

## **RESOLUTION NO. 2007-310**

Adopted by the Sacramento City Council

May 22, 2007

### **STREETCAR FEASIBILITY STUDY**

#### **BACKGROUND**

- A. In May of 2006 a Memorandum of Understanding (MOU) was approved which established the working relationships among the City of Sacramento, the City of West Sacramento, Regional Transit and the Yolo County Transit District (the "Parties"). The purpose of the MOU was to promote streetcar service between downtown Sacramento and West Sacramento.
- B. The parties agreed to proceed with a feasibility study, environmental review and preliminary engineering phase of the streetcar project.
- C. The study team was comprised of staff members from the four aforementioned agencies. Consultants used a \$500,000 community design grant that was awarded to Regional Transit to complete a feasibility study for streetcar service between Sacramento and West Sacramento.
- D. The Yolo County Transit District will commit \$2.5 million in STIP funds for the environmental review and the preliminary engineering phase of the streetcar project.

#### **BASED ON THE FACTS SET FORTH IN THE BACKGROUND, THE CITY COUNCIL RESOLVES AS FOLLOWS:**

- Section 1. Approve the Streetcar route alignment proposed in the feasibility study and set forth in Exhibit A.
- Section 2. Authorize the City Manager to direct staff to continue to work with City of West Sacramento, Regional Transit and Yolo County Transit District through the completion of the environmental review and the preliminary design phase of the streetcar project.

#### **Table of Contents:**

Exhibit A: Map-Streetcar Initial and Expansion Routes

Exhibit B: Phase 1 Summary Report Downtown/Riverfront Streetcar Study

Adopted by the City of Sacramento City Council on May 22, 2007 by the following vote:

Ayes: Councilmembers, Cohn, Fong, Hammond, McCarty, Pannell, Sheedy, Tretheway, Waters and Mayor Fargo.

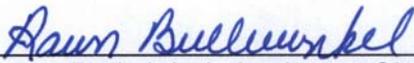
Noes: None.

Abstain: None.

Absent: None.

  
\_\_\_\_\_  
Mayor Heather Fargo

Attest:

