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Analysis of CCSF's Role and Future Funding Commitments to Caltrain

Prepared for City and County of San Francisco
Capital Planning Program

August 20, 2013



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July 18, 2013

Brian Strong, Director
Capital Planning Program
Office of the City Administrator
City and County of San Francisco

Dear Mr. Strong:

We are pleased to submit the enclosed report, which analyzes the City and County of San Francisco's (CCSF) role and future commitments to Caltrain.

We have enjoyed working with you and other CCSF and SFMTA staff.

Sincerely,



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EXECUTIVE SUMMARY

STUDY BACKGROUND AND PURPOSE

This study was commissioned by the City and County of San Francisco (City or CCSF) to evaluate its future obligations to the Caltrain passenger rail system. The report's main focus was to estimate the City's long-term funding commitments, identify challenges that could impact the City's ability to meet these obligations, and identify issues that may impede the future viability of the Caltrain system. Specifically, this report addresses the following four key topics:

1. CCSF's future operating and capital funding obligations, and any potential funding gaps
2. Risks that may impact the City's future obligations
3. Governance structure for ensuring Caltrain's long-term viability
4. Aligning regional policy objectives with Caltrain policies and practices

Caltrain is a key part of the transportation network between San Francisco, Peninsula communities, and San Jose/Gilroy, providing daily rail service vital to the corridor's economic and environmental health. The railway moves almost 20,500 riders during traditional weekday peak hour commutes along the system from San Jose and the Peninsula to San Francisco and 14,000 riders in the reverse direction, enhancing the regional economy.

The region benefits from other aspects of Caltrain as well. By providing a direct transit link, this lowers regional automobile trips, which in turn reduces carbon and other air pollution emissions. Additional weekday savings and benefits to the region come from reducing traffic congestion and commute times, and increasing quality of life by reducing driving stress. On evenings and weekends, Caltrain also provides transportation to regional entertainment and sporting events, including those in San Francisco, San Jose, and along the corridor.

CCSF is one of three member agencies which fund and govern the Peninsula Corridor Joint Powers Board (JBP). Along with San Mateo County Transit District (SamTrans), and Santa Clara County Valley Transportation Authority (VTA), CCSF contributes operating and capital project funds each year to operate and maintain the Caltrain system. Each member contributes equal shares for capital projects. For operating subsidies, each member's share is the result of a total subsidy request made by Caltrain staff, allocated to each member based on a negotiated formula reflecting the average weekday boardings in February, for each county.

Historically, CCSF's funding contributions to Caltrain have challenged fiscal planning and competed with other local needs to operate, maintain, and expand San Francisco's own transportation system. For example, the San Francisco Municipal Transportation Agency (SFMTA) has provided operating subsidies of approximately \$6 million to \$7 million per year to Caltrain, reducing SFMTA's ability to fund needed local services and improvements. CCSF's Proposition K funds, generated by a half-cent sales tax approved by San Francisco voters in 2003, provide most of CCSF's Caltrain funding for capital investments, also competing with needed other local-serving improvements. Moreover, in 2012, CCSF's obligation was further increased by its \$60 million commitment to fund part of the \$1.5 billion Caltrain Early Investment Program (EIP) involving system electrification.

METHODOLOGY

In order to assess Caltrain's potential future funding gaps, BAE Urban Economics followed these steps:

- Convened kick-off meeting with CCSF Capital Planning Program, SFMTA, Caltrain staff; SamTrans, VTA, California High Speed Rail Authority (CAHSRA), San Francisco County Transportation Authority (SFCTA), SF Mayor's Office, and the Metropolitan Transportation Commission (MTC) representatives;
- Convened regular meetings with a working group comprised of Capital Planning Program staff, SFMTA, and the Mayor's Office;

- Collected information from SFCTA, SFMTA, Capital Planning Program, MTC, and Caltrain staff; Reviewed all available past budgets, capital improvement plans, board minutes; correspondence, and environmental reports pertaining to Caltrain’s operating and capital needs including Electrification;
- Estimated historic funding requests, CCSF payments, future known funding requests, future allocations of Prop K funds, and remaining gaps for the next ten years; and
- Reviewed formula options to determine JPB member agencies’ potential operating subsidy allocations, including new policy-based options.

In light of the recent creation of the Mayor’s 2030 Transportation Task Force, which is charged with identifying transportation capital priorities for the City and connecting these with funding sources, this report also identifies potential funding sources for the Task Force to consider. These funding sources, along with revenue estimates for a subset of sources, can be found within Appendix E of this report.

FINDINGS: FUNDING GAPS

The analysis conducted for this study estimates a total 10-year funding estimated for CCSF’s contributions to Caltrain of almost \$145.8 million (uninflated). This gap includes:

- \$40.1 million shortfall for Electrification project (total for 10 years, uninflated)¹
- \$41.7 million shortfall for State-of-Good Repair projects (total for 10 years, uninflated)
- \$64.0 million or more shortfall for operating subsidy (total for 10 years, uninflated)

¹ BAE estimated the timing of Electrification project components, because Caltrain is not ready to spread these costs over time until it further refines the project’s design and delivery schedules during Summer 2013.

FINDINGS: FUNDING RISKS AND UNCERTAINTIES

In addition to the quantified funding gap analysis, work for this report found that CCSF faces substantial risks in meeting its funding obligations to Caltrain, which in turn impact its fiscal planning, economic vitality, and ability to meet transportation policy objectives. These risks and challenges from CCSF's perspective include:

- **Structural challenges.** Due to the structure of the JPB, with three member agencies responding to different constituencies and varying local policies, coordination with CCSF transportation initiatives has been challenging. The JPB structure creates a separation among the three member agencies, Caltrain staff, and governing Board, with no clear lead entity incentivized to reduce costs and raise revenues, as all three members are relied upon to “plug holes” as needed. In CCSF's case, this is further complicated by the City and County serving as the member of the JPB, representing multiple local transportation agencies within CCSF, requiring coordination of multiple budget processes. Also, with a membership comprised of one county and two transit agencies, there are differences between the three members' workflow, policy objectives, and competing local needs. Significant thought should be given to include San Mateo and Santa Clara counties going forward to Caltrain governance as well as operating and capital investments.
- **Uncoordinated budget preparation processes.** CCSF prepares its budget each fiscal year, effective July 1, beginning the previous December, when the Controller's Office issues detailed budget instructions to City departments. Departments then prepare their budget requests and submit them to the Controller by mid-February. The Controller reviews the proposed budgets and then turns the consolidated budget proposal over to the Mayor's Office of Public Policy and Finance for consideration by March 1st. However, Caltrain makes its budget requests to member agencies including CCSF several months after this process is underway, meaning that CCSF cannot easily accommodate or plan for its Caltrain capital project contributions.

- **CCSF's competing needs for limited transportation funds.** CCSF faces its own ongoing major need for both capital and operating funds for local transportation. The SFMTA has experienced several budget shortfalls in the past decade, has an ongoing structural operating deficit, and presently estimates a State of Good Repair backlog of over \$2.2 billion.² As a result, the funding of operating subsidies for Caltrain from SFMTA is becoming increasingly difficult.
- **Potential increased cost for Early Investment Program (EIP).** Although Caltrain expects to complete the EIP to upgrade system communications and electrify the system within the 2009 cost estimate of \$1.46 billion, the project's specific design and delivery process has not yet been determined. There is substantial potential risk that the project's costs will rise, once specific components are designed and contracted. CCSF could face additional requests for funding beyond its commitment of \$60 million. Moreover, the timing of funding requests is unclear, dependent on further project refinement. Caltrain expects to have refined information for the project in Summer 2013.
- **Variable year-to-year SOGR funding requests.** Caltrain prepares an annual capital budget based on a 10-year capital improvement plan (CIP). However, a systematic prioritization of State of Good Repair projects is not clearly described during this process, meaning that choices about SOGR spending, and the related requests to member agencies, are not clearly forecasted year to year. This results in widely varying SOGR contribution requests from member agencies to fund each year's SOGR budget. In the past five fiscal years, requests from member agencies have ranged from less than eight percent to almost 30 percent of total SOGR spending by Caltrain.
- **Variable year-to-year operating subsidy requests.** In addition, Caltrain's operating subsidy request varies each year, depending on the need for operating revenue and the ability of each member agency to afford the request.

² *Real Estate and Facilities Vision for the 21st Century*, SFMTA, 2013

- **Potential fluctuations in Prop K revenues.** This funding source – which at present is key to CCSF’s meeting its commitments for both SOGR and portions of the EIP – is generated by taxable retail sales, which in turn tend to fluctuate with economic cycles. The recent recession severely dampened taxable sales in San Francisco, highlighting the risk of relying on this funding source. Although sales tax revenue is rising again, CCSF will continue to face risks in meeting its transportation needs and Caltrain commitments as sales tax revenues rise and fall with the broader economic cycle.

POTENTIAL OPERATING SUBSIDY FORMULAS

This study incorporates an analysis of potential new formulas for allocating funding of the JBP member-contributed operating subsidy. Historically, this formula has been based on a count of February weekday average AM boardings in each of the three counties. A change in the formula for FY 2013-14 will be to rely on average weekday (all day) boardings.

In this study, a new operating subsidy formula is proposed that blends the current formula based on Caltrain ridership with a policy incentive to reduce single automobile trips. BAE worked with CCSF staff to formulate an approach that would align Caltrain’s operating formula with incentives to reduce greenhouse gas emissions, a goal set by legislation passed by the State through the Global Warming Solutions Act (AB32) and California’s Sustainable Communities and Climate Protection Act (SB375). In response to this landmark legislation, the region prepared a draft Plan Bay Area, a regional strategy for lowering greenhouse gas emissions by supporting a more efficient land use pattern, and by pairing land use changes with transportation investments. One performance target established by Plan Bay Area was to increase the region’s share of non-automobile trips by ten percentage points, so that non-automobile trips account for 26 percent of the Region’s trips. One way to reinforce this and help the region become more sustainable is to align transportation funding and policies with the performance targets established in Plan Bay Area. Since Caltrain is a major recipient of funds from three counties, this provides a unique ability to tie the operating subsidy formula to the goals of lowering non-automobile trips. The proposed

formula equally weighs Caltrain boardings with each County's share of non-auto commute trips. A county that successfully encourages non-auto commutes benefits from paying a lower Caltrain operating subsidy. This approach is proposed to be phased in over five years.

NEXT STEPS

The following outline recommends next steps for addressing the issues identified in this study, to close future funding gaps and address the risks and uncertainties described in this report.

Summer 2013

- Present this report to the initial large group convened to kick off the study
- Present report to Mayor's SF 2030 Transportation Task Force
- Begin discussions on implementing a new operating subsidy formula tied to greater regional transportation policies and goals
- Work with JPB Board and staff to address risk issues regarding structure and organization, budget coordination, and budget process questions (especially related to selection of SOGR projects each year)
 - This may require forming a subcommittee of the JPB Board, or other form of cross-member working group, to develop solutions
 - Process should explore alternative budgeting processes for JPB, including formulating a preliminary budget, a 2-year budget, a 10-year Capital Plan, improved SOGR prioritization processes, and forecasting member contributions at least one year ahead of funding request.
- Review Caltrain EIP project design and delivery, update cost model and funding gap estimates in this study; identify refined CCSF funding commitments in terms of timing, amounts, and match to proposed new funding sources

Fall 2013

- Upon the issuance of the Mayor's 2030 Transportation Task Force's final recommendations, determine outreach strategy for any sources identified that require voter approval or legislation action.
- Implement new budget process at JBP to inform upcoming CCSF budget cycle for FY 2014-15 (commences in December 2013)

Winter/Spring 2014

- Introduce legislation to initiate ballot measures for funding sources recommended by the Task Force that require voter approval.

INTRODUCTION

The Peninsula Corridor Joint Powers Board (JPB) was formed in 1987 to operate the Caltrain rail system, which provides passenger rail service from Gilroy to San Francisco through the sub-regions generally known as Silicon Valley and the Peninsula. The JPB is a unique regional transportation agency, comprised of three members: the City and County of San Francisco (CCSF), the San Mateo County Transit District (SamTrans), and the Santa Clara County Valley Transportation Authority (VTA). The JPB is governed by a nine-member Board of Directors, comprised of three representatives from each county.³

The portion of the Bay Area served by Caltrain contains more than 3.3 million residents and 1.6 million jobs, with vital economic activities depending on daily transportation throughout the corridor connecting San Jose, Silicon Valley, the Peninsula, and San Francisco. Caltrain, as a key link in this sub-region's transportation network, moves almost 20,500 riders during traditional weekday peak hour commutes along the system from San Jose and Peninsula residential locations, enhancing San Francisco's economy by tapping a large, talented regional workforce. In addition, Caltrain increasingly serves as a bi-directional commuter system, transporting almost 14,000 riders in a "reverse commute" to job locations elsewhere along the corridor southbound each weekday, similarly enhancing access to a talented workforce by Peninsula and Silicon Valley employers.

The sub-region benefits from other aspects of Caltrain as well. By providing a direct transit link, this translates into fewer automobile trips, which in turn lowers carbon and other air pollution emissions. Additional weekday savings and benefits to the region come from reducing traffic

³ For San Francisco, one member is appointed by the Mayor of San Francisco, one by the Board of Supervisors, and one by the Municipal Transportation Agency (MTA). For San Mateo County Transit District, one member is appointed by the City Selection Committee, one by the County Transit District, and one by the Board of Supervisors. For Santa Clara Valley Transportation Authority, all three members are appointed by VTA).

congestion and commute times, and increasing quality of life by reducing driving stress. On evenings and weekends, Caltrain also benefits the three member counties by providing transportation to regional entertainment and sporting events, including those in San Francisco, San Jose, and along the corridor.

