.6 million
- Factors for cost increase:
  - *Public input on maintaining the signature nature of the existing bridge*
  - *Increased right-of-way needs*

PROJECT SCHEDULE IS "COMPETING AGAINST TIME"

Construction Start	**December 2013**
Construction Completion	**December 2016**





6th Street Viaduct Seismic Improvement Project

City of Los Angeles, Los Angeles County, California

DISTRICT 7 - Bridge Nos. 53C-1880 and 53-0595

Federal Project No.:

BRLSZD 5006 (342-664)

INITIAL FINANCIAL PLAN

Prepared by the
City of Los Angeles
July 2010

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FIGURES

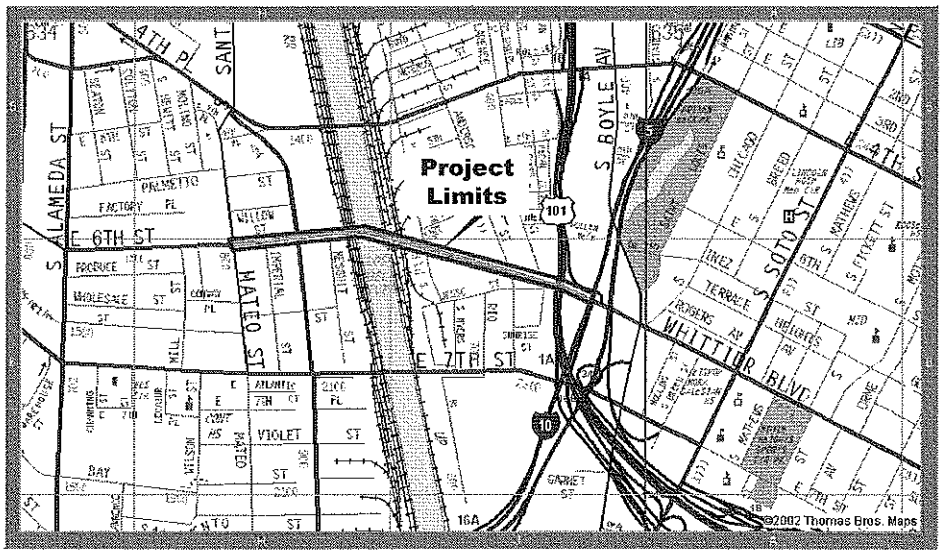
TABLES

1. BACKGROUND

On December 8, 2005, the Federal Highway Administration (FHWA) issued a Memorandum *"Project Financial Plan Requirements under SAFETEA-LU"* which directed every state Department of Transportation (DOT) to prepare Project Financial Plans for projects between $100 and $500 million in accordance with the FHWA Financial Plan Guidance issued May 2000 and updated on January 2007.

This document will provide detailed construction and support cost, schedule and revenue projections for the $359.3 million bridge viaduct project located in downtown Los Angeles.

Plan Update Schedule: The Initial Financial Plan for the Sixth Street Viaduct Seismic Improvement Project has been prepared in accordance with the FHWA guidance. The Final Financial Plan will be prepared prior to the request for federal construction funds. The Plan will be updated annually effective October 1, 2011 and every year thereafter and whenever there is a significant change to the project scope and/or budget.



Thomas Bros Map
Los Angeles County Page 634, Grid H-6

Figure 1, Project Location Map

Adherence to Federal Financial Plan Guidance

This Plan has been prepared in accordance with the requirements of Section 106, Title 23, and the Initial Financial Plan guidance issued by the Federal Highway Administration. The plan provides detailed cost estimates to complete the project and the estimates of financial resources to be utilized to fully finance the project. The federal guidance Attachment C checklist is attached as Appendix C of this report.

The cost data in the Initial Financial Plan provide an accurate accounting of costs incurred to date and include a realistic estimate of future costs based on engineers' estimates and expected construction cost escalation factors. While the estimates of financial resources rely upon assumptions regarding future economic conditions and demographic variables, they represent realistic, estimates of available monies to fully fund the project.

We believe the Initial Financial Plan provides an accurate basis upon which to schedule and fund the 6th Street Seismic Safety Improvement Project. The City of Los Angeles will prepare a final Financial Plan in advance of the construction phase and will review and update the Financial Plan on an annual basis, beginning the year following the final Financial Plan.

To the best of our knowledge and belief, the Initial Financial Plan as submitted herewith, fairly and accurately presents the financial position of the 6th Street Seismic Safety Improvement Project cash flows and expected conditions for the project's life cycle. The financial forecasts in the Initial Financial Plan are based on our judgment of the expected project conditions and our expected course of action.

We believe that the assumptions underlying the Initial Financial Plan are reasonable and appropriate. Further, we have made available all significant information that we believe is relevant to the Initial Financial Plan and, to the best of our knowledge and belief, the documents and records supporting the assumptions are appropriate.

Project Description

The California Department of Transportation (Caltrans) and the City of Los Angeles (City) propose to undertake the replacement of the 6th Street Viaduct over the Los Angeles River (Bridge No. 53C-1880) and the 6th Street Overcrossing, which is a portion of the US 101 Hollywood Freeway (Bridge No. 53-0595).

The 6th Street Viaduct and 6th Street Overcrossing comprise a single structure that spans a portion of the Hollywood Freeway (US 101), the Los Angeles River, city streets, and Union Pacific and Metrolink railroad tracks. The structure is located in a highly urbanized area just east of Downtown Los Angeles and connects Downtown Los Angeles on the west side of the river with the Boyle Heights community on the east side of the river.

An approximate 3,264-ft-long segment of the viaduct is owned by the City, and the 235-ft-long portion overcrossing US 101 is owned by Caltrans.

Purpose and Need

The purpose of the proposed project is to:

- Preserve 6th Street as a viable east-west link between Boyle Heights and Downtown Los Angeles;
- Reduce vulnerability of the 6th Street Viaduct in major earthquake events; and
- Resolve design deficiencies of the 6th Street Viaduct.

The 6th Street Viaduct was built in 1932. It is one of the oldest bridge structures in the state and spans more than 3500 feet. It is one of the longest bridges on the Prop 1B Seismic Match list in the highest population zone.

The 6th Street Bridge is one of the most vulnerable, locally owned bridges in California. Not only is it listed on Caltrans' mandatory seismic retrofit list, analyses performed indicate that this bridge has a 70% probability of failure for a design level earthquake within the next 50 years and the probability increases every year.

Closure or collapse of this structure would have a major impact on transportation corridors.

The 6th Street Viaduct suffers from a condition known as ASR (Alkali Silica Reactivity) which is essentially a concrete "cancer" that over time weakens concrete's strength and limits the ability to retrofit the bridge to current standards. There are no known methods to reverse or stop the ASR attack to the existing structure. Laboratory testing indicates that deterioration due to ASR will continue, furthering the structure's vulnerability to collapse in a seismic event.

The city proposes to replace the structure to address the deficiencies stated above.

Project Milestone Dates

The following activities have been completed on this project:

- Seismic Strategy Study
- Materials Study to characterize the ASR
- Technical Studies in Support of the Environmental Document
- Alignment Alternative evaluation including screening study
- Alternative Bridge Type evaluation including screening study
- Community outreach activities
- Bridge Advance Planning Study
- Preliminary ROW Relocation Report
- Preliminary Geotechnical and Foundation Report
- Preliminary Hazardous Materials Study
- Preliminary Roadway Design
- Administrative Draft EIR/EIS document

The following are the project milestone dates based on design sequencing method of delivery:

- Project Approval and Environmental Document (PA&ED) Sept 2010
- Completion of PS&E Jul 2013
- Right of Way Certification Sep 2013
- Ready to Advertise – Demolition and Bridge Construction Oct 2013
- Begin Construction - Demolition and Bridge Construction Dec 2013
- End Construction Dec 2016

2. COST ESTIMATE

This document represents the Initial Financial Plan for the Sixth Street Viaduct Project. Per FHWA guidance, this cost estimate is in the year of expenditure dollars that already takes inflation into account. The year of expenditure for this report is FY 2009, which is from July 1, 2008 to June 30, 2009. The cost estimate is based on Structures Advance Planning Studies that is 90% complete at the time of the cost estimate in July 2008. Right of way and construction have not taken place.

The cost estimates presented in this report are for present day costs (end of 2007) using 10% mobilization and 25% for construction contingencies. Right-of-way costs assume a 10% escalation and 20% contingency. Assuming that the project is approved for construction, the final budget capital costs should consider escalation. A common practice is to escalate the construction costs to midyear of construction. Figure 1 shows different constant escalation rates to a midyear of construction to 2013 (since adjusted to 2014). As illustrated in Figure 1, construction costs could escalate 23% - 68% at rates of 3.5% - 9% per year. Escalation of costs for highway construction in California as recorded by the California Department of Transportation (Caltrans) shows an escalation of 27% between 1995 and 2000 (5% average/year) and 69% between 2000 and 2007 (8% average/year). This averages 7% each year over the 12 year period.

Figure 2 shows different variable escalation rates assuming median, lower 10% and upper 10% escalation rates between 2007 and 2015. Also shown in this table is a 6% constant escalation rate over the same period. Attention should be given to the midyear of construction cumulative escalation figures given a 142% (constant 6%), 131% (median), 111% (lower) and 164% (upper).

Based upon the Caltrans historical construction cost data, it is recommended to assume a total escalation increase of 42% for construction costs to the mid-point of construction.

The total expected costs including escalation ranges from $275,601,000 for Bridge Concept 4 – Alignment 3A to $362,009,000 for Bridge Concept 5 – Alignment 3B. The cost used for this Financial Plan is $359.3 million, including bond interest costs of $14.0 million.

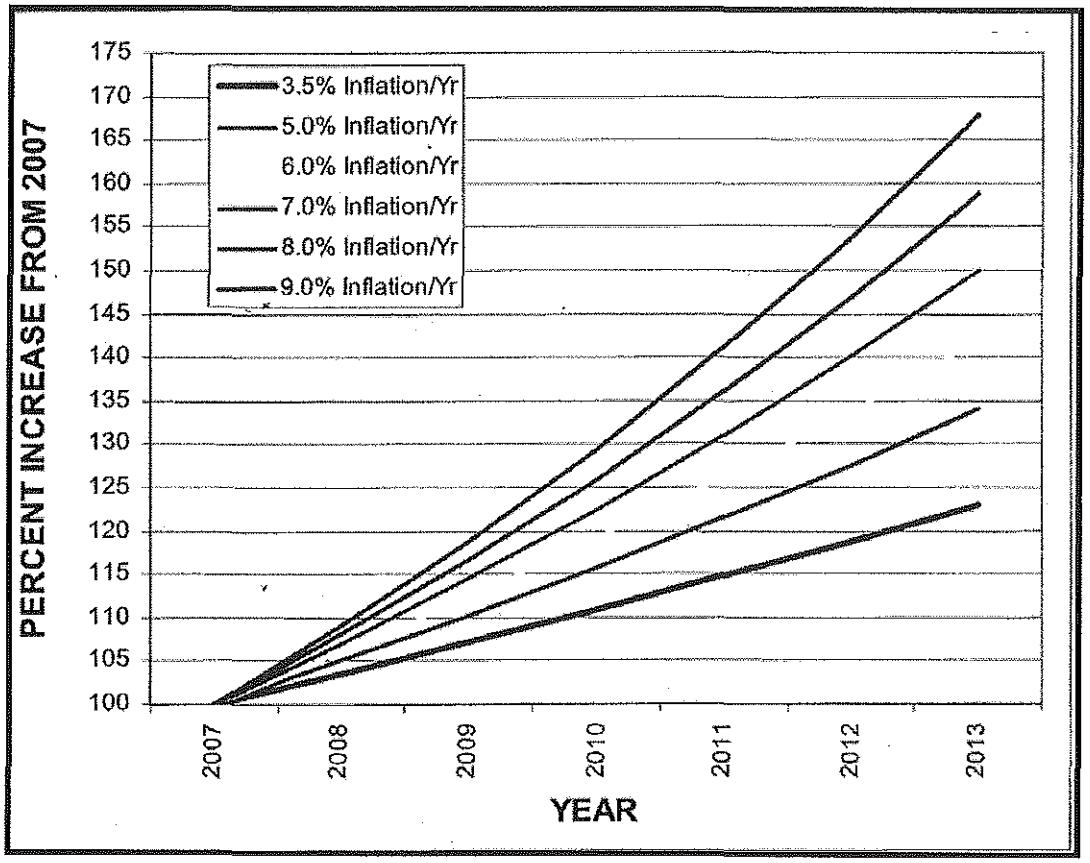


Figure 2, Percent Increase From 2007

	Yearly Escalation Rate				Cumulative Escalation Rate From End of 2007			
Year	Constant Escalation	Median	Lower 10% Limit	Upper 10% Limit	Constant Escalation	Median Escalation	Lower Esclation	Upper Esclation
2007	6.00%	5.20%	2.80%	8.50%	6.00%	5.20%	2.80%	8.50%
2008	6.00%	5.20%	2.80%	8.50%	112.36%	110.67%	105.68%	117.72%
2009	6.00%	4.90%	2.20%	8.60%	119.10%	116.09%	108.00%	127.85%
2010	6.00%	4.50%	1.60%	8.60%	126.25%	121.32%	109.73%	138.84%
2011	6.00%	4.20%	1.00%	8.70%	133.82%	126.41%	110.83%	150.92%
2012	6.00%	3.90%	0.40%	8.80%	142%	131%	111%	164%
2013	6.00%	3.50%	-0.20%	8.80%	150.36%	135.94%	111.05%	178.65%
2014	6.00%	3.20%	-0.80%	8.90%	159.38%	140.29%	110.16%	194.55%
2015	6.00%	2.80%	-1.40%	8.90%	168.95%	144.22%	108.62%	211.87%

Figure 3, Yearly/Cumulative Escalation Rate From 2007

Cost Estimate by Construction Segment

Construction reporting will be identified for the major elements of construction work, including frame and river spans.