  
\_\_\_\_\_  
Dawn Bullwinkel, Assistant City Clerk

LOCATION MAP  
Streetcar Initial & Expansion Routes

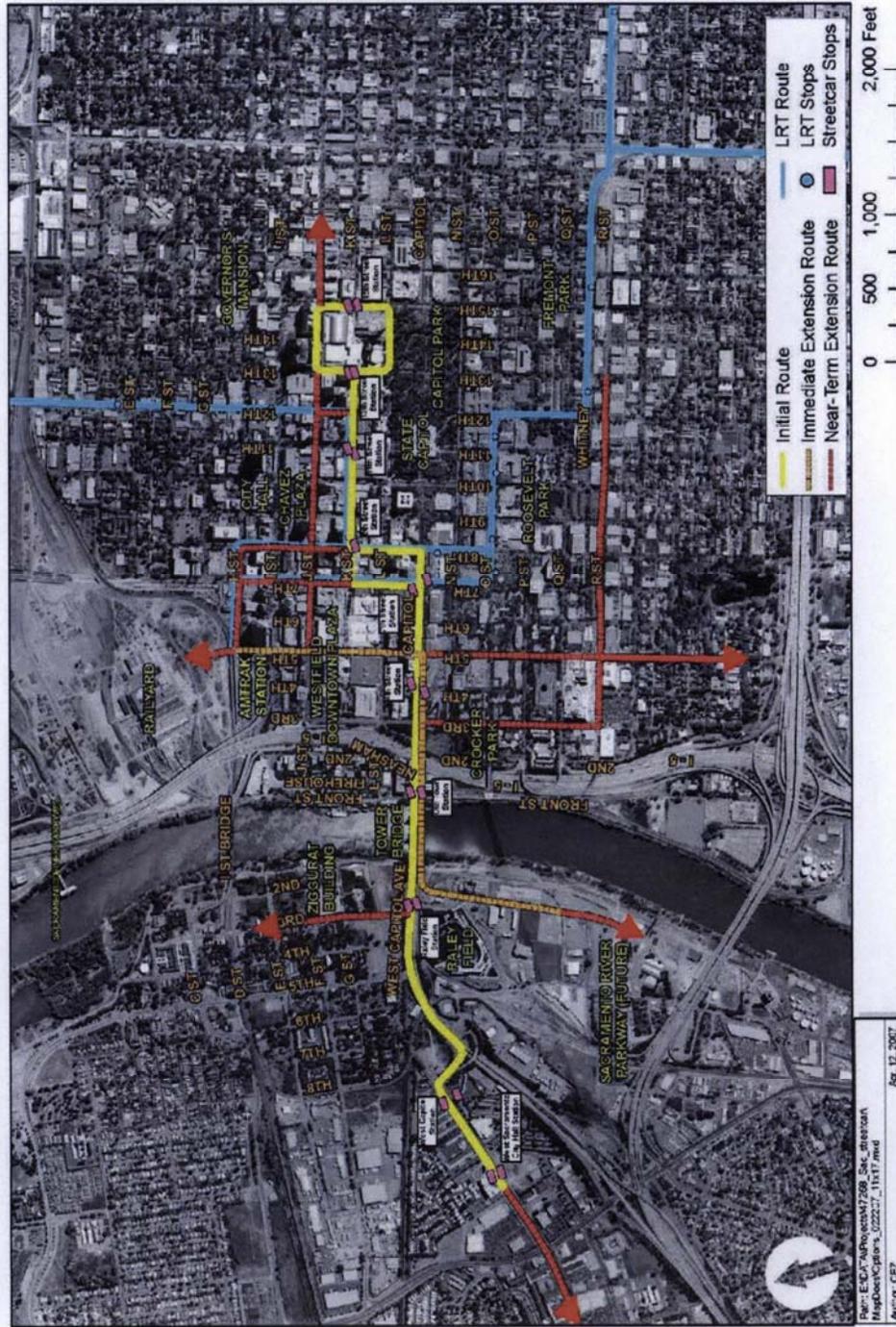


Figure 1. Preferred Initial Alignment and Possible Extensions

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# Phase 1 Summary Report

## Downtown/Riverfront Streetcar Study

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*City of Sacramento*



*Prepared by*

**HDR** | ONE COMPANY  
*Many Solutions™*

*In cooperation with*

Fehr and Peers  
Holland & Knight  
The Hoyt Company  
Leland Consulting Group  
LTK Engineering Services  
URS Corporation

May 2007



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## Table of Contents

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1.0 Introduction to the Phase 1 Report.....	1
1.1 The Report Structure.....	1
2.0 Executive Summary .....	3
2.1 The Streetcar Purpose .....	3
2.2 Premises for the Plan .....	4
2.3 The Planning Criteria.....	4
2.4 The Project Development Process .....	5
2.5 Selecting the Preferred Alignment.....	5
2.6 Environmental and Engineering Issues.....	9
2.7 The Vehicles .....	9
2.8 Operational Characteristics.....	10
2.9 Ridership and Fares.....	11
2.10 Capital and Operating and Maintenance Costs.....	12
2.11 Finance and Management .....	13
2.12 Capital Funding Tools.....	13
2.13 Operations and Maintenance Funding Sources.....	16
2.14 Management Alternatives .....	17
2.15 Phase 2 and Next Steps .....	19
3.0 Project Planning .....	20
3.1 Purpose and Need Statement .....	20
3.2 Route Studies .....	24
3.3 Travel Demand Analysis/Forecasting.....	31
3.4 Opportunities and Constraints.....	39
3.5 Refine Objectives and Criteria.....	40
3.6 Environmental Screening.....	42
4.0 Concept Development.....	47
4.1 Bridge Structure Evaluation.....	47
4.2 Conceptual Engineering.....	53
4.3 Station/Stop Design Criteria .....	55
4.4 Cost Estimate .....	58
5.0 Operations and System Planning .....	60
5.1 Service Criteria and System Characteristics.....	60
5.2 Service Design .....	63
5.3 Equipment Analysis.....	66
6.0 Financing and Organization.....	73
6.1 Funding Tools .....	73
6.2 Management Scenarios .....	79