These economic, social, and environmental benefits have long been recognized by the three members of the JPB, each of whom contribute scarce financial resources to ensure the continued operation and make necessary capital investments in the Caltrain system.

Funding for the JPB to maintain and operate the Caltrain system comes from a variety of sources, including federal and state grants, along with substantial contributions from each of the three member agencies. It is important to note that the system does not have a dedicated, reliable regional funding source; instead, Caltrain relies in part on each of its three member agencies to address operating shortfalls, with each member in turn using a complex set of sources for its obligations each year. For CCSF, funding to meet its Caltrain obligations has historically placed some strain on its ability to meet other local transit funding needs. In addition, issues of varying budget cycles between CCSF, SFMTA, and the JPB, as well as a range of accounting and budgeting processes, contributes to a lack of clarity and transparency each year for CCSF.

To date, CCSF has relied on two primary sources of funds to meet its Caltrain commitments. For capital projects providing ongoing investment in the system to maintain a ‘state of good repair,’ CCSF has drawn on allocations from Proposition K, a 2003 voter-approved half-cent local sales tax intended to finance transportation projects defined in the 30-Year Transportation Expenditure Plan⁴. For operating subsidy commitments, CCSF has drawn on the San Francisco Municipal

⁴ This document identified all projects and programs eligible to receive Prop K funding, including set-aside funds for Caltrain capital improvements and Electrification. The SFCTA administers Prop K, and can accelerate or change when the funds flow to Caltrain projects within the 30-year period. However, because funding for Caltrain projects is capped, the SFCTA cannot move funds between programs (i.e. from Transbay Terminal to Caltrain, etc.).

Transportation Agency (SFMTA) operating budget, because Prop K funds can only be used for capital projects. SFMTA has been the primary source for Caltrain operating subsidy funds for over a decade; however, with the SFMTA facing other major unfunded operating and infrastructure needs within San Francisco (e.g., bus, trolley, subway), a new source of ongoing operating subsidy funds for Caltrain must be identified. Reliance on SFMTA for this funding is not a sustainable approach for CCSF.

In addition to these ongoing funding challenges, CCSF has agreed to provide \$60 million of the nearly \$1.5 billion investment in Caltrain's Early Investment Program (for system electrification). Arranged through the 2012 High Speed Rail Early Investment Strategy Memorandum of Understanding between the Metropolitan Transportation Commission (MTC) and the JPB member agencies, this commitment marks a key step in preparing the Caltrain alignment to host the Peninsula segment of the California High Speed Rail system. The Prop K funding source described is expected to contribute part of the funding commitment made by CCSF for the Early Investment Program (EIP), but this source will not be sufficient to cover the full \$60 million CCSF commitment.

While CCSF policies and commitments clearly recognize the importance of Caltrain to its economy and transportation network, the level of funding for ongoing operations and capital projects, along with the increased challenge of the EIP to prepare for high speed rail, have created the need to prepare a sustainable financing strategy for CCSF's Caltrain obligations.

Purpose of Study

This study was commissioned by CCSF's Mayor's Office and the SFMTA Office of Public Policy and Finance, and overseen by CCSF's Capital Planning Program. It was conceived in part as a result of preparing the FY 2014-2023 Capital Plan, which identifies approximately \$25.0 billion of capital investments needed in the City and County of San Francisco over the next ten years. To expand on the challenges of Caltrain funding and to create a sustainable plan for the next ten years, further research and analysis was necessary, leading to this study.

The primary purpose of this study is to analyze the historical and ongoing funding obligations of CCSF's portion of Caltrain funding needs for both capital and operating costs over the next 10 years. Specifically, the study includes:

- Estimate of potential funding gaps for the next 10 years
- Identification of new or expanded funding mechanisms to fill those gaps
- Exploration of potential operating subsidy formulas which link to policy goals
- Identification of issues needing resolution to more clearly define the financing plan for Caltrain's capital investments including electrification (for High Speed Rail)
- Description of next steps for CCSF to help close estimated future funding gaps

Study Methodology

In order to assess Caltrain's potential future funding gaps and identify new funding sources to fill those gaps in a sustainable manner, this study followed these steps:

- Convened kick-off meeting with CCSF Capital Planning Program, SFMTA, Caltrain staff, SamTrans, VTA, CAHSRA, SFCTA, SF Mayor's Office, and MTC representatives.
- Convened weekly meetings with a working group comprised of Capital Planning Group staff, SFMTA, and the Mayor's Office.
- Collected information from SFCTA, SFMTA, Capital Planning Program, MTC, and Caltrain staff. Reviewed all available past budgets, capital improvement plans, board minutes, correspondence, and environmental reports pertaining to Caltrain's operating and capital needs including Electrification.
- Estimated historic funding requests, CCSF payments, future known funding requests, future allocations of Prop K funds, and remaining gaps for the next ten years.
- Identified potential new funding sources to meet funding gaps.
- Estimated selected new funding sources' amounts of revenue generation.

- Reviewed formula options to determine JPB member agencies' operating subsidy allocation, including new policy-based options.
- Recommended next steps.

Report Organization

The report is organized by chapter to correspond with each of the three categories of funding need and potential gaps: Caltrain Early Investment Program (EIP), Ongoing Capital Projects, and Ongoing Operating Subsidies. It provides a summary of background information, analysis of prior funding requests and allocations/payments, estimates of likely future funding needs, an estimate of potential future gaps for each category, and recommendations for next steps for CCSF. Additionally, Appendix E provides an overview of potential sources of new funding which CCSF could pursue to meet these gaps and 10 year revenue estimates for selected new sources.

CALTRAIN EARLY INVESTMENT PROGRAM (EIP)

Overview of Early Investment Program

The Caltrain Early Investment Program (EIP) involves installing advanced communications systems and electrifying most transit services. The EIP will achieve two simultaneous objectives to improve transit service: provide a cleaner and more efficient fleet for the existing Caltrain system, and pave the way for eventual implementation of the California High Speed Rail (HSR) initiative along this portion of the planned alignment.

Blended System Concept

In 2009, following voter approval of \$9 billion to plan and construct the state's high-speed rail system, Caltrain entered into an agreement with the California High-Speed Rail Authority to work in partnership to advance Caltrain corridor improvements that would support improved Caltrain service and high-speed rail service. Caltrain's coordination with the California High-Speed Rail Authority is managed through the Caltrain Modernization Program.

To support both Caltrain and HSR on the Peninsula rail corridor, initial project concepts were based on a four-track rail system that would require track expansion, sparking significant concerns about impacts to local communities. In 2011, a revised proposal emerged, known as the "blended system." This approach will implement a project with less impact along the Caltrain corridor, while supporting an integrated high-speed rail and modernized Caltrain service on shared tracks in order to maximize the use of existing infrastructure. Subsequent studies of capacity have supported this new approach, and the project is currently undergoing environmental review under the California Environmental Quality Act (CEQA). Caltrain anticipates that a final EIR will be published in the second half of 2014.

CCSF Funding Commitment

In 2012, the Metropolitan Transportation Commission (MTC) unanimously approved a Memorandum of Understanding (MOU), which was signed by multiple agencies, including the JPB, the California High Speed Rail Authority (CHSRA), the SFCTA and other local governments. The MOU enabled a series of actions by agencies that resulted in the full funding of the advanced signal system upgrade, and outlined a \$1.456 billion financing proposal from a mix of federal, state, regional, and local funds to pay for Electrification (see Appendix for sources). The JPB pledged \$180 million, which will be contributed in equal portions by CCSF, SamTrans, and Santa Clara VTA. CCSF's portion of this commitment is \$60 million.

Nearly \$20 million of CCSF's \$60 million contribution to the EIP is set to come from advancing Prop K funds, plus a credit from prior funds paid by CCSF to Caltrain.⁵ This amount could fluctuate due to changes in the timing requirements for the payments, or if Prop K revenue varies from current projections. If Prop K revenues are achieved as forecasted, this still leaves an unfunded commitment by CCSF of just over \$40 million

Estimate of CCSF Future Funding Gaps

In order to understand the timing and amount of funding to be contributed by CCSF to the Electrification Project, BAE analyzed several sources of information regarding the costs and timing of project delivery. These sources included information about project components and timing, drawn from the July 2009 Caltrain Electrification Program Environmental Assessment/Final Environmental Impact Report,⁶ as well as more detailed and current cost estimates provided by Caltrain staff for one of the first components known as the Communications-Based Overlay Signal System (CBOSS), commonly referred to as the Advanced Signal System. BAE then developed its

⁵ Communication from Maria Lombardo and Lee Saage, SFCTA, to Plans and Programs Committee, October 30, 2012, Letter from Caltrain to Steve Hemminger, MTC, 4-1-13..

⁶ The 2009 Caltrain Electrification Program Environmental Assessment/Final Environmental Impact Report has not yet been certified.

own estimate of the EIP project costs over time to derive funding gap estimates. However, during the period of finalizing this report, Caltrain provided an updated rough estimate of EIP costs and JPB funding needs for the next 10 years; these updated Caltrain estimates are shown in this final report.

Caltrain expects to further refine its rough timing of project costs when the EIP is refined during Summer 2013 to formulate project design and type of construction delivery methods. According to Caltrain, this refinement process may shift the separate State-of-Good Repair sequence of expenditures, accelerating some SOGR projects which benefit from their relationship to EIP components.

Funding levels by each of the three member agencies in the JPB were outlined in a Memorandum from the SFCTA to the Plans and Programs Committee of the San Francisco Board of Supervisors, dated October 30, 2012. This memo led to the advancement of additional Prop K funds for FY 2012-13 through FY 2014-15, to cover CCSF's contributions for the CBOSS component of the EIP over the next several years. However, at the time of this report, CCSF was still working to identify approximately \$7.0 million to cover its remaining CBOSS obligation. In addition, research for this report indicated that a prior \$4 million funding swap from regional air quality funds will be credited by Caltrain for a portion of CCSF's EIP contribution, likely in FY 2015-16.

BAE's estimates of the EIP project and potential funding gaps for CCSF are summarized on the following page. In general, as the project costs and timing are refined, it should be noted that the total cost of the EIP project may fluctuate. While the total EIP cost was estimated at \$1.456 billion by Caltrain staff during the 2009 environmental review process, and Caltrain is committed to keeping the project total at the planned number, it is uncertain if this goal will be achievable. Reasons for CCSF concern include the outdated age of this project estimate, the changes in land use and land use plans for the areas where electrification equipment will be installed, changes in potential project delivery and/or technology, and initial cost estimate's lack of inflation assumptions beyond a 2015 delivery date.

Table 1: Summary of CCSF Caltrain Electrification Project Funding Surplus (Gap)

(\$s in thousands)

	FY 2012-13 and prior	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	Total
Total EIP Program Costs (a)										
Communications-Based Overlay Signal System (CBOSS) (a)	\$ 28,200	\$ 47,300	\$ 113,501	\$ 30,712	\$ 11,241	\$ -	\$ -	\$ -	\$ -	\$ 230,954
Electrification System Costs (a)	\$ 24,000	\$ 3,250	\$ 10,100	\$ 37,250	\$ 222,600	\$ 258,000	\$ 334,150	\$ 269,605	\$ 66,545	\$ 1,225,500
Total	\$ 52,200	\$ 50,550	\$ 123,601	\$ 67,962	\$ 233,841	\$ 258,000	\$ 334,150	\$ 269,605	\$ 66,545	\$ 1,456,454
<i>% Completed</i>	3.58%	7.05%	15.54%	20.21%	36.26%	53.98%	76.92%	95.43%	100.00%	
Required CCSF Contribution										
CCSF Portion of JPB Amount for CBOSS (b)	\$ 3,000	\$ 6,390	\$ 10,237	\$ 3,747	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 23,375
CCSF's Portion of JPB Amount for Electrification System Costs (b)	\$ -	\$ 76	\$ -	\$ 7,287	\$ 8,526	\$ 11,191	\$ 8,932	\$ 613	\$ -	\$ 36,625
Total Required from CCSF	\$ 3,000	\$ 6,466	\$ 10,237	\$ 11,034	\$ 8,526	\$ 11,191	\$ 8,932	\$ 613	\$ -	\$ 60,000
Sources of CCSF Funds										
Prop K Funds ©	\$ 3,000	\$ 6,390	\$ 6,470	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 15,860
CMAQ/RIP (d)	\$ -	\$ -	\$ -	\$ 4,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,000
Total	\$ 3,000	\$ 6,390	\$ 6,470	\$ 4,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 19,860
CCSF Funding Surplus (Gap)	\$ -	\$ (76)	\$ (3,767)	\$ (7,034)	\$ (8,526)	\$ (11,191)	\$ (8,932)	\$ (613)	\$ -	\$ (40,140)
<i>Cumulative Funding Surplus (Gap)</i>	\$ -	\$ (76)	\$ (3,844)	\$ (10,878)	\$ (19,404)	\$ (30,595)	\$ (39,527)	\$ (40,140)	\$ (40,140)	

Notes:

- (a) Caltrain estimated the costs and timing of funds needed for CBOSS and electrification in a letter to Steve Heminger, Executive Director of the Metropolitan Transportation Commission dated March, 29, 2013. The annual cash flows estimated for CBOSS are based on contractual milestone payments with the contractor implementing CBOSS, while the electrification timing needs represent Caltrain's best estimates.
- (b) Caltrain estimated the costs and timing of funds needed for CBOSS and electrification in a letter to Steve Heminger, Executive Director of the Metropolitan Transportation Commission dated March, 29, 2013. The annual cash flows estimated for CBOSS are based on contractual milestone payments with the contractor implementing CBOSS, while the electrification funding needs represent Caltrain's best estimates.
- (c) Funds available from Prop K are based on a memorandum from SFCTA dated 10/30/12 that contains a schedule showing all Prop K funds available for CBOSS and electrification.
- (d) This funding was secured by a swap in 2008 between San Francisco's Regional Improvement Program funds and Congestion Mitigation and Air Quality Improvement Program (CMAQ) funds provided to the electrification project and was documented in letter from Caltrain to Steve Hemmnger, MTC, dated 4-1-13 re: San Francisco's funding commitment to EIP.

