SONOMA-MARIN AREA RAIL TRANSIT DISTRICT

SMART PROJECT FUNDING PLAN

July 2008

Prepared by:

Jacobs Carter Burgess, Inc.

In association with

Parsons Brinckerhoff, Inc. and KNN Public Finance

TABLE OF CONTENTS

TABLES

FIGURES

This document is a compilation and summary of information shared with the SMART Board of Directors at its May 21, 2008 meeting in San Rafael and at its June 18, 2008 meeting in Santa Rosa. Over the last several months of review and based on Board input, several changes have been incorporated into the Project Funding Plan. These changes reflect:

- The recent sharp rise in fuel costs which, in turn, has impacted the project's operating and maintenance (O&M) cost assumptions,

- Clarifications on bond financing assumptions recommended by the TAM Working Group.

- Given the rise in fuel costs, an increase in projected train ridership based on the FEIR ridership sensitivity analysis.

Even with these changes, the project can be built, operated and maintained with a ¼-cent sales tax measure over 20 years based on the following:

- First, the new 2008 sales tax projections and cash flow analysis are based on 2006 audited sales tax revenues received by Marin and Sonoma Counties. At the time the 2006 Expenditure Plan was prepared there were no audited sales tax reports for either county, only estimated sales tax forecasts. As a result, the projections used earlier proved to be much lower than actual sales tax revenues for both counties.

- Second, SMART did not maximize the opportunity for bonding against future sales tax proceeds in the 2006 Expenditure Plan. For the current 2008 effort, the Plan includes a sophisticated bonding strategy that envisions the use of bond issuances in fiscal years 2009, 2012 and 2015.

- Third, by extending the construction schedule by two years, SMART can continue to accrue sales tax revenue and optimize its bonding strategy for construction of the project. However, all efforts will be made to deliver the project as soon as possible.

In conclusion, based on the updated revenue forecast and the ability to maximize bond capacity, SMART can build and fully fund the rail project and bicycle/pedestrian pathway projected to cost approximately $541 million (in 4th Quarter,2008 dollars). This total consists of $450 million for the rail project and $91 million for the bicycle/pedestrian pathway.

I. Introduction

This paper describes the methodology and assumptions used to prepare a funding plan for the construction and operation of the Sonoma-Marin Area Rail Transit (SMART) passenger rail and pathway project. Topics addressed in this document include a description of estimated capital construction and annual operating and maintenance (O&M) costs, proposed funding sources, a bonding analysis, and a 20-year cash flow analysis.

This funding plan shows that the SMART passenger rail project and bicycle/pedestrian pathway can be constructed, maintained and operated over a 20-year period with reliance upon a ¼ cent district wide sales tax measure and the dedicated rail project revenue sources noted in this plan. The plan provides for the full construction of the Cloverdale to Larkspur rail system and 66% of

the bicycle/pedestrian pathway within the first phase of the project (2009-2014), with the remainder of the bicycle/pedestrian pathway completed by 2029.

In November 2006, SMART placed before the voters in Marin and Sonoma Counties a proposal to increase the local sales tax by ¼-cent for 20 years to fund the project. This measure received a 65.3% majority but needed 66.7% to be adopted. As the SMART Board has planned to place a new measure on the November 2008 ballot, a separate expenditure plan will be prepared based on the information contained in this document.

II. Project Description

The SMART Project is located in San Francisco's North Bay area. The project provides passenger train service along approximately 70 miles of the Northwestern Pacific Railroad (NWP) alignment. Utilizing this publicly owned right-of-way, the passenger rail project will serve fourteen stations, from Cloverdale in Sonoma County to a San Francisco bound ferry terminal in Larkspur. A key element of the project is a parallel bicycle/pedestrian facility linking the fourteen rail stations. SMART's environmental studies project that approximately 5,000 riders per weekday will ride the train and that approximately 7,000 to 10,000 people a day will utilize the bicycle/pedestrian pathway. Per the 2006 FEIR, train ridership is expected to increase with higher gas prices to approximately 6,000 riders per weekday based on $5.00/gallon gas prices. Service is to begin in the fall of 2014. This funding plan assumes the addition of weekend service with ridership assumed at 1,820 to 2,020 on Saturdays, and 1,160 to 1,260 on Sundays and holidays. These weekday and weekend ridership estimates have been used to develop SMART's train vehicle requirements, operating plan, and farebox revenue assumptions.

The fourteen stations along the corridor are being designed to accommodate available transit feeder services, shuttle services and, in selected suburban locations, park and ride facilities. SMART's goal is to make the stations as accessible as possible to existing and planned transit services. Commuter oriented service will be provided by an estimated fourteen roundtrip trains per weekday, operating at 30 minute headways in the morning and evening peak commute hours during the week and one mid-day train. Weekend service is proposed at four roundtrips on Saturdays, Sundays and holidays.

The SMART Project proposes the use of multiple unit rail vehicles along the corridor (see Figure 1). These vehicles are self-powered and produce lower noise levels and air emissions than conventional locomotive-hauled equipment. These rail vehicles can be operated with a blend of waste-based bio-diesel fuels, further enhancing the air quality goals of the project.

III. Project Costs

This section summarizes the capital and O&M cost estimates for the passenger rail and pathway project. Each set of cost estimates is described below.

Capital Cost

The capital cost methodology and capital cost estimates are based on the estimates and methodology prepared as part of the Preliminary Engineering activities conducted in preparing the Final EIR for the SMART Project, adopted by the SMART Board of Directors in July 2006.

Figure 1: Simulation of Proposed SMART Rail Vehicle

The detailed estimates were prepared by Parsons Brinckerhoff, Inc. and HDR Engineering. These estimates were also reviewed for their reasonableness by a technical peer review panel of transit industry experts convened by the rail district in 2006. The project, as defined in 2006, forms the foundation for these new cost estimates, with a few exceptions that are noted such as increased funding for Quiet Zones and finalization of the cost estimates for the CalPark Hill Tunnel Project. Since 2006, the estimates have been updated to reflect current market conditions, inflation and other cost factors that have changed in the last two years.

In addition, four factors have influenced the development of the capital cost estimate. These include:

- **The current level of project design**. From concept through construction, a major transportation project typically undergoes a four-step development process: 1) conceptual design where 5% to 10% of design takes place to determine the project's feasibility; 2) preliminary engineering, where the design evolves to approximately 30%; 3) final design, where the design is taken to 100% and allows for the issuance of construction bid documents; and 4) project construction.

  As the level of engineering and design increases, the project becomes better defined. In turn, this allows the project sponsor to decrease the project contingency set aside for unanticipated cost increases, such as the higher cost of construction materials. Currently, the estimates assume 30% design and an overall project contingency of 20%. This contingency should drop to 10% following completion of final design, typically resulting in a lower overall project cost.

- **Increased baseline cost of construction materials**. Due to rising worldwide demand, the cost of construction materials has increased significantly over the last several years. For example, major price drivers such as reinforced steel and concrete are anticipated to rise at

least 10% between 2006 and 2010 as indicated by the Caltrans Cost trend report. Since December 2006, the cost of cement is up by 10% (Engineering News Record, March, 2008).

- **Construction cost escalation**. Due to the recent significant rise in the cost of construction materials, SMART has assumed a 5% per year increase in construction costs through the mid-point of construction. This is one and one-half to two percent higher than normal inflation and is designed to provide a more conservative construction cost estimate. These construction cost escalation increases of 5% per year to mid-point of construction are added to the already updated line item baseline cost (i.e., the 10% increase in cement mentioned above) which contain their own varying contingencies depending upon the individual line item.