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## List of Figures

---

Figure 1. Preferred Initial Alignment and Possible Extensions .....	8
Figure 2. Daily Streetcar Ridership over Time for Various Fare Rates.....	11
Figure 3. Charrette Alternatives.....	27
Figure 4. Preferred Initial Alignment and Possible Extensions .....	30
Figure 5. Potential Market Area for Streetcar and Hypothetical Route.....	33
Figure 6. Existing (Year 2005) Streetcar Market Area Trip Markets by Trip Purposes .....	34
Figure 7. Future (Year 2032) Streetcar Market Area Trip Markets by Trip Purposes .....	35
Figure 8. Daily Streetcar Ridership over Time for Various Fare Rates.....	36
Figure 9. 2030 Streetcar Ridership Sensitivity to Fare Structure (Headway = 10 Min).....	36
Figure 10. Alternative Streetcar Alignment - Alignment B.....	37
Figure 11. 2010 Ridership Comparison: Alignment A vs. Alignment B.....	38
Figure 12. 2030 Ridership Comparison: Alignment A vs. Alignment B.....	38
Figure 13. Estimated Ridership for the Preferred Initial Alignment .....	39
Figure 14. West Sacramento Approach to Tower Bridge.....	47
Figure 15. Possible Tower Bridge Configuration.....	49
Figure 16. Capitol Mall Separation, Looking East Near Front Street .....	50
Figure 17. Possible Capitol Mall Configuration.....	51
Figure 18. Streetcar Stop Types.....	57
Figure 19. Vintage Trolley - Dallas, Texas.....	67
Figure 20. Replica Trolley - Portland .....	67
Figure 21. Replica Double Birney - Tampa.....	67
Figure 22. Rebuilt PCC Car .....	68
Figure 23. Modern US Streetcar by Inekon/Skoda - Portland .....	68
Figure 24. Replica Vintage Trolley – New Orleans .....	69



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## List of Tables

---

Table 1. Capital Cost Summary .....	12
Table 2. Operating Cost Summary .....	13
Table 3. Summary of Potential Capital Funding Sources.....	15
Table 4. Operations and Maintenance Funding Tools .....	17
Table 5. Market Area Travel Impacts of the Streetcar System.....	37
Table 6. Conceptual Alignment Summary Alignment "A" .....	54
Table 7. Conceptual Alignment Summary Alternative "B" .....	55
Table 8. Streetcar Stations .....	58
Table 9. Conceptual Cost Estimate .....	59
Table 10. Cycle Time.....	62
Table 11. Span of Service .....	64
Table 12. Survey of US Streetcars in Service or Procurement.....	70
Table 13. Summary Comparison of Vehicle Alternatives .....	71
Table 14. Summary of Potential Capital Funding Sources.....	76
Table 15. Operations and Maintenance Funding Tools .....	79



## 1.0 Introduction to the Phase 1 Report

The City of West Sacramento, the City of Sacramento, Sacramento Regional Transit District (RT), and the Yolo County Transit District (YoloBus) formed a partnership to study the reintroduction of the streetcar to connect their cities' downtowns and Riverfront areas. Over the past 30 years, both public and private interests looked at many ways to bring the streetcar back to this area - and this unique partnership, aided by funding from SACOG's Community Design Program, performed a thorough feasibility analysis for a Downtown/Riverfront Streetcar. This feasibility study develops information on the project in sufficient detail so that elected officials, public agencies, citizen groups, and other stakeholders can make informed decisions on the most appropriate transit investment, particularly in terms of technology, alignment, financing possibilities, and operating plans.

### 1.1 The Report Structure

This Report consists of an Executive Summary, followed by technical sections which summarize the technical analysis performed. This report's technical sections recap more lengthy Technical Memoranda that were produced over the course of the Phase 1 effort. These Technical Memoranda have been organized as Appendices A-M, and supplement this report.

This report is organized by the sequential elements of the study – Project Planning, Concept Development, Operations and System Planning, and Finance and Organization. A description of each study process is summarized below

- **The Executive Summary** – An overview of the project development process, including selection of a Preferred Initial Alignment, the fundamentals that drove the project development process, and a summary of the key technical, financial, operational, and organizational requirements needed to move the streetcar project into the next phase.
- **Project Planning** – The principal means of collecting information, assessing existing conditions and factors, and defining the direction for the preferred alignment.
- **Concept Development** – Once the initial alignment was identified, developing the technical aspects of the project
- **Systems Planning** – After the basic alignment was set and conceptual engineering initiated, developing the operations and systems plan to support the streetcar
- **Finance and Organization** – **Examining** the potential to finance the streetcar, as well as an organization approach that takes into account the intergovernmental nature of this venture