Project Construction Type

Design/Bid/Build (DBB) is proposed for this project as it will protect the currently planned funding. The planned funding sources for this project are;

• Federal Highway Bridge Program (HBP) Funds	$304.3 million
• Proposition 1B Bridge Seismic (LBSRA) Funds	$ 36.8 million
• City Matching Funds	$ 4.0 million
• Other State Funds	$ 0.2 million
• Bond Financing (HBP/Prop 1B) Funds	$ 14.0 million
Total	$359.3 million

By using a conventional Design-Bid-Build (DBB) approach, the earliest that construction could occur is December 2013. This schedule is driven by the following constraints:

- Historic structure, requiring long environmental documentation process
- Right-of-way impacts. ROW acquisition cannot begin until ROD is signed
- Railroad (RR) agreement needs to be in place prior to demolition
- Utility coordination and agreement

Construction Packages for the 6th St Bridge

For this project, the City is considering one bid package for demolition and construction. An early contract may be let for local roadway improvements, necessary for the detour to take place prior to the demolition and for relocating utilities. A detailed breakdown of the pre-construction activities as well as each of the phases is described below.

Alternative Alignments

As part of the on-going preliminary engineering effort, several different roadway alignments and structure types are being investigated for the proposed replacement structure. Each combination of roadway alignment and structure type has a different project cost and schedule due to varying structure, roadway, utility, right-of-way (ROW), and other considerations. For the purposes of this proposal, a representative alternative, Corridor B, bridge type 4A, which includes Alternative 3B4, including B modified", is selected. This alternative uses alignment "3B Modified" and structural alternative #4 (2 span extra-dosed concrete bridge over the LA River, concrete box girder approach spans). Other alternatives will have similar design sequencing considerations.

Preliminary Engineering/Environmental (PE) Activities:

- PE proceeds to prepare alternatives so that a preferred alternative can be selected in September 2009. Environmental documentation proceeds toward a ROD in September 2010.
- PS&E preparation begins shortly after the Record of Decision, being September, 2010. PS&E would be completed by July, 2013 and final bid documents, permits and right of way clearances completed the end of September 2013.
- Utilizing Final PS&E, the construction bid package would be advertised in October, 2013, with construction award in December, 2013.

ROW Activities:

- ROW acquisition work commences after ROD. RR agreements in place and utility coordination complete by September 2013.

Construction Activities:

- Contractor mobilization and demolition of existing viaduct.
- Construction of viaduct to be phased with demolition operations.

Cost Estimate by Major Project Element

Table 1 shows the current cost estimate by major element of the project. The major elements are comprised of:

- *PA&ED:* preliminary design and preparation of project report and environmental document.
- *PS&E and ROW:* preparation of plans, specifications and estimate, as well as Caltrans services to secure required right of way. Total costs for Caltrans, the City of Los Angeles and the Consultant Design Team are included.
- *Construction Support:* construction services, including Caltrans construction contract administration and inspection, and City of Los Angeles / Consultant Team involvement during construction.
- *Right of Way:* capital costs to secure the necessary ROW including relocation.
- *Construction:* detour and demolition of existing viaduct and reconstruction of viaduct.

TABLE 1 – ESTIMATED COSTS BY MAJOR PROJECT ELEMENT

PROJECT PHASE	COST (escalated)
PA & ED (Project Approval and Environmental Doc)	$ 15,316,356
Final Design (Plans, Spec. & Estimates)	10,000,000
ROW (Right of Way)	81,833,000
Financing Costs	2,890,395
Detour and Demo of Existing Viaduct	12,548,466
Reconstruction of Viaduct	210,506,290
CE (Construction Support)	15,145,000
Financing Costs	11,086,247
Total Project Cost	$ 359,325,754

3. IMPLEMENTATION PLAN

Figure 4 identifies the permits, reviews and approvals that would be required for project construction

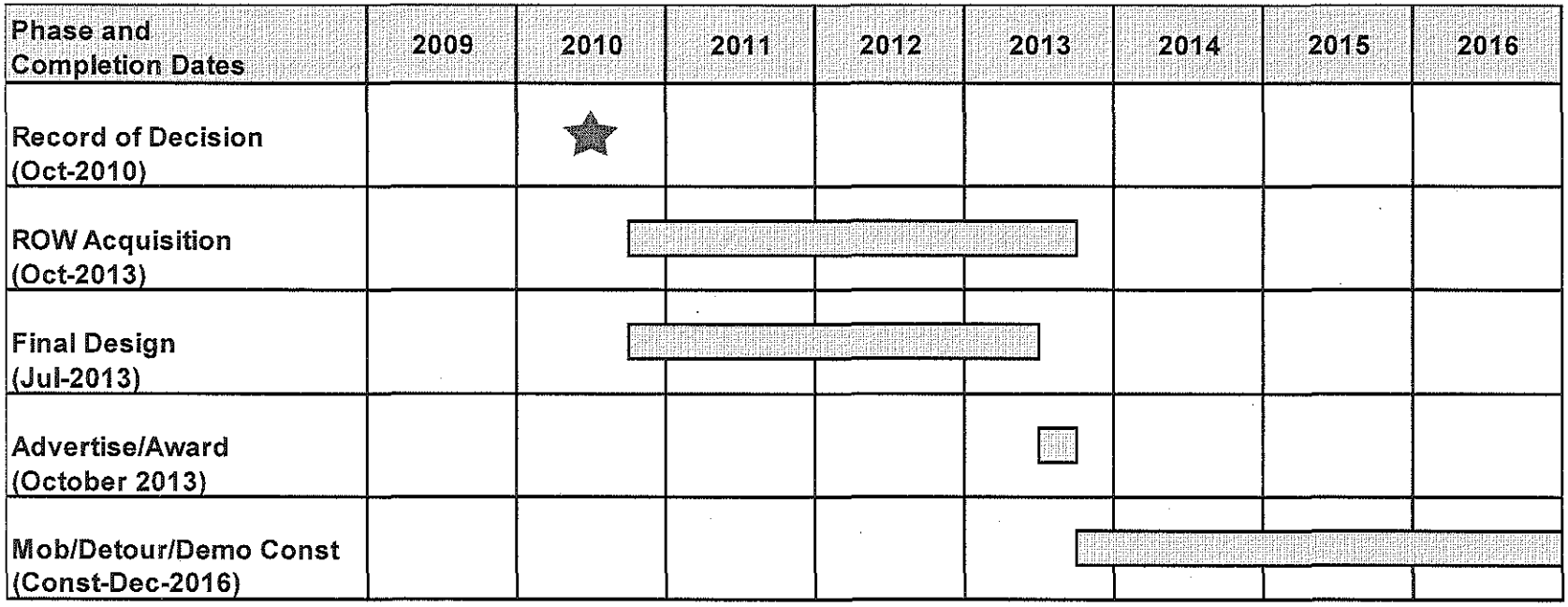
Figure 5 shows the project timeline. As of January 2009, the PA&ED phase is approximately 80% complete and the PS&E phase has not begun. All design work for the various construction segments is progressing on the same schedule.

Tables 2 and 3 show the actual expenditures through January 2009, and the budgeted expenditures, by project phase and fund source, respectively, for the remainder of the project through construction completion in 2016. Future Financial Plans will compare expenditures to this baseline projection of project costs. The project continues to make substantial progress and construction is expected to begin December 2013.

Figure 4, Agency / Permit / Approval

Agency	Permit/Approval
U.S. Army Corps of Engineers (USACE)	Section 404 Permit for possible discharge of dredged or fill material into the Los Angeles River
State Historic Preservation Officer (SHPO)	Section 106 consultation and agreement document to resolve the adverse effect to the historic 6th Street Viaduct
Los Angeles Regional Water Quality Control Board (RWQCB)	Section 401 Water Quality Certification for work in the Los Angeles River Channel
RWQCB	Groundwater Dewatering Permit for discharges of groundwater from construction and project dewatering to surface waters in the watersheds of Los Angeles
California Department of Fish and Game (CDFG)	Section 1602 Agreement for Streambed Alteration
California Public Utilities Commission (PUC) Rail Crossing Engineering Section (RCES)	Rail crossing construction or alteration authorization
Caltrans	Encroachment Permit
All railroad agencies owning and operating railroad tracks along both sides of the Los Angeles River	Railroad Maintenance Agreement for work within railroad ROW

Figure 5, Project Timeline (Calendar Year)

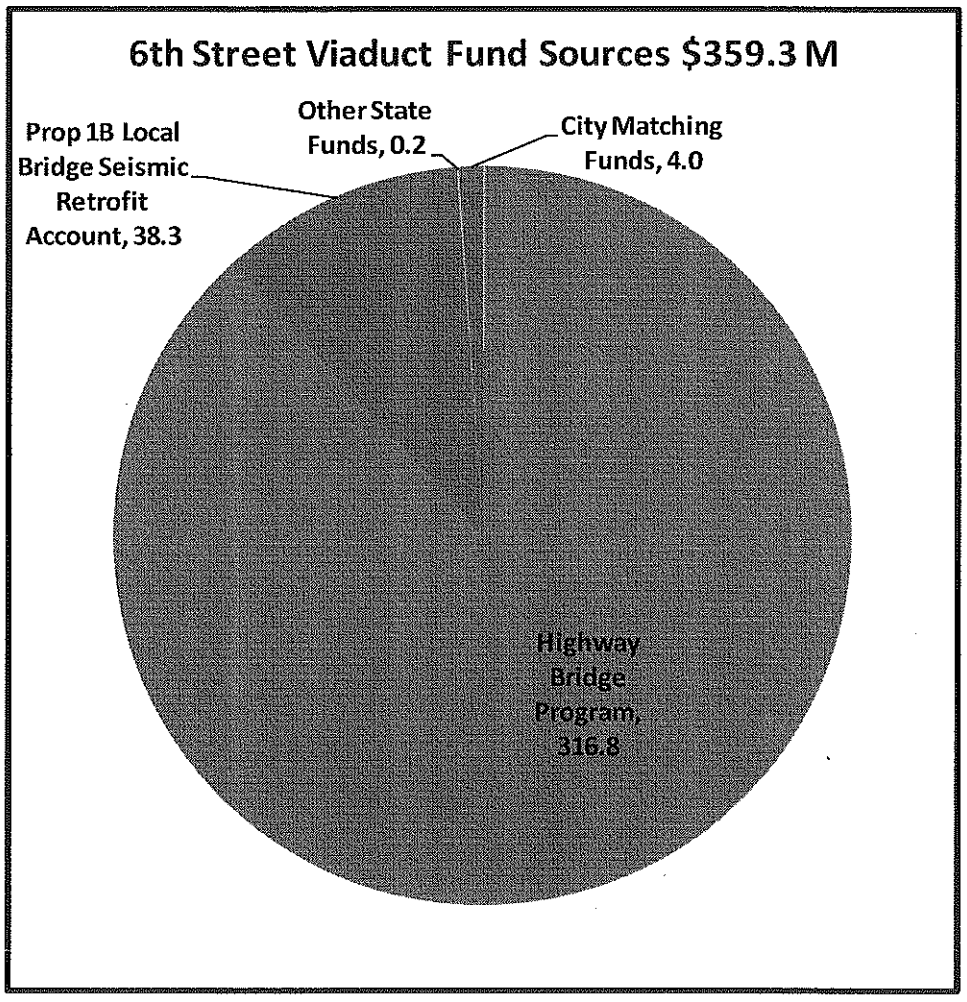


4. PROJECT FINANCING AND REVENUES

Overall Financial Plan

Based on the cost estimate prepared in July, 2008, the mid-point construction duration (FY 2011-2017) cost for the project will be in the range of $276 - $362 million. As stated above, the project team determined to use the total project costs of $345.3 million, plus $14 million in bond interest costs, for programming purposes, for a total of $359.3 million. The project is fully funded for this amount using local regional, state and federal funds, plus bonds required for cash flow needs which will be repaid by HBP funds matched by Proposition 1B funds. The funding sources and amounts are shown in Figure 6 below. Detailed charts are included in Appendix A.

Figure 6, Funding Sources In $ Millions



Description of Funding Sources

The funding sources identified for this project include:

Highway Bridge Program (HBP) funds – These are federal funds that are apportioned by formula to the states. Caltrans then programs these funds to the various bridge projects in the state. The City of Los Angeles has received programmed approval from Caltrans for approximately $304.5 million in HBP funds plus $13.2 million for reimbursement of financing costs, for a total HBP programming commitment of $316.8 million. The City will work with Caltrans to identify additional HBP funds available each year.

In some years, Advanced Construction (AC) Authority may have to be used if HBP funds are over-committed within the state. In some years, the City may have to finance the cash flow if the reimbursements of AC for HBP funds are not available as programmed.

Proposition 1B Local Bridge Seismic Retrofit Account (LBSRA) – These funds are part of the $20 billion Proposition 1B passed by California voters in November 2006. The LBSRA account provides $36.7 million for the 11.53 percent required match for the federal HBP Fund for the Local Seismic Bridge Retrofit Program projects, plus $1.6 million for financing costs, for a total LBSRA amount of $38.3 million. Prop 1B funds currently programmed are obligated on a first-come, first-serve basis.

The California Transportation Commission (CTC) approved the Caltrans March 9, 2007, list of eligible Proposition 1B LBSRA projects, and the 6th Street project was included on that list. In a June 19, 2008, letter, Caltrans notified Gary Moore, City Engineer, City of Los Angeles, that the 6th Street project will receive Proposition 1B LBSRA matching funds.

In some years, the City may have to finance the cash flow if the Proposition 1B funds are not available as programmed.

Other State Funds – Previous funding included $200,000 of state funds (primarily state gas tax funds).

City Matching Funds – These funds, totaling $4.0 million, are composed of Proposition C 25-percent Local Return funds, which are a component of the Los Angeles County Proposition C half-cent sales tax measure allocated by formula to the cities within Los Angeles County. The other City matching fund source is Proposition G, the City of Los Angeles' seismic bond funds.

Financing – There are two types of potential funding delays to the Project:

1. $72. 4 million of cumulative annual federal and state funding allocation shortfalls; and
2. $16.1 million of cumulative annual shortfalls of potential invoice reimbursement delays.