- **Cost revisions to date**. Cost estimates were previously presented to the SMART Board in 2006 and 2008. It should be noted that as individual line item costs have been tracked over this two year period, the cost of the rail project has risen. Between 2006 and 2008, capital costs rose between 14% and 15% and operating between 6% and 20%, depending on the line item. A key factor to the increases in operating costs is the updated fuel cost assumptions. In addition, part of the growth in costs is due to the addition of new project elements. For example, Quiet Zone mitigation has tripled and weekend service has been added.

As a result, SMART has updated its construction cost estimate based on the following construction elements:

- Track and Bridge Rehabilitation
- Bicycle/Pedestrian Pathway
- Signals
- Grade Crossings
- New Bridges and Tunnels
- Stations
- Maintenance and Layover Facilities
- Other Construction Costs, including Startup and Testing
- Vehicles
- Right-of-way
- Add-on Allowances, including:
  - Engineering, EIS, including design costs and design services during construction
  - Construction Management, including overall construction program management and administration
  - Construction Change Orders during construction
  - SMART Administration and Management costs
  - Project Reserve
- Contribution to the Rehabilitation of the CalPark Hill Tunnel

Tables 1A and 1B present the total capital costs, in millions of dollars, for the project in 4th Quarter, 2008 dollars, for the rail and bicycle/pedestrian pathway projects, respectively. The rail project is estimated to cost $449.8 million and the bicycle/pedestrian pathway is estimated at $90.6 million. This funding plan presents project costs in 2008 dollars. The 20-year cash flow analysis and all forecasted capital cost drawdowns are escalated to year-of-expenditure

Table 1A: Rail Project Capital Cost Estimate (2008$)	
Cost Category	**2008 Dollars in Millions**
Track and Bridge Rehabilitation	$102.3
Signals	17.0
Grade Crossings	24.9
New Bridges and Tunnels	3.7
Stations (14)	30.9
Maintenance and Layover Facilities	22.2
Other Construction Costs (Environmental Mitigation, etc.)	8.8
Quiet Zones	4.5
Construction Subtotal:	214.3
Contractor Design:	12.9
Construction Contingency:	33.6
Construction Total:	260.8
Rail Cars	73.6
Rail Project Land Acquisition	30.2
Construction Management, Agency Costs, Etc.	79.4
Cal Park Hill Tunnel	5.8
Total Rail Project Cost:	$449.8

Table 1B: Bicycle/Pedestrian Pathway Capital Cost Estimate (2008$)	
Cost Category	**2008 Dollars in Millions**
Bicycle/Pedestrian Pathway	$41.0
Other Construction Costs (Environmental Mitigation, etc.)	10.6
Construction Subtotal:	51.6
Contractor Design:	2.6
Construction Contingency:	8.5
Construction Total:	62.7
Pathway Project Land Acquisition	6.9
Construction Management, Agency Costs, Etc.	15.2
CalPark Hill Tunnel	5.8
Total Rail Project Cost:	$90.6

requirements. See **Appendix A** for year-of-expenditure construction cost estimate totals and **Appendix B** for construction cost details.

Operating and Maintenance Costs

Like the capital cost estimate, operating and maintenance (O&M) costs for the rail and bicycle/pedestrian pathway were developed during the Preliminary Engineering phase of the project and updated to incorporate current information. The O&M estimates were prepared by LTK Engineering and Parsons Brinckerhoff, Inc. and reviewed by the SMART technical peer review panel in 2006 and form the basis for this 2008 upgrade, with noted exceptions such as the addition of weekend service. Table 2 presents the annual O&M costs, in millions of dollars, for the project in 4th Quarter, 2008 dollars. The 20-year cash flow analysis and all forecasted operating and maintenance cost drawdowns are escalated to year of expenditure requirements. See **Appendix A** for year-of-expenditure O&M cost estimate totals.

Table 2: Annual Operating and Maintenance Cost Estimates (2008$)

Cost Category	2008 Dollars in Millions
Rail Operations (includes SMART management and administration)	$16.9
Shuttle Operations	1.4
Bicycle/Pedestrian Pathway Maintenance	0.8
Operation Life Safer Program	0.1
Bridge Operations	0.1
Total Annual Cost	$19.3

Several factors influenced development of the O&M cost estimate. These include:

- **Use of transit union labor to operate and maintain the rail service**. SMART will seek to contract out as much of the administration, operations and maintenance of the system as possible. All operations and maintenance of the rail corridor are assumed to be provided by existing transit labor organizations. SMART will include performance criteria in on-going operations plans, such as on-time performance, to ensure the provision of efficient and cost-effective rail service. The funding plan includes an annual escalation rate over the life of the sales tax for all O&M costs. These escalation rates are assumed to average 3.5% in fiscal years (FY) 2015 through 2018 and are then forecast to increase to an average of 3.75% annually thru FY 2029. Although generally higher than historic levels, these escalation factors are intended to produce a "conservative" forecast of operating costs due to the difficulty in predicting long-term inflation rates.

- **Use of a contractor to operate and maintain station shuttle service**. SMART also intends to competitively bid local shuttle services for delivering passengers at the work-end of their rail trip. Nine shuttle routes are proposed. The shuttles would be free to passengers, and would operate during the same hours as trains, in the morning and afternoon peak

commute periods. As with the rail service, the district will include performance criteria as part of the shuttle service contract.

For the purposes of this funding analysis, SMART has used current Marin County Transit District (MCTD) hourly operating costs of $75 (2008$). Following service start-up, shuttle operating costs are assumed to increase an average of 3.5% in FY through FY 2018 and are then forecast to increase by an average annual rate of 3.75% for the duration of the plan. Although these escalation factors are higher than historic levels, they are intended to produce a conservative financial forecast.

- **Fuel cost**. SMART will use ultra low sulfur diesel fuel for its rail operations. However, given the recent and unprecedented upward spike in fuel prices and to be conservative in its approach, SMART is now assuming a cost of $5.50 per gallon, in 2008$. The plan assumes that fuel costs will increase, on average, 3.5% per year between FY 2015 and FY 2018. This escalation rate increases to 3.75% annually for the duration of the program.

  In addition to this fuel source, SMART will explore the use of waste-based bio-diesel fuel blends. Current research and analysis on the use of bio-diesel fuels is changing rapidly and SMART will carefully review that analysis prior to selecting a fuel source or blended source in the final engineering phase of the project. It is currently anticipated that only waste-based bio-diesel fuels will be utilized.

SMART has updated its O&M cost estimate based on the following elements:

- **Rail Operations** – These costs consist of two elements: fixed costs and variable costs. Fixed costs include track and signal maintenance, calculated on a track mile basis; dispatch; insurance; station maintenance; contractor management; and general & administrative costs. Variable costs include fuel, train and engine crews, and equipment maintenance. In deriving the rail system operating costs, the following assumptions were made:

  - Track miles – a total of 69.8 miles, with seven sidings totaling 5.9 miles.
  - Assumes weekday use of 5 two-car trains and 2 one-car trains
  - Assumes weekend use of 2 one-car trains
  - Stations are to be located in Larkspur, San Rafael, Marin Civic Center, Novato South, Novato North, Petaluma, Corona, Cotati, Rohnert Park, Santa Rosa, Jennings, Windsor, Healdsburg and Cloverdale.
  - Weekday service every 30 minutes during the peak commute hours, with one mid-day train.
  - Weekend/holiday service of four roundtrips per day (train every four hours)

- **Shuttle Operations** – To enhance access to and from the SMART stations, a shuttle system consisting of nine routes would be provided. On weekdays, the shuttles would be free to rail passengers and operate during the same hours as the rail system in the morning and afternoon peak commute periods. This service would be contracted for the hours required. The contractor would provide vehicles, drivers, vehicle maintenance, and required insurance.