**A note about the alignment(s):** The alignment for this potential streetcar project went through an evolutionary process during the course of the Phase 1 study effort. During the initial fieldwork and project planning Charrette, a working provisional alignment was devised, and used to further analyze a potential project. Two options, called Alternatives A and B, each serving slightly different areas of both downtowns, were later developed and subjected to further review. To provide some indicator performance measures for a preferred alignment, the team prepared a



preliminary ridership forecast, service plan, and a capital and operating cost estimate based on these hypothetical routes. Revisions to each set of findings, which reflect the ultimate Preferred Initial Alignment, are included at the end of each respective summary section. During the first 60 days of Phase 2, the project's Policy Steering Committee, Technical Advisory Committee and design team will review and confirm the Preferred Initial Alignment and prepare updates for the appropriate Technical Memoranda.



## 2.0 Executive Summary

Four local agencies worked together to explore the feasibility of a streetcar link across the Sacramento River. This study concludes that the project is feasible and should move forward to the next phase of preliminary engineering and environmental analysis.

The assumptions employed for this analysis included a 2.2 mile route over the Tower Bridge reaching Sacramento's Midtown on the east, and the West Sacramento Civic Center on the west, using existing light rail track along 7<sup>th</sup>, 8<sup>th</sup> and K Streets for a portion of the route, and operating on 10 minute headways with a fleet of 8 cars. Ridership estimates for this scenario were surprisingly good, growing to as many as 11,000 per day by 2030. Capital cost estimates for this project are within six percent of the \$50 million targeted budget, and operating and maintenance costs were estimated at between \$2.5 million and \$3.5 million per year.

A variety of funding sources were explored for both capital and operating costs, and while more investigation and planning is required, sufficient funding could be put together to support the project. An assessment district or community facilities district to provide private sector participation is a key component of capital funding.

The conclusion of this feasibility study is that a streetcar system as described is financially and operationally viable and is worth pursuing. The recommendation is that the project proceed into Phase 2, during which preliminary engineering design, environmental analysis, and a financing plan will be developed and further details provided.

### 2.1 The Streetcar Purpose

The streetcar project described and studied in this feasibility analysis is a different form of transit than light rail or commuter buses. It is an **urban circulator** and a **pedestrian accelerator**, intended to support the "walkable urbanism" of both Downtowns and their shared riverfront. Further, the streetcar reinforces the expansion of a truly urban environment through redevelopment.

The typical streetcar trip is not strictly to work - although many of the thousands of new Downtown residents will use it for that purpose. Most of the nine trips per day generated by the typical household are not related to the trip from home to work. These are the trips this urban circulator type of transit is designed to capture. These more typical urban circulation trips include:

- Lunch or dinner trips by workers who have commuted downtown by transit or who "park once" and then walk or use the streetcar for other trips

*Passengers enjoying streetcar transportation*





- Downtown workers on both sides of the River crossing to go to retail, restaurant, office, and other inviting destinations
- Trips between business locations for mid-day meetings;
- Visitors circulating between the hotel and convention center core in Downtown and destinations in Old Sacramento, along the waterfront, Midtown and the Crocker Art Museum
- Lunch or dinner trips by downtown residents
- Residents, employees and visitors visiting Raley Field
- Employees and visitors connecting to the larger regional transit network, and - in the next stage of the project - to the Capitol Corridor at the Amtrak station

## **2.2 Premises for the Plan**

To achieve this vision, the four partners agreed the streetcar must meet six fundamental premises:

- Enhance the livability of the two downtowns and the Riverfront
- Offer an attractive mobility option for residents, employees, and visitors
- Support revitalization and economic redevelopment
- Upgrade the transportation infrastructure to increase capacity
- Coordinate improvements with other modes and development initiatives
- Operate within defined budget and schedule limits, using local funds and including private sector participation

## **2.3 The Planning Criteria**

To see that the project is effective, the Planning Criteria set high standards for the streetcar. The Criteria stated that:

- The target planning budget is \$50M, and a project delivered within five years
- The initial alignment is to be in the 2-2.5 miles range
- Headways are to be five to seven minutes
- The streetcar should tie to Sacramento RT's light rail system, when possible;
- Stations are to be cost effective
- Vehicles are to be ADA compliant



- There should be no grade separations, if possible, and tracks should be located within the existing rights of way

## 2.4 The Project Development Process

Guided by a Policy Steering Committee (PSC) and a Technical Advisory Committee (TAC), the initial phase of streetcar planning was developed through a rigorous, integrated process. The process was divided into four components encompassing 15 separate tasks. The four components employed were Project Planning, Concept Development, Operations and System Planning, and Finance and Organization.

