



South Access to the Golden Gate Bridge
Doyle Drive Project

FHWA Major Projects Financial Plan

FHWA Initial Financial Plan
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Submitted in Partnership by:
Federal Highway Administration
San Francisco County Transportation Authority
California Department of Transportation - Caltrans



FHWA



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Executive Summary

The Doyle Drive Replacement Project (the Project) is a 1.5 mile, state-of-the-art connector facility combining at grade, elevated, and below grade roadways and structures to connect the south end of the Golden Gate Bridge with city streets in San Francisco while minimizing impacts to the surrounding park and community facilities.

With a \$928.8 million cost estimate to complete the Project, the San Francisco County Transportation Authority (the Authority) and Caltrans have developed a financial plan that incorporates a combination of State, Federal and local sources to fully fund the project. In order to support both the implementation and financing of the Project, Caltrans and the Authority are serving as co-sponsors, as outlined in the Cooperative Agreement, attached to this report as Appendix H.

Given that Federal funds will be a significant contributor to pay for the Project and the total cost of the project exceeds \$500 million, Federal law requires the sponsoring agencies to submit a detailed financial plan defining the methodology in which the project will be executed. This document serves as the Doyle Drive Replacement Project Initial Financial Plan and is structured to meet the requirements outlined by the Federal Highway Administration (FHWA). Within this plan, the following topics will be presented in order to meet the FHWA requirements:

Section 1. Introduction to the Doyle Drive Replacement Project

Presents the project, the lead sponsoring agencies, other agencies, and public entities that are taking part in the Project's planning and implementation.

Section 2. Project Cost Estimate to Completion

Identifies the key cost components and estimating methodology for the \$928.8 million Project.

Section 3. Project Implementation Plan

Presents the project schedule and identifies the actual and projected expenditures by fiscal year (July 1 to June 30).

Section 4. Project Revenues

Identifies committed and anticipated funding from the following sources:

- \$405.0 million in State Highway Operation and Protection Program funds
- \$100.0 million in American Recovery and Reinvestment Act funds
- \$84.1 million in Regional Improvement Program funds
- \$80.0 million in Metropolitan Transportation Commission funds
- \$80.0 million in Golden Gate Bridge Highway and Transportation District funds¹
- \$67.9 million in Proposition K Sales Tax funds
- \$47.3 million in Urban Partnership Agreement funds
- \$28.6 million in Federal Earmark funds
- \$21.0 million in State Local Partnership Program funds
- \$20.0 million in Port Sonoma Ferry Earmarked funds

¹ \$80.0 million in GGBHTD funds includes \$4.0 million from Marin County and \$1.0 million from Sonoma County

- \$15.0 million in Traffic Congestion Relief Program funds
- \$6.0 million in Devil's Slide Earmarked funds

Additionally, Section 4 describes potential risk factors and mitigation strategies.

Section 5. Project Cash Flow

Summarizes anticipated funding account balances on an annual basis and concludes sufficient funds will be in place to meet capital expenditure requirements.

Section 6. Other Factors

Includes cost containment strategies, responsibilities of the sponsors, as well as related agreements and issues pertaining to the project financing requirements.

This Initial Financial Plan covers all revenues and expenditures realized since 2001. All funds and associated expenditures prior to 2001 are included as 'prior costs' within this financing plan because they are primarily related to prior planning activities and are considered independent of the current project.

Caltrans and the Authority believe that the Project team has developed the necessary financial and project structures to complete the Project on budget and on schedule. The FHWA Cost Estimate Review (CER) that was held in April of 2009 found that with 70% confidence the total year of expenditure (YOE) cost of the project (including all support costs, environmental costs, right of way, and construction costs) would be no more than \$827.4 million. With 90% confidence the total YOE cost of the project was found to be \$846.2 million. The total of committed funding for the project, \$878.8 million, exceeds the 90% confidence level cost estimate by \$32.6 million.²

² A comparison of the committed revenues to the FHWA CER cost estimate is required for the financial plan to be approved by FHWA, though the Caltrans cost estimate, totaling \$928.8 is used as a basis for the financial plan throughout the remainder of this document. The Caltrans cost estimate includes additional budgets for risk which causes it to exceed the FHWA estimate.

1.0 Introduction

1.1 Project Description

Doyle Drive is the section of Route 101 in San Francisco that is the southern access to the Golden Gate Bridge, connecting Marin and San Francisco counties and providing a major regional traffic link between the peninsula and North Bay Area counties. In addition to providing access to the Golden Gate Bridge, Doyle Drive also provides access to the Presidio of San Francisco (the Presidio), the Golden Gate National Recreational Area (GGNRA), and the Palace of Fine Arts. The current structure, built in 1936, does not meet current highway standards and is seismically deficient. Retrofits to the structure have addressed safety concerns in the short-term, but replacement is required as a long-term solution.

The purpose of the proposed Doyle Drive Replacement Project (the Project) is to improve the seismic, structural, and traffic safety of Doyle Drive while being sensitive to the Presidio and its purpose as a National Park.

Specific objectives of the Project are:

- to improve the seismic, structural and traffic safety on Doyle Drive;
- to maintain the functions that the Doyle Drive corridor serves as part of the regional and city transportation network;
- to improve the functionality of Doyle Drive as an approach to the Golden Gate Bridge;
- to preserve the natural, cultural, scenic and recreational values of affected portions of the Presidio;
- to be consistent with the San Francisco General Plan and the General Management Plan Amendment (GMPA), Final Environmental Impact Statement, Presidio of San Francisco, GGNRA (NPS 1994a and 1994b) for Area A of the Presidio and the Presidio Trust Management Plan: Land Use Policies for Area B of the Presidio (Presidio Trust 2002);
- to minimize the effects of noise and other pollution from the Doyle Drive corridor on natural and recreational areas at Crissy Fields and other areas adjacent to the Project;
- to minimize the traffic impacts of Doyle Drive on the Presidio and local roadways;
- to improve intermodal and vehicular access to the Presidio; and
- to redesign the Doyle Drive corridor using the parkway concept described within the Doyle Drive Intermodal Study (1996).

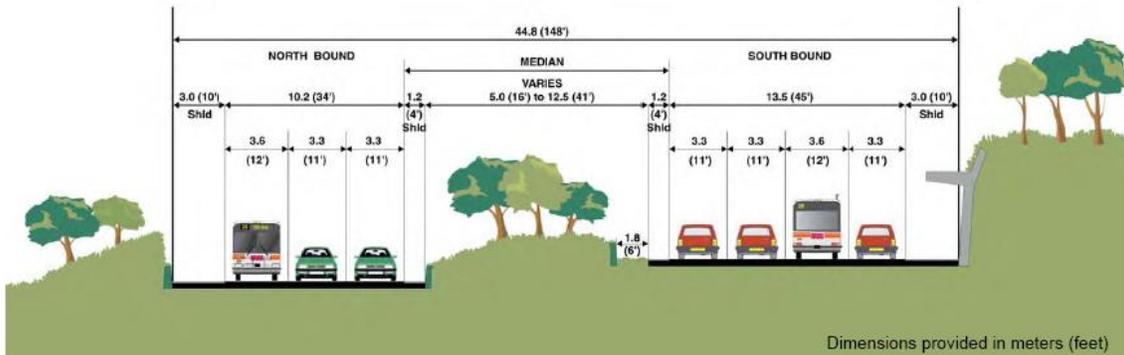
A Record of Decision was rendered by FHWA for Doyle Drive Final Environmental Impact Statement / Report (FEIS/R) in December of 2008. The option advanced for construction is known as the 'Refined Presidio Parkway' alternative in the FEIS/R. This alternative, shown in **Figures 1-1 and 1-2**, was the unanimous choice of the San Francisco County Transportation Authority's Board of Commissioners.

Figure 1-1: Project Map



The Refined Presidio Parkway Alternative will replace the existing facility with a new six-lane facility and a southbound auxiliary lane, between the Park Presidio Interchange and the new Presidio access at Girard Road. To minimize impacts to the park, the footprint of the new facility will overlap with a large portion of the existing facility's footprint east of the Park Presidio Interchange. Construction will take place between FY2009 and FY2013 as outlined in Section 3, Project Implementation Plan.

Figure 1-2: Cross Section



The total roadway width will be about 110 feet and the overall facility width including the median will vary from 120 to 150 feet. The width of the proposed landscaped median will vary from 15 feet to 45 feet. A 1,280 foot long high-viaduct will be constructed between the Park Presidio Interchange and the San Francisco National Cemetery. The height of the high-viaduct will vary from 65 to 115 feet above the ground surface. Shallow cut-and-cover tunnels will extend 850 feet past the cemetery to east of Battery Blaney. From Building 106 (Band Barracks) cut-and-cover tunnels up to 1,020 feet long will extend to east of Halleck Street. The facility will then rise slightly on a low causeway (395 feet long) over the site of the proposed Tennessee Hollow restoration and then pass over a depressed Girard Road. The low causeway will rise to approximately ten feet above the surrounding ground surface at its highest point. East of Girard Road the facility will return to existing grade north of the Gorgas warehouses and connect to Richardson Avenue. The facility will provide a transition zone starting from the Main Post Tunnel to reduce vehicle speeds prior to entering city streets.

The Park Presidio Interchange will be reconfigured due to the realignment of Doyle Drive to the south. New entrance and exit ramps will be constructed with ramp geometry consistent with current safety standards and additional lanes will be added where appropriate. Direct access will be provided to the Presidio and indirect access to Marina Boulevard in both directions via access ramps from Doyle Drive connecting to an extension of Girard Road. East of the new Letterman garage, Gorgas Avenue will be a one-way street with a signalized intersection at Richardson Avenue. North of Richardson Avenue, Lyon Street will remain in its existing configuration that provides access to Palace Drive. The surface parking spaces will be reconfigured to maintain the existing parking supply in the area and improve pedestrian access between the Presidio and the Palace of Fine Arts.

1.2 Project Sponsors

Federal Highway Administration (FHWA)

FHWA is one of the major agencies of the US Department of Transportation with the responsibility of overseeing America's highway system. FHWA's mission is to "improve mobility on our nation's highways through national leadership, innovation, and program delivery." FHWA meets this mission with three vital priorities in mind: safety, congestion mitigation, and environmental stewardship and streamlining. The Doyle Drive Replacement Project is in line with FHWA's mission and adheres to its vital three priorities. FHWA is the primary party responsible for ensuring that the provisions within the FEIS/R are carried out. The Project will use Federal funds, therefore FHWA's involvement is required. FHWA's approval of this financial plan is required for the Project to receive Federal funding for construction and move forward into implementation.

California Department of Transportation (Caltrans)

Caltrans is responsible for managing 45,000 miles of California's highways and freeways, as well as inter-city railways, airports, and heliports. It operates through six major programs: Aeronautics, Highway Transportation, Mass Transportation, Transportation Planning, Administration, and the Equipment Service Center, and owns eight toll bridges in the San Francisco Area (all operated by other agencies). Caltrans is the owner of Doyle Drive and will be the owner of the replacement facility. It is responsible for administering funds from the State Highway Operation and Protection Program (SHOPP) which is the largest source of funding for the Doyle Drive Project. Caltrans (along with the Authority) has been delegated by the FHWA to implement the Project in an appropriate and timely manner.