Federal and State Funding Shortfalls: Caltrans has agreed to program full funding for the 6th Street Viaduct Project, but stretched out over a longer time period. This allocation plan does not fit the Project's cash flow needs but fully funds the project over time. In order to keep the Project on schedule, the City will issue bonds, such as MICLA bonds, in the early years of the project and be paid back by the federal and state funds in the later years of the project. These shortfalls total $72.4 million over the life of the project and require up to $72.4 million of MICLA bonds. The interest costs for these bonds, $14 million, have been added to the project costs.

Monthly Invoice Reimbursement Delays: For the funds that will be available each year according to Caltrans, staff has conservatively assumed that the reimbursement of monthly invoices will be delayed by four months each during the Right-of-Way (ROW) phase and three months each during the Construction phase. These potential shortfalls total $16.1 million over the life of the project and require up to $16.1 million of additional MICLA bonds. Although the interest costs are not added to the project costs at this time, those interest and issuance costs will be eligible for reimbursement with state and federal funds.

Issuance and Interest Costs Reimbursement: Federal statute and guidelines allow the federal funds to pay back the bonds proceeds as well as the issuance and interest costs for both the longer term year to year shortfalls as well as the shorter term month to month shortfalls.[1]

The FHWA guidance states that the project must be approved as a Federal-aid debt-financed (bond, certificate, note, or other debt instrument) project in order to receive payments for eligible debt-related costs under section 122. With the approval of the 6th St. Financial Plan, Caltrans will approve the project as a Federal-aid debt-financed project and both the longer term and shorter term MICLA bond issuance and interest costs will be eligible for reimbursement.

Approval of Local AC: In order for the Project to move forward, Caltrans has requested that the City's governing body approve the use of local AC and the use of a funding source, such as MICLA, as a cash flow source for the yearly project expenses that exceed the federal and state reimbursements. The City would assume responsibility for the project costs until all yearly state and federal allocations have been disbursed. As the project progresses, project budget authority responsibility shifts from the City to the federal funding until the federal and state monies fully fund the project. The City will approve the budget authority for Local AC in late July 2010 and the approval document will be forwarded to Caltrans.

State Garvee Bonds not Feasible at this time: In most cases, AC is undertaken by the State (Caltrans), where it begins a project even if the project does not have sufficient federal-aid obligation authority to cover the federal share of project costs. Caltrans has done this primarily through the issuance of Garvee bonds, which are leveraged by future federal formula funds, such as Highway Bridge Program funds. The use of Garvee bonds allows the cost of the project to be spread over the useful life of the project rather than just the construction time period. Although the City is eligible to participate in Garvee bond financing, currently, there is no State capacity for these bonds. The City will continue to monitor the feasibility of this option, should Garvee bonds become available for the construction phase of the project.

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[1] States and public agencies can now receive Federal-aid reimbursements for a wide array of debt-related costs incurred in connection with an eligible debt financing instrument, such as a bond, note, certificate, mortgage, or lease, the proceeds of which are used to fund a project eligible for assistance under Title 23. The issuer may be a state, political subdivision, or a public authority.
This change to the Federal-aid program was codified into permanent highway law as an amendment to Section 122 of Title 23 U.S.C. Bond-related costs now eligible for Federal-aid reimbursement include interest payments, retirement of principal, and any other cost incidental to the sale of an eligible bond issue.
The FHWA guidance states that the project must be approved as a Federal-aid debt-financed (bond, certificate, note, or other debt instrument) project in order to receive payments for eligible debt-related costs under section 122. With the approval of the 6th St. Financial Plan, Caltrans will approve the project as a Federal-aid debt-financed project.

5. CASH FLOW AND CONTINGENCY FUND

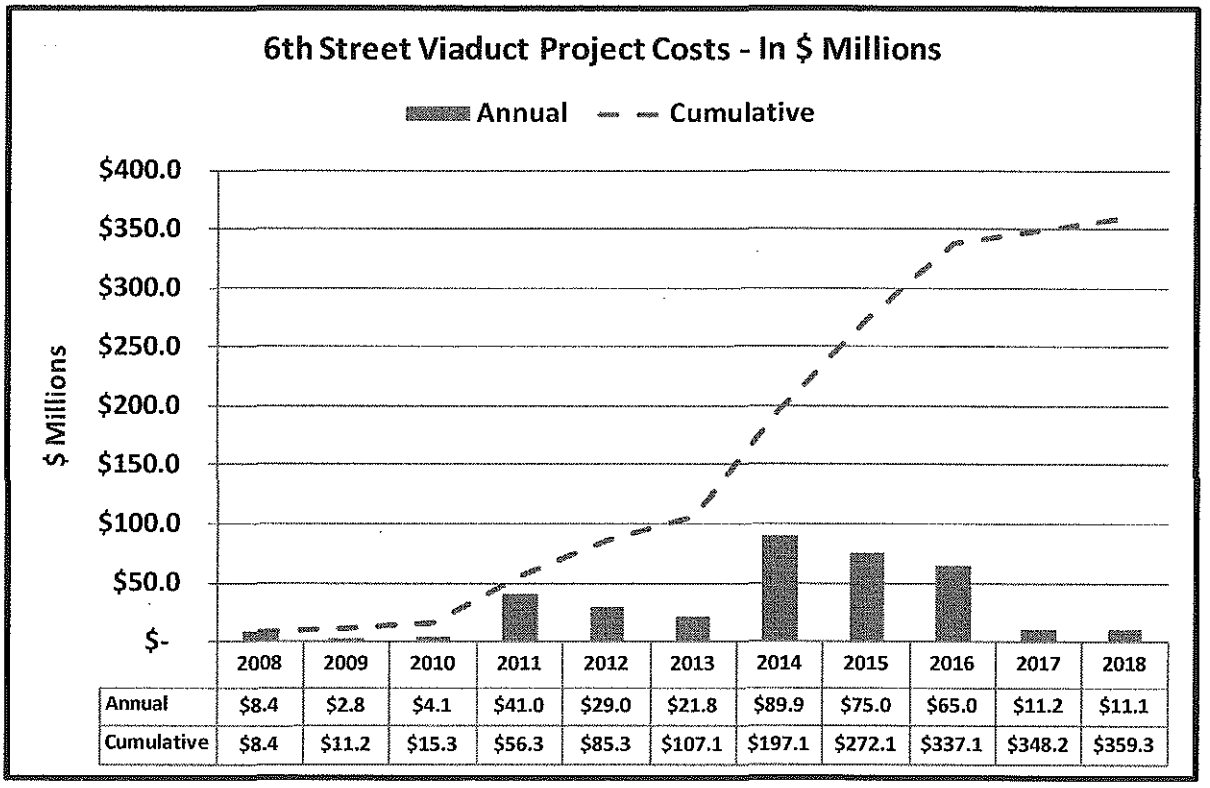
A project cash flow summary, depicting annual and cumulative costs, is shown in Figure 7. This cash flow includes a 25% contingency.

The cash flow Tables 2 – 5D are included in Appendix A. Table 2 shows the project expenditures by project phase by year. Table 3 shows the funding sources by project phase. Table 4 shows the programmed costs and funding sources, including Advanced Construction Authority by project phase. Table 4 is consistent with the Federal Transportation Improvement Program (FTIP) project listing.

Table 5 is the cash flow chart of revenues and expenditures and illustrates the bond financing required to fund the cash flow needs in the 2011 – 2018 period. These bonds are required because of the delay in the HBP and Proposition 1B funds available during the ROW and Construction phases.

Tables 5A through 5D illustrate the cash flow funding and reimbursements for the PA/ED, Final Design, ROW and Construction phases, respectively. The City will sell local bonds and use its Public Works Trust Fund as a cash reserve to keep the project on schedule.

Figure 7, Annual and Cumulative Funding Requirements In $ Millions



	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Annual	$8.4	$2.8	$4.1	$41.0	$29.0	$21.8	$89.9	$75.0	$65.0	$11.2	$11.1
Cumulative	$8.4	$11.2	$15.3	$56.3	$85.3	$107.1	$197.1	$272.1	$337.1	$348.2	$359.3

6. RISK IDENTIFICATION AND MITIGATION FACTORS

The City of LA has identified the risks to project completion and sufficiency of revenues in its Risk Management Plan for the 6th Street Viaduct Seismic Improvement Project. The risk mitigation strategies have been identified and include actions that will be taken to address revenue shortfalls including any reserves or other methods of funding which could be applied to this project. The Risk Management Plan also discusses proposed cost containment approaches (such as design sequencing and other ways to accelerate construction.

The following Figures 8 and 9 summarize the major risk types studied and a summary of the strategies. Appendix B includes a matrix of the detailed risk analysis summary of the Risk Management Plan document for the Sixth Street Viaduct Seismic Improvement Project.

Figure 8, Major Risk Types ($M)

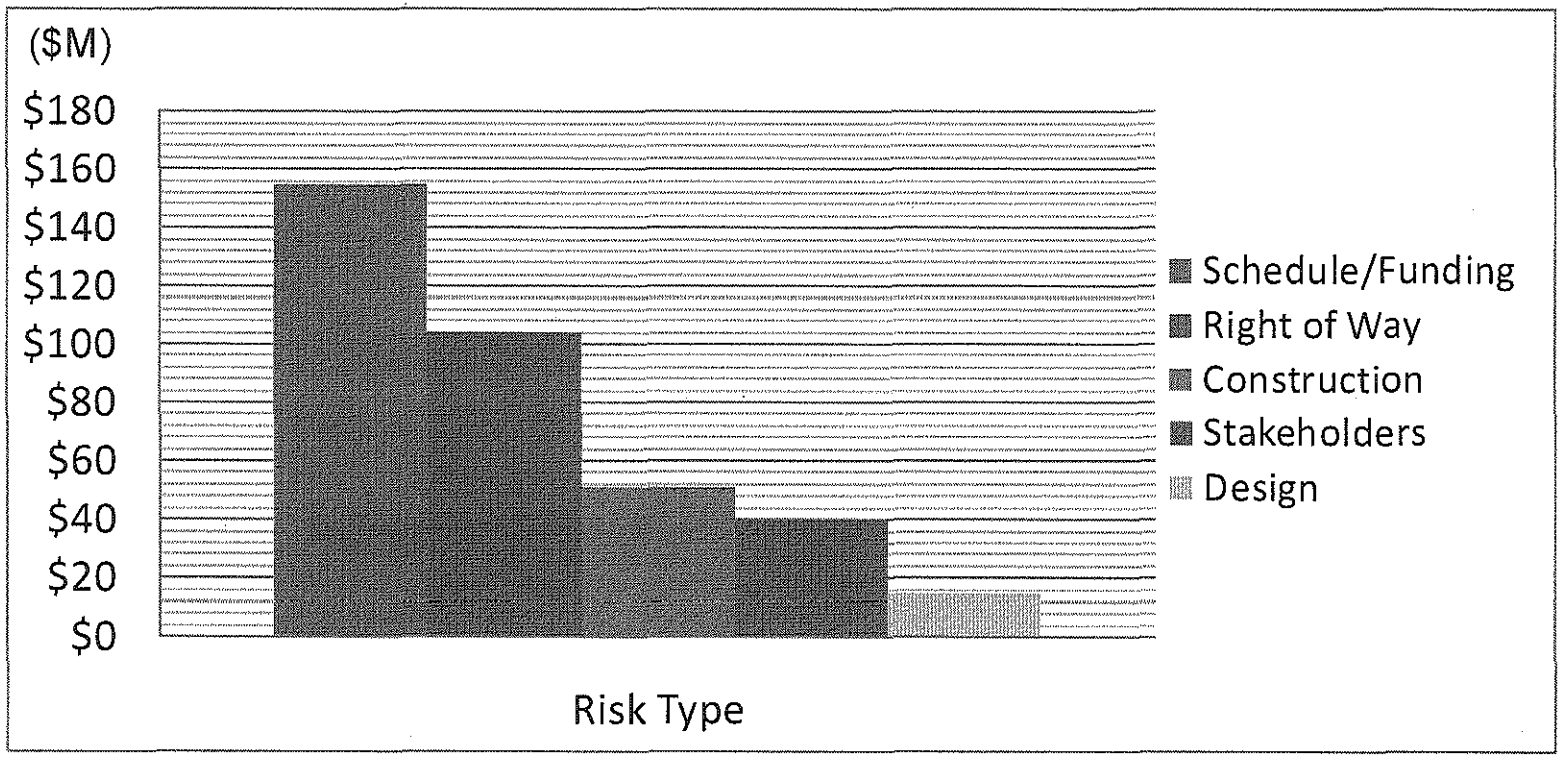
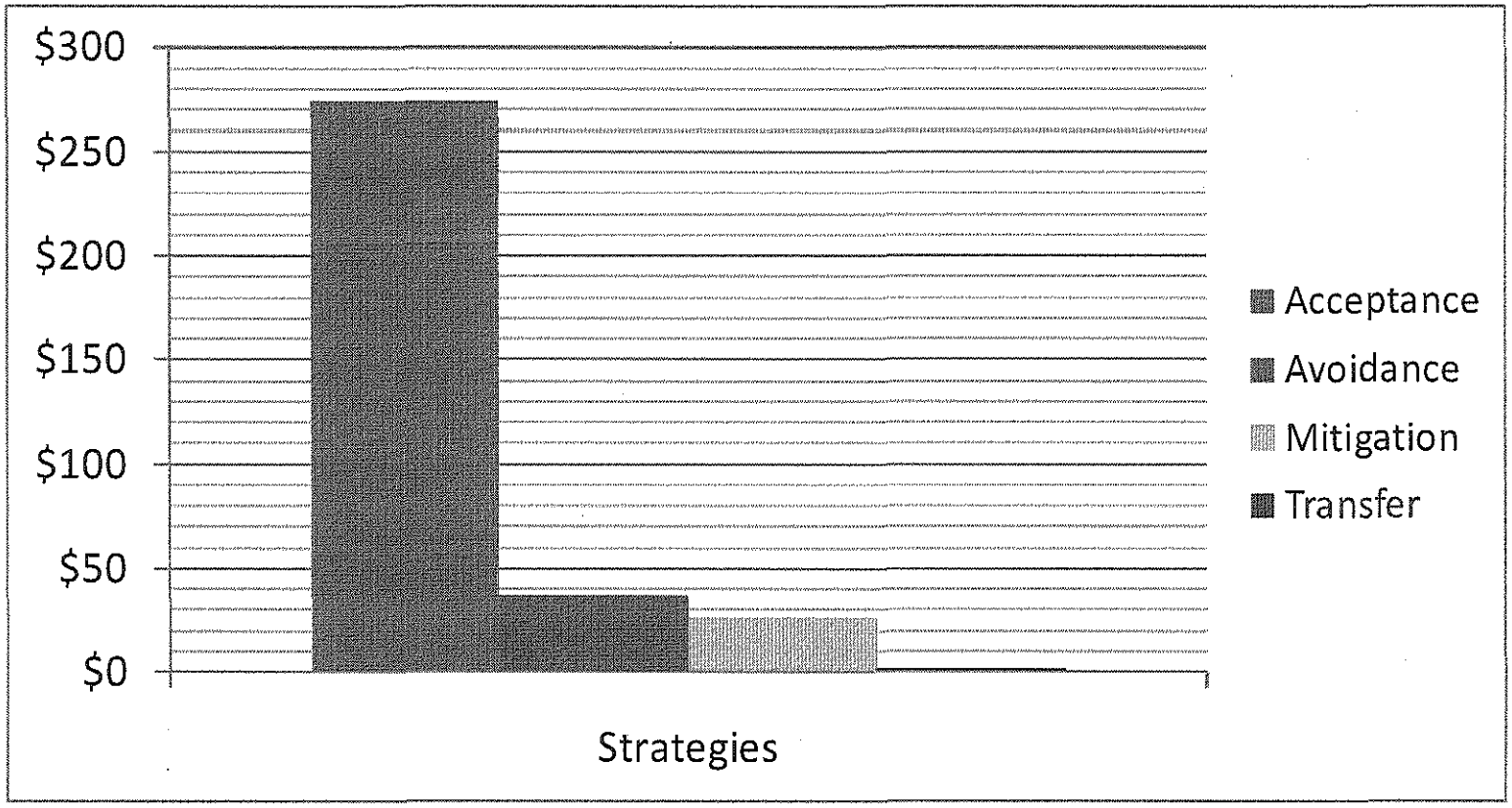