*West Sacramento City Hall - Existing*



- **Project Planning** – A six-task cluster that reflects collecting information, assessing existing conditions and factors, and defining the direction for the initial preferred alignment
- **Concept Development** – Once an initial alignment was identified, the second group of tasks began developing the technical aspects of the project including route studies, an examination of potential environmental issues that the project is likely to be required to address, conceptual engineering, ridership, etc.
- **Operations and Systems Planning** – After a basic alignment was devised and conceptual engineering initiated, an operations and systems plan to support the streetcar development was outlined and operating scenarios explored
- **Finance and Organization** – Having the potential to finance the streetcar is central to the determination of feasibility, as is an organization approach that takes into account the intergovernmental nature of this venture. This task group addresses these considerations

*West Sacramento City Hall - Concept*



## 2.5 Selecting the Preferred Alignment

A provisional alignment was developed during an October 2006 Design Charrette. It reflected the results of project tours, a review of preliminary route opportunities, public input, PSC and TAC involvement, Design Team guidance, and the principles and selection criteria. Based on that initial alignment, a series of Technical Memoranda explored various aspects of project development. Toward the end of Phase 1, the PSC requested the Design Team to make sure that the streetcar route met the project objectives, serving the civic and cultural heart of West



Sacramento, and reaching the highly successful Midtown area of Sacramento. In between, it would need to connect and transform as many development and redevelopment projects as possible. Thus, the PSC directed the team to:

- Meet individually with the Policy Steering Committee members to finalize specific issues and concerns
- Hold another Technical Advisory Committee work session to translate PSC and TAC goals and suggestions into a more refined alignment
- Define a range of possible future extensions – immediate and near-term – from the refined alignment

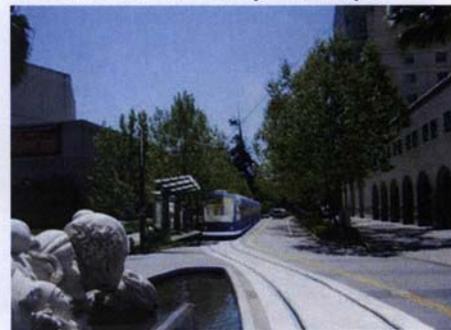
The Design Team and the TAC considered a number of variations in the route, and some of those variations/improvements in the alignment were incorporated into a resulting refined alignment.

Other revisions were not adopted for reasons of feasibility. For example, J Street in downtown Sacramento was considered, as an alternative to sharing track with Sacramento RT light rail on K Street. This approach was problematical in terms of added cost (building new track instead of using existing track for a portion of this distance), but a more serious “fatal flaw” is the high traffic volume and congestion on these sections of J Street. High traffic volumes and low levels of automobile service (congestion) make streetcar operations difficult, in that it may prove impossible to maintain a consistent schedule.

There is another issue which bears on this question as well: the City of Sacramento believes that J Street needs to be evaluated in the context of Sacramento RT’s long range light rail operating plans for downtown. Future studies will likely address the location of all light rail lines in downtown Sacramento and such plans would need to be integrated with streetcar operations – and vice versa.

The result of those sessions was an approved refined alignment, chosen at the end of the Phase 1 work that addressed the goals and concerns articulated by the PSC and TAC.

*Convention Center Stop - Concept*



### **2.5.1 The Preferred Alignment**

The preferred alignment (shown in yellow on Figure 1) works well as an urban circulator or “pedestrian accelerator” - precisely the function that other highly successful streetcar projects serve. As shown, the preferred alignment is 2.2 miles long, and it shares 0.5 miles of existing light rail trackage with RT. The preferred route:



- Follows a direct route from the civic and cultural heart of Downtown West Sacramento, serving most of the potential redevelopment sites along the line
- Extends farther into Midtown Sacramento, using the K Street light rail line to 13<sup>th</sup> Street, thus accessing the vibrant activities and helping vitalize the greater K Street corridor
- Traverses around the Convention Center up 13th Street to J Street, east to 15th Street, looping back on L Street to 13<sup>th</sup> Street and K Street for the return trip to West Sacramento

A detailed narrative of the route can be found in Section 3.2 of this report.