San Francisco County Transportation Authority (the Authority)

The Authority is the designated Congestion Management Agency (CMA) for the City and County of San Francisco and is responsible for developing and administering the Congestion Management Program (CMP). The Authority was created in 1989 to administer Proposition B funds, a voter referendum which levied a half-cent sales tax to be used for transportation purposes. Today the Authority is responsible for administering Proposition K funds (also a half-cent sales tax) which passed in 2003 and supersedes Proposition B.

The Authority (along with Caltrans) is the lead agency responsible for implementation of the Doyle Drive Replacement Project. The Authority is working jointly with Caltrans to design and implement the construction and mitigation measures for the Project.³

Metropolitan Transportation Commission (MTC) and Bay Area Toll Authority (BATA)

MTC, the metropolitan planning organization (MPO) for the nine county Bay Area region, prepares the Regional Transportation Plan (RTP). MTC administers Federal and certain State monies to projects in its coverage area, and has decision-making authority for the Regional Transportation Improvement Program (RTIP). In addition to administering funds, the MTC is responsible for the efficiency and effectiveness of the region's transportation system. Doyle Drive is included in the RTP and RTIP.

MTC also operates BATA which administers tolling for seven bridges owned by Caltrans: Antioch Bridge, Benicia-Martinez Bridge, Carquinez Bridge, Dumbarton Bridge, Richmond-San Rafael Bridge, San Francisco-Oakland Bay Bridge, and the San Mateo-Hayward Bridge. BATA was formed in 1997 by California Legislature for the purpose of collecting tolls used to construct and maintain bridges in the San Francisco Area and is expected to contribute capital funding to the Doyle Drive Replacement Project as outlined in Section 4, Project Revenue.

Golden Gate Bridge Highway and Transportation District (GGBHTD)

This agency is responsible for operating the Golden Gate Bridge as well as two public transit systems: Golden Gate Transit and the Golden Gate Ferry. Revenue from bridge tolls, ferry fares, bus fares, and Federal operating grants fund the maintenance of the Bridge and operations of the ferry and bus services. The GGBHTD is expected to contribute capital funding to the Doyle Drive Replacement Project as outlined in Section 4, Project Revenue.

Sonoma County Transportation Authority (SCTA)

SCTA is the CMA for Sonoma County and is responsible for managing the County's transportation projects and programs. Doyle Drive is important to many Sonoma County citizens because it provides the most direct access to San Francisco. SCTA is expected to contribute capital funding to the Doyle Drive Replacement Project as outlined in Section 4, Project Revenue.

Transportation Authority of Marin County (TAM)

TAM is the CMA for Marin County and is responsible for managing the County's transportation projects and programs. Marin County lies to the north of the Golden Gate Bridge; therefore many of its residents rely on Doyle Drive. TAM is expected to contribute capital funding to the Doyle Drive Replacement Project as outlined in Section

³ A cooperative agreement, attached as Appendix H, outlines the responsibilities of each project sponsor during the construction phase.

4, Project Revenue.

1.3 Project History

The history of the Project dates back to 1933 when the Golden Gate Bridge and Highway District (renamed in 1969, the Golden Gate Bridge Highway and Transportation District) started construction on Doyle Drive as the southern approach to the Golden Gate Bridge. Doyle Drive was named after Frank P. Doyle, a director of the California State Automobile Association. Mr. Doyle was a roadway advocate and civic leader, and the first private citizen to cross the Golden Gate Bridge.

Doyle Drive was designed and built to operate with three ten-foot lanes in each direction, separated by painted double stripes. In September 1945, Doyle Drive became a State highway. Subsequently, the California Division of Highways, now known as Caltrans, assumed responsibility for maintenance of the section extending from near the Golden Gate Bridge toll plaza to the Palace of Fine Arts and the Marina District of San Francisco.

In 1955, the Golden Gate Bridge Highway and Transportation District requested that the State widen and reconstruct Doyle Drive to handle increasing congestion. In 1962, the District specifically asked for an eight-lane divided roadway as part of a proposed Golden Gate Freeway. The proposal was not pursued due to public objection. In 1970, after a fatal accident on the facility, the National Transportation Safety Board (NTSB) recommended that Doyle Drive be upgraded to current freeway design standards. In 1973, a Draft Environmental Impact Statement (DEIS) was completed for reconstruction of Doyle Drive as an eight-lane highway with a fixed median barrier. The public objected to the proposal, and the following year the State legislature passed the Marks Bill, which prohibited Caltrans from widening Doyle Drive to more than six lanes without the specific approval of the San Francisco Board of Supervisors.

In 1985, the San Francisco Board of Supervisors recommended that Caltrans develop alternatives that would improve safety but not increase the number of vehicles using Doyle Drive. Caltrans responded with two alternative recommendations: an eight-lane roadway design and a six-lane roadway design. The issues surrounding each of these alternatives were never resolved and a preferred solution was not identified.

In 1991, Caltrans requested that the San Francisco Board of Supervisors revisit the most recent design concepts for Doyle Drive. The Supervisors responded with the establishment of the Doyle Drive Task Force, consisting of representatives from various local governments and public and private organizations. The task force considered design alternatives; developed a consensus on a preferred alternative, and in 1993 issued the Report of the Doyle Drive Task Force, which proposed a scenic parkway through the Presidio.

This parkway concept envisioned three travel lanes in a separate tunnel in each direction and an additional eastbound auxiliary lane between the Park Presidio interchange and a new direct access point to the Presidio. In principle, the Board of Supervisors unanimously approved the recommendations of the Task Force and urged Caltrans to expedite inclusion of rebuilding Doyle Drive in the next State transportation

funding cycle.

In the same year, Caltrans completed a Project Study Report for the replacement of Doyle Drive. The Task Force's recommended concepts were included in the alternatives evaluated in the Caltrans report.

In July 1994, the National Park Service published the Final GMPA, which identified the following objectives for Doyle Drive:

- redesign the Doyle Drive corridor as a parkway rather than a freeway;
- respect the Presidio's status as a National Historic Landmark District in redesign options;
- minimize the effects of noise and other pollution from the parkway on natural and recreational areas at Crissy Field and other areas adjacent to the Presidio;
- improve the Presidio entrance and circulation features as part of the Doyle Drive redesign; and
- maintain the functions that the Doyle Drive corridor provides as part of the regional and City transportation network.

In 1994, the Authority initiated the Doyle Drive Intermodal Study, which was funded by a Caltrans State planning and research grant, "to further the development and ultimate implementation of a realistic and fundable replacement for Doyle Drive."

The results of the Intermodal Study were released in 1996. They supported the Doyle Drive Task Force and GMPA recommendations that multi-modal and direct vehicular access, in and out of the Presidio, would be the central features of the replacement design. The study also emphasized that the Doyle Drive replacement be designed as a parkway. Other important recommendations included building a transit center; introducing transportation systems management and intelligent transportation systems technology, such as roadway surveillance cameras and real-time transit information kiosks.

Preparation of the DEIS/R began in 2000 and was completed in 2005. The Authority's Board of Commissioners unanimously agreed on the Presidio Parkway as the Preferred Alternative in September 2006. Input and refinements to the Preferred Alternative are reflected in the FEIS/R which was circulated in October 2008 and Record of Decision issued by FHWA on December 16, 2008.

1.4 Current Activities

The Project sponsors continue to undertake the actions necessary to meet the goal of awarding the first of eight contracts in June 2009. Before any contract may be awarded, this Financial Plan must be approved by FHWA.

This Project is dependent on Federal funding from the American Recovery and Reinvestment Act of 2009 (ARRA) among several Federal, State and local sources. The Project has been re-planned to accommodate an accelerated schedule to receive this funding and deliver a safe asset to the public as soon as possible. The accelerated schedule and refined cost estimate is expected to reduce the overall cost by

approximately \$115 million compared to the previous cost estimate from December 2008 totaling \$1,045 million.

1.5 Project Completion Schedule

Construction of the Project was scheduled to begin in FY2010, as noted in the FEIS/R, and be completed in FY2014. Due to the seismically deficient condition of the existing facility and stakeholder enthusiasm to complete the Project as soon as possible, the Project sponsors have a plan to accelerate the schedule and begin awarding contracts in June 2009. Under the accelerated schedule, the Project is expected to be completed by the end of FY2013. The Project schedule is covered in more detail in Section 3, Project Implementation.

1.6 Project Web Site

Additional information on the Doyle Drive Project including the FEIS/R can be found on the Project website at the following address: www.doyledrive.com.

2.0 Project Cost Estimate

2.1 Structure of the Cost Estimate

The cost estimate for the Doyle Drive Project is divided into eight contracts. Each of the contracts includes environmental work specific to the contract and separate from an initial environmental phase as described in **Figure 2-1** below.

Figure 2-1: Project Contracts

Contract	Project Description
Contract 1	Advanced Environmental Mitigation – (wet land, biological, tree removal). Mitigation prior to construction activities. Environmental mitigation during construction is accounted for in the individual contract budgets.
Contract 2	Utility Relocation Prior to Construction Activity, including private utility relocation for items owned by the Presidio. (Public utility relocations included in the ROW data sheet)
Contract 3	Ruckman, Southern PPL, SB High Viaduct.
Contract 4	SB Battery Tunnel, At Grade Detour, RW#6, RW#8, Permanent Roadway Sections, Long Weekend Closure, Partial Demo of Low Viaduct Structures & Open At-Grade Detour to Public Traffic.
Contract 5	Girard UC, Main Post Tunnels, Low Viaduct, Includes Fill Over Tunnels, Electrical and Mechanical Substations, Demo Existing Low Viaduct, Maintain and Removal At Grade Detour, Open Permanent Roadway to Public Traffic.
Contract 6	NB Battery Tunnels and related roadwork, includes fill over tunnels, conform to existing high viaduct.
Contract 7	NB High Viaduct, Northern Park Presidio Interchange, NB Roadway to Merchant Road.
Contract 8	Highway Planting.

2.2 Project Cost Categories

Within the total Project, there are eight cost categories which are identified to break down the estimate to a greater level of detail, distinguishing, for example, between capital construction costs and engineering costs. This categorization of cost elements is shown below in **Figure 2-2**.

Figure 2-2: Cost Categories

Cost Category	Cost Description
Environmental	Costs incurred related to feasibility analysis, community involvement and environmental review/permitting activities.
Preliminary Engineering/Design Phase Support	Costs include the preliminary engineering and design phase and support costs of Caltrans and the Authority.
Right-of-Way Support	Costs include production consultants, property managers, production/property management oversight, and State staffs.
Right-of-Way Capital	Costs include all non-mitigation related right-of-way.
Construction Phase Support	Costs include Caltrans construction administration for the construction contracts and internal State and Authority charges to the contracts.
Neat Construction	Hard construction costs, including construction contracts and procurement contracts for all segments of the Project.
Contingency	Factor applied to construction estimate to account for the risk associated with the current level of design.
Acceleration Risk Contingency	Budget in addition to construction contingency to account for the risk associated with accelerating design and construction of the Project. This budget is allocated to contracts based on an assessment of risk by Caltrans and the Authority.