Source: Caltrain, 2013; SFCTA, 2012; BAE, 2013.

Risks of EIP to CCSF

Several risks and aspects of uncertainty related to the Electrification project are present for CCSF.

These include:

- Refined project design and delivery schedules may result in increased total project costs
- The timing and amount per year of Electrification costs are not known, so CCSF cannot yet plan on what years it will need to provide large amounts of funding (BAE cost spread per year is very rough)
- Project design may lead to accelerated State of Good Repair costs in near-term, to save money over long term (if SOGR project can be completed more efficiently during Electrification process). While this may represent long-term savings to CCSF and the other JPB members, it may also complicate fiscal planning by CCSF.

CALTRAIN ONGOING CAPITAL PROJECTS

Overview of Ongoing Capital Projects

The operation and maintenance of Caltrain's existing service requires substantial investment in ongoing capital needs. These costs are covered by the State of Good Repair (SOGR) rehabilitation program that is designed to ensure the performance of Caltrain's facilities and fleet by replacing assets at the end of their useful/service life. Examples of projects include system-wide infrastructure upgrades, signal and track rehabilitation, rolling stock replacement, and safety improvements. Unlike the Early Investment Program for electrification, which involves a one-time contribution from member agencies, SOGR requires annual ongoing contributions from the JPB member agencies. It should be noted that in addition to the SOGR projects, Caltrain also funds a contingency for capital projects through this same category.

SOGR projects are planned as part of the Caltrain Short-Range Transit Plan (SRTP) which includes a 10-year capital improvement plan. The most recent SRTP was published in 2009, and is scheduled to be updated in 2013 (updated every four years). The most recent listings from the 2009 SRTP show a total of \$3.4 billion for capital projects needed for the next 10 years.

Each budget year, Caltrain staff reviews the SRTP, prioritizes those capital projects that are most needed, estimates available funding amounts from federal and state sources based on interaction with the Metropolitan Transportation Agency (MTC), and then requests JPB member agencies' contributions based on remaining funding needs. Historically, SOGR projects have totaled roughly \$25 million to \$35 million per year, depending on the number and cost of projects Caltrain estimates that it can undertake, the level of Federal Transit Administration (FTA) funds it receives, and how much each of the JPB members can afford to contribute. The total member agency contribution is then allocated equally to each of the three member entities, so that each contributes one-third of the total member contribution.

It should be noted that, on an annual basis, Catrain SOGR requests and resulting member contributions range widely (see table on next page). While FY 2011-12 member contributions were reduced due to the recession and less available funding, other years also vary widely. As one measure, total member contributions to the SOGR program range from a low of seven percent to a high of almost 30 percent across the years shown.

Historic CCSF Contributions

The table on the next page summarizes the historic amount of funding requested from and contributed by each member of the JPB including CCSF. Appendix B shows the detailed breakdown of projects funded by these member agencies' contributions for FY 2009-10 through 2013-14. As shown below, the average contribution for SOGR requested of CCSF was \$3.74 million for this time frame, including both SOGR and a small capital contingency fund.

Table 2: Historic Contributions for State of Good Repair (SOGR) Projects, FY 2008-09 to FY 2012-13

	FY 2008-09 (a)	FY 2009-10	FY 2010-11 (b)	FY 2011-12	FY 2012-13	Average
State of Good Repair (SOGR)						
CCSF	\$ 3,235,900	\$ 5,204,020	\$ 2,670,000	\$ 2,403,100	\$ 3,548,056	\$ 3,412,215
SamTrans	\$ 3,235,900	\$ 5,204,020	\$ 2,670,000	\$ 2,403,100	\$ 3,548,056	\$ 3,412,215
Santa Clara VTA	\$ 3,235,900	\$ 5,204,020	\$ 2,670,000	\$ 2,403,100	\$ 3,548,056	\$ 3,412,215
Subtotal	\$ 9,707,700	\$ 15,612,060	\$ 8,010,000	\$ 7,209,300	\$ 10,644,169	\$ 10,236,646
Capital Contingency Fund						
CCSF	\$ 320,000	\$ 330,000	\$ 330,000	\$ 330,000	\$ 330,000	\$ 328,000
SamTrans	\$ 320,000	\$ 330,000	\$ 330,000	\$ 330,000	\$ 330,000	\$ 328,000
Santa Clara VTA (c)	\$ 370,000	\$ 380,000	\$ 330,000	\$ 330,000	\$ 330,000	\$ 348,000
Subtotal	\$ 1,010,000	\$ 1,040,000	\$ 990,000	\$ 990,000	\$ 990,000	\$ 1,004,000
Total - SOGR + Capital Contingency						
CCSF	\$ 3,555,900	\$ 5,534,020	\$ 3,000,000	\$ 2,733,100	\$ 3,878,056	\$ 3,740,215
SamTrans	\$ 3,555,900	\$ 5,534,020	\$ 3,000,000	\$ 2,733,100	\$ 3,878,056	\$ 3,740,215
Santa Clara VTA	\$ 3,605,900	\$ 5,584,020	\$ 3,000,000	\$ 2,733,100	\$ 3,878,056	\$ 3,760,215
Total JPB Sources	\$ 10,717,700	\$ 16,652,060	\$ 9,000,000	\$ 8,199,300	\$ 11,634,169	\$ 11,240,646
Total Capital Budget	\$ 150,774,900	\$ 82,336,042	\$ 33,392,086	\$ 60,726,816	\$ 39,093,085	\$ 73,264,586
JPB Sources, as % of Total Capital Budget (d)	7.1%	20.2%	27.0%	13.5%	29.8%	15.3%

Notes:

(a) Caltrain fiscal year from July 1 through June 30th.

(b) JPB Member Agency contributions in 2011 were lower than the amount forecasted in Caltrain's approved budget. The 2011 approved capital budget shows an annual member contribution of \$4,578,159. Each member contributed \$1,578,159 less than requested.

(c) Santa Clara VTA contributed an additional \$50,000 in 2009 and 2010 to pay for capital contingency costs associated with Caltrain service to Gilroy.

(d) BAE calculated JPB sources as a % of the total capital budget. Annual capital budget varies depending on funding and project needs.

	FY 2008-09	FY 2009-10	FY 2010-11 (b)	FY 2011-12	FY 2012-13	Average
Federal Funds	16.4%	46.5%	36.8%	67.2%	49.4%	43.3%
State Funds	57.1%	25.7%	19.2%	13.6%	17.4%	26.6%
Other Sources	19.4%	7.5%	2.9%	5.7%	3.5%	7.8%
JPB Member Contributions	7.1%	20.2%	27.0%	13.5%	29.8%	19.5%
JPB Shortfall	0.0%	0.0%	14.2%	0.0%	0.0%	2.8%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	

Sources: Caltrain; BAE, 2013.

Estimate of CCSF Future Funding Gap

The table below provides allocations already identified by SFCTA through its Proposition K forecasts, and matches these against SOGR future needs, as provided by Caltrain to CCSF (see footnote in table below for information provided by Caltrain. It is important to note that the SOGR estimates from Caltrain have not been documented, and represent a substantial increase in SOGR needs by Caltrain compared to the historic pattern shown on the prior page. BAE utilized an average of these Caltrain SOGR estimates to prepare the funding gap analysis, rather than reflect the widely varying costs from year to year without better documentation.

Table 3: State of Good Repair (SOGR) Funding Surplus (Gap), CCSF Obligation

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23
Sources - Prop K per SFCTA Allocation (a)										
EP 7 Caltrain CIP	\$ 150,000	\$ 837,114	\$ 853,856	\$ 870,933	\$ 888,352	\$ 906,119	\$ 924,241	\$ 942,726	\$ 961,580	\$ 435,423
EP 17P Vehicles	\$ 1,000,000	\$ 745,281	\$ 778,818	\$ 813,865	\$ 850,489	\$ 888,761	\$ 928,756	\$ 970,550	\$ 1,014,224	\$ 1,059,864
EP 20P Rehab Upgrade Facilities	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
EP 22P Caltrain Guideways	\$ 1,300,000	\$ 800,000	\$ 836,000	\$ 873,620	\$ 912,933	\$ 954,015	\$ 996,946	\$ 1,014,808	\$ 1,088,689	\$ 1,137,680
Total	\$ 2,450,000	\$ 2,382,395	\$ 2,468,674	\$ 2,558,418	\$ 2,651,774	\$ 2,748,895	\$ 2,849,943	\$ 2,928,084	\$ 3,064,493	\$ 2,632,967
Uses - CCSF Contribution (SOGR + Capital Contingency Fund) (b)	\$ 4,800,000	\$ 7,068,889	\$ 7,068,889	\$ 7,068,889	\$ 7,068,889	\$ 7,068,889	\$ 7,068,889	\$ 7,068,889	\$ 7,068,889	\$ 7,068,889
Surplus (Gap)	\$ (2,350,000)	\$ (4,686,494)	\$ (4,600,215)	\$ (4,510,471)	\$ (4,417,115)	\$ (4,319,994)	\$ (4,218,946)	\$ (4,140,805)	\$ (4,004,396)	\$ (4,435,922)
Cumulative Surplus (Gap)	\$ (2,350,000)	\$ (7,036,494)	\$ (11,636,709)	\$ (16,147,180)	\$ (20,564,295)	\$ (24,884,288)	\$ (29,103,234)	\$ (33,244,039)	\$ (37,248,435)	\$ (41,684,357)

a) Prop K allocations for Caltrain capital projects from SFCTA per 2009 allocation forecast. Will be revised in 2013.

Note: Future Prop K allocations can be adjusted from year to year, but total over life of Prop K is capped for these categories.

b) FY 2013-14 contribution based on the actual request made by Caltrain to JPB members for FY 2013-14. Future years' contributions are taken from Caltrain's Capital Improvement Program (CIP) submitted to MTC in preparation for the RTP, and represent an average of actual SOGR needed for FY 2014-15 through FY 2022-23. It should be noted that Caltrain's CIP projections are uneven, and show higher contributions needed for FY 2014/15 through FY 2016/17 to pay for costs associated with prior year's deferred improvements, new rolling stock, and bridge rehabs.

See below for anticipated SOGR needs by year, as projected by Caltrain. Information to document or provide reasons for the timing rationale by Caltrain have not been provided to CCSF.

	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	Avg.
CIP Annual Funding Need from JPB	\$ 50,458,000	\$ 49,874,000	\$ 58,111,000	\$ 4,130,000	\$ 3,090,000	\$ 3,149,000	\$ 3,209,000	\$ 3,272,000	\$ 15,567,000	\$ 21,206.667
JPB Member Contribution (1/3 share)	\$ 16,819.333	\$ 16,624.667	\$ 19,370.333	\$ 1,376.667	\$ 1,030.000	\$ 1,049.667	\$ 1,069.667	\$ 1,090.667	\$ 5,189.000	\$ 7,068.889

Sources: Caltrain; SFCTA; BAE, 2013.

It should be noted that SFCTA, which administers Prop K, is able to advance future funds slated for Caltrain capital projects in order to close nearer-term funding gaps; however, the total funding that can be allocated by SFCTA is capped by the language of Prop K. Moreover, advancing Prop K funds for Caltrain capital improvements ahead of its pro rata share of tax revenue collected, incurs financing costs that reduce the total amount of funds for this category. The SFCTA applies 25 percent of the future allocation as a charge to advance the funds.

Risks of State of Good Repair Projects to CCSF

There are several risks and aspects of uncertainty which impact CCSF's fiscal planning for its contribution to SOGR projects:

- Unclear methods used to prioritize SOGR projects from year to year by Caltrain
- Uneven forecasts of JBP contributions needed for SOGR projects
- Unknown impacts of EIP project refinement on SOGR projects (which may be undertaken simultaneously, and/or may provide overall cost savings)
- The method of “backing into member contributions” after deducting federal and state funding, and after evaluating what one or more member agencies can afford
- Preparing funding requests after CCSF has drafted its next two-year budget, creating a last-minute scramble

The above issues result in difficult fiscal planning for CCSF. The Recommended Next Steps section in this report suggests re-aligning this process to provide a longer-term forecast of SOGR projects, costs, and member contribution needs, so that CCSF can identify funds and incorporate this funding commitment into its annual capital budget.

CALTRAIN ONGOING OPERATING SUBSIDY

Overview of Ongoing Operating Subsidy

In addition to capital needs, the Caltrain system requires member agencies to contribute funds each year to support ongoing operations. While farebox revenue and grants contribute a substantial portion of operating funds, contributions by member agencies are also a key component of meeting ongoing operating costs. Since FY 2009-10, Caltrain has received an average of \$31.7 million per year in operating subsidies from the three member agencies.