Potential stop locations are also depicted in Figure 1. This set of stop locations provides the best access to existing and future pedestrian connections to destinations along the line. Individual stop locations will be subject to further refinement in the Phase 2 Preliminary Engineering process. The initial alignment is designed to be successful from day one, while serving infill and large redevelopment properties on both sides of the River. It also is configured to easily expand through extensions, as significant future development occurs in the Triangle Redevelopment Area and in the Railyards redevelopment site.

### 2.5.2 Future Possible Extensions

Understanding the potential for extending the system is important, since recent streetcar projects show that when the initial system proves itself, there is an almost immediate call for extensions. Future extensions also will add value to the initial investment, linking more destinations and serving more riders. Figure 1, in addition to the Preferred Initial Alignment, shows a possible extension – called **immediate**, shown as an orange line. This extension - actually a pair of possible extensions, one on each side of the river - is ready when needed to shape and connect true pedestrian-oriented development in the two Downtowns and along the Riverfront.

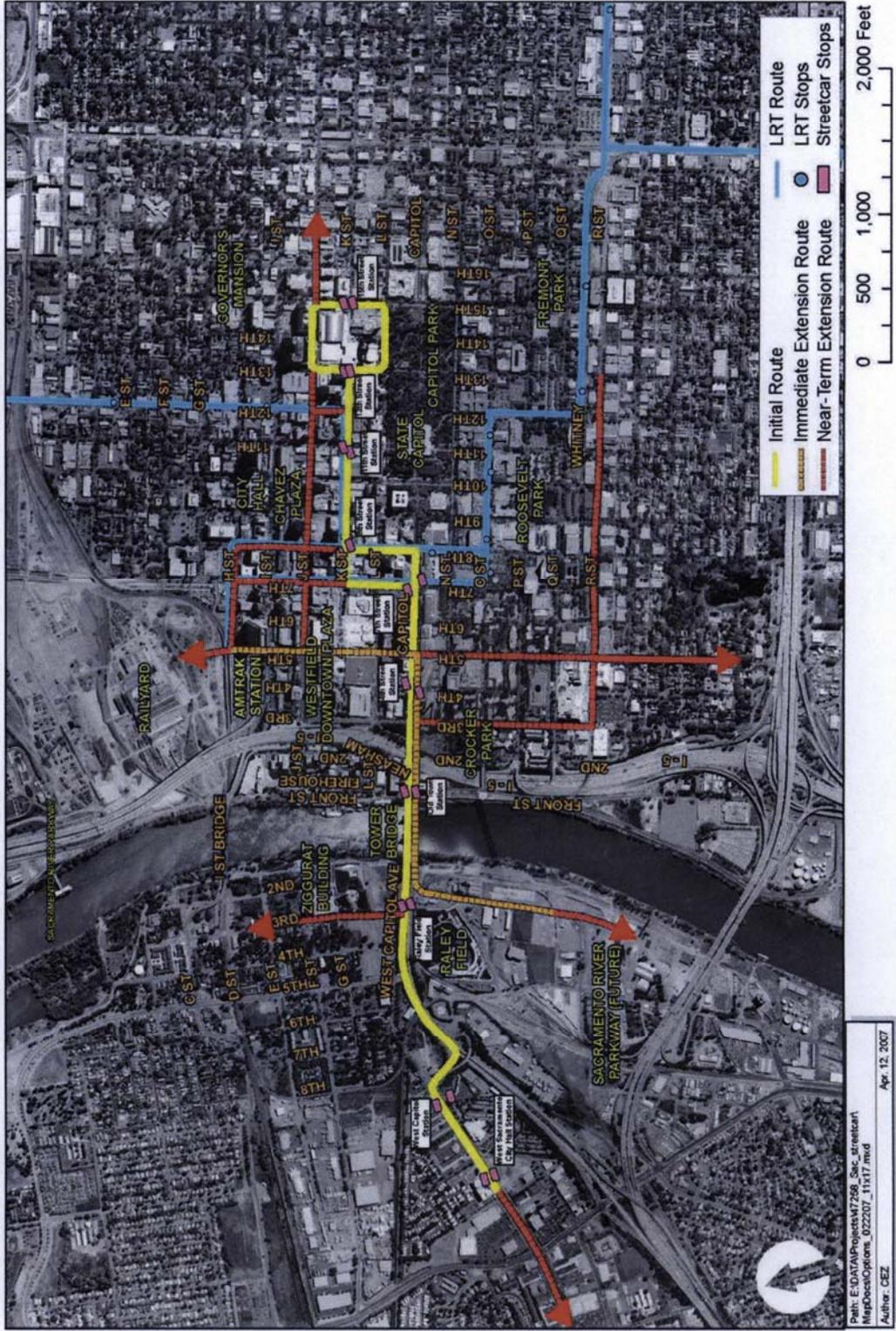
The immediate extension would share the track over the Tower Bridge, with an extension on the east side of the river north along Fifth Street to the Sacramento Valley (Amtrak) station; and on the west side, extending south to the Triangle redevelopment area along South River Road. This “Z” shaped route could be operated as a second line.