- **Bikeway/Pedestrian Path Maintenance and Insurance** – This includes annual maintenance of the asphalt pathway and insurance for the facility located outside of the SMART/public right-of-way.

- **Administrative Costs** – This includes employee salaries and benefits, office rent, supplies, computer equipment and miscellaneous administrative costs.

IV. Proposed Sources of Funds

Funds needed to build, operate and maintain the project are assumed to come from a number of sources. These sources are briefly described below.

Local Revenue Sources

- ***Farebox Revenues*** – These are revenues derived by fares collected from passengers using the rail system. It is assumed that SMART will operate a distance-based fare structure which charges more for longer train trips, similar to the corridor fare structure that Golden Gate Transit uses for bus service. For the purpose of the funding plan, an average fare of $4.50 was used and is escalated over time based on the rate of inflation. This fare was then multiplied by the projected ridership and annual days of service to calculate the farebox revenues. It is assumed that farebox revenues will cover an estimated 36% of the operating cost of the rail service.

- ***New SMART ¼-cent Sales Tax Revenues*** – This funding source includes the proceeds from a new ¼-cent tax, which would be implemented if approved by Marin and Sonoma County voters in November 2008. Tax collection would begin in April 2009. The tax would extend for 20 years and expire in March 2029, with proceeds projected to total $890.7 million, or an average of $44.5 million annually. Tax proceeds would initially fund final engineering, trackway and pathway improvements, debt service, land acquisition and the purchase of rail vehicles. Following service start-up this source would continue to fund debt service and on-going operations and maintenance costs.

  The starting points for the forecast of future sales tax revenues are the ¼-cent sales tax revenues associated with the Sonoma County Transportation Authority ("SCTA") and the half-cent sales tax revenues associated with the Transportation Authority of Marin ("TAM"). The audited SCTA sales tax revenues for FY ending June 30, 2007 were $19,770,528 and the audited TAM sales tax revenues for FY 2007 were $23,068,785. Because TAM is a one-half cent sales tax authority, the plan assumes use of ½ of TAM's fiscal year 2007 figure and added it to the SCTA figure for a combined total of $31,304,920; the starting point for a SMART ¼-cent sales tax if it were in place in fiscal year 2007. At the time this Funding Plan was prepared, the audited financial statements for FY 2008 for SCTA and TAM were not yet available. Having determined a starting value for the sales tax revenue forecast, real and inflationary growth will increase sales tax revenues over time. Below is historical sales tax data for both Marin and Sonoma Counties over the last 20 years. As the data shows, Marin County's sales tax revenue has grown at an average annual rate of 4.22%. Sonoma County's sales tax growth has grown at a higher average annual rate of 5.23%. Over the last 20 years, the combined average annual rate of growth was 4.83%.

Table 3: Historical Sales Tax Revenues

	Marin County		Sonoma County		Combined	
FY	Sales Tax	Growth	Sales Tax	Growth	Sales Tax	Growth
1988	5,346,531		7,665,041		13,011,572	
1989	5,629,432	5.29%	8,318,610	8.53%	13,948,042	7.20%
1990	6,140,013	9.07%	9,334,144	12.21%	15,474,157	10.94%
1991	6,302,724	2.65%	9,521,239	2.00%	15,823,963	2.26%
1992	6,130,937	-2.73%	9,240,892	-2.94%	15,371,829	-2.86%
1993	6,193,629	1.02%	9,667,255	4.61%	15,860,884	3.18%
1994	6,297,588	1.68%	9,912,637	2.54%	16,210,225	2.20%
1995	6,506,971	3.32%	10,049,809	1.38%	16,556,780	2.14%
1996	7,025,001	7.96%	11,057,828	10.03%	18,082,830	9.22%
1997	7,401,551	5.36%	11,655,865	5.41%	19,057,416	5.39%
1998	7,993,642	8.00%	12,923,237	10.87%	20,916,879	9.76%
1999	8,596,791	7.55%	13,760,430	6.48%	22,357,221	6.89%
2000	9,527,056	10.82%	15,810,470	14.90%	25,337,526	13.33%
2001	10,302,362	8.14%	17,429,706	10.24%	27,732,068	9.45%
2002	9,732,118	-5.54%	16,813,361	-3.54%	26,545,479	-4.28%
2003	9,694,417	-0.39%	16,886,783	0.44%	26,581,200	0.13%
2004	9,907,306	2.20%	17,369,653	2.86%	27,276,959	2.62%
2005	10,108,114	2.03%	18,084,274	4.11%	28,192,389	3.36%
2006	10,655,892	5.42%	19,464,336	7.63%	30,120,228	6.84%
2007*	11,534,392	8.24%	19,770,528	1.57%	31,304,920	3.93%
Average Growth		4.22%		5.23%		4.83%

Source For All Years But 2007: TDA Sales Taxes from California State Board of Equalization Annual Reports.
* 2007 data represents TAM and SCTA sales tax measures. Data from audited financial statements.

The historical sales tax revenue data suggest that SMART sales tax revenues should grow at an annual rate near the long term historical average of 4.83%. However, in light of the recent economic downturn, a conservative growth estimate has been assumed for the upcoming years of SMART's sales tax revenue forecast. **For FY 2008 through FY 2010 no growth in sales tax revenues is assumed.** Sales tax revenue annual growth rates then increase by 2.0%, 2.5% and 3.5% for fiscal years 2011, 2012, and 2013, respectively. For the remaining term of the tax a conservative growth rate of 4% per year is assumed. Table 4 below summarizes the SMART sales tax revenue forecast.

- ***Sonoma County's Measure M Sales Tax Revenues*** – Passed by county voters in November 2004, this measure will provide SMART with $23 million over 20 years for rail system design, engineering and system improvements.

- ***Joint Development Lease Revenues*** – SMART anticipates receiving approximately $14 million over the 20-year plan for joint development of housing, office and/or retail uses on property currently owned by SMART. The principle sites of anticipated joint development opportunities are the downtown Santa Rosa and Petaluma station sites.

Table 4: SMART Sales Tax Forecast

Fiscal Year	Sonoma County Annualized Sales Tax Revenue	Growth	Marin County Annualized Sales Tax Revenue	Growth	SMART 20 Year Sales Tax Revenue*
2007	19,770,528		11,534,392		
2008	19,770,528	0.0%	11,534,392	0.0%	
2009	19,770,528	0.0%	11,534,392	0.0%	7,826,230
2010	19,770,528	0.0%	11,534,392	0.0%	31,304,920
2011	20,165,939	2.0%	11,765,080	2.0%	31,931,018
2012	20,670,087	2.5%	12,059,207	2.5%	32,729,294
2013	21,393,540	3.5%	12,481,279	3.5%	33,874,819
2014	22,249,282	4.0%	12,980,530	4.0%	35,229,812
2015	23,139,253	4.0%	13,499,751	4.0%	36,639,004
2016	24,064,823	4.0%	14,039,742	4.0%	38,104,565
2017	25,027,416	4.0%	14,601,331	4.0%	39,628,747
2018	26,028,513	4.0%	15,185,384	4.0%	41,213,897
2019	27,069,653	4.0%	15,792,800	4.0%	42,862,453
2020	28,152,439	4.0%	16,424,512	4.0%	44,576,951
2021	29,278,537	4.0%	17,081,492	4.0%	46,360,029
2022	30,449,678	4.0%	17,764,752	4.0%	48,214,430
2023	31,667,665	4.0%	18,475,342	4.0%	50,143,007
2024	32,934,372	4.0%	19,214,356	4.0%	52,148,728
2025	34,251,747	4.0%	19,982,930	4.0%	54,234,677
2026	35,621,817	4.0%	20,782,247	4.0%	56,404,064
2027	37,046,689	4.0%	21,613,537	4.0%	58,660,226
2028	38,528,557	4.0%	22,478,078	4.0%	61,006,636
2029	40,069,699	4.0%	23,377,202	4.0%	47,585,176
Totals	**626,891,818**		**365,737,120**		**890,678,683**

*Fiscal years 2009 and 2029 reflect a partial year due to the April 2009 and March 2029 commencement and ending date of the sales tax.