In 1999, the JPB members agreed to a formula for calculating each member's share of the operating subsidy. Each member's share was calculated based on a February count of weekday morning peak-hour passenger boardings, per county of origin. In fiscal year 2006, member agencies agreed to an annual increase of 3 percent in operating contributions over the prior year. In 2009, the increases were discontinued as a result of the financial crisis that constrained member agency revenues.⁷ In FY 2012-13, Samtrans was able to increase its contributions, resulting in the other member agencies also increasing their contributions. Most recently, all three members agreed to shift to a slightly different formula for FY 2013-14, away from AM peak boardings to count instead, all day weekday boardings in the same week in February, by county. At present, this formula includes the extended Caltrain service to Gilroy.

The shift from AM peak boardings to weekday all day boardings reflects a shift in ridership patterns, with increases in non-traditional commute direction from San Francisco workers traveling south, as well as trips occurring throughout the day.

⁷ Memorandum from Gigi Harrington to Michael Burns and Ed Reiskin, Membership Agency Operating Contribution Methodology, dated January 31, 2013.

Historic CCSF Contributions

Based on the formula outlined above, applied each year to Caltrain operating subsidy needs, the table below shows the historic amount of each JPB member agency’s contribution. Between FY 2008-09 and FY 2013-14, the average operating subsidy contribution requested of CCSF was \$5.8 million. It should be noted that this average is affected by a reduced member agency request for FY 2011-12, when SamTrans experienced fiscal challenges, and all three member agencies’ contributions were reduced proportionately as a result.

Table 4: Historic Member Agency Contributions for Caltrain Operating Subsidy, FY 2008-09 to FY 2013-14

	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12	FY 2012-13	FY 2013-14	Average
Operating Subsidy to Caltrain							
CCSF	\$ 7,017,165	\$ 7,017,165	\$ 6,246,946	\$ 4,510,684	\$ 5,800,000	\$ 4,500,881	\$ 5,848,807
SamTrans	\$ 16,521,290	\$ 16,521,290	\$ 14,707,875	\$ 10,620,000	\$ 14,000,000	\$ 5,440,000	\$ 12,968,409
VTA	\$ 15,878,130	\$ 15,878,130	\$ 14,135,309	\$ 10,206,572	\$ 13,700,000	\$ 7,290,668	\$ 12,848,135
Total Agency Contributions	\$ 39,416,585	\$ 39,416,585	\$ 35,090,130	\$ 25,337,256	\$ 33,500,000	\$ 17,231,549	\$ 31,665,351
Contribution Rates							
CCSF	17.80%	17.80%	17.80%	17.80%	17.31%	26.12%	19.11%
SamTrans	41.91%	41.91%	41.91%	41.91%	41.79%	31.57%	40.17%
VTA	<u>40.28%</u>	<u>40.28%</u>	<u>40.28%</u>	<u>40.28%</u>	<u>40.90%</u>	<u>42.31%</u>	40.72%
Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

Sources: Caltrain; BAE, 2013.

Operating Subsidy Formula Options

Due to the changes in commute patterns since the operating subsidy formula was created, the three member agencies agreed to re-visit the formula in Spring 2013, resulting in an agreement for FY 2013-14 to allocate the Caltrain operating subsidy on the basis of average weekday (all day) boardings. CCSF also proposed in that meeting to revisit this formula again, prior to the next fiscal year, and try to integrate a more policy-based approach to the formula.

This section explores some basic allocation methods for this operating subsidy among the three members of the JPB, along with a more policy-based approach.

Methodology to Develop Options

In order to develop refined formula options for operating subsidy contributions, at the request of CCSF, BAE explored a series of “simple” methods based on readily-available metrics, as well as a policy-based method which better incorporates regional transportation and sustainable development policies. Supporting data used for the calculations are included in Appendix F.

Simple Allocation Methods

BAE prepared several “simple” allocation methods, which use basic, available metrics including track length in each county, population in each county, and number of jobs in each county, as described below.

- **Track Length Per County** – This is a relatively common method to allocate costs for many types of linear infrastructure (e.g., roads, sewer pipes, etc.). It would reduce CCSF’s share of the total subsidy significantly, due to the shorter length and more compact geography of San Francisco’s development pattern. It also reflects the average cost per mile to operate the rail system, which is one basic measure of performance. This approach, however, does not reflect utilization of the system or policies regarding sustainable development.

- **Population per County** – This simple method allocates operating subsidy simply on the number of residents in each county. It would be easy to use (e.g., California Department of Finance estimates county population each year, and can be adjusted during official Census years), and has the benefit of spreading subsidy across the entire “market” of potential riders, including to those riding to work and as well as for other purposes.
- **Jobs per County** – This measure would tie the allocation to share of jobs present in each County, which reflects the primary utilization of Caltrain as a means of transportation to work.

Policy-Based Method

In addition to the above simple allocation methods, BAE worked with the SFMTA and other CCSF staff to formulate policy-based methods which incorporate a key transportation goal across the region: to encourage non-automobile trips.

This common goal is set through a series of legislative and policy actions across the region. Starting with AB 32, California’s Global Warming Solutions Act, through SB 375, California’s Sustainable Communities and Climate Protection Act of 2008, the stage has been set to organize regional land use planning and transportation investments to support a more sustainable pattern, emphasizing less reliance on single-automobile commuting through major transit investments, transit-oriented development, and policies to encourage jobs-housing balance. Achievement of this goal will bring vital benefits to the region, including reduced traffic congestion, lower CO2 and other air pollution emissions, increased economic efficiencies in terms of reduced commute times and commute stress, and the ability to absorb additional economic growth while also improving quality of life.

These legislative initiatives have recently been captured through the Plan Bay Area process, which released a Draft Plan Bay Area in April, 2012. This Plan, our region’s Sustainable Communities Strategy as required by SB 375, created a regional blueprint that outlines how the nine-county Bay Area will sustainably accommodate future growth for the next 30 years. Between 2010 and 2040,

the Region is expected to add 2.1 million new residents and 1.1 million new jobs, with over 53 percent of new jobs in the nine-county region estimated to be located in the area served by Caltrain (e.g., San Francisco, San Mateo, and Santa Clara counties) by 2040.

Plan Bay Area achieves greenhouse gas reduction targets by pairing more efficient land use patterns with transportation investments. One major tenet of Plan Bay Area is to accommodate virtually all new development within the existing urbanized footprint. The Plan directs growth to jurisdictions that have expressed a willingness to accept more housing and employment, including major cities and priority development areas (PDAs). In addition, to achieve the sustainable development pattern envisioned, the Plan matches growth with transportation infrastructure that prioritizes public transit use, walking, and biking. Plan Bay Area outlines a transportation strategy to achieve this, directing funds towards maintaining existing assets while also supporting focused initiatives in strategic growth areas. As noted in the Plan, Caltrain is a key component of achieving the goals; EIP investments in Caltrain represent the sixth largest capital investment in the region for the planning period to achieve its goals. Caltrain's organizational structure, comprised of three of the region's nine counties, presents a unique opportunity to strengthen Plan Bay Area's goal of reducing non-auto trips.

In the policy-based approach proposed below, the Caltrain operating subsidy formula would shift from system utilization, as represented by boardings (current formula), to an approach that rewards each JPB member based on its lowered contribution to the three-county's number of undesired single-auto commute trips. A county that successfully encourages non-auto commute trips and reduces its share of single-drivers within the 3-county region would benefit by paying a lower portion of the total operating subsidy. This approach aligns the region's sustainable policies with the way the formula would be structured.

Table 5 on the next page shows this method, with supporting data included in the Appendices.

Table 5: Summary of Operating Subsidy Methods

Assumes method is applied to \$32,000,000 operating subsidy request (historic average of total requested each year)

	Current Method (FY 13/14)		Simple Allocation Methods						Policy-Based Method		Combined Approach	
	A		B		C		D		E		F	
	Average Weekday Boardings (a)		Track Length (b)		2010 Population by County (c)		2011 Jobs by County (d)		Single Driver Commuters by County (e)		Average of Methods A & E (f)	
	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount
CCSF	26.1%	\$ 8,358,400	6.4%	\$ 2,046,100	24.4%	\$ 7,795,753	26.7%	\$ 8,549,109	15.8%	\$ 5,071,322	21.0%	\$ 6,714,861
SamTrans	31.6%	\$ 10,102,400	26.4%	\$ 8,451,100	21.7%	\$ 6,955,567	22.1%	\$ 7,082,796	23.8%	\$ 7,618,678	27.7%	\$ 8,860,539
VTA	42.3%	\$ 13,539,200	67.2%	\$ 21,502,800	53.9%	\$ 17,248,680	51.2%	\$ 16,368,095	60.3%	\$ 19,310,000	51.3%	\$ 16,424,600
Total	100.0%	\$ 32,000,000	100.0%	\$ 32,000,000	100.0%	\$ 32,000,000	100.0%	\$ 32,000,000	100.0%	\$ 32,000,000	100.0%	\$ 32,000,000

Notes:

- a) Agreed to by JBP staff on conf call on 4-19-13 and described in letter from Caltrain dated 4-29-13. This method measures boardings for an average weekday during a week in February and allocates the total request by county, including Gilroy extension stations.
- b) Based on length of trackage in miles in each county, as calculated by BAE using ArcView GIS.
- c) Total population for each county from US Census 2010.
- d) Based on proportion of total jobs in each county, as reported by California Employment Development (EDD) in Current Employment Statistics program, 2011.
- f) Based on allocating share of all commuters not driving alone to work, within 3 county region (rewards county for higher non-single driver commuters). Expressed as a "credit" for higher rates of non-single drivers, by subtracting single drivers commuting from 1. See Appendix for commute mode data.
- f) Based on average of Method A + E. This method could be a phase out stage for current formula/phase in for policy-based formula in Column E.

Sources: US Census, 2010; Caltrain, 2012; CA EDD, Current Employment Statistics Program (June 2012 Benchmark), 2013; Memo from Caltrain (1-31-2013); American Community Survey, 2011; BAE, 2013.

Additionally, this report recommends phasing-in the new policy based formula over the next five years to allow counties to gradually adjust to the new methodology. Table 6 provides a “phased in” version of the policy approach, which uses the application of a weighted average over the next five years to shift the operating subsidy formula from its current methodology (which relies solely on weekday boardings) to a new formula based on the average of weekday boardings and the percentage of single auto trips within each county. Based on Table 5 above, Approach “F” would be in effect at the end of the five-year phase-in period

Table 6: Summary of Policy-Based Credit Methodology (Phased-in Approach)

Assumes method is applied to \$32,000,000 operating subsidy request (historic average of total requested each year)

Policy-Based Credit Method Phased-In Approach										
Year 1 (a)		Year 2 (a) (b)		Year 3 (a) (b)		Year 4 (a) (b)		Year 5 (a) (b)		
FY 2014-15		FY 2015-16		FY 2016-17		FY 2017-18		FY 2018-19		
Current Weekday Boarding Method		Weighted Average (80% Current / 20% Policy)		Weighted Average (70% Current / 30% Policy)		Weighted Average (60% Current / 40% Policy)		Average (50% Current / 50% Policy)		
%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	
CCSF	26.1% \$ 8,358,400	24.1% \$ 7,700,984	23.0% \$ 7,372,277	22.0% \$ 7,043,569	21.0% \$ 6,714,861					
SamTrans	31.6% \$ 10,102,400	30.0% \$ 9,605,656	29.2% \$ 9,357,283	28.5% \$ 9,108,911	27.7% \$ 8,860,539					
VTA	42.3% \$ 13,539,200	45.9% \$ 14,693,360	47.7% \$ 15,270,440	49.5% \$ 15,847,520	51.3% \$ 16,424,600					
Total	100.0% \$ 32,000,000	100.0% \$ 32,000,000	100.0% \$ 32,000,000	100.0% \$ 32,000,000	100.0% \$ 32,000,000					

Notes:

- a) Current method measures boardings for average weekday during a week in February.
- b) Policy method based on allocating a credit based on share of all commuters not driving alone to work, within the 3 county region (rewards county for higher non-single driver commuters).

Sources: Caltrain, 2012; Memo from Caltrain (1-31-2013); America Community Survey, 2011; BAE, 2013.

SUMMARY OF CCSF FUNDING GAPS FOR CALTRAIN

The table on the next page summarizes the estimated funding gaps for CCSF's contributions to Caltrain over the next 10 years, including funds needed for the Early Investment Program, the estimated State of Good Repair project needs, and the annual operating subsidy assuming a phased-in shift from boardings to the policy-based method. The total funding gap over the 10 year period is \$145.9 million (uninflated).