### 2.5.3 Near-term Extensions

In addition to the immediate possible extensions, there are a wide variety of possible **near-term** extensions (shown as the red dashed lines on Figure 1). These extension options would serve planned and programmed redevelopment and neighborhood areas on both sides of the River. In West Sacramento, these options would include heading west along West Capitol Avenue; south to Pioneer Bluffs, the Stone Lock District, and Southport; or north to Raley’s Landing and the Washington Specific Plan area. For Sacramento, possible extensions could serve redevelopment and infill locations including the Railyards, Richards Boulevard to the north; the R Street corridor, Broadway to the south; and farther east into Midtown.



Figure 1. Preferred Initial Alignment and Possible Extensions



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## 2.6 Environmental and Engineering Issues

The Phase 1 analysis examined a number of environmental and engineering issues. A partial list of these issues appears below; more detailed reviews are found in Appendix B which supplements this report.

Key environmental and engineering issues:

**Tower Bridge** – The Tower Bridge is an historic structure built in 1934. Originally designed to support rail operation, all rail facilities were removed in 2004. Streetcars would restore this historic function to the bridge, but may add new elements to the bridge that could alter the bridge’s design, appearance, or historic mechanical system, as well as the configuration and width of its travel lanes.

*Additional structural and traffic analyses, as well as conferring with the State Historic Preservation Office, are included in Phase 2 of the project development process.*

**Tower Bridge 1943**



**Tower Bridge 2007**



**Tower Bridge Concept**



**The I-5 Overcrossing** - Unlike Tower Bridge, the I-5 overcrossing at Capitol Mall originally was not designed to accommodate rail. The streetcar line would need to traverse over this structure.

*Preliminary structural analysis and an initial review by Caltrans indicate that the additional dead weight of project facilities on the overcrossing would not require bridge modification or strengthening. Permitting requirements would likely be minimal, involving only an Encroachment Permit from Caltrans.*

**Streetcar Storage and Maintenance** – The intention is for the streetcar to share existing light rail storage and maintenance facilities with RT vehicles at the Academy Way light rail facility.

*No fatal flaws or unavoidable impacts related to vehicle storage and maintenance are anticipated at this time. An allowance to augment the RT maintenance facility is included in the Cost Estimate.*

## 2.7 The Vehicles

The initial vehicle was assumed to be a replica streetcar, similar to the car that is operating in Tampa, Little Rock, and Charlotte, and a close look-alike to cars that ran in Sacramento from the



1920s through World War II. The vehicle is manufactured by the Gomaco Trolley Company in Iowa. The car is 45-50 feet long, and it holds about 80 passengers, with 40 seated and 40 standing. Given the operational characteristics, an initial fleet of eight vehicles (six in service and two in reserve) would be required.

This working assumption on vehicle selection was made based solely on cost considerations, but the PSC and TAC have asked for the modern streetcar (the “Inekon-type” vehicle being used in streetcar projects in Portland, Tacoma, Seattle and Washington, DC) to remain a possibility, depending on the system design and budget findings made during Phase 2 of the study.