- ***NCRA Freight Trackage Fees*** – For use of the Class IV trackage that SMART will upgrade and maintain, SMART has assumed that the NCRA will pay annual trackage fees. The funding plan conservatively estimates payment of trackage fees of $168,000 per year (2008$) during FY 2015 through FY 2019, escalated based on inflation. In FY 2020, the annual figure is assumed to rise (based on added freight car miles) to $561,600 (2008$) and would increase with inflation through FY 2029.

- ***Railroad Fiber Optic Lease Revenues*** – The funding plan assumes the receipt of $30,000 (2008$) annually from a communications company for use of an easement to provide a fiber optic line along the railroad right-of-way. It has been assumed that the lease payment amount will increase over time based on inflation.

- ***SMART Property Operating Lease Revenues*** – The funding plan assumes SMART will continue to lease its excess right-of-way at $477,000 per year (2008$) between FY 2008 and FY 2012, adjusted for inflation. During project construction and just prior to the beginning of rail service in 2014, it is assumed the payment will drop to $318,000 annually (2008$), adjusted for inflation, and continue through the remainder of the forecast, based on the project's need for selected sites. SMART will continue to lease excess right-of-way not required for the project.

- ***Advertising Revenues*** – Based on discussions with potential advertisers, SMART assumes it will receive approximately $150,000 annually (2008$), adjusted for inflation, beginning in 2014. This estimate was based on the use of illuminated kiosks on platforms at the system's 14 stations and interior advertising on the rail vehicles.

Last in regard to other local revenues, TAM has requested that the SMART Board adopt a funding strategy that agrees not to tap into any funding that TAM or Marin Transit currently has programmed for transportation improvements in Marin County, including funds in the Regional Transportation Plan (T-2030 and T-2035) or the Federal Transportation Improvement Program, without the express written consent of TAM or Marin Transit. This request will be considered by the SMART Board at its July, 2008 meeting.

Regional Revenue Sources

- ***RM2 Funds*** – In March 2004, Bay Area voters passed Regional Measure 2 (RM2) raising the toll on the seven State-owned toll bridges in the San Francisco Bay Area by $1.00. The extra dollar is to fund a number of transportation improvement projects and programs, including providing SMART with $35 million allocated between the San Rafael and Larkspur rail stations.

State Revenue Sources

- ***Proposition 116 Funds*** – Originally passed by state voters in 1990, Proposition 116 earmarks a total of $28 million for rail service improvements in the SMART corridor. Since these funds are only available on a 50/50 matching basis, SMART will leverage its sales tax revenues to obtain these state funds.

- ***TCRP Funds*** – Adopted in 2000, the Transportation Congestion Relief Program (TCRP) provides transportation funding for a number of specific improvement projects. Under this measure, SMART will receive a total of $37 million for system planning, design and engineering, and project construction. All of these funds have been allocated by the California Transportation Commission to SMART as of June, 2007.

- ***State Transit Assistance Program (STA) Funds*** – A state program that provides capital and operating funds for transit operators, it is assumed that SMART would receive $1,000,000 per year (in 2008$) based on the projected route miles of service provided by the SMART rail district. These funds would be adjusted for inflation and would be available beginning in FY 2017.

  In determining future revenues, the STA estimate was calculated in two ways to produce a range of revenue totaling between $730,000 and $1.3 million per year (2008$). Since the calculations would be influenced by the interest rates SMART would pay for construction financing, the district has assumed the mid-point of this range at $1,000,000 per year (2008$).

  These STA monies would only be allocated to the SMART rail district based on the provision of new rail service and the new ¼-cent SMART sales tax. These funds would not be available to the region absent new rail service and the new ¼-cent SMART sales tax. The

annual allocation of STA population-based funding currently provided to North Bay small transit providers is not impacted by the allocation of new STA rail service funds.

It should be noted that the plan does not include the use of other state transportation funding (e.g., Proposition 1B monies) already being received by other Marin and Sonoma county transit operators.

Federal Revenue Sources

- ***Federal Highway Administration Funds*** – Assumes that SMART will receive $2.4 million for Marin County station sites transferred from the Golden Gate Transit District when the rail right-of-way was transferred to SMART in 2005.

- ***Congressional Earmarks*** – Under the Safe, Accountable, Flexible, Efficient, Transportation Equity Act: A Legacy for Users (SAFETEA-LU), SMART obtained a congressional authorization of $5 million for system design and engineering. SMART received an earmark of New Starts funding of $1.96 million from Congress in FY 2008. SMART assumes that during the next reauthorization cycle (2010–2015), it will receive an additional $23.04 million for project construction, resulting in a total of $25 million in new federal rail funding.

As with state funding, the plan does not include the use of other federal funds (e.g., revenues from the Regional Surface Transportation Program or Congestion Mitigation & Air Quality Program) already being received by other Marin and Sonoma county transit operators.

Other Revenue Sources

- ***NCRA Capital Offsets*** – The North Coast Railroad Authority (NCRA) has already spent approximately $10 million to upgrade the rail corridor along the right-of-way which SMART owns and will use. It is assumed that NCRA will contribute another $27.2 million for additional system improvements that will reduce SMART's required capital outlay for construction for the portion of the corridor between Cloverdale and Novato.

- ***Interest Earnings*** – SMART assumes interest earned on average annual cash balances at an average annual rate of 4.10%.

Bond Financing

To implement rail service by Fall 2014, SMART intends to leverage use of its sales tax proceeds to borrow construction funds, through the issuance of bonds, that will be needed to build the project. It is anticipated that SMART will need to issue a total of approximately $345 million in bonds between FY 2009 and FY 2015 to fully fund its construction program. **Appendix C** contains revenue totals, by year-of-expenditure, for implementing the capital and O&M program.

V. Bonding Analysis

SMART will utilize tax-exempt municipal bond offerings to accelerate the start of capital projects. It is projected that SMART will utilize three bond offerings in order to meet its

forecasted capital expenditure requirements. Based on the bonding assumptions below, the three bond offerings will generate proceeds of approximately $303.0 million, $12.2 million and $29.8 million in fiscal years 2009, 2012 and 2015, respectively. The bonds will be structured as sales tax revenue bonds which are supported by a "first lien" or pledge of sales tax revenues. The sales tax revenue bond structure is frequently used by transportation and transit agencies to finance capital programs because these bonds are considered a strong credit structure which are well received by market participants and investors.

There are many factors affecting bonding capacity, including IRS expenditure requirements, sales tax revenue collections, interest rates at the time of issuance, debt service coverage ratios required by market participants and the availability of bond insurance. In order to issue tax-exempt bonds and realize low tax-exempt interest rates, SMART must expend the majority of each bond's proceeds within three years of the issuance of the bonds. In addition, bond proceeds must be used for capital projects and not for day-to-day working capital.

The interest rate scale for the bonds assumed in the Funding Plan is based on market conditions as of February 27, 2008. February 27, 2008 represents a recent "market high" and therefore represents a conservative scale. This interest rate scale is approximately 0.5% (50 basis points) higher that current market rates. When SMART issues bonds in the future, interest rates may vary from those forecasted. Fluctuation in rates will have a direct impact on bonding capacity. SMART has a certain degree of flexibility to address adverse movements in interest rates through project element phasing as appropriate.