Table 7: Summary of CCSF Estimated Funding Gaps, FY 2013-14 - FY 2022-23

(\$s in thousands)

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23
Early Investment Program (CBOSS + Elec)										
CCSF Contribution Request (a)	\$ (6,466,337)	\$ (10,237,333)	\$ (11,034,000)	\$ (8,526,000)	\$ (11,191,000)	\$ (8,932,000)	\$ (613,333)	\$ -	\$ -	\$ -
CCSF Funding (b)	\$ 6,390,000	\$ 6,470,000	\$ 4,000,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Net Surplus (Gap)	\$ (76,337)	\$ (3,767,333)	\$ (7,034,000)	\$ (8,526,000)	\$ (11,191,000)	\$ (8,932,000)	\$ (613,333)	\$ -	\$ -	\$ -
<i>Cumulative Surplus (Gap)</i>	<i>\$ (76,337)</i>	<i>\$ (3,843,670)</i>	<i>\$ (10,877,670)</i>	<i>\$ (19,403,670)</i>	<i>\$ (30,594,670)</i>	<i>\$ (39,526,670)</i>	<i>\$ (40,140,003)</i>	<i>\$ (40,140,003)</i>	<i>\$ (40,140,003)</i>	<i>\$ (40,140,003)</i>
State of Good Repair (SOGR) Projects										
CCSF Contribution Request (c)	\$ (4,800,000)	\$ (7,068,889)	\$ (7,068,889)	\$ (7,068,889)	\$ (7,068,889)	\$ (7,068,889)	\$ (7,068,889)	\$ (7,068,889)	\$ (7,068,889)	\$ (7,068,889)
CCSF Funding (d)	\$ 2,450,000	\$ 2,382,395	\$ 2,468,674	\$ 2,558,418	\$ 2,651,774	\$ 2,748,895	\$ 2,849,943	\$ 2,928,084	\$ 3,064,493	\$ 2,632,967
Net Surplus (Gap)	\$ (2,350,000)	\$ (4,686,494)	\$ (4,600,215)	\$ (4,510,471)	\$ (4,417,115)	\$ (4,319,994)	\$ (4,218,946)	\$ (4,140,805)	\$ (4,004,396)	\$ (4,435,922)
<i>Cumulative Surplus (Gap)</i>	<i>\$ (2,350,000)</i>	<i>\$ (7,036,494)</i>	<i>\$ (11,636,709)</i>	<i>\$ (16,147,180)</i>	<i>\$ (20,564,295)</i>	<i>\$ (24,884,288)</i>	<i>\$ (29,103,234)</i>	<i>\$ (33,244,039)</i>	<i>\$ (37,248,435)</i>	<i>\$ (41,684,357)</i>
Operating Subsidy										
CCSF Contribution Request (e)	\$ (4,500,881)	\$ (8,358,400)	\$ (7,700,984)	\$ (7,372,277)	\$ (7,043,569)	\$ (6,714,861)	\$ (6,714,861)	\$ (6,714,861)	\$ (6,714,861)	\$ (6,714,861)
CCSF Funding (f)	\$ 4,500,881	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Net Surplus (Gap)	\$ -	\$ (8,358,400)	\$ (7,700,984)	\$ (7,372,277)	\$ (7,043,569)	\$ (6,714,861)	\$ (6,714,861)	\$ (6,714,861)	\$ (6,714,861)	\$ (6,714,861)
<i>Cumulative Surplus (Gap)</i>	<i>\$ -</i>	<i>\$ (8,358,400)</i>	<i>\$ (16,059,384)</i>	<i>\$ (23,431,661)</i>	<i>\$ (30,475,230)</i>	<i>\$ (37,190,091)</i>	<i>\$ (43,904,952)</i>	<i>\$ (50,619,813)</i>	<i>\$ (57,334,674)</i>	<i>\$ (64,049,535)</i>
Total Estimated Funding Surplus (Gap)	\$ (2,426,337)	\$ (16,812,227)	\$ (19,335,199)	\$ (20,408,748)	\$ (22,651,684)	\$ (19,966,855)	\$ (11,547,140)	\$ (10,855,666)	\$ (10,719,257)	\$ (11,150,783)
<i>Cumulative Surplus (Gap)</i>	<i>\$ (2,426,337)</i>	<i>\$ (19,238,564)</i>	<i>\$ (38,573,763)</i>	<i>\$ (58,982,511)</i>	<i>\$ (81,634,194)</i>	<i>\$ (101,601,049)</i>	<i>\$ (113,148,190)</i>	<i>\$ (124,003,856)</i>	<i>\$ (134,723,113)</i>	<i>\$ (145,873,896)</i>

Notes:

- a) San Francisco's required flow of funds for CBOSS and electrification were estimated by SFCTA, in coordination with Caltrain, and assumes a design, bid, build construction contract for electrification.
 - b) Funding sources for EIP: SFCTA Prop K Expenditure Forecast, 2009 (currently being updated). Also, the \$4M shown for 2015-16 represents prior year CCSF funds from CMAQ that will be credited to EIP by Caltrain in that year.. This \$4M credit is outlined in a letter from Caltrain to MTC dated 4-1-13.
 - c) FY 2013/14 figure is based on current SOGR request from Caltrain to San Francisco. Future years' SOGR contributions are based on actual SOGR needs estimated by Caltrain and submitted to MTC, and represent an average of SOGR needs for FY 2014/15 through FY 2022-23. It should be noted that Caltrain's CIP future needs estimates are very uneven year to year, with a substantial jump foreseen from JPB members for FY 2014/15 through FY 2016/17 to pay for higher costs associated with deferred needs to replace non-electric rolling stock and bridge rehabs. See Table X for detail.
 - d) Source of funding: SFCTA Prop K per 2009 Expenditure Forecast (currently being updated). See Appendix for detail by project category.
 - e) FY 2013-14 is based on actual request from Caltrain. FY 2014-15 and onward based on proposed phased-in approach described in this report, blending the current formula with an incentive adjustment to align with the proposed policy-based formula. This combined approach is phased in until FY 2018-19, when the new policy-based formula is fully in effect.
- All estimates shown for contribution requests assume the split between three members is applied to \$32M total, which is the historic average of Caltrain request total for operating subsidy, although this varies each year.
- f) Source of funding for FYI 2013-14 not yet identified, but assumed will be from SFMTA budget as in past years.

Sources: Caltrain; SFCTA; BAE, 2013.

Risks and Uncertainties to CCSF

In addition to the quantified funding gap analysis estimated above, research for this study indicated that CCSF faces significant risks and uncertainty in meeting its funding obligations to Caltrain, which in turn impact its fiscal planning, economic vitality, and ability to meet transportation policy objectives. These risks include:

- **Structural challenges.** Due to the structure of the JBP, with three member agencies responding to different constituencies and varying local policies, coordination with CCSF transportation initiatives has been challenging. The JPB structure creates a separation among the three member agencies, Caltrain staff, and governing Board, with no clear lead entity incentivized to reduce costs and raise revenues, as all three members are relied upon to “plug holes” as needed. In CCSF’s case, this is further complicated by the City and County serving as the member of the JPB, representing multiple transportation agencies within CCSF, requiring coordination of multiple budget processes. Also, with a membership comprised of one county and two transit agencies, there are differences between the three members’ workflow, policy objectives, and competing local needs.
- **Uncoordinated budget preparation processes.** CCSF prepares its two-year budget each fiscal year, effective July 1, beginning with preparations the previous December. By March 1, CCSF’s Controller’s Office has forwarded a consolidated proposed budget to the Mayor’s office for further public and elected officials’ review. Caltrain makes its budget requests to member agencies including CCSF several months after this process is underway, meaning that CCSF cannot easily accommodate or plan for its Caltrain capital project contributions.
- **CCSF’s competing needs for limited transportation funds.** CCSF faces its own ongoing major need for both capital and operating funds for local transportation. The SFMTA has experienced several budget shortfalls in the past decade, has an ongoing structural operating deficit, and presently estimates a State of Good Repair backlog of over \$2.2

billion.⁸ As a result, the funding of operating subsidies for Caltrain from SFMTA is growing increasingly infeasible.

- **Potential increased cost for Early Investment Program (EIP).** Although Caltrain expects to complete the EIP to upgrade system communications and electrify the system within the 2009 cost estimate of \$1.46 billion, the project's specific design and delivery process has not yet been determined. There is substantial potential risk that the project's costs will rise, once specific components are designed and contracted. CCSF could face additional requests for funding beyond its commitment of \$60 million. Moreover, the timing of funding requests is unclear, dependent on further project refinement. Caltrain expects to have refined information for the project in Summer 2013.
- **Variable year-to-year SOGR funding requests.** Caltrain prepares an annual capital budget based on a 10-year capital improvement plan (CIP). However, a systematic prioritization of State of Good Repair projects is not clearly described during this process, meaning that choices about SOGR spending, and the related requests to member agencies, are not clearly forecasted year to year. This results in widely varying SOGR contribution requests from member agencies to fund each year's SOGR budget. In the past five fiscal years, requests from member agencies have ranged from less than eight percent to almost 30 percent of total SOGR spending by Caltrain.
- **Variable year-to-year operating subsidy requests.** In addition, Caltrain's operating subsidy request varies each year, depending on the need for operating revenue and the ability of each member entity to afford the request.

⁸ *Real Estate and Facilities Vision for the 21st Century*, SFMTA, 2013

- **Potential fluctuations in Prop K revenues.** This funding source – which at present is key to CCSF’s meeting its commitments for both SOGR and portions of the EIP – is generated by taxable retail sales, which in turn tend to fluctuate with economic cycles. The recent recession severely dampened taxable sales in San Francisco, highlighting the risk of relying on this funding source. Although sales tax revenue is rising again, CCSF will continue to face risks in meeting its transportation needs and Caltrain commitments as sales tax revenues rise and fall with the broader economic cycle.

RECOMMENDED NEXT STEPS

The following outline recommends next steps for addressing the issues identified in this study, to close future funding gaps and address the risks and uncertainties described in this report.

Summer 2013

- Present this report to the initial large group convened to kick off the study
- Present report to Mayor's SF 2030 Transportation Task Force
- Begin discussions on implementing a new operating subsidy formula tied to greater transportation policies and goals
- Work with JPB Board and staff to address risk issues regarding structure and organization, budget coordination, and budget process questions (especially related to selection of SOGR projects each year)
 - This may require forming a subcommittee of the JPB Board, or other form of cross-member working group, to develop solutions
 - Process should explore alternative budgeting processes for JPB, including formulating a preliminary budget, a 2-year budget, a 10-year Capital Plan, improved SOGR prioritization processes, and forecasting member contributions at least one year ahead of funding request.
- Review Caltrain EIP project design and delivery, update cost model and funding gap estimates in this study; identify refined CCSF funding commitments in terms of timing, amounts, and match to proposed new funding sources

Fall 2013

- Upon the issuance of the Mayor's 2030 Transportation Task Force's final recommendations, develop and implement an outreach strategy for any recommended source that requires voter approval or legislation action.

- Implement new budget process at JBP to inform upcoming CCSF budget cycle for FY 2014-15 (commences in December 2013)

Winter/Spring 2014

- Introduce legislation to initiate ballot measures for funding sources recommended by the Task Force that require voter approval.

APPENDIX A: EIP FUNDING PLAN

Appendix A-1: EIP Proposed Funding Plan

Program Costs (in \$ millions, year of expenditure)		
Advance Signal System	\$	231
Electrification and Electric Multiple Units (EMUs)	\$	1,225
Total	\$	1,456
Program Funding (in \$ millions)		
JPB Contributions	\$	180
JPB Local - Currently Available	\$	11
Caltrain PTC	\$	4
Subtotal Local	\$	195
Prop 1A Connectivity	\$	108
Prop 1A High Speed Rail Authority	\$	600
Prop 1B Caltrain	\$	24
Subtotal State	\$	730
Federal RR Admin for PTC	\$	17
Federal Transit Admin prior/current obligations	\$	43
Federal Transit Admin future obligations	\$	440
Subtotal Federal	\$	500
MTC Bridge Tolls	\$	11
BAAQMD Carl Moyer	\$	20
Subtotal Regional	\$	31
Total Proposed Funding Sources	\$	1,456

Notes:

- a) Caltrain Joint Powers Board (JPB) Local Contribution is \$60 million. Each agency's contribution including Proposition 1A Connectivity funds as outlined in Note b, is contingent upon the \$60 million each from the other two JPB partners.
- b) Prop 1A Connectivity is \$42 million from Caltrain, \$26 million from VTA, and \$38 million from BART (2nd priority for BART after receipt of \$150 million for railcars).
- c) Prop 1B Caltrain is \$20 million Public Transportation Modernization, Improvement, and Service Enhancement Account (PTMISEA), \$4 million State-Local Partnership Program (SLPP).
- d) FTA Prior/Current Obligations is \$16 million for electrification in prior years, \$27 million for EMI in FY12.
- e) FTA Future Obligations is \$315 million for electric multiple units (EMUs), \$125 million from fixed guideway caps. Funds will be programmed in accordance with MTC Transit Capital Priorities program between approximately FY 2012-13 and FY 2022-23.
- f) Bridge Tolls is from Regional Measure 1 (RM1) West Bay Rail Reserve.
- g) Bay Area Air Quality Management District (BAAQMD) funds to be confirmed.
- h) Assumes that all local sources, Prop 1B PTMISEA, all federal sources, and bridge tolls can be used as match to Prop 1A funds, totaling \$726 million in matching funds for \$708 million in Prop 1A funds.
- i) Other potential future funding sources could be substituted if secured including federal Transportation Investment Generating Economic Recovery (TIGER) funds (such as current Caltrans application for \$44 million), State Interregional Transportation Improvement Program (ITIP) funds private financing.

Source: Memorandum of Understanding, High Speed Rail Early Investment Strategy, Attachment Attachment B, March 28 2012.