Figure 9, Major Risk Strategies ($M)



Independent Verification of Cost Estimate

The City of Los Angeles Bureau of Engineering authorized LAN Engineering (AECOM) to provide an independent verification of estimate of costs associated with the replacement alternative being considered for the 6th Street Viaduct Seismic Improvement Project.

The report[2] discusses and documents the methodologies and resources used by LAN Engineering to produce an Independent Cost Estimate for 6th St. Viaduct Bridge Replacement project. The report considered the construction cost associated with bridge and roadway improvements, but did not address right-of- way cost. The report used 10% mobilization, 25% contingencies, but did not apply escalation costs to keep present day cost consistent with the design team. The Financial Plan used 42% escalation applied to the total estimated cost.

The independent estimate of unit price & quantity for the structures came out to be within 2 to 13 percent of the designer estimate and are summarized in Table 1 below. The cost estimate study concluded that the designer's estimate is reasonably accurate and reliable within an acceptable range of accuracy.

Scope and Summary of Independent Verification of Cost Estimates

The scope of work of this cost estimate study was to independently develop unit prices and generate quantities for the given list of bid items and preliminary plans (15% complete) for Bridge Concepts 1A, 2, and 4A. The list of items and preliminary plans were provided by the designers. The scope of work was limited to these three bridge concepts, being those generally preferred by the project stakeholders.

A summary of the estimates made by the designers and independent check is shown in Figure 10. Bridge and Roadway Construction Cost Estimates were developed for the Bridge Replacement Concept Designs shown in Figure 11.

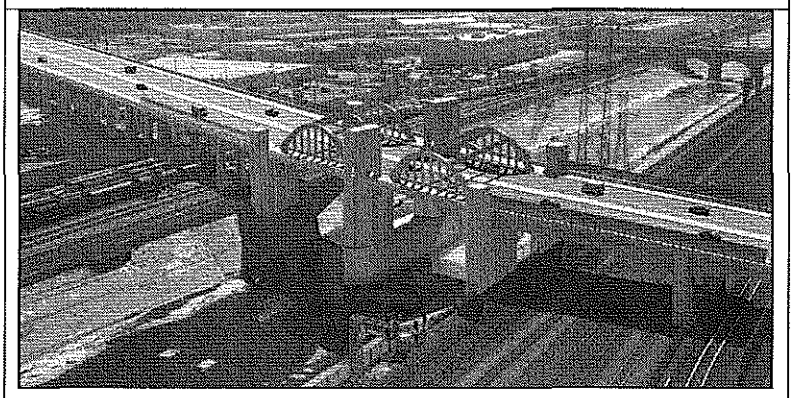
Figure 10, Independent Verification of Costs Summary ($'s)

Summary of Estimates	Structural Cost Concept 1A	Structural Cost Concept 2	Structural Cost Concept 4A	Roadway Cost
Designer's Estimate	$161,791,000	$96,132,000	$103,799,000	$43,460,000
Independent Estimate (Unit Prices)	$168,335,000	$90,076,000	$96,851,000	$44,976,000
Independent Estimate (Unit Prices and Quantities)	$157,948,000	$107,969,000	$96,153,000	n/a

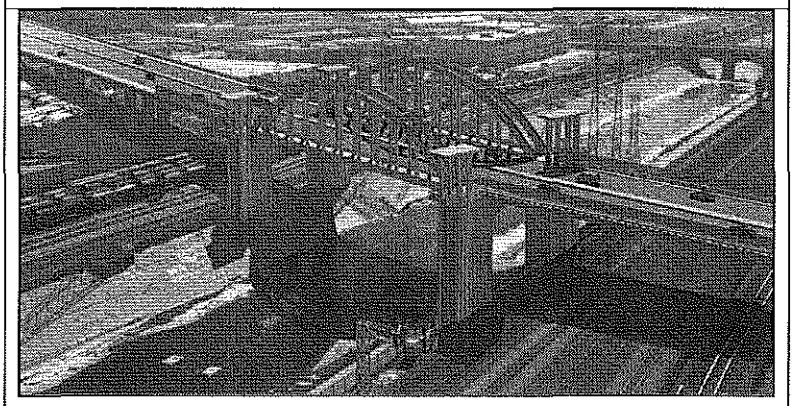
[2] "City of Los Angeles, Independent Cost Estimating Contract, Task Order No. 1, Independent Cost Estimate Report, 6th Street Viaduct Seismic Improvements", by LAN Engineering Corporation, October 2009.

Figure 11, Bridge Concepts

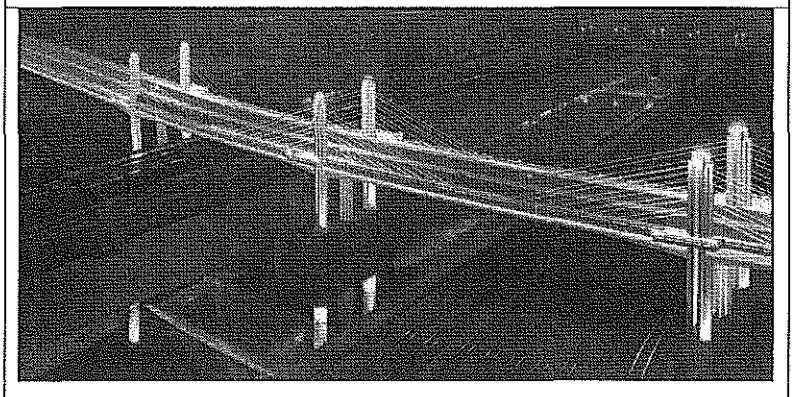
Bridge Concepts



Bridge Concept No. 1A: Replica of existing bridge (architecture and span lengths) from abutment to abutment



Bridge Concept No. 2 : CIP Box Girder for Main Span (2 spans) & Approach spans with Steel Tied Arch Pedestrian Ways for main spans



Bridge Concept No. 4A: Dual Pylon Extradosed Box Girder for Main Span (4 spans) with CIP Box Girders for Approach spans

APPENDIX A - FINANCIAL CHARTS

6TH STREET VIADUCT SEISMIC IMPROVEMENT PROJECT

TABLE 2 – PROJECT EXPENDITURES, BY PROJECT PHASE

	Fiscal Year											
FUND SOURCES	2007-08 & Prior	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	Total
Highway Bridge Program (HBP) - PE/ED/PS&E	$ 6,751,028	$ 2,210,596	$ 3,291,461	$ 4,426,500	$ 4,426,500	$ -	$ -	$ -	$ -	$ -	$ -	$ 21,106,085
Highway Bridge Program (HBP) - ROW	-	-	-	20,000,000	20,000,000	20,000,000	15,005,622	-	-	-	-	75,005,622
Highway Bridge Program (HBP) - Construction	-	-	-	-	-	-	50,000,000	50,000,000	50,000,000	50,000,000	20,692,898	220,692,898
Subtotal, HBP Funds —>	6,751,028	2,210,596	3,291,461	24,426,500	24,426,500	20,000,000	65,005,622	50,000,000	50,000,000	50,000,000	20,692,898	316,804,605
Prop 1B Local Bridge Seismic Retrofit- ROW & Const	-	-	-	2,598,870	2,598,870	2,598,870	8,418,338	6,497,175	6,497,175	6,497,175	2,604,404	38,310,878
Subtotal, Prop 1B Funds —>	-	-	-	2,598,870	2,598,870	2,598,870	8,418,338	6,497,175	6,497,175	6,497,175	2,604,404	38,310,878
City Matching Funds	1,487,757	552,649	822,865	573,500	573,500	-	-	-	-	-	-	4,010,271
												-
Total Funding	$ 8,238,785	$ 2,763,245	$ 4,114,326	$ 27,598,870	$ 27,598,870	$ 22,598,870	$ 73,423,960	$ 56,497,175	$ 56,497,175	$ 56,497,175	$ 23,297,302	$ 359,125,754
Local Bonds	-	-	-	13,401,130	1,401,130	-	30,551,291	18,502,825	8,502,825	-	-	72,359,200
Payback of Local Bonds	-	-	-	-	-	765,870	14,036,390	-	-	45,345,885	12,211,055	72,359,200
Cumulative Balance	$ -	$ -	$ -	$ 13,401,130	$ 14,802,260	$ 14,036,390	$ 30,551,291	$ 49,054,116	$ 57,556,941	$ 12,211,056	$ 1	$ 1
Project Costs	8,438,785	2,763,245	4,114,326	41,000,000	29,000,000	21,833,000	87,048,466	75,000,000	65,000,000	11,151,290	-	345,349,112
Financing Costs-Interest Only*	-	-	-	-	-	-	2,890,395	-	-	-	11,086,247	13,976,642
Total Project & Financing Costs	$ 8,438,785	$ 2,763,245	$ 4,114,326	$ 41,000,000	$ 29,000,000	$ 21,833,000	$ 89,938,861	$ 75,000,000	$ 65,000,000	$ 11,151,290	$ 11,086,247	$ 359,325,754

* Financing costs from local bonds or other short-term financing to be reimbursed by HBP funds; assumes 5% APR; Excludes loan origination costs

TABLE 3 – FUNDING SOURCE BY PROJECT PHASE

Funding Source	Activity				
	PA/ED/PS&E	ROW	CON & CE	Financing	Total
Highway Bridge Program (HBP) - PA/ED/PS&E	$ 21,106,085				$ 21,106,085
Highway Bridge Program (HBP) - ROW		72,446,755			72,446,755
Highway Bridge Program (HBP) - Construction & CE			210,878,244		210,878,244
Highway Bridge Program (HBP) - Financing Costs				12,373,521	12,373,521
Prop 1B Local Bridge Seismic Retrofit- ROW & Const		9,386,245	27,321,512		36,707,757
Prop 1B Local Bridge Seismic Retrofit- Financing Costs				1,603,121	1,603,121
Other State funds	200,000				200,000
City Matching	4,010,271				4,010,271
Total --->	$ 25,316,356	$ 81,833,000	$ 238,199,756	$ 13,976,642	$ 359,325,754

TABLE 4 – PROGRAMMED COSTS AND FUNDING SOURCES

	Fiscal Year								
Phase Summary	2007-08 & Prior	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	Beyond	Total
PE	$ 16,000,000	$ 9,316,356	$ -	$ -	$ -	$ -	$ -	$ -	$ 25,316,356
ROW	-	-	-	84,723,395	-	-	-	-	84,723,395
Construction and CE	-	-	-	-	-	-	249,286,003	-	249,286,003
Total —>	$ 16,000,000	$ 9,316,356	$ -	$ 84,723,395	$ -	$ -	$ 249,286,003	$ -	$ 359,325,754
	Fiscal Year								
Fund Source Summary	2007-08 & Prior	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	Beyond	Total
Fed $	$ 12,800,000	$ 7,453,085	$ (8,000,000)	$ 28,853,000	$ 20,000,000	$ 20,000,000	$ 65,005,622	$ 170,692,898	$ 316,804,605
Local Match	3,200,000	1,863,271	(853,000)	7,126,561	(2,591,212)	(2,591,212)	20,170,938	(22,115,075)	4,210,271
LSSRP Bond	-	-	-	2,591,212	2,591,212	2,591,212	8,422,167	22,115,075	38,310,878
Local AC	-	-	8,853,000	46,152,622	(20,000,000)	(20,000,000)	155,687,276	(170,692,898)	-
Total —>	$ 16,000,000	$ 9,316,356	$ -	$ 84,723,395	$ -	$ -	$ 249,286,003	$ -	$ 359,325,754
	Fiscal Year								
PE Summary	2007-08 & Prior	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	Beyond	Total
Fed $	$ 12,800,000	$ 7,453,085	$ (8,000,000)	$ 8,853,000					$ 21,106,085
Local Match	3,200,000	1,863,271	(853,000)						4,210,271
LSSRP Bond									-
Local AC			8,853,000	(8,853,000)					-
Total —>	$ 16,000,000	$ 9,316,356	$ -	$ -	$ -	$ -	$ -	$ -	$ 25,316,356
	Fiscal Year								
ROW Summary	2007-08 & Prior	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	Beyond	Total
Fed $				$ 20,000,000	$ 20,000,000	$ 20,000,000	$ 15,005,622		$ 75,005,622
Local Match				7,126,561	(2,591,212)	(2,591,212)	(1,944,137)		-
LSSRP Bond				2,591,212	2,591,212	2,591,212	1,944,137		9,717,773
Local AC				55,005,622	(20,000,000)	(20,000,000)	(15,005,622)		-
Total —>	$ -	$ -	$ -	$ 84,723,395	$ -	$ -	$ -	$ -	$ 84,723,395
	Fiscal Year								
Construction Summary	2007-08 & Prior	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	Beyond	Total
Fed $							$ 50,000,000	$ 170,692,898	$ 220,692,898
Local Match							22,115,075	(22,115,075)	-
LSSRP Bond							6,478,030	22,115,075	28,593,105
Local AC							170,692,898	(170,692,898)	-
Total —>	$ -	$ -	$ -	$ -	$ -	$ -	$ 249,286,003	$ -	$ 249,286,003