2.3 Cost Estimate in Current Dollars

The methodology below explains how the cost estimate in current and constant dollars is derived for the Doyle Drive Project.

The Doyle Drive cost estimate listed herein is based on the most current Caltrans estimate and is expressed in April 2009 (2009\$) terms. This cost estimate represents a comprehensive re-evaluation of inputs to the Caltrans estimate from December 2008, based on design and schedule refinements and the most recent bid tabulations from projects let by Caltrans in the previous four quarters. The capital cost in 2009\$ for each Project phase is shown in **Figure 2-3**, below.

Figure 2-3: Capital Costs in 2009\$ (No Escalation)

Contract	Project Description	Capital Cost with No Escalation
Contract 1	Advanced Environmental Mitigation – (wet land, biological, tree removal). Mitigation prior to construction activities. Environmental mitigation during construction is accounted for in the individual contract budgets.	\$ 3,574,580
Contract 2	Utility Relocation Prior to Construction Activity, including private utility relocation for items owned by the Presidio. (Public utility relocations included in the ROW data sheet)	\$ 14,700,000
Contract 3	Ruckman, Southern PPL, SB High Viaduct.	\$ 120,030,000
Contract 4	SB Battery Tunnel, At Grade Detour, RW#6, RW#8, Permanent Roadway Sections, Long Weekend Closure, Partial Demo of Low Viaduct Structures & Open At-Grade Detour to Public Traffic.	\$ 97,770,000
Contract 5	Girard UC, Main Post Tunnels, Low Viaduct, Includes Fill Over Tunnels, Electrical and Mechanical Substations, Demo Existing Low Viaduct, Maintain and Removal At Grade Detour, Open Permanent Roadway to Public Traffic.	\$ 263,880,000
Contract 6	NB Battery Tunnels and related roadwork, includes fill over tunnels, conform to existing high viaduct.	\$ 63,650,000
Contract 7	NB High Viaduct, Northern Park Presidio Interchange, NB Roadway to Merchant Road.	\$ 89,190,000
Contract 8	Highway Planting.	\$ 7,600,000
Total Cost		\$ 660,394,580

2.4 Escalated Cost Estimate in Year of Expenditure Dollars

The Project sponsors committed to using a reasonable and rational set of inflation gauges in order to accurately plan and program the Doyle Drive Project. To this end, the Project sponsors participated in a multi-disciplinary “Cost Estimate Review” conducted by FHWA in April of 2009, which verified the accuracy and reasonableness of the Caltrans cost estimate. The review verified the cost estimating methodology for the Project and identified the key factors contributing to cost uncertainty as, 1) uncertainty in inflation rate, related to ARRA impact on market; 2) cost threat due to change orders, differing site conditions, etc. after construction start; and 3) the need for a comprehensive agreement with the Presidio prior to construction start. To a large degree, these uncertainties are mitigated by the Acceleration Risk Contingency budgets noted above. The Authority and Caltrans are working with the Presidio on contracting and expect to have an agreement in place by mid May.

The Project cost estimate includes an adjustment for inflation, using Caltrans Major Projects Team guidance. Each Project construction phase requires multiple months for construction, so the estimators use the mid-point of each construction phase, based on the current Project schedule, and inflate the current estimate of construction phase accordingly. During the April CER, FHWA and Caltrans determined that a 3.0% escalation factor was reasonable for the Project's timeframe and has been applied to all costs in this Financial Plan.

With the 2009\$ cost estimate and basis for escalation complete, the year of expenditure dollar estimate was calculated based on the following methodology, which is consistent with Caltrans standard practice:

1. Convert the annual escalation rates to monthly equivalent escalation rates.
2. For each Project contract contained in the 2009\$ cost estimate, identify the year expenditures will commence and the duration of construction.
3. Identify the mid-point of construction (to the month).
4. For each cost element contained in the 2009\$ cost estimate, multiply the cost estimate by the appropriate cumulative escalation factor to calculate the year of expenditure cost estimate.

Figure 2-4, below, displays the construction duration for each contract phase, with the mid-point of construction expressed as the number of years from April 2009. This mid-point of construction translated into a corresponding escalation rate, as shown in the table.

Figure 2-4: Contract Duration and Corresponding Escalation Factor

Contract	Start Date	End Date	Mid-Point Construction	Corresponding Escalation Factor
Contract 1	Jun - 2009	May - 2011	May - 2010	1.03509
Contract 2	Jun - 2009	Aug - 2010	Dec - 2009	1.02242
Contract 3	Oct - 2009	Feb - 2011	Jun - 2010	1.03764
Contract 4	Dec - 2009	Feb - 2011	Jul - 2010	1.04020
Contract 5	Oct - 2010	Dec - 2012	Nov - 2011	1.08201
Contract 6	Dec - 2010	Dec - 2012	Dec - 2011	1.08468
Contract 7	Dec - 2010	Dec - 2012	Dec - 2011	1.08468
Contract 8	Aug - 2012	Jun - 2013	Dec - 2012	1.11722

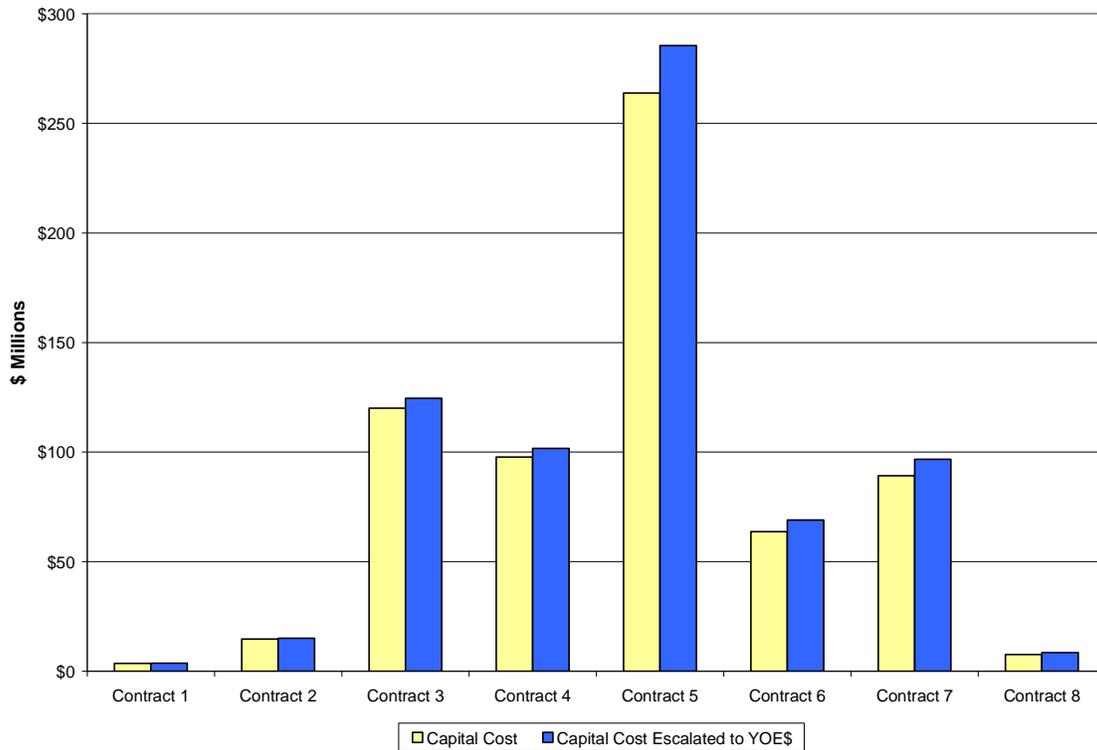
These escalation rates were then applied to each contract, as displayed in **Figure 2-5** below. **Figure 2-5** does not include project support costs discussed below.

Figure 2-5: Project Costs Inflated to Year of Expenditure

Contract	2009\$ Cost	Factor	YOES Cost
Contract 1	\$ 3,574,580	1.03509	\$ 3,700,000
Contract 2	\$ 14,700,000	1.02242	\$ 15,029,525
Contract 3	\$ 120,030,000	1.03764	\$ 124,547,879
Contract 4	\$ 97,770,000	1.04020	\$ 101,700,225
Contract 5	\$ 263,880,000	1.08201	\$ 285,521,670
Contract 6	\$ 63,650,000	1.08468	\$ 69,039,999
Contract 7	\$ 89,190,000	1.08468	\$ 96,742,773
Contract 8	\$ 7,600,000	1.11722	\$ 8,490,889
Total Cost	\$ 660,394,580		\$ 704,772,960

Overall, escalation costs contribute approximately \$44.4 million to the total cost of the Doyle Drive Project. The chart shown in **Figure 2-6** below, displays the 2009\$ capital cost compared to year of expenditure costs, by Project phase.

Figure 2-6: Project Phase 2009\$ Costs Compared to Year of Expenditure Cost



2.5 Caltrans R/W, Design and Construction Phase Support Costs

There are various Caltrans and Authority support costs for each phase of the Project. While they are not capital costs, they do contribute to the total public outlay for the Doyle Drive Project. Design support services account for \$57.0 million, or about 8.1% of the construction contract cost; construction support services account for just under \$74.9 million, or 10.6% of the construction contract cost; and right-of-way support accounts for \$4.0 million, or 12.1% of the right-of-way acquisition cost. These agency support costs are shown in **Figure 2-7**, below, broken down by Project segment.

Figure 2-7: Caltrans & Authority Support Costs by Project Contract (\$ millions)

Contract	R/W Support Cost	Design Phase Support	Construction Phase	
			Support	YOE\$ Cost
Contract 1	\$ 1.0	\$ 5.0	\$ 1.0	\$ 7.0
Contract 2	\$ 0.5	\$ 2.7	\$ 2.0	\$ 5.2
Contract 3	\$ 1.0	\$ 9.3	\$ 16.0	\$ 26.3
Contract 4	\$ 1.5	\$ 7.7	\$ 14.5	\$ 23.7
Contract 5	\$ -	\$ 18.1	\$ 22.0	\$ 40.1
Contract 6	\$ -	\$ 5.2	\$ 8.0	\$ 13.2
Contract 7	\$ -	\$ 8.1	\$ 9.5	\$ 17.6
Contract 8	\$ -	\$ 0.9	\$ 1.9	\$ 2.8
Total Cost	\$ 4.0	\$ 57.0	\$ 74.9	\$ 135.9

2.6 Summaries of the Current Cost Estimates

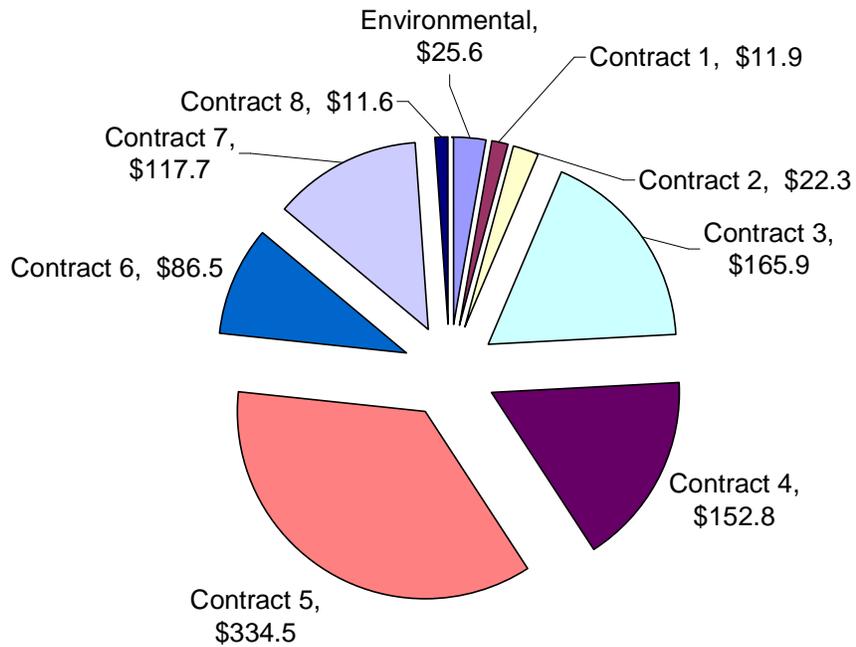
This section summarizes the Project cost estimate by Project contract. Contracts for the Doyle Drive Project will be organized by location and/or logical phasing of work, and will serve as the basis for cost monitoring and control in keeping with the Project Financial Plan.