Further considerations and assumptions associated with the bonds which make them attractive to market participants and investors are shown in Table 5.

In order to enhance the credit of the bonds, it has been assumed that bond insurance will be purchased from an "AAA" rated insurer, resulting in an "AAA" rating for the bonds. Based on current market conditions, coverage and other assumptions, it is believed that bond insurance will be available to SMART. The bond insurance provider may also provide a surety bond in lieu of funding a debt service reserve fund from bond proceeds. The surety bond would maximize bond proceeds available for capital expenditures.

However, considering the current volatile nature of the bond insurance industry and credit requirements, SMART's consultants have also considered the impact to the Funding Plan if bond insurance is not available. While un-insured bonds will result in lower bond proceeds due to higher interest rates and the loss of the surety bond, based on current market conditions and a conservative "A" underlying rating, there is sufficient bonding capacity to complete all of the rail project as currently planned if bond insurance is not available. In addition, by adjusting its phasing, the entire bicycle/pedestrian pathway project would also be completed over the 20 year life of the sales tax. However, more of the pathway project would be constructed earlier if the bonds achieve an "AA" category underlying rating.

To determine the appropriate level of debt service coverage (annual sales tax revenues divided by the annual debt service payment) for SMART, coverage assumptions were discussed informally with credit analysts from both rating agencies and bond insurers. Based on these discussions, the credit analysts indicated that a coverage ratio of 1.3x or greater would result in

Table 5: Bond Assumptions

Three Bond Issues	Fiscal Year Ending 2009, 2012, 2015
Total Estimated Net Proceeds	$345 million
Bond Insurance Premium	60 basis points of total debt service *
Surety Bond	2.5% of debt service reserve fund Requirement *
Optional Call Provision	10-year at par
Structure	Level debt service
Interest Rate Scale	2/27 AAA/ins Revenue MMD *
Debt Service Coverage and Additional Bonds Test	1.3x times *

* Based on current market conditions and KNN discussions with market participants.

an investment grade rating of "A" or better and also that the bonds would qualify for bond insurance. Though this coverage ratio is slightly lower than what is typically required of a new issuer, the 1.3x coverage is possible because the combined Sonoma and Marin Counties tax base is large and wealth levels are relatively high.

Total debt service repayment over the life of the sales tax is projected to be approximately $530.9 million. Total debt service includes principal and interest payments.

While KNN Public Finance believes all bonding assumptions to be reasonable, changes in future interest rates, sales tax collection and coverage requirements could either increase or decrease bonding capacity depending upon the current market conditions at the time of bonding.

VI. Cash Flow Analysis, FY 2008 – FY 2029

A pro forma, year-by-year cash flow analysis was conducted to assess the overall adequacy of revenues to cover the proposed capital and O&M costs associated with building and operating the project. **Table 6** contains the projected cash flow analysis for the project.

The cash flow model used in the financial assessment defines the magnitude, timing and type of expenditure for which revenues may be required. The cash flow model consists of four basic components: Capital Revenues, Operating Revenues, Capital Costs and Operating Costs, each of which has sub-components.

TABLE 6: Project Cash Flow Statement (in Year-of-Expenditure Dollars, Thousands)

SMART Project **7/11/2008**

CASH FLOW ANALYSIS

Full Build Operation: Sonoma-Marin to Cloverdale

FY 2008-2029 (Escalated Dollars in Thousands)

Version Dated: 07/02/08

Sales Tax Begins 4th Q of FY 2009 (partial year of sales tax revenue)

Service Begins Fall of 2014 (partial year of operations)