TABLE 5 – CASH FLOW FINANCING: ALL PHASES

	Fiscal Year											
PHASE	2007-08 & Prior	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	Total
PA/ED (Proj Approval and Envir Doc)	$ 8,438,785	$2,763,245	$ 4,114,326	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 15,316,356
Final Design (PS&E)	-	-	-	5,000,000	5,000,000	-	-	-	-	-	-	10,000,000
Subtotal, PA/ED and PS&E —>	8,438,785	2,763,245	4,114,326	5,000,000	5,000,000	-	-	-	-	-	-	25,316,356
ROW (Right of Way)	-	-	-	36,000,000	24,000,000	21,833,000	-	-	-	-	-	81,833,000
ROW Financing Costs	-	-	-	-	-	-	2,890,395	-	-	-	-	2,890,395
Subtotal, ROW —>	-	-	-	36,000,000	24,000,000	21,833,000	2,890,395	-	-	-	-	84,723,395
CONSTRUCTION COST (CON)												
Detour and Demo of Existing Viaduct	-	-	-	-	-	-	12,548,466	-	-	-	-	12,548,466
Reconstruction of Viaduct	-	-	-	-	-	-	70,000,000	70,000,000	60,000,000	10,506,290	-	210,506,290
CE (Construction Support)	-	-	-	-	-	-	4,500,000	5,000,000	5,000,000	645,000	-	15,145,000
Construction Financing Costs	-	-	-	-	-	-	-	-	-	-	11,086,247	11,086,247
Subtotal, Construction and CE—>	-	-	-	-	-	-	87,048,466	75,000,000	65,000,000	11,151,290	11,086,247	249,286,003
Total Project & Financing Costs	$ 8,438,785	$2,763,245	$ 4,114,326	$41,000,000	$29,000,000	$21,833,000	$89,938,861	$75,000,000	$65,000,000	$11,151,290	$11,086,247	$ 359,325,754
	Fiscal Year											
FUNDING	2007-08 & Prior	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	Total
Highway Bridge Program (HBP) - PA/ED/PS&E	$ 6,751,028	$2,210,596	$ 3,291,461	$ 4,426,500	$ 4,426,500	$ -	$ -	$ -	$ -	$ -	$ -	$ 21,106,085
Highway Bridge Program (HBP) - ROW	-	-	-	20,000,000	20,000,000	20,000,000	12,446,755	-	-	-	-	72,446,755
Highway Bridge Program (HBP) - Construction	-	-	-	-	-	-	50,000,000	50,000,000	50,000,000	50,000,000	10,878,244	210,878,244
Highway Bridge Program (HBP) - Financing Costs	-	-	-	-	-	-	2,558,867	-	-	-	9,814,654	12,373,521
Subtotal, HBP Funds —>	6,751,028	2,210,596	3,291,461	24,426,500	24,426,500	20,000,000	65,005,622	50,000,000	50,000,000	50,000,000	20,692,898	316,804,605
Prop 1B Local Bridge Seismic Retrofit- ROW & Const	-	-	-	2,598,870	2,598,870	2,598,870	8,086,810	6,497,175	6,497,175	6,497,175	1,332,811	36,707,757
Prop 1B Local Bridge Seismic Retrofit- Financing Costs	-	-	-	-	-	-	331,528	-	-	-	1,271,593	1,603,121
Subtotal, Prop 1B Funds —>	-	-	-	2,598,870	2,598,870	2,598,870	8,418,338	6,497,175	6,497,175	6,497,175	2,604,404	38,310,878
Other State Funds	200,000	-	-	-	-	-	-	-	-	-	-	200,000
City Matching Funds	1,487,757	552,649	822,865	573,500	573,500	-	-	-	-	-	-	4,010,271
												-
Total Funding	$ 8,438,785	$2,763,245	$ 4,114,326	$27,598,870	$27,598,870	$22,598,870	$73,423,960	$56,497,175	$56,497,175	$56,497,175	$23,297,302	$ 359,325,754
Local Bonds	-	-	-	13,401,130	1,401,130	-	30,551,291	18,502,825	8,502,825	-	-	72,359,200
Payback of Local Bonds	-	-	-	-	-	765,870	14,036,390	-	-	45,345,885	12,211,055	72,359,200
Cumulative Balance	$ -	$ -	$ -	$13,401,130	$14,802,260	$14,036,390	$30,551,291	$49,054,116	$57,556,941	$12,211,056	$ 1	$ 1
Project Costs	8,438,785	2,763,245	4,114,326	41,000,000	29,000,000	21,833,000	87,048,466	75,000,000	65,000,000	11,151,290	-	345,349,112
Financing Costs-Interest Only*	-	-	-	-	-	-	2,890,395	-	-	-	11,086,247	13,976,642
Total Project & Financing Costs	$ 8,438,785	$2,763,245	$ 4,114,326	$41,000,000	$29,000,000	$21,833,000	$89,938,861	$75,000,000	$65,000,000	$11,151,290	$11,086,247	$ 359,325,754

* Financing costs (interest and issuance costs) from local bonds/financing will be reimbursed by HBP funds, matched by Prop. 1B funds; assumes 5% APR (issuance costs not calculated but actual costs would be reimbursed).

TABLE 5A – CASH FLOW FINANCING: PA-ED PHASE

Costs - PA/ED													
	Fiscal Year												
PHASE	2007-08 & Prior	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	Total
PA/ED (Proj Approval and Envir Doc)	$ 8,438,785	$ 2,763,245	$ 4,114,326									$15,316,356
Final Design (PS&E)												-
Subtotal, PA/ED and PS&E --->	8,438,785	2,763,245	4,114,326	-	-	-	-	-	-	-		15,316,356
ROW (Right of Way)												-
Subtotal, ROW --->				-	-	-						-
CONSTRUCTION COST (CON)												
Detour and Demo of Existing Viaduct												-
Reconstruction of Viaduct												-
Subtotal, Construction --->							-	-	-	-	-	-
CE (Construction Support)												
Subtotal, Construction and CE--->												
Total Project Costs	$ 8,438,785	$ 2,763,245	$ 4,114,326	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$15,316,356
Funding												
Highway Bridge Program (HBP) - PA/ED/PS&E	$ 6,751,028	$ 2,210,596	$ 3,291,461		$ -	$ -						$12,253,085
Highway Bridge Program (HBP) - ROW												-
Highway Bridge Program (HBP) - Construction												-
Subtotal, HBP Funds --->	$ 6,751,028	$ 2,210,596	$ 3,291,461	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$12,253,085
Prop 1B Local Bridge Seismic Retrofit							-	-	-	-		-
Other State Funds	200,000											200,000
City Matching Funds	1,487,757	552,649	822,865		-	-						2,863,271
												-
Total Funding	$ 8,438,785	$ 2,763,245	$ 4,114,326	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$15,316,356
Subtotal Balance - need to finance	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -

TABLE 5B – CASH FLOW FINANCING: FINAL DESIGN PHASE

Costs - Final Design												
	Fiscal Year											
PHASE	2007-08 & Prior	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	Total
PA/ED (Proj Approval and Envir Doc)												$ -
Final Design (PS&E)				5,000,000	$ 5,000,000							10,000,000
Subtotal, PA/ED and PS&E --->	-	-	-	5,000,000	5,000,000	-	-	-	-	-		10,000,000
ROW (Right of Way)												-
Subtotal, ROW --->				-	-	-						-
CONSTRUCTION COST (CON)												
Detour and Demo of Existing Viaduct												-
Reconstruction of Viaduct												-
Subtotal, Construction --->							-	-	-	-	-	-
CE (Construction Support)												
Subtotal, Construction and CE--->												
Total Project Costs	$ -	$ -	$ -	$ 5,000,000	$ 5,000,000	$ -	$ -	$ -	$ -	$ -	$ -	$ 10,000,000
Funding												
Highway Bridge Program (HBP) - PA/ED/PS&E				$ 4,426,500	$ 4,426,500	$ -						$ 8,853,000
Highway Bridge Program (HBP) - ROW												-
Highway Bridge Program (HBP) - Construction												-
Subtotal, HBP Funds --->	$ -	$ -	$ -	$ 4,426,500	$ 4,426,500	$ -	$ -	$ -	$ -	$ -	$ -	$ 8,853,000
Prop 1B Local Bridge Seismic Retrofit							-	-	-	-		-
Other State Funds												-
City Matching Funds				573,500	573,500	-						1,147,000
												-
Total Funding	$ -	$ -	$ -	$ 5,000,000	$ 5,000,000	$ -	$ -	$ -	$ -	$ -	$ -	$ 10,000,000
Subtotal Balance - need to finance	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -

TABLE 5C – CASH FLOW FINANCING: ROW PHASE

Costs - ROW												
	Fiscal Year											
PHASE	2007-08 & Prior	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	Total
PA/ED (Proj Approval and Envir Doc)												$ -
Final Design (PS&E)												-
Subtotal, PA/ED and PS&E --->	-	-	-	-	-	-	-	-	-	-		-
ROW (Right of Way)				36,000,000	24,000,000	21,833,000						81,833,000
Subtotal, ROW --->				36,000,000	24,000,000	21,833,000						81,833,000
ROW Financing Costs							2,890,395					2,890,395
Subtotal, ROW & Financing --->	-	-	-	36,000,000	24,000,000	21,833,000	2,890,395	-	-	-	-	84,723,395
CONSTRUCTION COST (CON)												
Detour and Demo of Existing Viaduct												-
Reconstruction of Viaduct												-
Subtotal, Construction --->	-	-	-	-	-	-	-	-	-	-	-	-
CE (Construction Support)												
Subtotal, Construction and CE--->	-	-	-	-	-	-	-	-	-	-		-
Total Project Costs	$ -	$ -	$ -	$ 36,000,000	$ 24,000,000	$ 21,833,000	$ 2,890,395	$ -	$ -	$ -	$ -	$ 84,723,395
Funding												
Highway Bridge Program (HBP) - PA/ED/PS&E				-	-	-						$ -
Highway Bridge Program (HBP) - ROW				20,000,000	20,000,000	20,000,000	15,005,622					75,005,622
Highway Bridge Program (HBP) - Construction												-
Subtotal, HBP Funds --->	$ -	$ -	$ -	$ 20,000,000	$ 20,000,000	$ 20,000,000	$ 15,005,622	$ -	$ -	$ -	$ -	$ 75,005,622
Prop 1B Local Bridge Seismic Retrofit				2,598,870	2,598,870	2,598,870	1,921,163	-	-	-		9,717,773
Other State Funds												-
City Matching Funds												-
												-
Total Funding	$ -	$ -	$ -	$ 22,598,870	$ 22,598,870	$ 22,598,870	$ 16,926,785	$ -	$ -	$ -	$ -	$ 84,723,395
Subtotal Balance - need to finance	$ -	$ -	$ -	$ (13,401,130)	$ (1,401,130)	$ 765,870	$ 14,036,390	$ -	$ -	$ -	$ -	$ (0)
Local Bonds	-	-	-	13,401,130	1,401,130	-	-	-	-	-	-	14,802,260
Payback of Local Bonds	-	-	-	-	-	765,870	14,036,390	-	-	-	-	14,802,260
Cumulative Balance	$ -	$ -	$ -	$ 13,401,130	$ 14,802,260	$ 14,036,390	$ 0	$ 0	$ 0	$ 0	$ 0	$ (0)