Figure 2-8: Cost Estimate by Project Contract (\$ millions)

Contract	Environmental Support	Design Phase Support	R/W Support Cost	R/W Capital	Construction Phase Support	Construction	Risk Factor	Total Cost per Phase
Environmental	\$ 25.6	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 25.6
Contract 1	\$ -	\$ 5.0	\$ 1.0	\$ -	\$ 1.0	\$ 3.7	\$ 1.2	\$ 11.9
Contract 2	\$ -	\$ 2.7	\$ 0.5	\$ -	\$ 2.0	\$ 15.0	\$ 2.1	\$ 22.3
Contract 3	\$ -	\$ 9.3	\$ 1.0	\$ 10.0	\$ 16.0	\$124.5	\$ 5.0	\$165.9
Contract 4	\$ -	\$ 7.7	\$ 1.5	\$ 23.0	\$ 14.5	\$101.7	\$ 4.4	\$152.8
Contract 5	\$ -	\$ 18.1	\$ -	\$ -	\$ 22.0	\$285.5	\$ 8.9	\$334.5
Contract 6	\$ -	\$ 5.2	\$ -	\$ -	\$ 8.0	\$ 69.0	\$ 4.2	\$ 86.5
Contract 7	\$ -	\$ 8.1	\$ -	\$ -	\$ 9.5	\$ 96.7	\$ 3.3	\$117.7
Contract 8	\$ -	\$ 0.9	\$ -	\$ -	\$ 1.9	\$ 8.5	\$ 0.3	\$ 11.6
Total Cost	\$ 25.6	\$ 57.0	\$ 4.0	\$ 33.0	\$ 74.9	\$704.8	\$ 29.5	\$928.8

These costs for each Project contract are displayed as a chart in **Figure 2-9**, below.

Figure 2-9: Cost Estimate by Project Contract (\$ millions)

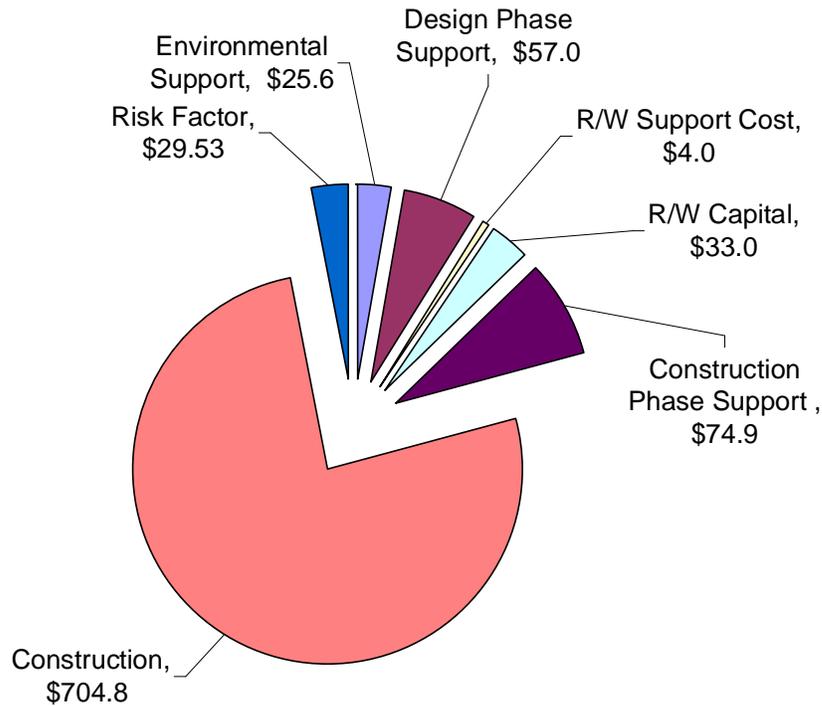


For another perspective of Project costs, the following table (Figure 2-10) and chart (Figure 2-11) show costs by Project cost category.

Figure 2-10: Cost Estimate by Cost Category (\$ millions)

Cost Category	Amount
Environmental Support	\$ 25.6
Design Phase Support	\$ 57.0
R/W Support Cost	\$ 4.0
R/W Capital	\$ 33.0
Construction Phase Support	\$ 74.9
Construction	\$ 704.8
Risk Factor	\$ 29.5
Total Cost	\$ 928.8

Figure 2-11: Cost Estimate by Project Category (\$ millions)



2.7 Costs Incurred to Date (2000 through 2009)

As of March 31, 2009, \$39.1 million had been spent on Project planning, environmental, and design activities. These expenditures are shown in **Figure 2-12**, which also shows that 4.1% of the total Project costs had been incurred at the end of March 2009.

Figure 2-12: Cost Estimate by Project Category (\$ millions)

Cost Category	Amount	Expended to Date	Percent Expended
Environmental Support	\$ 25.6	\$ 22.6	88.3%
Design Phase Support	\$ 57.0	\$ 16.5	28.9%
R/W Support Cost	\$ 4.0	\$ -	-
R/W Capital	\$ 33.0	\$ -	-
Construction Phase Support	\$ 74.9	\$ -	-
Construction	\$ 704.8	\$ -	-
Risk Factor	\$ 29.5	\$ -	-
Total Cost	\$ 928.8	\$ 39.1	4.2%

2.8 Cost to Complete

The remaining cost to complete the Doyle Drive Replacement Project is \$889.7 million. The rate of annual expenditures throughout the construction duration will be summarized in the following section.

3.0 Project Implementation Plan

3.1 Project Schedule

The summary schedule for the Doyle Drive Project shows the construction contract advertisement, award, and completion dates in **Figure 3-1**, below. These milestone dates are the basis for calculating the mid-point of construction, and associated escalation rates, and the year-of-expenditure estimate discussed in Section 2, Project Cost Estimate.

Figure 3-1: Contract Milestones

Contract	Advertisement	Award	Completion
Non Contract R/W			Aug - 2010
Contract 1	May - 2009	Jun - 2009	May - 2011
Contract 2	May - 2009	Jun - 2009	Aug - 2010
Contract 3	Aug - 2009	Oct - 2009	Feb - 2011
Contract 4	Oct - 2009	Dec - 2009	Feb - 2011
Contract 5	May - 2010	Oct - 2010	Dec - 2012
Contract 6	Jul - 2010	Dec - 2010	Dec - 2012
Contract 7	Jul - 2010	Dec - 2010	Dec - 2012
Contract 8	Mar - 2012	Aug - 2012	Jun - 2013

3.2 Actual Annual Expenditures

As noted in Section 2.7, a total of \$39.1 million in planning, environmental, and design costs had been expended as of March 31, 2009 (**Figure 2-12**). **Figure 3-2** shows these expenditures, by fiscal year.

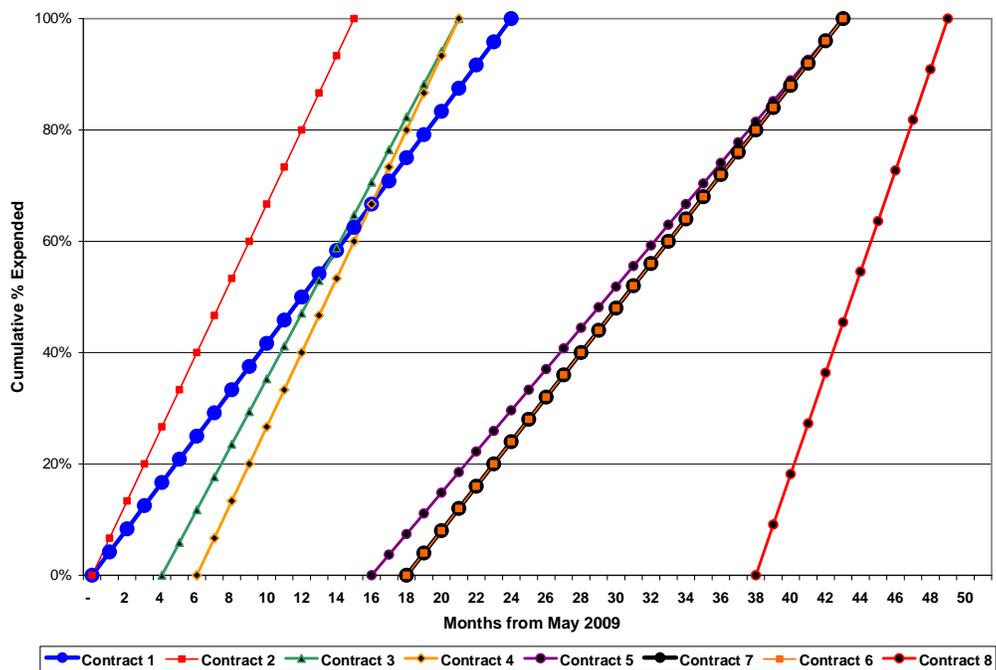
Figure 3-2: Actual Expenditures by Fiscal Year (\$ millions)

State Fiscal Year	Environmental	Design	ROW	Total Expended
Prior	\$ 1.7	\$ -	\$ -	\$ 1.7
FY 2001	\$ 2.7	\$ -	\$ -	\$ 2.7
FY 2002	\$ 2.8	\$ -	\$ -	\$ 2.8
FY 2003	\$ 2.2	\$ -	\$ -	\$ 2.2
FY 2004	\$ 2.7	\$ -	\$ -	\$ 2.7
FY 2005	\$ 3.6	\$ -	\$ -	\$ 3.6
FY 2006	\$ 1.8	\$ -	\$ -	\$ 1.8
FY 2007	\$ 2.5	\$ -	\$ -	\$ 2.5
FY 2008	\$ 1.5	\$ 6.6	\$ -	\$ 8.1
FY 2009 (to 3/31)	\$ 1.1	\$ 9.6	\$ 0.3	\$ 11.0
Total Cost	\$ 22.6	\$ 16.2	\$ 0.3	\$ 39.1