	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	TOTAL
Annual CPI	3.50%	4.25%	4.50%	3.50%	3.25%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.75%	3.75%	3.75%	3.75%	3.75%	3.75%	3.75%	3.75%	3.75%	3.75%	3.75%	
Conversion Factor from 2008$	1.00	1.04	1.09	1.13	1.16	1.20	1.25	1.29	1.34	1.38	1.43	1.48	1.54	1.60	1.66	1.72	1.78	1.85	1.92	1.99	2.07	2.15	
Construction Cost Escalation Rate	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	
Conversion Factor from 2008$	1.00	1.05	1.10	1.16	1.22	1.28	1.34	1.41	1.48	1.55	1.63	1.71	1.80	1.89	1.98	2.08	2.18	2.29	2.41	2.53	2.65	2.79	
Portion of year with operations (percentage)	0	0	0	0	0	0	0	75%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
REVENUES																							
Local																							
Operating Revenues -- Passenger Fares								7,335	10,122	10,476	10,276	10,636	11,008	11,393	11,792	12,205	12,632	13,074	13,532	14,005	14,495	15,003	177,983
Sonoma County Measure M	1,150	1,150	1,150	1,150	1,150	1,150	1,150	1,150	1,150	1,150	1,150	1,150	1,150	1,150	1,150	1,150	1,150	1,150	1,150	0	0	0	21,850
Local Sales Tax Contribution		7,826	31,305	31,931	32,729	33,875	35,230	36,639	38,105	39,629	41,214	42,862	44,577	46,360	48,214	50,143	52,149	54,235	56,404	58,660	61,007	47,585	890,679
Joint Development Lease Revenue			250	0	4,000	2,000	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	14,250
NCRA Trackage Fee Revenues								163	224	232	240	249	865	898	931	966	1,002	1,040	1,079	1,119	1,161	1,205	11,376
Railroad Fiber Optic Lease Revenues								29	40	41	43	45	46	48	50	52	54	56	58	60	62	64	747
SMART Property Operating Lease Revenues	477	498	520	538	371	383	397	411	425	440	455	473	490	509	528	548	568	589	611	634	658	683	11,207
Advertising Revenue						45	187	194	200	207	215	223	231	240	249	258	268	278	288	299	310	322	4,013
Local Revenue Subtotal:	1,627	9,474	33,225	33,619	38,250	37,453	37,464	46,420	50,766	52,676	54,093	56,137	58,868	61,097	63,414	65,821	68,322	70,921	73,622	75,278	78,194	65,362	1,132,105
Regional																							
Regional Measure 2	250	1,000	15,000	18,750																			35,000
Regional Revenue Subtotal:	250	1,000	15,000	18,750	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	35,000
State																							
State Transit Assistance (STA)										1,269	1,303	1,338	1,374	1,410	1,448	1,487	1,527	1,568	1,610	1,653	1,697	1,743	19,425
Proposition 116		10,000	18,000																				28,000
Traffic Congestion Relief Program (TCRP)	1,000	15,050	12,249																				28,299
State Revenue Subtotal:	1,000	25,050	30,249	0	0	0	0	0	0	1,269	1,303	1,338	1,374	1,410	1,448	1,487	1,527	1,568	1,610	1,653	1,697	1,743	75,724
Federal																							
Federal Highway Administration (FHWA)		1,200	1,200																				2,400
Federal Earmarks	1,960	2,000	2,000	5,000	6,000	6,000	2,040																25,000
Federal Revenue Subtotal:	1,960	3,200	3,200	5,000	6,000	6,000	2,040	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27,400
Other																							
NCRA Capital Offset			37,200																				37,200
Interest Earnings on Average Cash Balance & Reserves	77	6,446	10,766	8,246	5,305	2,838	859	923	1,482	945	438	211	220	279	339	305	288	311	553	880	1,121	1,088	43,917
Other Revenue Subtotal:	77	6,446	47,966	8,246	5,305	2,838	859	923	1,482	945	438	211	220	279	339	305	288	311	553	880	1,121	1,088	81,117
Total Revenues (Year-of-Expenditure)	4,915	45,170	129,640	65,615	49,554	46,291	40,362	47,343	52,249	54,890	55,834	57,686	60,461	62,787	65,201	67,613	70,137	72,800	75,785	77,811	81,012	68,192	1,351,346
EXPENSES																							
Planning Studies/Preliminary Eng./Final Design																							
Long Range Planning Fund								2,500					2,500										5,000
Preliminary Engineering																							0
Final Design	300	35,728	19,019	1,090	1,126																		57,263
Subtotal:	300	35,728	19,019	1,090	1,126	0	0	2,500	0	0	0	0	2,500	0	0	0	0	0	0	0	0	0	62,263
Capital																							
Cal Park Hill Tunnel Rehabilitation Contribution		5,984	5,984																				11,968
Construction Total (excl. Tunnel Rehab, Maint. Facility & Bike/Ped Path)			29,102	72,755	87,306	72,755	29,102																291,021
Maintenance Facility (Built in Two Phases)			10,091	1,682	1,682	1,682	1,682								6,849	7,191	7,551	7,928					46,336
Right-of-Way			18,383	18,383																			36,767
Vehicles			43,856	43,856																			87,713
Bike/Pedestrian Pathway			13,014	13,014	13,014	13,014	13,014		9,782	10,271	10,785									6,189	6,499	6,824	115,420
Subtotal:	0	5,984	120,431	149,691	102,002	87,451	43,798	0	9,782	10,271	10,785	0	0	0	6,849	7,191	7,551	7,928	0	6,189	6,499	6,824	589,226
Operating & Maintenance																							
Rail (weekday)	0	0	0	0	0	0	0	13,976	19,287	19,962	20,661	21,435	22,239	23,073	23,939	24,836	25,768	26,734	27,736	28,777	29,856	30,975	359,254
Rail (weekend/holiday)	0	0	0	0	0	0	0	2,336	3,224	3,337	3,454	3,583	3,717	3,857	4,001	4,152	4,307	4,469	4,636	4,810	4,991	5,178	60,052
Bridge Tender	0	0	0	0	0	0	0	107	148	153	159	165	171	177	184	191	198	206	213	221	230	238	2,762
Bike/Ped	0	0	0	0	0	0	0	777	1,073	1,110	1,149	1,192	1,237	1,283	1,331	1,381	1,433	1,487	1,543	1,601	1,661	1,723	19,982
Shuttle	0	0	0	0	0	0	0	1,336	1,844	1,908	1,975	2,049	2,126	2,206	2,288	2,374	2,463	2,555	2,651	2,751	2,854	2,961	34,340
Admin. (included in Rail weekday operations amount following start-up)	895	933	975	1,009	1,042	1,078	1,116	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7,049
Operation Life Saver	107	112	117	121	125	129	133	138	143	148	153	159	165	171	177	184	191	198	206	213	221	230	3,540
Program Management	100	2,000	2,000	225	225	225	225	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,000
Subtotal:	1,102	3,045	3,092	1,355	1,392	1,432	1,475	18,671	25,719	26,619	27,550	28,583	29,655	30,767	31,921	33,118	34,360	35,649	36,986	38,372	39,811	41,304	491,978
Total Expenses (Year-of-Expenditure)	1,402	44,757	142,541	152,136	104,519	88,884	45,273	21,171	35,501	36,890	38,335	28,583	32,155	30,767	38,770	40,309	41,911	43,577	36,986	44,562	46,310	48,128	1,143,467
BOND FINANCING																							
Bond Proceeds		303,053			12,162			29,847															345,062
Annual Debt Payment			14,768	24,079	24,080	24,682	25,173	25,173	26,604	28,177	28,173	28,175	28,175	28,177	28,177	28,174	28,179	28,176	28,182	28,179	28,178	28,172	530,853
Net:	0	303,053	-14,768	-24,079	-11,918	-24,682	-25,173	4,675	-26,604	-28,177	-28,173	-28,175	-28,175	-28,177	-28,177	-28,174	-28,179	-28,176	-28,182	-28,179	-28,178	-28,172	-185,791
ANNUAL SURPLUS (DEFICIT)	3,513	303,465	-27,669	-110,600	-66,883	-67,274	-30,083	30,846	-9,857	-10,177	-10,675	927	130	3,843	-1,746	-870	47	1,046	10,617	5,070	6,524	-8,108	
Beginning Cash Balance	0	3,513	306,978	279,309	168,709	101,826	34,552	4,469	35,315	25,459	15,282	4,607	5,534	5,664	9,507	7,761	6,891	6,938	7,984	18,602	23,672	30,196	
REVISED CASH BALANCE TOTAL	3,513	306,978	279,309	168,709	101,826	34,552	4,469	35,315	25,459	15,282	4,607	5,534	5,664	9,507	7,761	6,891	6,938	7,984	18,602	23,672	30,196	22,088	

In summary, the cash flow represents approximately $1.351 billion in total revenues between FY 2008 and FY 2029, with total construction and O&M costs of $1.143 billion. Bonding will cost a net additional $186 million over the course of the plan. These figures reflect full construction of the rail project and 66% of the bicycle/pedestrian pathway by Fall 2014. However, funds are sufficient to complete the remainder of the bicycle/pedestrian facility by FY 2029 and provide an ending cash balance of approximately $22.1 million.

VII. Risk Management

In developing its project funding plan, SMART has purposely taken a conservative approach in estimating future costs and future revenues. Conservative features incorporated into the plan include the following:

- A contingency of approximately 20% for all construction costs.
- An additional 5% factor built into the construction cost estimates through mid-point of construction.
- A contingency of 20% for annual operating and maintenance costs.
- Reliance on an experienced program management team, including rail and civil engineers and project control specialists with responsibility to oversee final design and construction of the project.

As a sensitivity analysis, SMART ran its cash flow model to take into account several different planning assumptions. SMART was asked to respond to a situation where NCRA did not fully fund its capital offset program or pay annual trackage fees SMART ran its model assuming no additional improvements beyond the $10 million NCRA has already invested in the corridor. Even under this case, SMART can still fully fund the rail project and nearly half of the bicycle/pedestrian pathway by Fall 2014 and over 80% of the bicycle/pedestrian pathway by 2029.

As described in Section V, SMART also considered the impact to the Funding Plan if bond insurance were unavailable. In that situation, SMART would need to meet higher debt service coverage requirements. Even under this occurrence, SMART can fully fund the rail project by Fall 2014 and the bicycle/pedestrian pathway by FY 2029.

VIII. Conclusions

Although both capital and operating costs have increased for the proposed project since the 2006 Expenditure Plan, the ¼-cent sales tax measure, along with other sources noted in this Funding Plan, are still sufficient to fund the project. As noted in the beginning of this report, the project can be built, operated and maintained with a 20 year ¼ cent sales tax measure with updated cost information for three reasons:

- First, the new 2008 sales tax projections and cash flow analysis are based on 2006 audited sales tax revenues received by Marin and Sonoma Counties. At the time the 2006

Expenditure Plan was prepared there were no audited sales tax reports for either county, only estimated sales tax forecasts. As a result, the projections used earlier proved to be much lower than actual sales tax revenues for both counties.

- Second, SMART did not maximize the opportunity for bonding against future sales tax proceeds in the 2006 Expenditure Plan. For the current 2008 effort, SMART implemented a sophisticated bonding strategy that envisions the use of bond issuances in fiscal years 2009, 2012 and 2015.

- Third, by extending the construction schedule by two years, SMART can continue to accrue sales tax revenue and optimize its bonding strategy for construction of the project. However, all efforts will be made to deliver the project as soon as possible.

In conclusion, based on the updated revenue forecast bonding capacity and construction schedule, SMART can build and maintain the rail project and bicycle/pedestrian pathway projected to cost approximately $541 million (in 4th Quarter, 2008 dollars, or $450 million for the rail project and $91 million for the bicycle/pedestrian pathway.)