TABLE 5D – CASH FLOW FINANCING: CONSTRUCTION AND CE PHASE

Costs - Construction & CE (Support)												
	Fiscal Year											
PHASE	2007-08 & Prior	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	Total
PA/ED (Proj Approval and Envir Doc)												$ -
Final Design (PS&E)												-
Subtotal, PA/ED and PS&E —>	-	-	-	-	-	-	-	-	-	-		-
ROW (Right of Way)												-
Subtotal, ROW —>				-	-	-						-
CONSTRUCTION COST (CON)												
Detour and Demo of Existing Viaduct							12,548,466					12,548,466
Reconstruction of Viaduct							70,000,000	70,000,000	60,000,000	10,506,290		210,506,290
Subtotal, Construction —>	-	-	-	-	-	-	82,548,466	70,000,000	60,000,000	10,506,290	-	223,054,756
CE (Construction Support)							4,500,000	5,000,000	5,000,000	645,000		15,145,000
Subtotal, Construction and CE—>	-	-	-	-	-	-	87,048,466	75,000,000	65,000,000	11,151,290	-	238,199,756
Construction Financing Costs											11,086,247	11,086,247
Subtotal, Construction, CE & Financing Costs—>	-	-	-	-	-	-	87,048,466	75,000,000	65,000,000	11,151,290	11,086,247	249,286,003
Total Project Costs	$ -	$ -	$ -	$ -	$ -	$ -	$ 87,048,466	$ 75,000,000	$ 65,000,000	$ 11,151,290	$ 11,086,247	$ 249,286,003
Funding												
Highway Bridge Program (HBP) - PA/ED/PS&E												$ -
Highway Bridge Program (HBP) - ROW												-
Highway Bridge Program (HBP) - Construction							50,000,000	$ 50,000,000	$ 50,000,000	$ 50,000,000	$ 20,692,898	220,692,898
Subtotal, HBP Funds —>	$ -	$ -	$ -	$ -	$ -	$ -	$ 50,000,000	$ 50,000,000	$ 50,000,000	$ 50,000,000	$ 20,692,898	$ 220,692,898
Prop 1B Local Bridge Seismic Retrofit					-	-	6,497,175	6,497,175	6,497,175	6,497,175	2,604,404	28,593,105
Other State Funds												-
City Matching Funds												-
												-
Total Funding	$ -	$ -	$ -	$ -	$ -	$ -	$ 56,497,175	$ 56,497,175	$ 56,497,175	$ 56,497,175	$ 23,297,302	$ 249,286,003
Subtotal Balance - need to finance	$ -	$ -	$ -	$ -	$ -	$ -	$ (30,551,291)	$ (18,502,825)	$ (8,502,825)	$ 45,345,885	$ 12,211,055	$ (0)
Local Bonds	-	-	-	-	-	-	30,551,291	18,502,825	8,502,825	-	-	57,556,941
Payback of Local Bonds	-	-	-	-	-	-	-	-	-	45,345,885	12,211,055	57,556,940
Cumulative Balance	$ -	$ -	$ -	$ -	$ -	$ -	$ 30,551,291	$ 49,054,116	$ 57,556,941	$ 12,211,055	$ 0	$ (0)

APPENDIX B - RISK ANALYSIS SUMMARY

OF THE

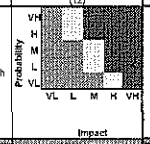
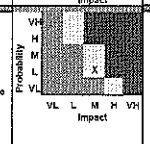
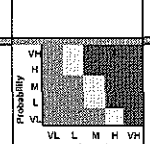
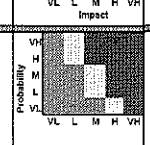
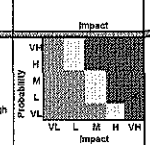
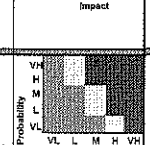
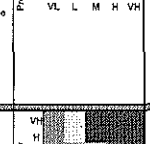
RISK MANAGEMENT PLAN DOCUMENT

FOR THE

6TH STREET VIADUCT SEISMIC IMPROVEMENT PROJECT

UPDATED MAY 2010

PROJECT RISK MANAGEMENT PLAN - Sixth Street Viaduct

Priority	Status	ID #	Date Identified / Project Phase	Functional Assignment	Threat/Opportunity Event	SMART Column	Risk Trigger	Qualitative Analysis: Type	Probability	Impact	Risk Matrix	Optional Quantitative Analysis: Probability (%)	Impact ($ or days)	Effect ($ or days)	Response Strategy	Response Actions including advantages and disadvantages	Affected WBS Tasks	Monitoring and Control: Responsibility (Task Manager)	Status Interval or Milestone Check	Date, Status and Review Comments
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15) = (13)x(14)	(16)	(17)	(18)	(19)	(20)	(21)
	Active	1A	6/1/2004 PID	funding	Project funding. Project funding sources need to be defined and secured.	As of 3/1/2006 it appears that approximately 69% of the project can be funded under the FHWA HBP program, within this programs scope restrictions. As of Nov, 2007 it appears that the 11% will be funded under Prop 1B LSSRP within this programs scope restrictions. Other possible funding to cover items not cover by HBR and LSSRP includes, Prop C and B and MTA.	Funding obligations appear to be in place to cover the baseline project costs of $245 million. During the 6/08 submitted revised baseline cost to Caltrans in the amount of $307.3 million. During the 4qt of 2008 the project cost for the preferred alignment 3B is $349M. Amount doesn't include financial costs.	Schedule Cost	Low	Very High		30%	0	0	Acceptance	MTA call for projects. LSSRP Bond funds have a set amount for entire program.		LA/CH2M/DEA	quarterly	1/2008 - FHWA funding to be allowed for viaduct portion over state right of way. MTA call for projects submitted. LSSRP includes 6th St. for local match. Update funding to Caltrans in June of 08. Funding update to Caltrans in the 4qt of 2008.
	Active	1B	5/9/2007 PA&ED	funding	Project funding through the LSSRP may not be available for the project. This represents approximately 11% of the total funding package.	CTC guidelines for LSSRP will provide funds based on a first come first serve, that is being ready to bid/advertise a project for construction. As of the May, 2008, the LSSRP funds have been increase to approximately $145 million. However this amount may not cover all projects within the LSSRP.	If other major projects (Golden Gate Bridge retrofit, replacement ramps to YBI) within the LSSRP are ready for construction funding prior to 6th being ready for construction.	Schedule Cost	Low	moderate		30%	0	0	Acceptance	1) Investigate project delivery method of design build with City Risk Management Group. 2) Inform City Managers and Council Districts of potential funding threat. 3) Work with FHWA and Caltrans to allow preliminary design to move ahead prior to ROD. 4) Investigate other funding sources.		LA/HNTB/ DEA/CH2M/MN	quarterly	In the 4th quarter of 2007, Item (1) was provided to the City Engineer for consideration. As of 1st quarter of 2008, it appears at the completion of the Advanced Planning & VE Studies an internal preferred alignment and bridge concept could be selected for the replacement alternative. If a preferred alternative becomes apparent, need to begin dialog with Caltrans and FHWA on strategy number 3.
	Active	1C	4/7/2009 PA&ED	funding	Bridge Loan for Cash Flow.	Project cash flow may require a bridge loan. Current sources have not been identified to provide a bridge loan.	The statewide HBRP program cannot meet cash flow requirements for all projects per schedule. The HBRP will reimburse interest payments to advance construction.	Schedule Cost	Very High	High		90%	0	0	Acceptance	City needs to identify bridging funds to advance construction. Measure R could be a source or other banks such as the Infrastructure Bank		City/HNTB	quarterly	The draft financial plan was complete 3/09.
	Active	2A	3/30/2006 PID	row	Right of Way. Right of Way Takes and Associated Cost along entire project, abutment to abutment.	The proposed width of the viaduct will require additional right of way. Depending upon the alignment, the right of way takes will change.	The current City right of way is almost directly adjacent to the edge of the bridge deck. Replacement schemes will require additional right of way. Right of way costs need to be determined for various alignments in order to determine funding risks. Right of way cost varies from $52 million, $62 million, $42 million for alignment A, B and C.	Schedule Cost	Very High	High		90%	0	0	Acceptance	Need to determine if right of way costs are less by shifting the alignment to the north or south, (east side of river) and if aerial ROW are acceptable.		MN/LA	quarterly	As of 6/08 right of way cost have been determine for alignment A, B and C. Cost include 10% for escalation and 15% for contingencies. Can't perform detailed appraisal until after the ROD is signed. The preferred alignment 3B (modified) was set during the 1st qt of 2009 with associated row cost of $62M. This may be impacted with the new bridge type concept 1A.
	Retired	2B	4th Qt 08 PID	design	Right of Way. Right of Way Takes at the west end of the project between Santa Fe and Mateo Streets along the north side of the project may not be acquired prior to starting construction.	The proposed width of the viaduct will require additional right of way. If this right of way cannot purchased, the out to out bridge width would need to fit within the existing City R/W.	Construction bid package is prepared but R/W not secured by City.	Scope Cost	Low	Very High		0%	0	0	Acceptance	Contingency plan to consider reducing the roadway bed width and peeling the roadway off the viaduct near Mesquite St. Bridge would require redesign for fast frame. This action would allow the construction to proceed until R/W is obtained. Bridge Concepts 1, 2, 3 and 4 would require approx 6 months to redesign and Concept 5 would require approx 12 months to redesign.		MN/DEA	quarterly	As of 2/2008, it appears that the roadway could be peeled off from the viaduct. Bridge Concept No. 4 is impacted the least of the 5 bridge concepts and Concept 5 the most. In the 4th qt of 2008 it was decided to use the design sequencing project delivery method to avoid this risk.
	Active	3	6/1/2004 PID	row	Relocation of City facility. City maintenance facility below viaduct located at west end of the project.	Prior to demo and during construction this facility will need to be relocated.	Need to have plan in place for relocation prior to construction. Current estimate ranges from $2 to $5 million as a functional relocation.	Schedule Cost	very high	moderate		90%	0	0	Acceptance	Risk must be accepted in order to maintain schedule and continue with development of design. City departments must consider options and opportunities in addressing this issue.		LA/MN/CH	quarterly	As of the 1Qt of 2008, Caltrans and FHWA will allow for the early relocation of the facility prior to construction (cover the relocation and R/W costs). Location is not known, but investigating a few sites. Need a early design in place. RELOCATE PRIOR TO ROD. Caltrans has indicated that the funding is not eligible under the HBRP to pay for the facility real estate. As of the 1 qt of 2009 the City (CAO) is looking at funding for this facility. Team should consider relocating to the Pickle Works or Venture Food properties.
			9/1/2004					Schedule												2/2008 - City presented the project to SHPO for early consultation. Appears SHPO concurs with recommendation for replacement. Need to work with SHPO for historical mitigation. Team has also met with LA Conservancy. It appears the Conservancy understands the bridge

PROJECT RISK MANAGEMENT PLAN - Sixth Street Viaduct

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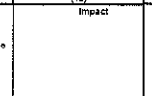
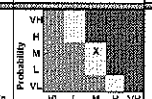
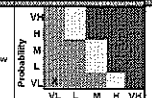
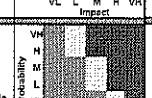
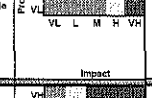
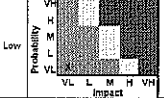
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15) =(13)X(14)	(16)	(17)	(18)	(19)	(20)	(21)
	Active	4	PID	environmental	Removal of Historical Structure. Engineering studies have concluded replacement is the measure to solve the ASR and seismic vulnerabilities.	SHPO & LA Conservancy may require additional studies to preserve the existing structure, or keeping the existing structure with the addition of a new structure at a different location.	Initial consultation with SHPO and LA Conservancy.	Scope	Very Low	moderate		10%	0	0	Acceptance	Consultation with SHPO & LA Conservancy to explain the existing condition of the structure, ASR and seismic safety issues in keeping the structure in place.		LA/PTG/DEA	quarterly	structural issues, but would like to exhaust all potential ways to solve the seismic and materials problems. As of 6/08 Team has engaged Eric Delony to investigate different method for ASR treatment. A workshop was held with the public in 2006. It appears that replacement is acceptable to all stakeholds as of the 1st qt of 2009. SHPO is concerned about accumulative impact to the collection of LA River bridges. Many want to start study to determine an approach to the accumulative impact.
	Active	5	1/1/2006 PID	planning	Number of signature bridge types to study.	Need to consider a number of bridge types to span the LA river, but within acceptable budget and range of applicable structural systems for this site.	Different bridge types are applicable to this site considering span lengths, cost, function and aesthetics. During the preliminary engineering and environment phase there is a need to narrow down the possible bridge types for further detailed study to be included into the environmental document and presented to the public at large.	Scope Cost	Moderate	Moderate		50%	0	0	Acceptance	Perform a screening of a large number of bridge types. Rank the different bridge types and then the design team develop preliminary designs/alignment/rendering and cost for these options to be carried into the environmental document.		DEA	monthly	During the 4th quarter of 2008, 15 bridge concepts were screened down to 5 with input from CAC, bridge experts and team members. Five concepts have been carried into Advanced Planning Studies to determine cost on 3 different alignments. During the 1st qt of 2009, two more concepts have been added, 1A a replica from abutment to abutment and 4A a 3-dual tower extradosed. Type selection will be based on the APS reports.
	Active	6	6/1/2004 PID	design	Utilities - Fiber Optics Line on and adjacent to viaduct.	Need to determine utilities that require relocation. Risk is related to cost to owner and timing to relocate prior to demo.	Fiber optics line on existing bridge and adjacent to structure. Relocation cost may be high. Not sure of costs to City and Utility Company.	Schedule Cost	Very Low	Very Low		10%	0	0	Transference	Need to determine all utility location and agreements and inform utility company(s) so they can begin planning for the relocation.		CH	quarterly	3/2006 - PSR notes fiber optics line within sidewalk of bridge. 9/2006 fiber optics line located on poles adjacent to viaduct. 5/9/07 Appears costs to be burdened on the utility company(s).
	Active	7	6/1/2004 PID	construction	Contaminated soils at site	During foundation investigations it was noted that petro may be present in the ground.	Contaminated soils need to be identified and a plan put in place for mitigation. Type and amount could effect foundation type selection.	Schedule Cost	High	Moderate		70%	0	0	Acceptance	Need to determine degree of contaminated soils within the construction area, (foundations), and below bridge in general.		CH	quarterly	3/2006 -Need to review past geotech reports and determine plan of action for future investigations. 5/09/07 specs will have construction contractor remove contaminated soils, design team needs to identify and place into PS&E documents. Contaminated soils need to be considered in the cost of bridge type concept 1A.
	Dormant	8	6/1/2004 PID	planning	Accurate Mapping and Survey Data	Survey data and mapping used during the seismic vulnerability studies was not tied to control. Need to have accurate survey information for use in the preliminary design and final design phases.	It is likely that the alignment corridor along Sixth Street will not change. Therefore an opportunity can be achieved by performing design surveys during the PR/ED period.	Quality Schedule	Very Low	Very Low		10%	0	0	Acceptance	Need to perform design survey during PR/ED phase. Will result in less redo of engineering products during the final design phase.		DEA	at project milestones	As of 1/3/07 aerial mapping completed and field surveys are underway. As of 6/9/07 aerial mapping and field surveys are completed. Following on surveying likely to supplement current mapping (pot holing high risk utilities).
	Active	9	6/1/2006 PID	planning	Cost Escalation from Bridge Type Selection	A baseline project was priced for dp box girders with allowance for architectural enhancements. If signature structures are selected over the main spans and approaches, the cost will increase.	During the preliminary engineering phase a number of different bridge type were studied to determine cost. At the end of the Screening Study 5 bridge types surfaced. The baseline structure did not receive any votes from the CAC, therefore a new base line was establish, call Bridge Concept No. 2 that did receive favorable votes from the CAC and engineering teams.	Cost Scope	High	Moderate		70%	0	0	Acceptance	Funding amounts and sources to be updated at the end of the Advanced Planning Studies.		LA and consultant team	at project milestones	Base line cost established in 2/06 and updated in 12/06 and again 10/07. In the 1st qt of 2008 the alignment 3B (modified) became the staff's recommended alignment. New base line cost is $345 million (CIP Box Girder with steel tie arches for ped/way over the LA River). Bridge Concept No. 2. Bridge Concepts 1 - 5 costs as of 6/08 and range with Concept No. 4 having the lowest cost and Concept No. 5 the highest. The baseline Concept is about equal to Concept No. 4. In the 2nd qt of five supplemental APS concepts will be completed, concept 1A a replication from abutment to abutment and 4A a 3-dual tower extradosed. Costs for these two new concepts will not be determined until May/09 but will be higher than Concepts 1 and 4.