3.3 Forecast Annual Expenditures

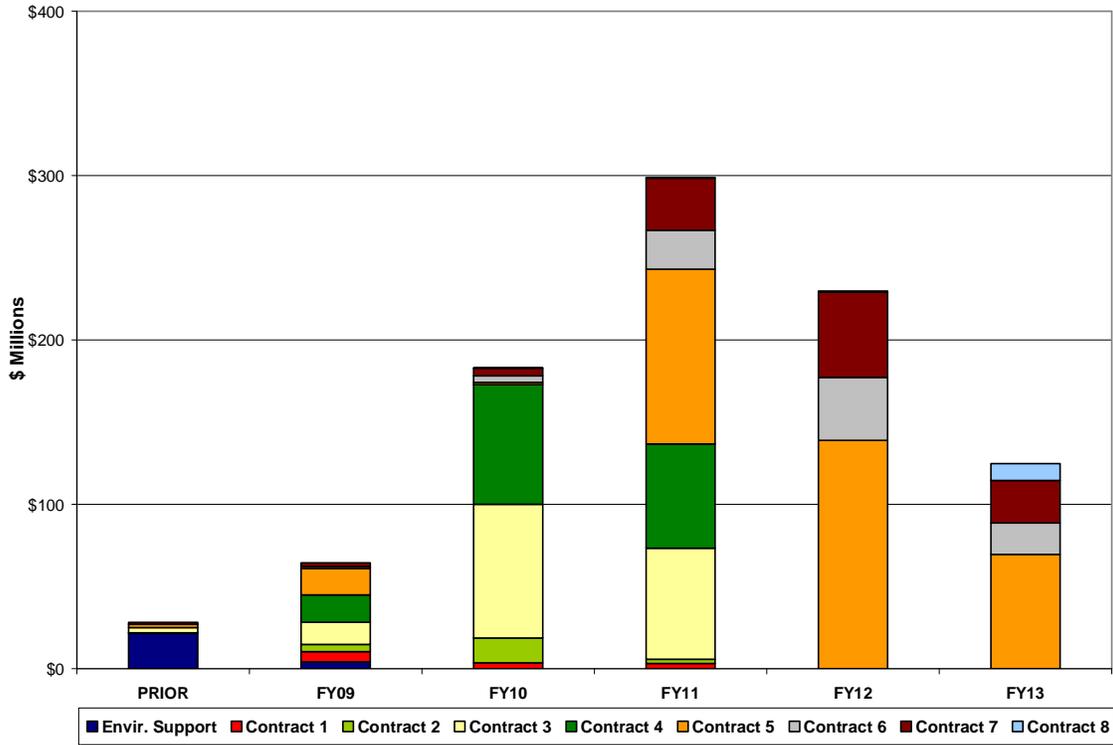
The Doyle Drive Financial Plan forecasts Project expenditures forward from May 2009, which is an anchor point for future Project milestones (e.g., advertising, award, start and end construction date). The chart below (**Figure 3-3**) shows the construction expenditure curves for each project contract, exclusive of support costs for right-of-way, design, and construction. The curves illustrate the number of months from May 2009 until 100% of the total construction costs have accrued.

Figure 3-3: Construction Expenditure Curves by Contract



Another view of these contract expenditures is by total contract outlay over the life of the Doyle Drive Project. This chart (**Figure 3-4**) illustrates the cash flow requirements for the Project in each fiscal year.

Figure 3-4: Doyle Drive Total Contract Outlay by Fiscal Year



In FY2009, several contracts are underway but expenditures do not begin to ramp up until FY2010. Cash flow demand then peaks in FY2011, and then begins to decline. Contracts 1 through 4 are complete in FY2011. Contracts 5 through 8 will end in FY 2013.

3.4 Annual Actual and Forecast Expenditures by State Fiscal Year (YOE\$)

Figure 3-5 provides a summary of the actual and forecast expenditures for the Doyle Drive Project, through completion of the construction.

Figure 3-5: Table of Annual Expenditures by State Fiscal Year (\$ millions)

State Fiscal Year	Expended to Date	Projected Expenditures	Total Expenditures	Cumulative Expenditures
Prior	\$ 1.7	\$ -	\$ 1.7	\$ 1.7
FY 2001	\$ 2.7	\$ -	\$ 2.7	\$ 4.3
FY 2002	\$ 2.8	\$ -	\$ 2.8	\$ 7.1
FY 2003	\$ 2.2	\$ -	\$ 2.2	\$ 9.3
FY 2004	\$ 2.7	\$ -	\$ 2.7	\$ 12.0
FY 2005	\$ 3.6	\$ -	\$ 3.6	\$ 15.7
FY 2006	\$ 1.8	\$ -	\$ 1.8	\$ 17.5
FY 2007	\$ 2.5	\$ -	\$ 2.5	\$ 20.0
FY 2008	\$ 8.1	\$ -	\$ 8.1	\$ 28.1
FY 2009	\$ 11.0	\$ 53.4	\$ 64.4	\$ 92.5
FY 2010	\$ -	\$ 183.1	\$ 183.1	\$ 275.6
FY 2011	\$ -	\$ 298.7	\$ 298.7	\$ 574.3
FY 2012	\$ -	\$ 229.7	\$ 229.7	\$ 804.0
FY 2013	\$ -	\$ 124.7	\$ 124.7	\$ 928.8
Total Cost	\$ 39.1	\$ 889.6	\$ 928.8	

3.5 Schedule Implications for Financial Plan

The implementation plan for the Doyle Drive Project has two significant and related implications: the year of expenditure cost estimates and the projected cash flow needs of the Project.

If any shifts in the Project schedule occur, costs due to escalation will impact the year of expenditure cost estimate for Doyle Drive. As noted in Section 2, Caltrans uses a 3.0% escalation rate during the entire Project construction timeframe.

A schedule shift, with accompanying escalation rate changes, would impact the cash flow forecast. The methodology discussed earlier in this section would be adjusted to accommodate such changes.

The Project sponsors acknowledge that unforeseen events may result in cost increases. Examples might include:

- **Changes in environmental and subsurface/site conditions:** this might include utility relocations or other historical, archeological, or cultural resources that were undetected in the environmental review.
- **Contractor changes:** could include any number of issues that would require a change of contractors, which would result in lost time.

- **Removal of hazardous materials:** if hazardous materials were undetected in an environmental site assessment, cleanup could require additional cost and schedule delay.
- **Schedule delays and accelerations:** delays in schedule are costly in terms of escalation cost; acceleration often costs a premium from the contractor.
- **Unanticipated overtime costs:** depending on contractors' means and methods of construction, delays may ensue which require additional work from contractors or subcontractors, with overtime charges the only way to stay on schedule.
- **Changes in government rules and regulations:** any number of regulatory changes from State and Federal agencies can result in additional construction costs, such as for additional environmental mitigation.
- **Owner requested changes:** changes requested by the owner, Caltrans, during construction are a frequent cause of increased construction costs.
- **Federal or State budget changes:** could change the cash flow for a project, resulting in additional construction time and escalation costs, or costs for bond finance or other remedy.
- **Third party concerns:** during construction third parties may come forward to express concerns or request remedies for unforeseen construction impacts. This would include any public or private stakeholder.
- **Dispute or litigation:** can arise from any number of parties to the project, and result in schedule delay and/or increases in construction costs.

Unforeseen events will be addressed via regularly scheduled meetings of the Project managers, with financial implications addressed accordingly. All adjustments to the schedule and/or cash flow will be incorporated into the annual updates of the financial plan.

4.0 Project Revenues

4.1 Overall Financial Plan

The Project will be financed with a combination of Federal, State, and local funding sources. The variety of funding sources to be used is expected to provide a greater degree of flexibility and stability than would result from a single-sourced funding plan. The Authority has developed the plan in conjunction with Caltrans and various local agencies and jurisdictions.

The total funding package of \$954.8 million is comprised of a combination of the following Federal, State, and local funding sources:

- \$405.0 million in State Highway Operation and Protection Program funds
- \$100.0 million in American Recovery and Reinvestment Act funds
- \$84.1 million in Regional Improvement Program funds
- \$80.0 million in Metropolitan Transportation Commission funds
- \$80.0 million in Golden Gate Bridge Highway and Transportation District funds⁴
- \$67.9 million in Proposition K Sales Tax funds
- \$47.3 million in Urban Partnership Agreement funds
- \$28.6 million in Federal Earmark funds
- \$21.0 million in State Local Partnership Program funds
- \$20.0 million in Port Sonoma Ferry funds
- \$15.0 million in Traffic Congestion Relief Program funds
- \$6.0 million in Devil's Slide Earmark funds

Details regarding these funding sources can be found in the Plan of Finance in Appendix D. In total, the Project has \$878.8 million in committed funds and an additional \$76.0 million in anticipated funds to fully fund the Project.

4.2 Committed Funding Sources - \$878.8 Million

State Highway Operation Protection Program (SHOPP) Funds - \$405.0 Million

Caltrans has committed \$405.0 million to the Doyle Drive Project through the SHOPP, as authorized in Government Code Section 14526.5, Streets and Highways Code Section 164.6.

American Recovery and Reinvestment Act (ARRA) Funds - SHOPP - \$50.0 Million

The recently signed ARRA of 2009 allocates approximately \$27.0 billion of Federal stimulus funding for highway construction projects. The Authority has requested \$100.0 million to help fund the Doyle Drive Reconstruction Project. At this time, \$50.0 million has been committed through the SHOPP program. The remaining \$50 million is discussed below under Anticipated Funding.

⁴ \$80.0 million in GGBHTD funds includes \$4.0 million from Marin County and \$1.0 million from Sonoma County

Regional Improvement Program (RIP) Funds - \$84.1 Million

The State of California has committed \$84.1 million to the Project through the RTIP in the form of Regional Improvement Program (RIP) funds. Authority Resolution 06-30 and the 2008 STIP CTC Staff Recommendations affirmed commitments of \$71.1 million in RIP funds for the Project. In addition, Authority Resolution 09-18 committed an additional \$13.0 million in RIP funds to the Project.

Metropolitan Transportation Commission Funds - \$80.0 Million

Authority Resolution 09-18 authorized the execution of a Memorandum of Understanding (MOU) between the Authority, MTC, and GGBHTD regarding the Project’s financial plan. The MOU obligates MTC to contribute \$80.0 million in regional toll revenues to the Project.

Golden Gate Bridge Highway and Transportation District Funds - \$80.0 Million

The MOU authorized under Authority Resolution 09-18 also included an agreement between the Authority and the GGBHTD obligating GGBHTD to contribute \$80.0 million to the Project, including a total \$5.0 million from the Marin (\$4.0 million) and Sonoma (\$1.0 million) County Transportation authorities. **Figure 4-1** shows the breakdown of these funds.