APPENDIX B: HISTORIC SOGR COST DETAIL

Appendix B-1: Cost Detail, State of Good Repair Projects, FY 2009 - FY 2012

	2009	2010	2011	2012	2013	Average
A. State of Good Repair						
Stations and Intermodal Access						
South Terminal Station Improvements	\$ 480,000	\$ 4,225,000	\$ -	\$ -	\$ -	
Systemwide Station Improvements - SOGR	\$ 1,000,000	\$ 500,000	\$ 500,000	\$ 400,000	\$ 500,000	
Advanced Traveler Information System (ATIS)	\$ -	\$ 100,000	\$ -	\$ -	\$ -	
Subtotal	\$ 1,480,000	\$ 4,825,000	\$ 500,000	\$ 400,000	\$ 500,000	\$ 1,541,000
Right of Way/Signal & Communications						
System-wide Track Rehabilitation Program	\$ 650,000	\$ -	\$ 652,336	\$ 1,050,000	\$ 588,000	
Wide Spectrum (Data) Radio ATCS Implementations	\$ 415,000	\$ -	\$ -	\$ -	\$ -	
Railroad Signal System Rehab	\$ 140,000	\$ -	\$ 900,000	\$ -	\$ 540,000	
Caltrain Visual Messaging System - Update	\$ 36,000	\$ -	\$ -	\$ -	\$ -	
Maintenance of Caltrain Engineering Standards	\$ 435,000	\$ -	\$ -	\$ -	\$ -	
Operations Control Center Replacement	\$ -	\$ 260,000	\$ -	\$ -	\$ -	
Quint St. and Jerrold Bridges Replacement	\$ -	\$ 600,000	\$ -	\$ -	\$ -	
Los Gatos Creek Bridge Replacement & Guadalupe Env.	\$ -	\$ 400,000	\$ 280,000	\$ 1,000,000	\$ -	
North South Road Channel	\$ -	\$ -	\$ -	\$ 70,300	\$ -	
Train Dispatcher Voice Communication System Upgrade	\$ -	\$ -	\$ -	\$ -	\$ 345,600	
Voice Radio System Rehab	\$ -	\$ -	\$ -	\$ -	\$ 110,000	
San Mateo Bridges Replacement - Design	\$ -	\$ -	\$ -	\$ -	\$ 240,000	
Railroad Communication System SOGR	\$ -	\$ -	\$ -	\$ -	\$ 204,300	
Upgrade Public Address at 22nd St, SSF, Snyvl, Diridon	\$ -	\$ -	\$ -	\$ -	\$ 800,000	
Subtotal	\$ 1,676,000	\$ 1,260,000	\$ 1,832,336	\$ 2,120,300	\$ 2,827,900	\$ 1,943,307
Rolling Stock						
Rolling Stock Equipment	\$ 2,450,900	\$ -	\$ 5,600,000	\$ -	\$ -	
Parking Machine Replacement Program	\$ 380,800	\$ -	\$ -	\$ -	\$ -	
PCI Compliance & Network Security Improvements	\$ 220,000	\$ -	\$ -	\$ -	\$ -	
F40 Locomotive Overhaul	\$ -	\$ 1,031,215	\$ -	\$ -	\$ -	
Gallery Car State of Good Repair Program	\$ -	\$ 401,978	\$ -	\$ -	\$ -	
Overhaul/Replacement F40 SEP-HEP Units	\$ -	\$ 1,838,667	\$ -	\$ -	\$ -	
MP36 Radiators	\$ -	\$ 231,000	\$ -	\$ -	\$ -	
Repair Gallery Car Bolster	\$ -	\$ 310,000	\$ -	\$ -	\$ -	
Traction Motors & New Wheel Sets for F40	\$ -	\$ 110,000	\$ -	\$ -	\$ -	
Gallery Car SOGR	\$ -	\$ -	\$ -	\$ 2,901,621	\$ -	
Bombardier Car SOGR	\$ -	\$ -	\$ -	\$ 637,379	\$ -	
Locomotive O/H - SOGR	\$ -	\$ -	\$ -	\$ -	\$ 2,605,256	
Passenger Car SOGR Program	\$ -	\$ -	\$ -	\$ -	\$ 394,744	
Subtotal	\$ 3,051,700	\$ 3,922,860	\$ 5,600,000	\$ 3,539,000	\$ 3,000,000	\$ 3,822,712
Legal Mandates and Required Infrastructure Enhancements						
Narrow Banding Project	\$ -	\$ 700,000	\$ 606,141	\$ -	\$ -	
Payment Card Industry Data Security Standard	\$ -	\$ -	\$ 291,000	\$ -	\$ -	
Update of Suicide Prevention Signs	\$ -	\$ -	\$ 110,000	\$ -	\$ -	
ADA on Caltrain - Increase Capacity	\$ -	\$ -	\$ -	\$ -	\$ 59,848	
South Terminal Wayside Power	\$ -	\$ -	\$ -	\$ -	\$ 1,300,000	
Railsim Modeling Software Upgrade	\$ -	\$ -	\$ -	\$ -	\$ 300,000	
Dual Mode Communications	\$ -	\$ -	\$ -	\$ -	\$ 242,000	
Station Utilities and Asset Maps	\$ -	\$ -	\$ -	\$ -	\$ 992,421	
Subtotal	\$ -	\$ 700,000	\$ 1,007,141	\$ -	\$ 2,894,269	\$ 920,282
Caltrain 2015/2025						
Caltrain 2025 Implementation Program	\$ 3,500,000	\$ 3,340,000	\$ -	\$ -	\$ -	
Caltrain Service Reliability Plan	\$ -	\$ 200,000	\$ -	\$ -	\$ -	
Caltrain Rolling Stock Procurement Plan and Specification	\$ -	\$ 114,200	\$ -	\$ -	\$ -	
PRP - Program Implementation & Management	\$ -	\$ -	\$ 2,805,000	\$ 150,000	\$ 422,000	
Subtotal	\$ 3,500,000	\$ 3,654,200	\$ 2,805,000	\$ 150,000	\$ 422,000	\$ 2,106,240
Caltrain Support Program and Capital Contingency						
Capital Program Management	\$ -	\$ 500,000	\$ 434,050	\$ 500,000	\$ 500,000	
Capital Project Development	\$ -	\$ 750,000	\$ 565,950	\$ 500,000	\$ 500,000	
Subtotal	\$ -	\$ 1,250,000	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 850,000
State of Good Repair Subtotal	\$ 9,707,700	\$ 15,612,060	\$ 12,744,477	\$ 7,209,300	\$ 10,644,169	\$ 11,183,541
B. Caltrain Capital Contingency						
Capital Contingency - Engineering	\$ 300,000	\$ 330,000	\$ 330,000	\$ 330,000	\$ 330,000	
Capital Contingency - Rail Services	\$ 660,000	\$ 660,000	\$ 660,000	\$ 660,000	\$ 660,000	
Capital Contingency Subtotal	\$ 960,000	\$ 990,000	\$ 990,000	\$ 990,000	\$ 990,000	\$ 984,000
Capital Contingency - Gilroy	\$ 50,000	\$ 50,000	\$ -	\$ -	\$ -	\$ 20,000
Total	\$ 10,717,700	\$ 16,652,060	\$ 13,734,477	\$ 8,199,300	\$ 11,634,169	\$ 12,187,541

Sources: Caltrain; BAE, 2013.

APPENDIX C: OPERATING SUBSIDY DATA

Appendix C-1: Data for Simple Allocation Methods

	Avg. Weekday Boardings		Track Length		Population		Jobs	
	Feb 2012 Avg. Weekday (All Day) Boardings (a)	Percent of Total	Miles (b)	Percent of Total	2010 Population (c)	Percent of Total	2011 Jobs (d)	Percent of Total
San Francisco County								
4th and King	9,670		0.0					
22nd Street	1,252		1.5					
Bayshore	165		3.4					
Subtotal	11,087	26.2%	4.9	6.4%	805,235	24.4%	422,700	26.7%
San Mateo County								
South SF	389		4.2					
San Bruno	432		2.4					
Millbrae	2,880		1.9					
Broadway			1.6					
Burlingame	749		1.2					
San Mateo	1,477		1.6					
Hayward Park	327		1.0					
Hillsdale	2,097		1.5					
Belmont	454		1.7					
San Carlos	1,004		1.2					
Redwood City	2,399		2.1					
Subtotal	12,208	28.8%	20.3	26.4%	718,451	21.7%	350,200	22.1%
Santa Clara County								
Atherton			2.4					
Menlo Park	1,471		1.0					
Palo Alto	4,661		1.4					
Stanford Stadium			0.6					
California Avenue	1,069		1.0					
San Antonio	611		2.4					
Mountain View	3,670		2.1					
Sunnyvale	1,965		2.7					
Lawrence	606		2.1					
Santa Clara	715		3.5					
College Park	85		1.4					
San Jose Diridon	3,187		1.1					
Tamien	653		2.0					
Capitol	27		3.0					
Blossom Hill	66		3.5					
Morgan Hill	113		11.5					
San Martin	43		3.9					
Gilroy	116		6.2					
Subtotal	19,058	45.0%	51.6	67.2%	1,781,642	53.9%	809,300	51.2%
Grand Total	42,353	100.0%	76.8	100.0%	3,305,328	100.0%	1,582,200	100.0%

Notes:

- a) Average weekday boardings from Caltrain Annual Ridership Counts, February 2012.
 - b) System length estimated by BAE using ArcView (GIS)
 - c) Population from US Census 2010
 - d) Jobs from State of California CES data published annually. Shows average for the year.
- Source: BAE, 2013.

Appendix C-2: Mode of Transportation to Work, 2011

Means of Transportation (a)	San Francisco		San Mateo		Santa Clara		Region		Share of Total			
	#	%	#	%	#	%	#	%	San Francisco	San Mateo	Santa Clara	Total
Drove Alone (incl. Motorcycle)	168,682	38.6%	253,412	71.1%	642,288	76.9%	1,064,382	65.3%	15.8%	23.8%	60.3%	100.0%
Not Driving Alone												
Carpooled	32,015	7.3%	38,390	10.8%	83,370	10.0%	153,775	27.2%	20.8%	25.0%	54.2%	100.0%
Bus	102,994	23.6%	13,932	3.9%	18,201	2.2%	135,127	23.9%	76.2%	10.3%	13.5%	100.0%
Streetcar	7,769	1.8%	463	0.1%	1,820	0.2%	10,052	1.8%	77.3%	4.6%	18.1%	100.0%
Subway or Elevated	22,493	5.1%	9,680	2.7%	833	0.1%	33,006	5.8%	68.1%	29.3%	2.5%	100.0%
Railroad	4,658	1.1%	5,454	1.5%	7,784	0.9%	17,896	3.2%	26.0%	30.5%	43.5%	100.0%
Bicycle	15,016	3.4%	4,202	1.2%	15,334	1.8%	34,552	6.1%	43.5%	12.2%	44.4%	100.0%
Walked	43,121	9.9%	9,193	2.6%	18,546	2.2%	70,860	12.5%	60.9%	13.0%	26.2%	100.0%
Other Means	6,116	1.4%	3,347	0.9%	7,375	0.9%	16,838	3.0%	36.3%	19.9%	43.8%	100.0%
Worked at Home	<u>34,261</u>	<u>7.8%</u>	<u>18,480</u>	<u>5.2%</u>	<u>40,124</u>	<u>4.8%</u>	<u>92,865</u>	<u>16.4%</u>	36.9%	19.9%	43.2%	100.0%
Subtotal Not Driving Alone	268,443	61.4%	103,141	28.9%	193,387	23.1%	564,971	34.7%				
Total	437,125	100.0%	356,553	100.0%	835,675	100.0%	1,629,353	100.0%				

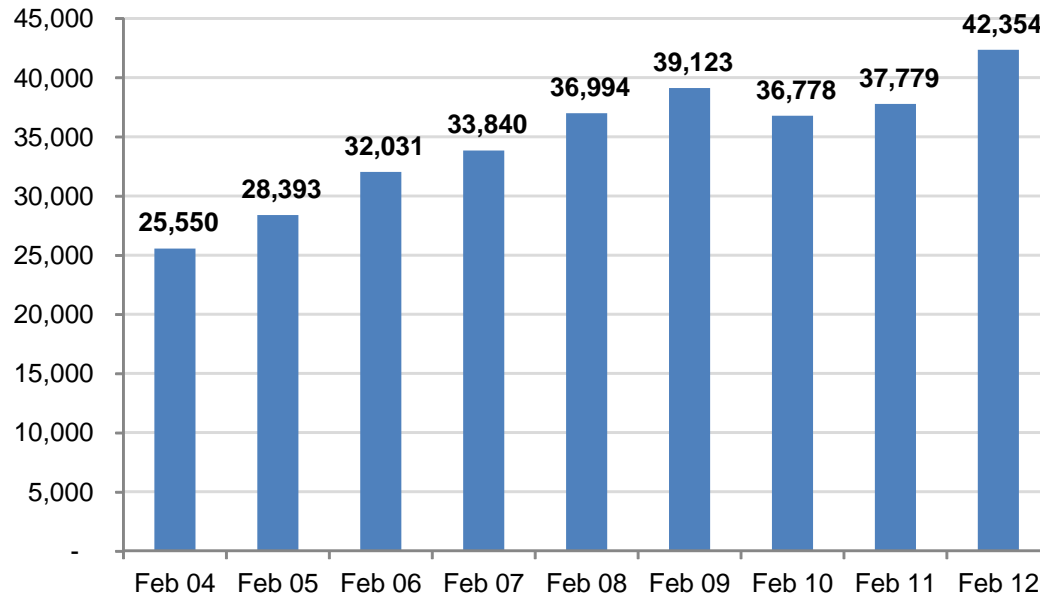
Notes:

(a) The American Community Survey (ACS) publishes demographic estimates based on statistical sampling conducted continuously in 2011. Universe includes all workers age 16+, including military.

Sources: American Community Survey, 2011; BAE, 2013.