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(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15) =(13)x(14)	(16)	(17)	(18)	(19)	(20)	(21)
	Active	10	3/30/2006 PID	planning	Cost Escalation from Stakeholder enhancements	A baseline project has been priced for a HBP project that limits funding for bridge replacement, right of way, and approx. 200 feet of roadway approach work at both ends of the bridge. Oth er scope items may be added that will not be funded by the HBRR program. Therefore, other sources of funding will be required.	During the environmental phase the scope should be defined.	Cost Scope	Very High	very high	Probability VH H M L VL / VL L M H VH Impact	90%	0	0	Mitigation	Need to have stakeholder understand the project need, scope and cost. Consensus building will be required.		LA and consultant team	at project milestones	3/13/2006 - Baseline project was presented to the Funding Task Group. As of the 1 Qt of 2006, "Greening" elements are being added to include guideline from the LA River master plan, (median treatments at ends of viaduct to include vegetation and color schemes of median on viaduct, gateway pylons near river, belvederes at river piers, possible preservation of existing arch ribs as gateways, pathway below replacement option at existing cross roads). Roadway/greening cost have increased as noted in the 6/06 total roadway cost items.
	Active	11A	6/1/2004 PID	design	Existing Corp of Engineers Tunnel below west viaduct and rail road.	There is an existing tunnel below the west viaduct that serves as access to the river. Currently the game plan is to avoid this facility, but the new alignment, foundation or construction could have impacts on the tunnel.	If the reconstruction conflict with the existing tunnel or it operations during construction. This will be determined during the bridge advanced planning studies.	Cost Scope	Very High	Moderate	Probability VH H M L VL / VL L M H VH Impact	90%	0	0	Acceptance	Need to determine tunnels use and constraints with owner. Need to avoid if possible for location of proposed foundations within the approach to the tunnel. Must avoid any tunnel conflict by modifying alignment and foundation location, as cost related to relocating tunnel under railroad right of way will be very costly and impact schedule.		MN/DEA	prior to setting final alignment	As of 1/3/07 field survey scans completed to determine location of tunnel. As of 1st Qt 08 tunnel impacts will require some reconstruction for foundation construction. Impacted length is approximately 40, but is not located within the Rail Road R/W. Cost at APS stage indicate cost impacts less than 2% of project costs. Need to reconstruct architectural features effect during from realignment.
	Active	11B	2/1/2005 PID	design	Existing Corp of Engineers Ramp below west viaduct and rail road.	There is an existing ramp leading to the tunnel below the west viaduct that serves as access to the river. Currently the game plan minimize realignment of the ramp for the different bridge concepts.	If the reconstruction conflict with the existing tunnel or it operations during construction. This will be determined during the bridge advanced planning studies.	Cost Scope	High	very low	Probability VH H M L VL / VL L M H VH Impact	0%	0	0	Mitigation	Need to determine tunnels use and constraints with owner and design for relocation of ramp		MN/DEA	prior to setting final alignment	As of 2/1/08 some realignment of the ramps to the tunnel will require realignment and reconstruction to allow for new foundations. As of the 2 quarter of 08, it has been determined that the tunnel can be shut down during periods of construction. Need to reconstruct architectural features effect during from realignment.
	Active	12	6/1/2004 PID	Construction	Existing Power Transmission Lines at east and west river banks	Currently power lines transverse the alignment at the river banks. Risk will be during construction, what are the power company restrictions that could effect the method of construction.	The decision to replace the bridge.	Cost Schedule	High	low	Probability VH H M L VL / VL L M H VH Impact	70%	0	0	Avoidance	Need to work with the utility company to define construction restrictions and deal with this in the design and specs.		CH	During prelim. Design	DWP restrictions will need to be placed into specs.
	Dormant	13	6/1/2004 PID	design	Relocation of Existing Power Transmission Lines located at east and west river banks.	Some potential bridge types, cable supported systems, would likely require relocation of the power lines. Feasability of these type of structural systems will depend upon the likelihood to relocate the transmission lines. Also, alignment shifts toward the south, will impact the towers.	The decision to study cable supported structures and move the alignment toward the south. Cable Stay bridge concepts were eliminated during the screening study and are no longer being considered. Also, alignments were screened and those within 25 feet of the towers were eliminated.	Schedule Cost	Very Low	Very Low	Probability VH H M L VL / VL L M H VH Impact	10%	0	0	Avoidance	As of the 4 Qt of 2007, it was determined from DWP that relocating the power lines or towers was a fatal flaw as the system is non-redundant.		CH/DEA/MN	During prelim. Design	During the 4th Qt of 2007 it was determined to be a fatal flaw to relocated the tower line due to cost and redundancy of the system. Therefore all alignments and bridge types requiring relocation were dismissed from further consideration.
	Active	14	6/1/2004 PID	design	Railroad Restrictions	Bridge type, span layout will depend upon RR allowing bents within their R/W, construction access such as contractors equipment and use of false work. The most economical structure type will be cip on false work depending upon the RR restrictions.	Decision to replace bridge or retrofit bridge.	Schedule Cost	High	High	Probability VH H M L VL / VL L M H VH Impact	70%	0	0	Acceptance	Need to know railroad restrictions and select bridge type and construction method accordingly.		MN/DEA	During prelim. Design	As of 2/11/08 meetings with Rail Road companies indicate: demo can take place during 48 hour windows with protection provided for the tracks, false work bents can be located within R/W for CIP construction. Rail Road would like to eliminate existing horizon clearance issues that do not meet current standards. Replacement schemes being considered will span rail road R/W. Retrofit alternative do not meet existing clearance requirements. Bridge concepts 1, 2 and 3 have greater rail road impacts compared to concepts 4 and 5. Bridge concepts 1A and 4A were added in the 1st qt of 2008. Concept 1A will have the most impacts to the railroad row.

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	Active	15	6/1/2004 PID	r/w	Right of Way needs	Need to determine right of way takes (partial, full, aerial) for different alignments and bridge types and determine estimate of associated R/W costs.	Decision to replace bridge.	Cost Schedule	Very High	Very High		90%	0	0	avoidance	Need to determine right of way needs and associated cost.		LA/MN	During prelim. Design	As of 1/07 a matrix of potential property impacts has been established for the different alignments. City Risk Management Group indicates that aerial right of way is acceptable. However, the design team does not recommend alignment C due to risks involved during and after construction. In the 4th qt of 06 the PDT recommended alignment 3B modified as the preferred alignment to minimize this risk.
	Active	16A	1/1/2006 PID	r/w	It may be possible to span some existing properties by obtaining aerial rights of way. Opportunity would result in lower R/W cost, but threat is issue of having a City facility located over non-City property.	Risk relates to future maintenance access to viaduct, usage of property below the viaduct by others, and objects from the viaduct deck causing damage or injury to property of others below the viaduct.	Decision to obtain aerial R/W is moving ahead as of the 4 Qt of 06.	Schedule Cost	Moderate	Moderate		50%	0	0	Avoidance	City risk management group needs to determine if opportunity (decrease R/W cost) is worth the risk associated with the decision to obtain aerial rights.		LA and consultant team	During prelim. Design	As of 1/1/06 initial meetings have been held with City Risk Group and LABOE. Risk Group needs to better understand the degree of R/W needs to address the opportunity/threat risks. Design team recommends alignment A, or B as risk go down and total project cost is lowest for alignment A.
	Active	16B	2/13/2006 PID	r/w	It may be possible to span some existing properties by obtaining aerial rights of way. Opportunity would result in lower R/W cost, but threat is higher construction cost due to risk of construction taking place over existing facilities.	Risk relates to obtaining accurate construction cost estimates. Contractor will increase bid amounts to cover their risks associated with building in congested areas and over existing facilities.	Decision to obtain aerial R/W is moving ahead as of the 4 Qt of 06.	Schedule Cost	Very High	Moderate		0%	0	0	Avoidance	Should consider performing a contractors cost estimate instead of using bid items and historical data for unit cost for the bid items.		LA and consultant team	Milestone Cost Estimates	As of 2/2006 the team is considering performing a contractors type of cost estimate. During the APS period contractor's input suggests that alignments A or B are preferred over alignment C. Alignment B is most preferred by contractors to minimize risk and provide for access during construction. In the 4th qt of 06 the PDT recommended alignment 3B modified as the preferred alignment to minimize this risk.
	Active	17	3/13/2006 PID	environmental	Opportunity to reuse portions of the existing bridge.	As part of the alternative to replace the existing bridge should consider reuse of the existing steel arch for art work within the project area.	Using the existing arch rib as an architectural feature and a "green" solution to reuse materials.	Scope Cost	Low	Moderate		30%	0	0	Acceptance	Could be a unique way to dispose of the existing bridge and preservation of the arch ribs.		LA and consultant team	During prelim. Design	Need to discuss potential idea with SHPO & LA Conservancy. LA Conservancy, Mike B. indicated that this scheme would not be preservation. Some members of the CAC like the idea as a gateway. However, SHPO is neutral on there reuse.
	Dormant	18	6/1/2004 PID	design	Foundation type	The current bridge typically uses spread footing, with the exception of pile support bents at the river and near US 101. The substructure cost will likely make up 30 to 50% of the bridge cost and these cost are not well defined.	Decision to replace bridge.	Cost Schedule	Moderate	Moderate		50%	0	0	Acceptance	Need to perform geotech and structural preliminary design to capture the cost of the substructure including foundation. Issues include vibration at nearby building, potential contaminated soils and seismic demands.		CH/DEA	During prelim. Design	Preliminary foundation recommendations as of 5/06 are to use steel piles driven into place.
	Dormant	19	1/1/2006 PID	environmental	Birds nesting on existing structure.	Need to perform environmental studies to determine if certain birds are nesting on the structure. Risk is regarding cost escalation due to schedule delays associated with the demo of the existing structure.	Decision to replace bridge.	Cost Schedule	Moderate	Low		50%	0	0	Acceptance	Need to determine type of nesting birds and perform pre-demo survey.		PTG	During prelim. Design	A mitigation measure may be needed.
	Retired	20A	3/18/2005 PID	environmental	Maintaining traffic on existing viaduct while demo takes place and construction a new viaduct.	In order to replace the bridge, a complete detour away from the site is desired from the standpoint of right of way and construction cost. If this solution is not accepted, project cost will increase to obtain additional right of way and construction cost will increase for staged construction and traffic control. Feasible to stage construct a new viaduct is questionable from a structural engineering viewpoint.	Decision to demo and replace the existing viaduct.	Scope Cost	Very Low	very low		10%	0	0	Avoidance	Need to complete a TMP that includes a detour for the duration of the demo and reconstruction./ Should consider and reject staged construction in the environmental process (increase time to construct, temporary structural supports within river and railroad right of way, structural stability)		MN	During prelim. Design and Environmental phase.	As of the 4th Qt of 2006 it appears acceptable to detour traffic away from the demo and construction site for the replacement alternative.
			3/18/2005					Scope												As of the 4th Qt of 2006 it appears acceptable to detour traffic away from