Figure 4-1: GGBHTD Funding

Source	Amount (\$ millions)
GGBHTD Contribution	\$ 75.0
Marin County Contribution	\$ 4.0
Sonoma County Contribution	\$ 1.0
Total Bridge District Contribution	\$ 80.0

Proposition K Sales Tax Funds - \$67.9 Million

The Authority administers and oversees the delivery of the Proposition K half-cent local transportation sales tax program, which was passed by 75% of San Francisco voters in November 2003. The Authority, in its capacity as administrator of Proposition K, has committed \$67.9 million in Prop K funding to the Project through FY2014. This funding amount represents an acceleration of expected annual tax collections between FY2004 and FY2034.

Urban Partnership Agreement Funds - \$47.3 Million

The First Amended and Restated Urban Partnership Agreement set forth an agreement between the U.S. Department of Transportation (USDOT) and its San Francisco Bay Area Urban Partner (which includes the Authority), in which the USDOT would allocate approximately \$87.0 million in Federal grant funding to multiple reconstruction and variable pricing projects in the Bay Area. The Doyle Drive Reconstruction Project was allocated \$47.3 million of this to be funded through FHWA’s Public Lands Highway

Discretionary Program.

Federal Earmark Funds - \$28.6 Million

Federal earmarks totaling \$28.6 million have been obligated between FY2000 and FY2009. These earmarks have been partially received and the remainder of this funding is listed on the current TIP. A total of \$14.0 million in Federal High Priority funds (\$10.0 million already expended) and \$14.5 million in Public Lands Highway Discretionary funds (\$10.8 million already expended) have been committed to the Project. **Figure 4-2** shows a breakdown of earmarked funds.

Figure 4-2: Federal Earmarks

Source	Amount (\$ millions)
Public Lands Highway Grant - FY 2000	\$ 8.2
Public Lands Highway Grant - FY 2005	\$ 1.0
Public Lands Highway Grant - FY 2006	\$ 1.3
Public Lands Highway Grant - FY 2008	\$ 1.5
Public Lands Highway Grant - FY 2009	\$ 0.4
Public Lands Highway Grant - FY 2009	\$ 2.2
Total Public Lands Highway Discretionary Funds	\$ 14.5
Federal High Priority FY2006	\$ 5.6
Federal High Priority FY2009	\$ 1.6
Federal High Priority FY2009	\$ 1.2
Federal High Priority FY2009	\$ 1.2
Federal High Priority FY2009	\$ 1.0
Federal High Priority FY2009	\$ 1.6
Federal High Priority FY2009	\$ 1.2
Federal High Priority FY2009	\$ 0.7
Total Federal High Priority Funds	\$ 14.0
Total Federal Earmark Funds	28.6

State Local Partnership Program Funds - \$21.0 Million

The Highway Safety, Traffic Reduction, Air Quality, and Port Security Bond Act of 2006 was approved by California voters in November 2006 as Proposition 1B. This authorized \$1.0 billion to be deposited in the State Local Partnership Program (SLPP) account to be available, upon appropriation by the Legislature, for allocation by the California Transportation Commission over a five-year period to eligible transportation projects nominated by an applicant transportation agency. In November 2008, Authority Resolution 09-18 committed all \$21.0 million of the Authority's SLPP funds to the Project.

Traffic Congestion Relief Program Funds - \$15.0 Million

In September 2000, Caltrans adopted the Traffic Congestion Relief Program (TCRP) Guidelines under Resolution G-00-23. To date, \$15.0 million of TCRP funds have been committed to the Project.

4.3 Anticipated Funding Sources - \$76.0 Million

Two Federal earmarks and a portion of the ARRA funding are anticipated to be allocated to the Project. The earmarks were originally programmed for other projects in the region that no longer need the funds. These funds will be available for use but must be redirected either through an amendment or as part of the next Federal highway funding bill authorization. It is most likely that this reallocation would happen through the latter mechanism, which makes identifying the time at which these funds would be received difficult to estimate.

Port Sonoma Ferry Funds - \$20.0 Million

This Port Sonoma Ferry earmark was for “Multi-Modal Facility Improvements,” stemming from Section 1962 of SAFETEA-LU. The recipient was a developer for a Port Sonoma land holding who was attempting to partner with a public agency to spend the funds on port improvements. The partnership was never established and the project was not implemented. Sonoma County has verbally conveyed to MTC that this earmark could be redirected to the Project.

Devil’s Slide Earmark Funds - \$6.0 Million

The Devil’s Slide tunnel project located along the Pacific coast in Caltrans District 4 was allocated a Federal earmark for \$6.0 million as part of the TEA-21 Federal funding authorization. It subsequently received emergency relief funding after a landslide occurred and was no longer in need of the original Federal earmark to complete the project.

American Recovery and Reinvestment Act (AARA) Funds – Discretionary - \$50.0 Million

As noted above, the Authority has requested \$100.0 million to help fund the Doyle Drive Reconstruction Project. At this time, \$50.0 million has been committed through the SHOPP program but an additional \$50.0 million is expected to be allocated from the \$1.5 billion multimodal discretionary portion of the program through the US DOT. These allocations are expected to be made in mid 2009.

4.4 Summary of Committed & Anticipated Funding

Based on the committed and anticipated funding sources outlined above, **Figure 4-3** summarizes the sources and amounts of funding required for the Project.

Figure 4-3: Funding Sources for the Doyle Drive Replacement Project (\$ millions)

Funding Source	Committed	Anticipated	Total
State Highway Operation and Protection Program Funds	405.0	-	405.0
ARRA Federal Stimulus Funds	50.0	50.0	100.0
Regional Improvement Program Funds	84.1	-	84.1
Golden Gate Bridge Highway and Transportation District Funds	80.0	-	80.0
Metropolitan Transportation Commission Funds	80.0	-	80.0
Proposition K Funds	67.9	-	67.9
Urban Partnership Agreement Funds	47.3	-	47.3
Federal Earmark Funds	28.6	-	28.6
State Local Partnership Program Funds	21.0	-	21.0
Port Sonoma Ferry Funds	-	20.0	20.0
Traffic Congestion Relief Program Funds	15.0	-	15.0
Devil's Slide Earmark Funds	-	6.0	6.0
Total	878.8	76.0	954.8

4.5 Key Revenue Assumptions, Risks, and Mitigations

The Project will use funding from several Federal, State, and local entities, creating a complex cash flow situation which will need to be managed closely as the Project is implemented to be sure revenues meet or exceed Project costs. The following risk items have been identified and will be monitored closely to minimize potential adverse impacts to the Project, its sponsors, and other stakeholders.

Figure 4-4: Summary of Key Risks

Risk Category	Description
Cost	Escalation Assumptions - The escalation assumption agreed upon by Caltrans and FHWA in April of 2009 was 3.0% escalation for the entire project construction period. With the volatility in the economy and pending start of many large construction projects due to Federal ARRA stimulus funding, unit price trends for construction materials and labor could make abnormal shifts during the time the Project is being constructed. Additionally, any delays will have a ripple effect on the overall schedule.
	Support Costs – Caltrans and the Authority acting together as the general engineering contractor, will provide all support to the Project in the areas of right of way, design, and construction. A total cost of \$135.9 million has been budgeted for this effort. While this represents approximately 15% of the total Project cost and is considered ample at this juncture, Caltrans will continually monitor the Project support requirements and adjust cost and scope continually to be sure the Project is implemented within the allotted budget.
Revenue	Proposition K Funds – Downturns in the economy could cause total proceeds from San Francisco County sales tax collections to be lower than forecast.

	<p>Anticipated Federal Funding – There are two Federal earmarks that have been identified for use on the Project, but these earmarks have yet to be redirected from their original use. The Sonoma Ferry and Devil’s Slide earmarks totaling \$26.0 million (\$20.0 and \$6.0 million respectively) are expected to be transferred to the Project either by amendment or at the time the next Federal highway funding bill is passed.</p> <p>The \$50 million in anticipated ARRA funding is expected to be allocated to the project once the USDOT completes its project listing process this year.</p>
	<p>Availability of Local Funding – Several of the local funding sources including the Golden Gate Bridge Highway and Transportation District, and the Marin and Sonoma County Transportation Authorities have not committed their funding until the final year of construction, previously expected to be FY2014. Under the accelerated schedule, the final year of construction would be FY2013, giving these local agencies one less year to identify and allocate the funding they have committed. There has been some speculation that MTC could intervene and divert STIP or other funding programmed by MTC from these entities (only for the Sonoma and Marin County funds totaling \$5 million) to the Project, though this would be an undesirable approach to meeting these commitments. The Authority and Caltrans will work with these and other entities funding the Project to identify specific timeframes when funds will be allocated to the Project and document these expectations.</p>
	<p>Availability of SHOPP Funding - Due to the accelerated schedule, some SHOPP funding will need to be advanced from FY2011 to FY2010. Guidance from Caltrans suggests that the SHOPP account has enough liquidity to accommodate the advancement of these funds.</p>

If the Project sponsors encounter any changes to the financial profile of the Project due to the risks noted above, there are one or more risk mitigation strategies that could be implemented to offset those changes. **Figure 4-5** summarizes the risk mitigation strategies available to the Project sponsors.

Figure 4-5: Summary of Key Mitigation Strategies

Risk Mitigation Strategies
<p>Value Engineering – Value Engineering can be used to identify cost savings during design while maintaining Project benefits. Caltrans institutes its Value Engineering Analysis for every major project during design and construction phases such that it can identify ways to more cost effectively meet project objectives.</p>
<p>Design Build - Design-Build provisions have recently been established in California as part of the comprehensive PPP legislation (SB 4). If Doyle Drive can be positioned as one of the pilot program projects for design-build, additional flexibility will be afforded contractors, who could engage in design and construction functions at the same time, and perhaps deliver the Project at a lower cost than under traditional delivery methods.</p>

Contract Monitoring – Caltrans, together with the Authority, will act as the general engineering contractor, providing support services to the construction contractors. This will allow very close monitoring of Project costs by Caltrans so that the Project team will foresee any potential funding shortfall far in advance of it actually occurring. Monthly budget reports will illuminate contract progress in relation to funding and alert the Project team if there are changes to the plan.