APPENDIX A – O&M AND CAPITAL CONSTRUCTION COST TOTALS, YEAR-0F-EXPENDITURE

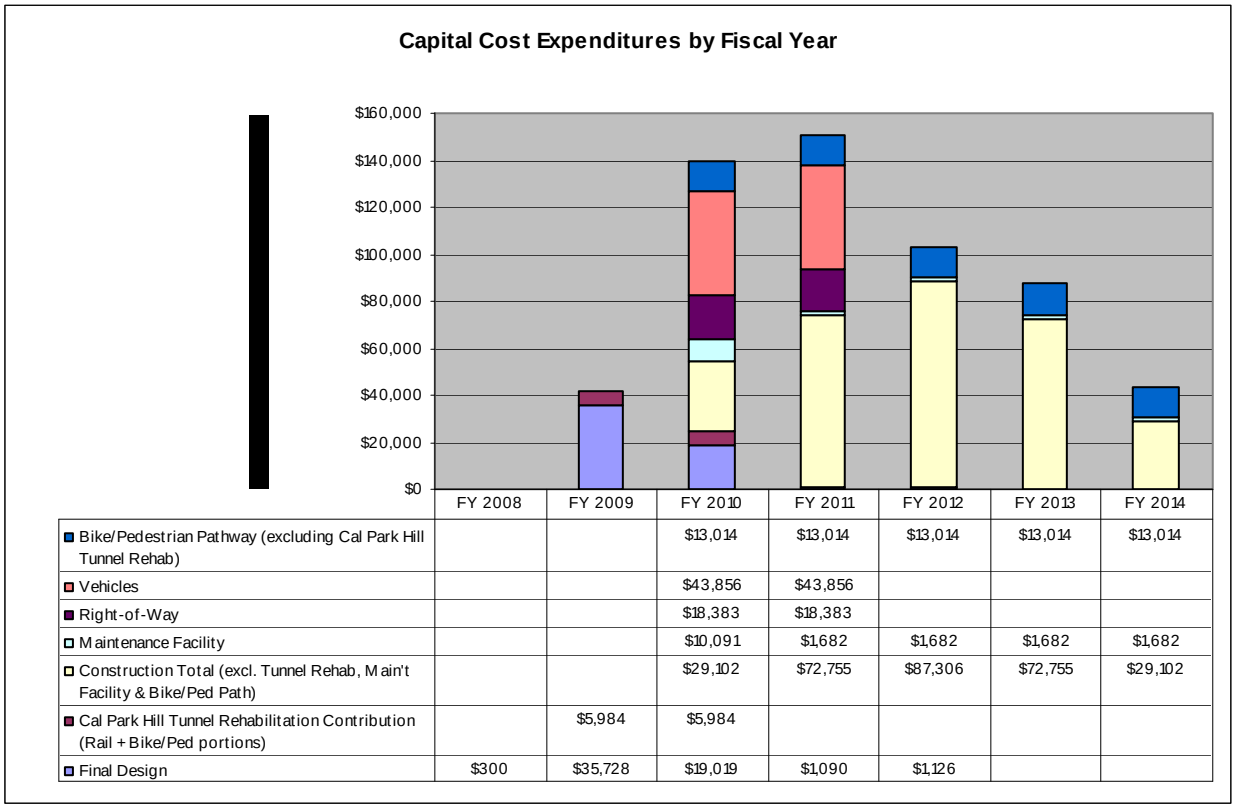
TABLE 7: O&M and Capital Costs
By Year-of-Expenditure

Amounts shown are totals for FY 2008 - FY 2029, in escalated thousands of dollars

OPERATING COSTS		
Train Operations (Weekday)	72%	$359,254
Train Operations (Sat/Sun/Holiday)	12%	$60,052
Shuttle Operations	7%	$34,340
Bike/Pedestrian Pathway Maintenance	4%	$19,982
Administration	1%	$7,049
Program Management	1%	$5,000
Operation Life Saver	1%	$3,540
Rail Bridge Operations	1%	$2,762
Planning Funds	1%	$5,000
20-Year Total	**100%**	**$496,978**
CAPITAL COSTS		
Construction (Track, Signals, Grade Crossings, Structures, Stations, Other)	45%	$291,021
Bike/Pedestrian Pathway	18%	$115,420
Vehicles	14%	$87,713
PE/Final Design	9%	$57,263
Maintenance Facility	7%	$46,336
Right-of-Way	6%	$36,767
Cal Park Hill Tunnel Rehabilitation Contribution	2%	$11,968
20-Year Total	**100%**	**$646,489**
TOTAL (Operating and Capital)		**$1,143,467**
Bond Financing Costs (Net)		$185,791
TOTAL COSTS		**$1,329,258**

Note: Percentages may not add to 100% due to rounding.

FIGURE 2: Capital Cost Expenditures by Fiscal Year



	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014
Bike/Pedestrian Pathway (excluding Cal Park Hill Tunnel Rehab)			$13,014	$13,014	$13,014	$13,014	$13,014
Vehicles			$43,856	$43,856			
Right-of-Way			$18,383	$18,383			
Maintenance Facility			$10,091	$1,682	$1,682	$1,682	$1,682
Construction Total (excl. Tunnel Rehab, Main't Facility & Bike/Ped Path)			$29,102	$72,755	$87,306	$72,755	$29,102
Cal Park Hill Tunnel Rehabilitation Contribution (Rail + Bike/Ped portions)		$5,984	$5,984				
Final Design	$300	$35,728	$19,019	$1,090	$1,126		

Note: Capital expenditures during this seven-year period total $566.6 million (in year-of-expenditure dollars). Additional capital expenditures will occur during later years (e.g., later phases of the bicycle/pedestrian pathway). Total 20-year SMART capital expenditures are $646.5 million (in year-of-expenditure dollars).

APPENDIX B – DETAILED CONSTRUCTION COST ESTIMATE, RAIL AND BICYCLE/PEDESTRIAN FACILITY, 2008 $

TABLE 8: SMART Rail Construction Cost Estimate (2008$)