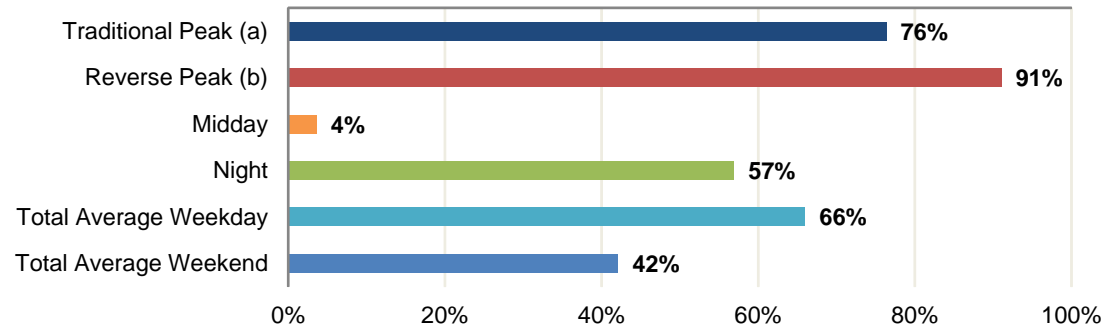
APPENDIX D: BACKGROUND RIDERSHIP & OPERATING DATA

Appendix D-1: Average Weekday (All Day) Passenger Boardings, February 2004 – February 2012



Sources: Caltrain; BAE, 2013.

Appendix D-2: Caltrain System wide Commute Patterns, February 2004 – February 2012



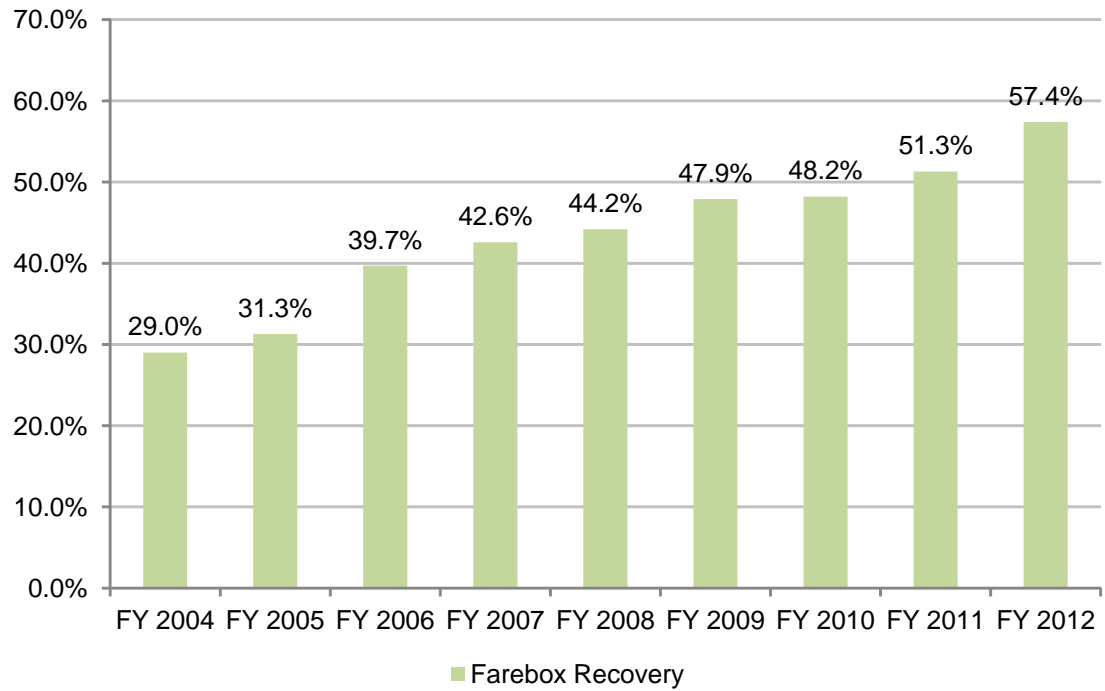
Notes:

(a) Traditional peak refers to northbound morning and southbound evening commutes.

(b) Reverse peak refers to southbound morning and northbound evening commutes.

Sources: Caltrain; BAE, 2013.

Appendix D-3: Farebox Recovery, FY 2004- FY 2012



Sources: Caltrain; BAE, 2013.

APPENDIX E: POTENTIAL FUNDING SOURCES

This report shows that additional funds will be needed to meet CCSF's commitments to Caltrain for Electrification, ongoing State of Good Repair capital projects, and operating subsidies. In light of the recent creation of the Mayor's 2030 Transportation Task Force, which is charged with identifying transportation capital priorities for the City and connecting these with funding sources, this report includes a high level overview of potential funding sources for the Task Force to consider. These sources were identified through a range of approaches including:

- Discussions with CCSF staff
- National and international literature review to identify innovative funding mechanisms for rail and major infrastructure projects
- Review of several brainstorming lists generated by JPB agency members
- BAE's experience working with CCSF departments and agencies, as well as across the US on similar funding studies

The underlying approach to this research was to identify new sources of funds which would increase available revenues for Caltrain, in order to eliminate competing with other extensive transportation funding needs in San Francisco. The chart on the following pages summarizes the findings of the research. If the Task Force chooses to pursue any of these options, deeper analysis of the funding vehicle would be required.

BAE evaluated these funding options in conjunction with CCSF staff and selected five mechanisms with the greatest potential for generating substantial new funds (at least roughly \$1 million per year), as well as a general "fit" with other CCSF fiscal and economic development initiatives.

Appendix E-1: Potential Funding Options for CCSF Caltrain Funding Gaps

Source	Description	Notes
Taxes & Fees		
Commuter Transportation Tax	Example from NY/NJ metro. Tax on business payroll > \$1.2M. Levied on all areas served by MTA and regional transit providers. Known as the Metropolitan Commuter Transportation Mobility Tax.	SF recently changed its payroll tax to gross receipts tax.
Parcel Tax	Apply a uniform flat tax on all real property (or certain categories), and dedicate funding to San Francisco's commitment to Caltrain. Requires 2/3 voter approval	SF recently passed a \$79 parcel tax to fund City College, expected to generate \$14 million per year for 8 years. Other parcel taxes apply, including a \$33.30/parcel for the SF Unified School District (generates \$7 million per year for 20 years), and a \$213.90/year parcel tax for SF Teacher Support.
Real Estate Transfer Tax	Increase real estate transfer tax rate. Transfer tax is imposed when real estate is sold or transferred from one entity to another. Transfer taxes go to the General Fund, and accounted for 4% of CCSF GF revenue in 2011.	The current transfer tax rates are 0.68% for properties less than \$1M, 0.75% for properties between \$1-5M, 2% for properties between \$5-10M, 2.5% from properties over \$10M. Total transfer tax revenue to CCSF in FY 2010-11 was \$135M.
Vehicle License Fee Increase	SB 1492, signed in 2012, allows City of San Francisco to restore fee to pre-2004 level of 2% of vehicle value.	Estimate this will generate as much as \$55 million annually for CCSF. Requires voter approval (may be on ballot in Fall 2014). Funds targeted to other projects (proposed uses do not include Caltrain).
Sales Tax Increase	Add to the current sales tax rate, which is 8.75% in San Francisco, including Prop K, which funds Caltrain and many other local transportation improvements.	Sales tax rate in SF = 8.75%. CA base rate is 7.50%. SF charges an extra 0.50% for Prop K (transportation), 0.50% for BART, and 0.25% for SF County Public Finance Authority. Requires voter approval to increase.
Tax /Fee on Auto Sales Sector	Levy tax or fee on car sales sector in San Francisco.	Preliminary legal research suggests gross receipts adjustment for this sector would work legally in CCSF. Requires voter approval.

Transit Impact Development Fee/TSP	Fee charged to new development projects. Must have nexus to projects. CCSF has existing TIDF on non-residential development only. From \$9.65-\$12.06 per square foot, depending on the use.	The City is modifying its TIDF to create Transit Sustainability Program and TSP fee. Applies only to new development and can only be used to pay for capital costs serving new development (residents and workers.).Fee includes allocation for Caltrain Electrification (2% of total for BART and Caltrain Electrification)
Value Capture		
Assessment District	Create an assessment district for properties that benefit from proximity to Caltrain stations. Additional cost to tax payer. Examples used for rail: Portland, Seattle.	Works well where capital investment benefits major property owners. Votes needed vary by type of district (e.g., Mello-Roos Community Facilities District, Transportation Benefit District, etc.)
Tax-Increment Financing (TIF)	Captures increment of property tax above base (no additional cost to tax payer). Capability eliminated through dissolution of redevelopment agencies, but underlying legal structure remains.	Pending legislation to create successor to redevelopment agencies at transit stations. Last effort was vetoed by Governor, but many believe another attempt will pass. For Caltrain, most likely applicable to station improvements.
Infrastructure Finance District	Similar to tax increment, but more limited applicability. Specifically for infrastructure. No additional cost to tax payer. Requires 2/3rds vote of affected property owners.	CCSF is exploring IFDs for other infrastructure needs.
Sale/ Lease of Real Estate Assets for Development	Caltrain owns several assets with development potential. Caltrain leases trackage rights to 4 th and King site (yard and station) with substantial development potential (may require relocation of existing storage).	SFMTA's Real Estate Vision estimates sale of five properties could yield \$26M to \$50 M. Planning Department study of 4 th /King property estimates value at \$148 M to \$228 M, but land is not owned by Caltrain or CCSF, so value capture would be complicated. Values depend on obtaining feasible entitlements.
User Fees		
Surcharge on Sports/Entertainment Tickets	Add small surcharge to entertainment and sporting event tickets in CCSF benefiting from regional Caltrain service.	Common in some other cities. May not need voter approval (further analysis by City Attorney needed).
Transit Pass Transfer Fee	Charge fee to transit users transferring from one provider to another.	Works against regional policies to encourage transit ridership.

Other Local Strategies		
Grant Funds from CA Carbon Cap & Trade Program	State will grant portion of funds from California Cap and Trade Program to fund local CO2 reduction projects.	The first sale occurred in 2012. CA is currently shaping criteria for grant program. Caltrain EIP will reduce CO2 emissions, making some portion of it possibly eligible for grant funding from this source..
Infrastructure Trust/Bank	Establish a trust fund that combines public and private capital into infrastructure bank. Some models can issue tax-exempt debt financing for infrastructure projects	The Chicago Infrastructure Trust is organized as a not-for-profit, blending both public and private funds. Other examples include Canada's P3C, European Infrastructure Bank, etc. Requires revenue stream to pay back private investors.
Redirect Prop K Funds to Caltrain EIP	SFCTA currently imposes a 25% charge to recipient if the payment is borrowing from future programmed funds (to discourage this practice and reflect potential bond issuance costs). Spending for Caltrain is also capped by current voter-approved expenditure plan. Since Caltrain EIP may need to request advancement of funds, incurring this 25% fee, both the fee and the cap could be revisited in light of EIP needs.	Requires working closely with SFCTA and other partners to change fee policy and/or shift fund formulas. Requires voter approval to amend the expenditure plan if total for Caltrain EIP were raised.
Regional Strategies		
Advertising Program (on Caltrain)	Joint regional JPB effort to wrap trains (similar to Portland MAX).	Could generate \$500,000 annually or more, depending on program based on Portland MAX generating \$200,000)
Concession Program	Could be used to attract food kiosks, food trucks, small retailers	Done successfully at various scales across US at transit stations
Develop Joint Renewable Energy Power Plant for Regional Transit	This strategy would lower fuel costs and emissions by jointly developing a renewable energy source to power transit including Caltrain and BART.	Under discussion
Increase Bridge Tolls	Raise bridge tolls on Bay Area bridges	Requires regional voter approval
High-Occupancy Toll (HOT) Lanes	Charges single occupancy vehicles to use HOV lanes	Used in other regions to generate revenues from "premium" service

ESTIMATES FOR A SAMPLE OF POTENTIAL FUNDING OPTIONS

The preceding chart provides an extensive set of potential funding options to fill the gaps identified in this study. It is important to note that portions of the analysis of funding gaps, particularly the part related to Caltrain EIP, may shift substantially over the period through FY 2022-23, as Caltrain prepares project design and delivery schedules.

To analyze the impact of potential new funding options, four options were selected for further estimation. These options were selected due to their ability to generate useful order-of-magnitude dollars, their “fit” with CCSF policies, and their relationship to beneficiaries of Caltrain services. The selected options include:

- **Commuter Transportation Tax** – This mechanism is in place in the New York City metro region (including portions of New Jersey), and provides substantial revenues to the regional commuter rail system. Known as the Metropolitan Commuter Transportation Mobility Tax, the mechanism imposes a small tax on private employers with payroll above \$1.2 M per year. This approach is intended to align taxation policies with the beneficiaries of the transportation network – companies with commuting workforces – without the administrative challenge of determining actual commute rates or changes in an employer’s workforce commute patterns over time.

In San Francisco, where the business tax system was recently modified through Measure E, which switched the basis of the tax from payroll to gross receipts, this mechanism could be modified to align with gross receipts. For purposes of estimating potential revenue, care was taken to assume a very small tax rate; the analysis shown assumes a 0.025 percent tax rate (which would be in addition to the range of 3.0 to 5.0 percent gross receipts tax in place currently, depending on the industry sector of the business). Based on an analysis of the number of firms with gross receipts above \$1.2 M (to match the NY approach), this mechanism could generate annual (un-inflated) revenues of \$7.2 M or more. Due to the

need to obtain voter approval, the timing of this revenue stream is shown on the next page as commencing for the FY 2015-2016 period.