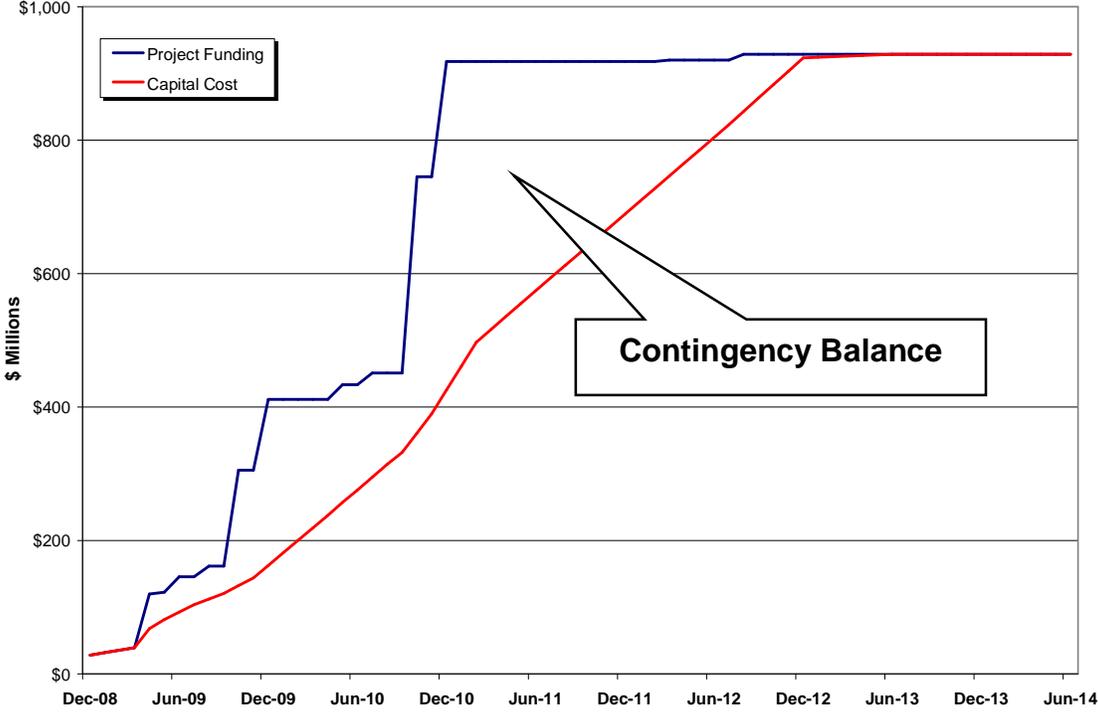
Multi-Sourced Funding Plan - Due to the relatively high number of funding sources, the Project team has some flexibility in shifting funds from certain sources forward or backward in time to accommodate small shifts in contract costs (i.e. MTC has agreed to provide their \$80 million contribution as early as June 2009 despite it being programmed for FY2010 and FY2011). If such shifts are needed, the Authority will evaluate the entire Project funding plan to determine if ample funding will be available to complete the Project or if additional actions on the cost or funding sides will be necessary. Additionally, with the strong political will to implement the Project on the accelerated schedule, it is likely that additional funding could be obtained to cover minor funding shortfalls if this contingency did not provide the additional time needed to produce the funds.

AB 3090 – AB 3090 is a mechanism that allows project sponsors such as the Authority to advance local funds to a project in exchange for committed RIP funds programmed at a later date in the STIP. As such, the Authority can use this mechanism to help fill funding gaps that could result from the timing of availability of RIP funds as compared to when they are need for the Project.

Flexible Invoice Payment System - Caltrans and MTC have established an invoice payment system to route recurring contractor invoices to local agencies for payment. This system has been successfully used on several BATA toll bridge contracts and can be used for all local funding sources.

As such, payments can be made by the local agencies without necessitating the entire contract funding amount to be held in escrow by Caltrans at the time the contract is awarded. This additional contingency between the anticipated cumulative revenues and required expenditures is illustrated in **Figure 4-6**.

Figure 4-6: Cumulative Anticipated Revenues and Expenses



5.0 Project Cash Flow

5.1 Revenue Timing by Source

The Project will be funded by a combination of Federal, State, and local sources. In addition to the committed funding sources, all cash flow analyses presented are based on the assumption that the anticipated funding, discussed in Section 4, Project Revenue, will be provided as planned (in its entirety, at the time a project is awarded). A summary of the Authority's funding plan for the Project throughout the construction period is provided in Appendix D.

State Highway Operation Protection Program Funds - \$405.0 Million

Caltrans will allocate \$405.0 million of SHOPP funds to the Project to cover approximately 40% of the total Project costs. Caltrans made \$24.0 million available in FY2007 and will program the remaining \$381.0 million for FY2009 and FY2010. These funds will be expended from FY2009 through FY2013.

American Recovery and Reinvestment Act Funds - \$100.0 Million

The Project will receive \$100.0 million of ARRA funds from two funding mechanisms as noted above. The current funding plan assumes that the committed \$50.0 million of this will be used in FY2010 and the anticipated \$50.0 million will be used in FY2011.

Regional Improvement Program Funds - \$84.1 Million

RIP funds in the amount of \$84.1 million have been programmed for use in FY2009 (\$4.1 million) and FY2011 (\$79.1 million). A total of \$0.9 million has been expended to date. MTC has indicated that there is some flexibility in the actual timing that these funds are made available, though the revised STIP retains these program dates.

Metropolitan Transportation Commission Funds - \$80.0 Million

The MOU between the Authority and the MTC states that MTC will contribute \$80.0 million to the Project no later than the final year of construction. The current plan of finance assumes this funding will be accelerated to FY2010, though MTC has agreed to provide these funds as early as FY2009 if the Authority needs them to accommodate the accelerated schedule (letter attached as Appendix K).

Golden Gate Bridge Highway and Transportation District Funds - \$80.0 Million

The Golden Gate Bridge Highway and Transportation District is expected to contribute \$80.0 million to the Project (including a \$5.0 million from the Marin and Sonoma County Transportation Authorities) no later than the final year of construction. A total of \$77.0 million of this funding is programmed for FY2011 and \$3.0 million in FY2013.

Proposition K Sales Tax Funds - \$67.9 Million

Proposition K funding of \$67.9 million has been committed to the Project through

FY2014. This funding amount represents an acceleration of expected annual tax collections between FY2004 and FY2034. \$8.9 million has already been expended on environmental support work through FY 2008 and the remaining \$58.9 million is scheduled to be used in FY2009 through FY2013.

Urban Partnership Agreement Funds - \$47.3 Million

The Project was allocated \$47.3 million to be funded through FHWA's Public Lands Highway Discretionary Program in FY2007. This funding is expected to be received in FY2009 and used between FY2009 and FY2010.

Federal Earmark Funds - \$28.6 Million

Federal earmarks totaling \$28.6 million have been obligated to the Project. \$20.8 million has already been spent through March of FY2009 and the remaining \$7.8 million will fund project expenditures in FY2009 and FY2010.

State Local Partnership Program Funds - \$21.0 Million

The Authority committed \$21.0 million of its SLPP funds to the Doyle Drive Replacement Project in FY2011.

Port Sonoma Ferry Funds - \$20.0 Million

Sonoma County has verbally agreed to transfer this \$20 million Federal earmark to the MTC for use on the Project, though this will have to be done by amendment or as part of the next Federal highway funding bill reauthorization.

Traffic Congestion Relief Program Funds - \$15.0 Million

\$15.0 million of State TCRP funds have been committed to the Project. \$4.0 million has been spent through FY2009. \$8.6 million is programmed to be spent in FY2009 and the remaining \$2.4 million will be used to fund design work in FY2011.

Devil's Slide Earmark Funds - \$6.0 Million

Caltrans received additional funding for the Devil's Slide project in District 4 such that this \$6.0 million earmark was no longer needed. It is expected to be transferred to the Project by amendment or as part of the next Federal highway funding bill reauthorization.

Total Project Revenue Timing

Figure 5-1 summarizes the planned funding for the Project over the construction period.

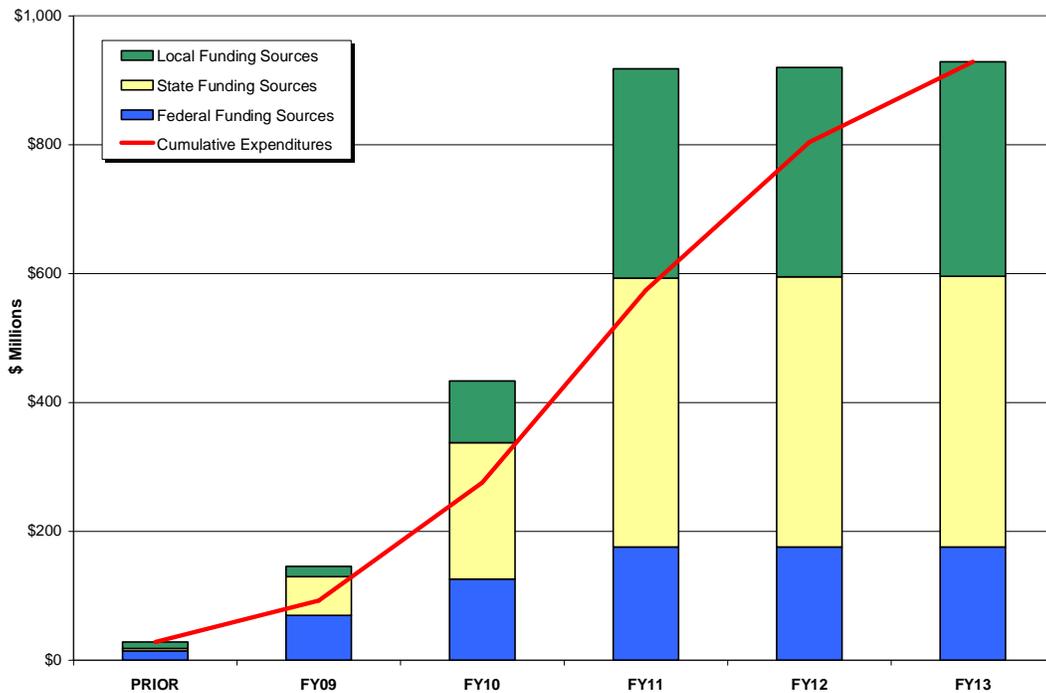
Figure 5-1: Summary of Project Funding by Fiscal Year (\$ Millions)

Funding Source	Through FY2008	FY2009	FY2010	FY2011	FY2012	FY2013	Totals
State Highway Operation and Protection Program	-	47.5	151.7	203.1	1.9	0.8	405.0
ARRA Federal Stimulus	-	-	50.0	50.0	-	-	100.0
Regional Improvement Program	0.9	4.1	-	79.1	-	-	84.1
Golden Gate Bridge Highway and Transportation District	-	-	-	77.0	-	3.0	80.0
Metropolitan Transportation Commission	-	-	80.0	-	-	-	80.0
Proposition K	8.9	1.9	-	52.0	-	5.0	67.9
Urban Partnership Agreement	-	43.0	4.3	-	-	-	47.3
Federal Earmarks	14.3	12.3	1.9	-	-	-	28.6
State Local Partnership Program	-	-	-	21.0	-	-	21.0
Port Sonoma Ferry	-	-	-	-	-	-	-
Traffic Congestion Relief Program	4.0	8.6	-	2.4	-	-	15.0
Devil's Slide Earmark	-	-	-	-	-	-	-
Total Sources of Funds	28.2	117.5	287.9	484.6	1.9	8.8	928.8

5.2 Project Funding vs. Planned Expenditures

Based on the cumulative expenditure forecast developed in Section 3, Project Implementation, **Figure 5-2** presents a comparison of cumulative planned expenditures to the expected timing of funds. In summary, the sources of funds will be available to sufficiently cover expenditures on an annual basis throughout the life of the Project. State and Federal funds will constitute the majority of funding through FY2010 with local funding sources playing a major role in FY2011. About 99% of project funds will be on hand by the end of FY2011.