Project : SMART Commuter Rail Project

4/1/2008

LARKSPUR TO CLOVERDALE: RAIL PROJECT **(MP 14.6 TO MP 84.6) 70 M**

Ref SEC		Description	Quantity	Units	Unit Cost	Subtotal Cost Without Contigency	Cont.
5 & 6	**Track and Bridge Rehab**						
	1	Track Improvements		TF		$64,584,131	10%
	1a	Rail Salvage Credit		TF		($2,402,470)	0%
	2	Bridge Rehabilitation		EA		$37,137,165	20%
	3	Storm Damage and Culvert Upgrade		LS		$2,951,048	20%
4	**Bike_Ped Path**						
	1	On/Adjacent NWP Right-of-Way		Miles		$0	15%
	2	Off - ROW Bike Path		LS		$0	15%
	3	Pathway Bridges		LS		$0	15%
	4	Roadway Crossings		LS		$0	15%
9	**Signals**						
	1	San Rafael to Santa Rosa		LS		$12,416,280	10%
	2	Santa Rosa to Cloverdale		LS		$3,974,917	10%
	3	San Rafael to Larkspur		LS		$640,472	10%
9	**Grade Crossings**						
	1	San Rafael to Santa Rosa		LS		$16,133,218	10%
	2	Santa Rosa to Cloverdale		LS		$7,426,892	10%
	3	San Rafael to Larkspur		LS		$1,327,289	10%
7 & 8	**New Bridge and Tunnels**						
	1	Cal Park Hill Tunnel - (Ventilation, Fire Piping and Lighting Systems)				$1,840,887	15%
	2	Puerto Suello Hill Tunnel - (Ventilation, Fire Piping and Lighting Systems)				$1,881,852	15%
10	**Stations**						
	1	Stations & Park-n-Ride Lots	14	EA	$1,817,170	$25,440,377	20%
	2	Allow for Station Upgrades (e.g.; Canopies, Architectural, etc.)	14	EA	$390,190	$5,462,664	0%
11	**Maintenance and Layover Facilites**						
	1	Maintenance Facility and Layover Facility	1	LS	$22,180,000	$22,180,000	25%
12	**Other Construction Costs**						
	1	Start-up and Testing (1% construction costs)	1	LS	$2,009,947	$2,009,947	15%
	2	Quiet Zone Mitigation	1	LS	$4,500,000	$4,500,000	15%
	3	Environmental Mitigation	1	LS	$5,483,913	$5,483,913	20%
	4	Utility Relocations (allowance of $96,000/sta)	1	LS	$1,344,180	$1,344,180	30%
	Construction Subtotal					$ 214,332,761	
	Contractor Design		6%			$ 12,859,966	10%
		Construction Contingency	15.69% Weighted Average			$33,621,974	
			Construction Total (4 th Qtr. '08)			$260,814,700	
13	**Vehicles**						
	1	Vehicles (12 ea DMU vehicles includes 15% Spares)				$64,900,000	
	2	Maintenance Vehicles (regulator, undercutter, etc)				$1,975,000	
	3	Vehicles Contingency			10%	$6,687,500	
	DMU Vehicle Subtotal					$73,562,500	
14	**Right-of-Way**						
	1	R-O-W Acquisition				$21,605,808	
	2	R-O-W Contingency			40%	$8,642,323	
	Right-of-Way Subtotal					$30,248,131	
	Add-On Allowances (Multipliers)						
	1	Engineering, CM, Agency Cost, Construction, Change Orders, (29% of Construction Total)	29%			$75,636,263	
	2	Engineering & Agency Cost (3% of Vehicles Subtotal)	3%			$2,206,875	
	3	Engineering & Agency Cost (5% of R-O-W Subtotal)	5%			$1,512,407	
	TOTAL BASELINE PROJECT COSTS (4 th Qtr. 2008$)					$443,980,875	
		Cal-Park Hill Tunnel - Civil Rehabilitation Phase A & B, includes PS&E, R-O-W, & contingency				$5,840,000	
	TOTAL BASELINE PROJECT COST (4 th Qtr. 2008$ & Cal Park Tunnel Civil)					**$449,820,875**	

Construction Cost per mile	Mile	70.00	$6,426,012
		DATE:	4/1/2008

Sheet 1 of 1

TABLE 9: SMART Bicycle/Pedestrian Pathway Construction Cost Estimate (2008$)

Project : SMART Commuter Rail Project

4/1/2008

LARKSPUR TO CLOVERDALE: BICYCLE & PEDESTRIAN PATH **(MP 17.9…, - ...MP 84.6) 53.1 M**

Ref SEC		Description	Quantity	Units	Unit Cost	Subtotal Cost Without Contigency	Cont.
5 & 6	**Track and Bridge Rehab**						
	1	Track Improvements		TF		$0	20%
	2	Bridge Rehabilitation		EA		$0	20%
	3	Culvert Rehabilitation		EA		$0	20%
4	**Bike-Ped Path**						
	1	On/Adjacent NWP Right-of-Way	53.1	Miles		$39,203,202	15%
	2	Off - ROW Bike Path	1	LS		$1,250,456	15%
	3	Roadway Crossings	1	LS		$590,210	15%
9	**Signals**						
	1	San Rafael to Santa Rosa		LS		in rail project	10%
	2	Santa Rosa to Cloverdale		LS		in rail project	10%
	3	San Rafael to Larkspur		LS		in rail project	10%
9	**Grade Crossings**						
	1	San Rafael to Santa Rosa		LS		in rail project	10%
	2	Santa Rosa to Cloverdale		LS		in rail project	10%
	3	San Rafael to Larkspur		LS		in rail project	10%
7 & 8	**New Bridge and Tunnels**						
	1	Cal Park Hill Tunnel - (Ventilation, Fire Piping and Lighting Systems)		LS		in rail project	15%
	2	Puerto Suello Hill Tunnel - (Ventilation, Fire Piping and Lighting Systems)		LS		in rail project	15%
10	**Stations**						
	1	Stations & Park-n-Ride Lots		EA		$0	20%
11	**Maintenance and Layover Facilites**						
	1	Maintenance Facility and Layover Facility		LS		$0	30%
12	**Other Construction Costs**						
	1	Start-up and Testing (1.75% construction costs)		LS		$0	15%
	2	Environmental Mitigation	1	LS	$10,603,456	$10,603,456	20%
	3	Utility Relocations (allowance of $75,000/sta)		LS		$0	30%
	Construction Subtotal					$51,647,324	
	Contractor Design		5%			$2,582,366	10%
	Construction Contingency		**16.53% Weighted Average**			$8,535,508	
			Construction Total (4 th Qtr. FY '08)			$62,765,198	
13	**Vehicles**						
	1	Vehicles				$0	
	2	Maintenance Vehicles				$0	
	3	Vehicles Contingency			10%	$0	
	DMU Vehicle Subtotal					$0	
14	**Right-of-Way**						
	1	R-O-W Acquisition				$4,943,283	
	2	R-O-W Contingency			40%	$1,977,313	
	Right-of-Way Subtotal					$6,920,597	
	Add-On Allowances (Multipliers)						
	1	Engineering, CM, Agency Cost, Construction, Change Orders, (23.5% of Construction Total)	23.5%			$14,749,821	
	2	Engineering & Agency Cost (3% of Vehicles Subtotal)	3%			$0	
	3	Engineering & Agency Cost (5% of R-O-W Subtotal)	5%			$346,030	
	SUBTOTAL BASELINE PROJECT COSTS (4 th Qtr. 2008 $)					$84,781,646	
	Cal-Park Hill Tunnel - Civil Rehabilitation Phase A & B, includes PS&E, R-O-W, & contingency					$5,840,000	
	TOTAL BASELINE PROJECT COST (4 th Qtr. 2008$ & Cal Park Tunnel Civil)					**$90,621,646**	

Construction Cost per mile	Mile	53.10	$1,706,622
		DATE:	4/1/2008

Sheet 1 of 1

APPENDIX C – REVENUE TOTALS, BY YEAR-OF-EXPENDITURE

TABLE 10: O&M and Capital Revenues
By Year-of-Expenditure

Amounts shown are totals for FY 2008 - FY 2029, in escalated thousands of dollars

Local SMART Sales Tax Revenue (Operating or Capital)		**$890,679**
OTHER OPERATING REVENUES		
Passenger Fares	58%	$177,983
Interest Earnings	14%	$43,917
Sonoma County Measure M	7%	$21,850
State Transit Assistance (STA)	6%	$19,425
Joint Development Lease Revenue	5%	$14,250
NCRA Trackage Fees	4%	$11,376
SMART Property Operating Lease Revenues	4%	$11,207
Advertising Revenue	1%	$4,013
Railroad Fiber Optic Lease Revenues	0.2%	$747
20-Year Total	100%	**$304,768**
OTHER CAPITAL REVENUES		
NCRA Capital Offset	24%	$37,200
Regional Measure 2	22%	$35,000
Traffic Congestion Relief Program (TCRP)	18%	$28,299
Proposition 116	18%	$28,000
Federal Earmarks	16%	$25,000
Federal Highway Administration (FHWA) Funds	2%	$2,400
20-Year Total	100%	**$155,899**
TOTAL REVENUES		**$1,351,346**

Note: Percentages may not add to 100% due to rounding.