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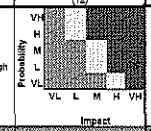
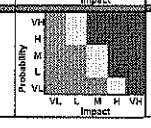
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15) =(13)x(14)	(16)	(17)	(18)	(19)	(20)	(21)
	Retired	208	PID	environmental	maintaining traffic on existing viaduct while performing construction of the retrofit alternative.	In order to retrofit the structure, lane closures will be necessary and a detour is likely not required.	Decision to retrofit the existing viaduct.	Cost	very high	Moderate	Probability VH H M L VL; VL L M H VH; Impact	0%	0	0	Acceptance	Need to complete a TMP that includes a detour for the duration of the retrofit.		MN	During preliminary Design and Environmental phase.	the design and construction are. However, it might be more cost effective to allow for construction with lane closures. Most of the seismic retrofit work would take place below the roadway deck.
	Active	21	1/1/2006 PID	construction	Unit price escalation for materials, fuel and labor could exceed available funds to complete the project.	From about 2004 the cost for highway construction materials (steel, rebar, cement, asphalt) have increased dramatically over historical indexes. The baseline cost have been determined using 2006, first quarter cost and escalated to midyear of construction. It is not possible to predict the market prices for a project targeted for midyear of construction taking place in quarter 1, 2013. Risk is availability of funds to cover cost increases.	Construction cost at time of advertising the project.	Cost Schedule	Moderate	Moderate	Probability VH H M L VL; VL L M H VH; Impact	50%	0	0	Acceptance	Need to follow construction cost escalation, update estimates, document and obtain funding.		City/Funding Agencies	During preliminary and final design phases.	As of 6/08 a cost escalation factor of 42% is being used in the cost estimates. As of the 4th qt of 08, unit prices are not escalating as has been the case in previous years.
	Active	22	1/3/2007 PID	design	Removal of existing piles could increase construction activities and excavations within channel and adjacent to rail road facilities.	The existing foundations within the river and at the top of the river banks (adjacent to rail road facilities) are pile supported. As-built plans indicate piles are 15 feet in length being constructed of partial length reinforced concrete. Piles can not be reused and mostly likely must be removed for construction of new deep foundation.	Proposed alignments within the footprint of the existing foundations.	Cost Schedule	Very High	High	Probability VH H M L VL; VL L M H VH; Impact	80%	0	0	Acceptance	Account for pile removal in environmental documents and cost estimates and the possibility of using driven H-piles between existing piles at the river pier.		DEA/CH/PTG	Cost estimate updates and environmental documents.	As of 1/Q/07 preliminary alignments will overlap the existing piles, thus requiring removal of existing piles or driving piles between existing piles. For bridge concepts 1, 2 and 3 impacts will occur at the top of river bank. For bridge concepts 1, 4 and 5 conflict will occur at the middle river pier.
	Active	23	1/3/2007 PID	design	Cost and schedule to relocate underground utilities.	Underground utility study is required to determine (such as sewer siphon) impacts within the project area. Until the type and impacts are determine relocation cost responsibility can not be estimated.	Decision to retrofit or replace viaduct.	Cost Schedule	High	Low	Probability VH H M L VL; VL L M H VH; Impact	70%	0	0	Acceptance	Identify utilities and relocation cost to project.		MN/CH	Design development	As of 2/2008 it appears that the sewer siphon will not be impacted below the river. Also, the Wastewater Engineering Services Division is indicating that the siphon may be abandoned. Impacts for added concepts 1A and 4A has not been determined as of 1st qt of 09.
	Active	24	2/1/2006 PID	design	City cash flow to pay for design and environmental cost. Delays in payments likely to slow down the project and risk obtaining funding sources that are tied to dead lines.	Payments to perform preliminary design and environmental studies is being delayed due to internal issues within the City.	Decision to move ahead with project.	Cost Schedule	High	High	Probability VH H M L VL; VL L M H VH; Impact	0%	0	0	Acceptance	Elevate the cash flow issue to upper management within the City.		City/CH	Design development	As of 2/2008 Caltrans has been responsive to provide additional reimbursements but process within the City is delaying timely payments. As of the 2nd quarter 08, design firm's have invoices have been delayed over 90 days.
	Active	25	1/3/2007 PID	design	Failure to reach agreement with State and Advisory Council will delay the ROD milestone and possible funding sources could be lost.	Need to obtain concurrance of preferred environmental alternative.	Decision to replace viaduct.	Cost Schedule	Moderate	High	Probability VH H M L VL; VL L M H VH; Impact	0%	0	0	Acceptance	Need to work with these groups to provide an understanding of the project purpose and need.		PTG	Environmental Process	106 process requires concurrence. In the 4th qt of 08 the PDT recommendation is to replace the viaduct.
	Active	26	1/3/2007 PID	design	Changes to the out-to-out width of the bridge after the preferred bridge type is selected will result in redesign. Redesign will affect schedule and design cost.	Currently the preliminary design is being made using a 10 wide medians and 10 wide sidewalks. If these are changed after Oct of 2006, it will require reworking the design.	Decision to change geometric configuration of viaduct (out-to-out width or alignment)	Cost Schedule	Moderate	Very High	Probability VH H M L VL; VL L M H VH; Impact	0%	0	0	Acceptance	Move to have EV studies as soon as Advanced Planning Studies are completed.		MN/CH	Design development	The VE studies are being schedule shortly after completion of the Advanced Planning Studies. VE studies should be concluded in July of 08. Stakeholds may want a reduced roadway width.
	Retired	27	6/16/2006	Environmental	Selection of a "Apparent Best Project"	In order to keep the project moving ahead need to start design at risk in October. Opportunity will be to accelerate the schedule.	Selection of an Apparent Best Project and the City approval to move ahead with design to support the environmental document.	Cost Schedule	moderate	High	Probability VH H M L VL; VL L M H VH; Impact	0%			Acceptance	Have a team work shop following the VE study to determine an Apparent Best Project.		City/CH/PTG/MN/ DEA	At conclusion of VE studies.	Cost and environmental tech studies are complete as of 6/08. After VE studies team to meet to address which alternative is likely to be the apparent best project. During the 1st qt it was decided to remove the PDT recommended bridge type, but to recommend the replacement alternative along an alignment 3B (modified).
			6/16/2006																	

PROJECT RISK MANAGEMENT PLAN - Sixth Street Viaduct

	Identification							Qualitative Analysis				Optional Quantitative Analysis			Response Strategy			Monitoring and Control		
Priority	Status	ID #	Date Identified Project Phase	Functional Assignment	Threat/Opportunity Event	SMART Column	Risk Trigger	Type	Probability	Impact	Risk Matrix	Probability (%)	Impact ($ or days)	Effect ($ or days)	Strategy	Response Actions including advantages and disadvantages	Affected WBS Tasks	Responsibility (Task Manager)	Status Interval or Milestone Check	Date, Status and Review Comments
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15) =(13)x(14)	(16)	(17)	(18)	(19)	(20)	(21)
	Active	28	[illegible]	Engineering Services	Caps on design contracts set at $5 million.	The magnitude of the design work will likely exceed the design fees available within the contracts. This could cause delays to schedule if a solution is not found to increase total contract amounts.	Scoping of project for next design phase.	Schedule Scope	Very High	Moderate		0%			Acceptance	City program manager to discuss with upper management.		City/DEA/PTG/MN	Prior to execution of Task Order No. 2	Additional funds for design and construction engineering have been requested through Caltrans as of 8/08. However, no action regarding consultant caps within contract agreements.
	Dormant	29	6/19/2008	Construction	Pile driving vibration damage to existing facilities.	During construction, third parties may claim their property was damaged due to pile driving, resulting in claims to the Contractor and City.	Decision to use driven piles.	Cost Schedule	High	High		0%			Acceptance	Within the construction specifications, require the contractor to perform preconstruction surveys of properties and to install vibration monitors to document level of vibration.		CH	During final design	Normally would place requirements within the contract specifications. Geotech to investigate drilled shafts for applicable pile type, risks and costs.
	Active	30	6/18/2008	Design	Relocation of City facility. City maintenance facility below viaduct located at west end of the project.	The facility needs to be relocated prior to demo to avoid demo and construction delays. At this time design is proceeding.	Decision to retrofit or replace viaduct.	Cost Schedule	very high	high		0%			Acceptance	Need to being the planning process and design process in task order no. 2.		CH/City	quarterly	Need to determine if design and relocation can take place prior to the ROD. During the 1st qt of 09 the decision was made to assign this project (relocation and design) to the cities CAO.
	Active	31	4/7/2009	Funding	1B funding being lost due to starting demo at a late date.	Demo may be delayed until after Council elections. Demo is the first construction activity and funding of 1B is based on a first come first serve basis until the funds are depleted.	Decision to delay demo for election dates.	Cost Schedule	Very High	low		0%			Acceptance	If the elections are determined by June of 2011 it might be ok to award construction in Apr of 2011 assuming 3 months of mobilization by the contractor.		City	quarterly	Need to have CD 14 understand potential lost of 1B findings.
	Dormant	32	4/7/2009	Construction	Differing Site Conditions	Pile foundation type not being compatible with existing conditions.	Decision to use deep foundations	Cost Schedule	High	Very High		0%			Acceptance	Recommend a drilling program that drills boring at each bent location.		City/CH	quarterly	Approximately 18 borings were taken along alignment C, for bridge concept 4, preliminary foundation report. Will need to re-address after bridge type is determined and layout of bents sel.
	Active	33	4/7/2009	Design/Construction	Delay of Notice to Proceed on Design could result in high project costs.	It is estimated that 18 months will be required to perform the final design and be ready to list the project for advertising. With bid award target date of 4/2011, final design should be underway by 6/2009. As of April of 2009 ntp has not been given for final design.	Decision to retrofit or replace bridge.	Cost Schedule	Very High	Moderate		0%			Mitigation	Move to change project delivery method to design sequencing or design-build. Unchecked details could be used as the bidding documents.		City/CH	monthly	This method has not been used by the City for past projects. CH and the City are determining the process to move forward.
	Dormant	35	4/7/2009	Design	Process to select bridge type	If the decision to select bridge type is not made in the 3 or 4 qt of 2008, the lack of decision will likely delay the design and put funding at jeopardy. If construction can not start (1B funding).	Decision making process and final decision to select the bridge type.	Cost Schedule	High	Very High		0%			Avoidance	Need to meet with decision makers so they understand the need to select the bridge type so final PS&E can be developed so a construction contract can be award.		City/PDT	monthly	Meeting have been held with CD14 in the 1 qt of 2009 to explain the issue of "first come first serve" to secure 1B funding. Meetings have also been held with the City Engineer on the funding plan and its constraints.
	Dormant	36	4/7/2009	Construction	Buried man-made objects	Buried man-made objects (rock pile, concrete chunks, etc.) might be in the vicinity of pile work.	Decision to use deep foundations.	Cost Schedule	Moderate	Moderate		0%			Acceptance	Recommend a drilling program that drills boring at each bent location. Consider geophysical surveys		City/CH	quarterly	Approximately 18 borings were taken along alignment C, for bridge concept 4, preliminary foundation report. Will need to re-address after bridge type is determined and layout of bents sel. Also could review past city projects within this area for potential old foundations.
	Dormant	37	4/7/2009	Construction	"Green House Gas" Legislation Cost	The California Legislator could enact new carbon emission standards for construction equipment in California.	Contractors would need to pass on the extra cost of upgrading their equipment to meet the new standards.	Cost Schedule	Very High	Low		0%			Acceptance	Will need to determine cost impacts and increase unit prices within cost estimate.		PDT	quarterly	Will need to consider when law is passed. Also, if not law at the time of the construction award, may want to place language into the contract to avoid potential change order.

PROJECT RISK MANAGEMENT PLAN - Sixth Street Viaduct

	Identification							Qualitative Analysis				OPTIONAL Quantitative Analysis			Response Strategy			Monitoring and Control		
Priority	Status	ID #	Date Identified Project Phase	Functional Assignment	Threat/Opportunity Event	SMART Column	Risk Trigger	Type	Probability	Impact	Risk Matrix	Probability (%)	Impact ($ or days)	Effect ($ or days)	Strategy	Response Actions including advantages and disadvantages	Affected WBS Tasks	Responsibility (Task Manager)	Status Interval or Milestone Check	Date, Status and Review Comments
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15) = (13)x(14)	(16)	(17)	(18)	(19)	(20)	(21)
	Dormant	38	4/7/2009	Design	Design competition for final design.	Decision to hold a design competition has been asked about by city and other stakeholder. The competition would ask design firms to submit preliminary design for a competition to win the final design. A design competition would likely delay the job by 1 year and risk losing TE funds.	City decides to move ahead with a design competition.	Cost Schedule	low	Very High		0%			Avoidance	Inform City Engineer and other stakeholds of risks and associated cost to have a design competition.		City/CH	monthly	Have discussed with City Engineer on April 7, 2009. Issues include, setting up criteria for the competition, advertizing the competition, short listing qualified teams, providing stipends to teams, selecting team, potential modification to environmental document and the time delay that will risk funding.
	Active	39	3/26/2010	Design	The SHPO reviewing the bridge plans	As part of the MOU with the SHPO, plans will be submitted to the SHPO for review and comment. A 30 review period is being required. Changes to the plans and untimely review could delay the project schedule causing additional design cost and potentially funding deadlines.	City decided to accepted the SHPO review as part of the MOU.	Cost Schedule	low	High		0%			Acceptance	Provide the SHPO with plans and request review comments within 30 days for consideration. Place the review time line into the project schedule.		City/Design Team	monthly	

APPENDIX C – CHECKLIST FOR FINANCIAL PLAN COMPONENTS
FHWA FINANCIAL PLAN GUIDANCE ATTACHMENT C
6th STREET VIADUCT PROJECT INITIAL FINANCIAL PLAN
July 2010

1. Cost Estimate	Status
Provide a total cost estimate for the full project. Provide an activity breakdown for feasibility studies, preliminary engineering, environmental assessment, right-of-way acquisition, construction, construction engineering and inspection, project management, contingencies, and ITS activities. Include other cost categories, as necessary. See *Major Project Program Cost Estimating Guidance.*	completed
All cost estimates should be expressed on a year-of-expenditure basis and should include a narrative describing assumptions used to arrive at such estimates.	completed
2. Implementation Plan	
Provide a comprehensive description of the project, including, but not limited to, project scope, termini, and interconnections. Describe any proposed phasing for the project and dependencies on other projects. Include a list of all federal, state, and local permits and approvals required for the project and a schedule for obtaining such permits and approvals.	completed
Include the schedule for completing the project, by year, showing estimated costs.	completed
It should be noted that updates to the initial financial plan should ensure consistency in project scope. If costs/schedule change, the changes must be clearly identified to ensure valid comparisons to the initial financial plan.	completed
3. Financing and Revenues	
Sources should include separate line items, as applicable, for Federal, state, and local funds; private investment; any other contributions; market value of right-of-way dedications; bond proceeds (general obligation, revenue, GARVEEs, and others); state infrastructure bank loans; other borrowing (specify); investment income; Federal credit assistance (TIFIA). The total of all funding sources should equal the total of the cost estimate. New funding sources developed after the Initial Financial Plan should be incorporated at the subsequent Annual Update.	completed
4. Cash Flow	
The cash flow pro forma should indicate the level of cash required to fund the project on an annual basis over the period of the financial plan. The pro forma should include beginning and ending balances, all sources and uses of funds, and show annual change in financial position. Total sources and uses should be equal.	completed