Figure 5-2: Cumulative Project Sources and Uses Forecast



6.0 Other Factors

6.1 Impacts on State DOT Budget / STIP

The Doyle Drive Replacement Project has been part of the State Transportation Improvement Plan (STIP) and the RTIP for several years. The current TIP dated May 28, 2008 (Appendix E) shows that \$987.3 million has been programmed for the Project from various State and Federal sources. Due to changes in the Project cost, timing, and funding from certain sources, the Authority is working with MTC to update the TIP to reflect the final funding assumptions (described in Section 4, Project Revenues) that will carry the Project forward into implementation. Appendix F shows the revised (proposed) TIP entry for the Project, which is expected to be approved by MTC at the end of April, 2009. After MTC approves the revised TIP entry, it will be submitted to Caltrans and FHWA for their approvals and is expected to replace the current TIP entry in June of 2009. The revised TIP has \$954.8 million programmed for the Project between FY2000 and FY2013.

The Project, when completed, will be operated and maintained by Caltrans. State capital funding for this Project will not impact Caltrans's ability to fund annual system maintenance for this or other projects.

6.2 Impacts on Other Local Public Budgets

Certain local funds outlined in Section 4, Project Revenues are not listed in the Current TIP. Many of these are secured by MOUs or other agreements that have been ratified by the respective boards of the dedicating organizations. These funds may not have been formally budgeted for in the same way that State funds have been due to the procedures associated with the capital planning systems at these agencies. This funding, totaling \$354.0 million, is listed below. All local funding sources are considered Committed, despite certain sources not having firm commitment dates that correspond to the accelerated schedule.

Local Funds:

- \$80.0 million: Golden Gate Bridge Highway and Transportation District funds (including \$5.0 million from Marin (\$4.0) and Sonoma (\$1.0) County Transportation authorities)
- \$80.0 million: Metropolitan Transportation Commission funds (from BATA)
- \$21.0 million: State Local Partnership Program funds
- \$67.9 million: Proposition K funds (the Authority)
- \$84.1 million: Regional Improvement Program (RIP, various years)
- \$21.0 million: State Local Partnership Program

Total: \$354.0 million

6.3 Special Cost Containment Strategies

Throughout the planning phase of the Project, the Project sponsors have employed value engineering principles to review the cost effectiveness of the design alternatives and life-cycle cost analysis to maximize the value of the Project within the identified

Project budget. Caltrans employs a value engineering analysis during the design phase that continues into construction. Caltrans is committed to ensuring the proper use of capital funds through a comprehensive and aggressive financial and construction contract compliance audit program.

Cost estimates have been established by cost element for each of the eight contracts. The costs will be subdivided into eight major categories, which correspond with the cost elements identified in **Figure 2-2**, and will be tracked on a continuous basis. These categories are:

1. **Environmental** – Costs incurred related to feasibility analysis, community involvement and environmental review/permitting activities.
2. **Preliminary Engineering / Design Phase Support** – Costs include the preliminary engineering and design phase and support costs of Caltrans and the Authority.
3. **Right of Way Support** – Costs include production consultants, property managers, production/property management oversight, and State staffs.
4. **Right of Way Capital** – Costs include all non-mitigation related right-of-way.
5. **Construction Phase Support** – Costs include Caltrans construction administration for the construction contracts and internal State and Authority charges to the contracts.
6. **Neat Construction** – Costs include construction contracts and procurement contracts for all segments of the Project.
7. **Contingency** – Factor applied to construction estimate to account for the risk associated with the current level of design.
8. **Accelerated Risk Contingency** – Additional factor applied to account for the risk associated with accelerating design and construction contracts.

Over the course of the Project, cost estimates will be updated to reflect current design and engineering, including construction, right of way, utility relocations, mitigation, appropriate contingencies, and other factors. Likewise, the Project financial plan, including cash flow analysis, will be updated collaboratively, based upon input from Caltrans and the Authority. After contracts have been awarded, monthly budget reports will detail actual costs versus budget as contracts progress.

Caltrans will evaluate, negotiate, and make recommendations on change orders and claims, and expedite resolution to avoid delays. Caltrans uses a design change request process called the Risk Management Information System (RMIS) to evaluate environmental, design, structure, and right-of-way impacts from changes in Project elements.

RMIS is a web-based application that manages and displays information about risks associated with large construction projects. The system supports interactive data manipulation and reporting to support risk management teams. Each project has an assigned Risk Response Team.

Risks have a magnitude measured using several variables: impact, measured in both

dollars and days, and probability of occurrence during the project lifetime, measured in percentage terms. Closely associated with the risks are two other items: Contract Change Orders (CCOs) and Notices of Potential Claim (NOPCs). NOPCs are assigned a probability of turning into a CCO and have associated potential cost and schedule uncertainties. CCOs have actual cost and schedule uncertainties.

The impact of a risk to a project changes as the project develops. The RMIS application tracks and generates reports on the changing risk conditions and impacts. Records are updated quarterly and will be incorporated into regular Financial Plan updates.

6.4 Major Responsibilities of All Parties Involved

The Programmatic Agreement among the FHWA, the California Department of Transportation, the San Francisco Transportation Authority, the Presidio Trust, the National Park Service, the Department of Veterans Affairs, the California State Historic Preservation Officer, the Advisory Council on Historic Preservation, and the San Francisco Recreation and Parks Department for the South Access to the Golden Gate Bridge, Doyle Drive Replacement Project, San Francisco California (the Programmatic Agreement), attached as Appendix G, outlines the roles and responsibilities of major Project stakeholders in planning and implementing the Project. This document states that FHWA is the lead agency and has primary responsibility for the Project, but that FHWA has delegated responsibility for the design and implementation of the Project to Caltrans and the Authority. The other parties listed in this agreement have the responsibility to review, and in some cases approve, certain aspects of the Project's design and other items during implementation.

A cooperative agreement, attached as Appendix H, will guide the construction of the Project, limiting involvement to FHWA, Caltrans, and the Authority. FHWA will remain the lead agency responsible for the Project. Caltrans will act as the co-general engineering contractor (with the Authority), providing engineering and design support to the construction contractors. Caltrans will advertise, open bids, and approve all contracts for construction. It will also provide the independent quality assurance for all work done on the State highway system right of way.

The Authority will be the designated agency responsible for collecting funds from the various sources according to this financial plan (and subsequent updates hereto) such that there is ample funding in escrow at the time each contract is awarded, and on hand to pay monthly invoices from contractors. The Authority will also act as the co-general engineering contractor (with Caltrans), providing engineering and design support to the construction contractors. The Authority will provide the independent quality assurance for all work done off of the State highway system right of way.

To accomplish its duties as the 'funding gatekeeper,' the Authority will be required to follow the following steps regarding the each of the funding sources:

Federal Sources:

- **Earmarks (PLH, HPP, UPA)** – The Authority must request the obligation for all Federal earmarks through Caltrans in the year they are appropriated. Caltrans

will submit an E-76 form to FHWA, showing the expenditure purpose and other details, and the funds will be released to Caltrans within two to three months.

- **Stimulus (ARRA)** – \$50.0 million of Federal stimulus funding is expected to come directly from the USDOT through the multimodal discretionary portion of ARRA. The timing for obtaining these funds has not been determined due to the recent development of this funding source.

State Sources:

- **SHOPP** – Caltrans can request SHOPP funding from the CTC in the amount appropriated for the given fiscal year. The CTC approves the request at its regular monthly meetings and funding is transferred to the Project fund held by Caltrans within two to three months. \$50.0 million in ARRA funding for the Project is being routed through the SHOPP program such that the total SHOPP contribution will increase to \$455.0 million.
- **TCRP** – Similar to the SHOPP program, Caltrans must apply to the CTC for TCRP funding in the amount designated for the current fiscal year. Once approved the funding is transmitted to the Project fund held by Caltrans within two to three months.

Local Sources:

- **SLPP** – The Authority must request funding from Caltrans which reviews applications twice per year. Once the application is approved, Caltrans directs the funding to the Authority, usually two to three months after the application is submitted.
- **RIP** – Caltrans must initiate a request from the CTC. Usually this can be approved at the monthly CTC meeting if the request reflects what is programmed in the TIP. Turnaround time for the funding is generally two to three months.
- **Proposition K** – The Authority, as the designated agency to collect and distribute these funds, must make an internal request for the funding in an amount no greater than that designated for that year based on the Strategic Plan financial model. These requests are processed on an ongoing basis taking typically four to six weeks.
- **BATA / MTC** – MTC must go through an internal request process for this funding which generally takes four to six weeks.
- **GGBHTD / Marin / Sonoma** – The time for these funds to be made available is not expected to exceed two to three months, though the Marin and Sonoma portions may take longer since they must be routed through GGBHTD.

6.5 Agreements and Issues Related to Financing and Construction

Funding agreements outlining how much each Project sponsor expects to contribute are listed below.

Authority Resolution 06-30 – Attached as Appendix I, this resolution affirms commitments of \$71.1 million in RIP funds for the Project, with \$5.0 million allocated to FY2009 and the remaining \$66.1 million programmed for FY2011.

Authority Resolution 09-18 – Attached as Appendix C, this resolution

1. Commits an additional \$13.0 million in RIP funds to the Project to be programmed in the 2010 STIP. These will be used to fund capital costs in FY2011.
2. Authorizes the execution of a Memorandum of Understanding (MOU) between the Authority and MTC obligating MTC to contribute \$80 million to the Project no later than the final year of construction.
3. Includes an agreement between the Authority and GGBHTD obligating GGBHTD to contribute \$80 million to the Project, including a total \$5.0 million from the Marin (\$4.0 million) and Sonoma (\$1.0 million) County Transportation Authorities, no later than the final year of construction.

2008 STIP CTC Staff Recommendations - Attached as Appendix J, this document affirms commitments of \$71.1 million in RIP funds for the Project, with \$5.0 million allocated to FY2009 and the remaining \$66.1 million programmed in FY2011 of the Project funding schedule.

The Programmatic Agreement – Attached as Appendix G, this agreement establishes roles and responsibilities of signatories to the agreement regarding the Project design, protocols for treatment of historical properties, administrative procedures for the Project, and other terms pertaining to the Project’s planning and implementation.

Cooperative Agreement - The Cooperative Agreement outlines the responsibilities of FHWA, Caltrans and the Authority during the construction phase of the Project. Caltrans is responsible for managing the contractors and providing support to them as the Project is built. The Authority is the lead agency regarding the collection of funding from the various sources and tracking Project cash flow. Both agencies will provide design and support services to the project.

Transportation Improvement Plan (TIP) - The current TIP, attached as Appendix E, shows estimates of funding from various sources totaling \$987.3 million. The revised, proposed TIP, attached as Appendix F, contains an updated funding plan totaling \$954.8 million, which is expected to be approved by MTC, Caltrans, and FHWA by June 2009.

6.6 Schedule for Future Annual Updates

Adjustments to the cost estimate will be computed in a manner consistent with the methodology established in this Initial Financial Plan. For future updates, the Project will consider Caltran’s and the Authority’s fiscal year (July 1 – June 30) as the Project’s fiscal year. This timing will facilitate the development of compatible subsequent STIP and TIP updates.

The ongoing monthly budget reports will provide a basis to enable the timely preparation of annual updates to the Financial Plan. A 60-day period will allow ample time for a comprehensive update to be completed. Therefore, annual updates to the financial plan will be submitted to FHWA within 60 days following the end of the fiscal year, which will be September 1st of each year.