- **Flat Parcel Tax (\$20 per parcel excluding non-taxable parcels)** – This mechanism has experienced some voter approval success, and is relatively easy to administer. It would require a 2/3rds voter approval, but has been estimated at a very low rate, increasing its potential success. In addition, it could be combined with other non-Caltrain related infrastructure improvement needs of CCSF, and packaged as an investment with citywide benefits for all property owners. This mechanism could generate an estimated \$4.1 M per year (un-inflated) starting in FY 2015-16 if it received voter approval.
- **Auto Sales Sector Gross Receipts** – In keeping with the approach recently enacted in CCSF, with different industry sectors taxed on gross receipts at varying rates (from 3 to 7 percent), this mechanism refines that approach with a policy focus to levy a small charge to automobile owners. This mechanism would require 2/3rds voter approval, and should also be assessed to ensure it does not create an undue burden on sales of this sector, since the products sold represent an important component of taxable retail sales in San Francisco. Care was taken to set the rate relatively low for this mechanism (at 0.5 percent of gross receipts); and as a result, this mechanism would yield approximately \$927,000 annually. The estimate does not propose to tax auto parts retailers or mechanics services.
- **Regional Sports/Entertainment Ticket Surcharge** – This mechanism is used successfully in other situations to defray the added fiscal burden of a core city serving as the regional sports and entertainment venue for a larger region, and is often implemented as a surcharge on the parking garages or lots serving the event attendees. In this case, because the events in San Francisco benefit the region and draw from the subsidized costs by CCSF of Caltrain service, the approach was taken to charge a small flat fee for each ticket. Data is only partially available to estimate the potential attendees to regional-attraction events. BAE relied on a combination of live performance categories from a recent

study of San Francisco nightlife (conducted by the City), along with an estimate of attendance at AT&T Park. The combination of these two identifiable segments, with a surcharge of \$1.00 per attendee's ticket, would generate \$9.7 M per year. The estimate shown does not include the proposed Warriors stadium venue, but this could be included through a timely development agreement item. This surcharge may be implementable through Board of Supervisors action without seeking voter approval, and could take effect in FY 2014-15,⁹ although it is likely that voter approval would be required.

The table on the following page provides an estimate of the amount of funding that could be generated by these four funding sources over the 10-year period. As indicated, the combination of these four sources could generate \$186 M or more, closing the funding gap incurred by EIP, operating subsidy, and capital projects.

In summary, these four mechanisms, none of which reduce current funding for other San Francisco transportation projects, could generate \$186 million or more over the 10-year period if implemented as shown, exceeding the identified funding gap (see estimates on following page). The timing of revenues will depend on the sequencing of implementation, but appears to offer a workable mix of well-timed revenue sources. It should be noted that the rates assumed for estimating purposes, as well as the mix of these four mechanisms, could be varied to lower the total, raise the total and eliminate the need for all four mechanisms, or the additional funds generated through implementation could be used for related transportation needs such as the Downtown Extension of Caltrain to the Transbay Terminal.

⁹ Consultation with the City Attorney's Office (personal communication, 3-18-13), identified that further legal research is necessary to conclude that no voter approval is necessary.

Appendix E-2: Estimate of Potential Revenue from Selected Funding Options

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Total
	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	
Total Estimated Funding Surplus (Gap)	\$ (2,426,337)	\$ (16,812,227)	\$ (19,335,199)	\$ (20,408,748)	\$ (22,651,684)	\$ (19,966,855)	\$ (11,547,140)	\$ (10,855,666)	\$ (10,719,257)	\$ (11,150,783)	
Cumulative Surplus (Gap)	\$ (2,426,337)	\$ (19,238,564)	\$ (38,573,763)	\$ (58,982,511)	\$ (81,634,194)	\$ (101,601,049)	\$ (113,148,190)	\$ (124,003,856)	\$ (134,723,113)	\$ (145,873,896)	
Funding Sources:											
Commuter Transportation Tax (a)	\$ -	\$ -	\$ 7,227,086	\$ 7,227,086	\$ 7,227,086	\$ 7,227,086	\$ 7,227,086	\$ 7,227,086	\$ 7,227,086	\$ 7,227,086	\$ 57,816,690
Flat Parcel Tax @ \$20 per Parcel (b)	\$ -	\$ -	\$ 4,130,000	\$ 4,130,000	\$ 4,130,000	\$ 4,130,000	\$ 4,130,000	\$ 4,130,000	\$ 4,130,000	\$ 4,130,000	\$ 33,040,000
Auto Sales Sector Gross Receipts Tax (c)	\$ -	\$ -	\$ 926,718	\$ 926,718	\$ 926,718	\$ 926,718	\$ 926,718	\$ 926,718	\$ 926,718	\$ 926,718	\$ 7,413,742
Regional Sports/Ent. Ticket Surcharge (d)	\$ -	\$ 9,761,500	\$ 9,761,500	\$ 9,761,500	\$ 9,761,500	\$ 9,761,500	\$ 9,761,500	\$ 9,761,500	\$ 9,761,500	\$ 9,761,500	\$ 87,853,500
Total	\$ -	\$ 9,761,500	\$ 22,045,304	\$ 22,045,304	\$ 22,045,304	\$ 22,045,304	\$ 22,045,304	\$ 22,045,304	\$ 22,045,304	\$ 22,045,304	\$ 186,123,932
Cumulative Total	\$ -	\$ 9,761,500	\$ 31,806,804	\$ 53,852,108	\$ 75,897,412	\$ 97,942,716	\$ 119,988,020	\$ 142,033,324	\$ 164,078,628	\$ 186,123,932	

Notes:

See Appendix F for detailed calculations and assumptions.

a) This option assumes only firms with annual payroll exceeding \$1.2 M would be subject to the tax. Tax rate assumed = 0.25% of payroll (gross receipts proxy)

b) Assumes approximately 206,500 assessor's parcels (recorded). Has not been adjusted for parcels owned by non-profits or public agencies.

c) Assumes 0.25% tax on all taxable auto sales per total taxable auto sales as reported by State Board of Equalization per last 4 quarters available (4Q 2010 - 3Q 2011), and 84% of all non-fuel/parts, car-related sales are automobile sales, according to the 2007 Census of Retail Trade.

d) Reflects \$1 ticket surcharge on all sports and entertainment tickets for San Francisco events. Sports tickets include all Giants home games, assuming 81 sold out games. Entertainment includes live theater and concerts. Ticket sales based on data from the Office of the Controller 2012 report, *The Economic Impact of San Francisco's Nightlife Businesses*, which estimates 6.4 million spending customers for live theater and other performances. Does not include proposed Warriors stadium events.

Source: BAE, 2013.

Appendix E-3: Data for Commuter Transportation Tax

Estimated Annual Payroll, San Francisco Firms that Meet the Minimum Annual Payroll Threshold, 2010

Industry	Employees (#)	Employment Size Class									Total (d)
		1-4	5-9	10-19	20-49	50-99	100-249	250-499	500-999	1000 or more	
Agriculture, forestry, fishing, and hunting	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	\$ -
Mining, quarrying, and oil and gas extraction	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	\$ -
Utilities	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	\$ -
Construction	\$ -	\$ -	\$ -	\$ 174,283,171	\$ 131,252,791	\$ 219,948,063	\$ 90,248,960	\$ 45,056,928	\$ 90,316,511	\$ -	751,106,424
Manufacturing	\$ -	\$ -	\$ -	\$ -	\$ 36,632,489	\$ 22,753,099	\$ 26,090,220	\$ -	\$ -	\$ -	85,475,808
Wholesale trade	\$ -	\$ -	\$ -	\$ 190,133,317	\$ 109,534,108	\$ 64,941,171	\$ -	\$ 94,958,423	\$ 180,536,455	\$ -	640,103,473
Retail trade	\$ -	\$ -	\$ -	\$ -	\$ 165,806,814	\$ 196,315,268	\$ 81,103,219	\$ 18,949,350	\$ 79,145,119	\$ -	541,319,769
Transportation and warehousing	\$ -	\$ -	\$ -	\$ 38,443,139	\$ 49,971,487	\$ 63,245,163	\$ 15,432,371	\$ 63,566,671	\$ -	\$ -	230,658,831
Information	\$ -	\$ -	\$ 229,597,656	\$ 462,277,161	\$ 356,944,008	\$ 635,300,898	\$ 596,997,933	\$ 151,010,539	\$ 541,304,542	\$ -	2,973,432,736
Finance and insurance	\$ -	\$ 653,349,603	\$ 830,687,353	\$ 1,460,822,703	\$ 1,250,697,812	\$ 1,600,586,867	\$ 1,509,644,431	\$ 1,674,298,104	\$ 2,476,027,471	\$ -	8,073,511,000
Real estate, rental and leasing	\$ -	\$ -	\$ -	\$ 182,833,194	\$ 107,642,054	\$ 104,001,219	\$ 51,604,867	\$ 159,088,623	\$ -	\$ -	605,169,957
Professional, scientific, and technical services	\$ -	\$ -	\$ 698,737,844	\$ 1,213,849,701	\$ 1,127,731,310	\$ 1,182,879,050	\$ 709,127,998	\$ 480,444,709	\$ 1,777,815,261	\$ -	7,190,585,872
Management of companies and enterprises	\$ -	\$ -	\$ 48,742,464	\$ 190,952,621	\$ 138,594,644	\$ 327,806,462	\$ 329,011,633	\$ 269,154,816	\$ 966,279,179	\$ -	1,971,037,000
Administrative and support services	\$ -	\$ -	\$ -	\$ 176,546,873	\$ 210,670,934	\$ 274,474,131	\$ 192,798,630	\$ 187,242,474	\$ 488,108,348	\$ -	1,529,841,390
Educational Services	\$ -	\$ -	\$ -	\$ -	\$ 58,373,374	\$ 122,634,845	\$ 117,085,145	\$ 90,013,435	\$ 239,178,556	\$ -	627,285,355
Health care and social assistance	\$ -	\$ -	\$ -	\$ 366,478,344	\$ 227,541,633	\$ 359,348,007	\$ 124,413,893	\$ 146,591,337	\$ 1,124,076,636	\$ -	2,348,449,849
Arts, entertainment, and recreation	\$ -	\$ -	\$ -	\$ -	\$ 43,742,041	\$ 85,682,939	\$ 66,192,000	\$ 45,221,551	\$ 71,531,102	\$ -	312,369,633
Accommodation and food services	\$ -	\$ -	\$ -	\$ -	\$ 226,299,363	\$ 181,389,091	\$ 90,896,238	\$ 103,692,528	\$ 77,270,767	\$ -	679,547,987
Other services (except public administration)	\$ -	\$ -	\$ -	\$ -	\$ 114,501,996	\$ 98,702,441	\$ 23,358,980	\$ 22,105,047	\$ 89,781,603	\$ -	348,450,068
Industries not classified	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	\$ -
Subtotal, Payroll for Firms that Meet the Minimum Annual Threshold											\$ 28,908,345,154
Commuter Tax Rate											0.025%
Estimated Annual Commuter Tax Revenue											\$ 7,227,086

Notes:

- (a) The average pay per employee by industry was calculated by dividing Q1 2010 payroll figures by all full- and part-time employees on payroll in the pay period including March 12, 2010.
- (b) Average number of employees by size class by industry available at the state level only.
- (c) Average not available by industry for establishments with over 1000 employees. This figure reflects the state average for all establishments with over 1000 employees.
- (d) Total annual payroll capped at the industry maximum for San Francisco if calculated payroll exceeds the reported total.

Sources: US Census Bureau, County Business Patterns, 2010; BAE, 2013.

Appendix E-4: Data for Auto Sales Sector

	Q4 2010	Q1 2011	Q2 2011	Q3 2011	Total
Taxable Sales - Motor Vehicle and Parts Dealers (a)	\$ 109,286,863	\$108,203,685	\$ 115,270,209	\$ 108,533,398	\$ 441,294,155
Less: Portion attributable to parts (b)					\$ (70,607,065)
Portion Attributable to car sales					\$ 370,687,090
Gross Receipts Tax (c)					0.25%
Estimated additional gross receipts on motor vehicle sales					\$ 926,718

Notes:

a) Total taxable auto sales as reported by the State Board of Equalization per last 4 quarters available (4Q 2010 - 3Q 2011).

(b) 84% of car-related sales are new and used automobile sales, and 16% attributable to parts, according to the 2007 Census of Retail Trade.

(c) Assumes tax is 0.25% of adjusted car sales (proxy for gross receipts on new and used car dealer gross receipts).

Sources: CA State Board of Equalization; BAE, 2013.

OTHER JPB REVENUE-GENERATING AND COST REDUCTION STRATEGIES

In addition to revenue-generating mechanisms, this study summarizes other approaches to lowering JPB member contributions, by lowering operating and capital costs for the JPB. Some of these approaches will require further research and discussion among JPB members to frame the amount and timing of savings or other measures.

- **Maximize Farebox Revenues** – Specific analysis for this strategy is beyond the scope of this study. While the JPB has a good track record of maximizing farebox revenue, the JPB could likely benefit from an annual or bi-annual review of all farebox pricing policies with its member representatives, to ensure that a common understanding of steps taken or not taken is reached.
- **Maximize Asset Management** – This strategy includes focused attention on the 4th and King station in San Francisco, which was recently analyzed by the San Francisco Department of Planning through a consultant study, completed in 2012, which estimated a range of residual land values between \$148 million to \$228 million, with a higher value attributed to a “boulevard” development scheme. The estimates do not include the costs or benefits of relocation Caltrain facilities or replacing Highway 280, and do not isolate potential value that would accrue to the landowner vs. Caltrain. Other revenue-generating ideas include charging market rates for parking, implementing a modest concession program at stations, and developing an advertising program.
- **Joint Renewable Energy Power Facility** – A recent idea is the creation of a joint power generation facility using renewable energy sources to generate electricity, to be shared by transit agencies in the region, including BART and Caltrain. This idea may be particularly useful to Caltrain when its system is electrified.
- **Merge with BART** – Finally, several leading policy-makers in the region have proposed to study a merger of BART with Caltrain, so that the talent, overhead, and operating efficiencies can be maximized, and costs reduced.