The modern streetcar, although more expensive, has greater passenger capacity (about 125 passengers) and other positive operating characteristics. These vehicles are designed with a large low-floor center section, allowing level boarding, a key for both wheelchair access and for passengers with bikes, luggage, or the small folding carts used by urban residents to carry home their groceries. They also have two sets of double doors located in this center section, in addition to a single door at each end. This facilitates much faster loading and unloading of passengers and reduces the “dwell time” at each stop, thus improving average speed along the route.

A fleet comprised entirely of modern cars would add approximately \$16 million to total project cost.

The choice of vehicles has more than operational implications; it also could influence the applicability and attractiveness of streetcars in possible future extensions.

*Replica*



*Modern*



## 2.8 Operational Characteristics

This section addresses the total time for a round trip time and frequency of service (“headways”), and the number and type of stops.

### *Round Trip Times, Frequency of Service, and Hours of Operation*

The round trip would take 52 minutes, approximately 26 minutes each way (including layover) and the estimated average operating speed is 10 miles per hour generally and 6.5 miles per hour on RT tracks (due to coordination with light rail trains on the tracks). The average dwell time at a stop would be 15 to 30 seconds, depending on the particular stop. There would be a five minute layover at each end of the route.

Headways (time between streetcars) were assumed to be 10 minutes. The initial Planning Criterion for headways was 5 to 7 minutes, and operation at that frequency is also feasible but had implications for both capital and operating costs. More frequent headways require more vehicles and the system costs more to operate. For reasons of reducing fleet size and managing operating costs, initial headways were set at 10 minutes during peak times and 15 minutes in off-peak times. In general, the streetcar operations were assumed to be from 6:00 AM to 12:00AM.



**Streetcar Stops**

There are 18 stops or stations planned along the route, and they generally are spaced about 1200 to 1400 feet apart, the equivalent of three to four downtown Sacramento blocks. The stops would have simple shelters, and generally they would be located at curb side. In the case of Capitol Mall, they are proposed to be located in the center median between the tracks. The stops would be 65-75 feet long to accommodate one vehicle, and would be configured to be accessible to wheelchair boarding.

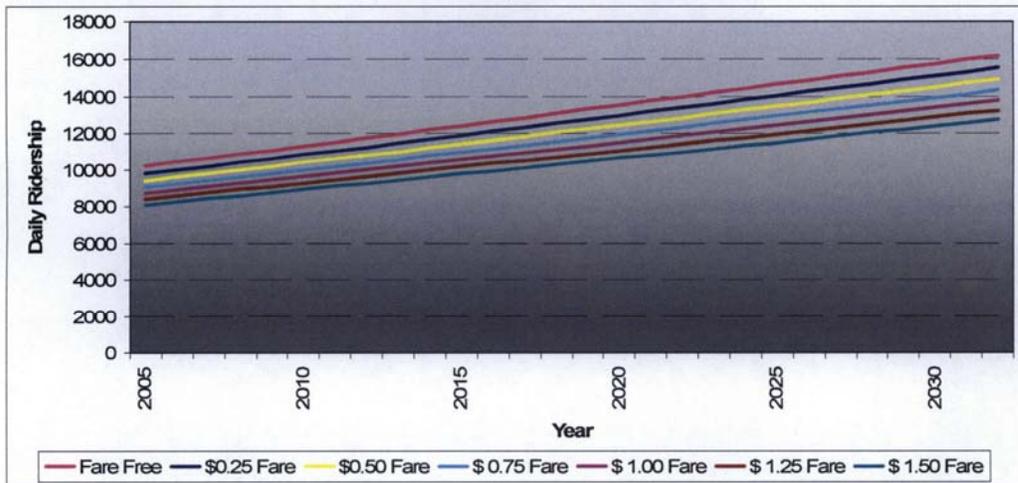
**Current and proposed view of Tower Bridge towards West Sacramento**



**2.9 Ridership and Fares**

For the year 2010, the estimated patronage on the preferred route is projected at 9,900 riders per day, growing to some 11,100 riders by 2030. The average rider is expected to travel approximately 4-6 blocks, one or two station stops, underscoring the streetcar’s role as a “pedestrian accelerator”.

**Figure 2. Daily Streetcar Ridership over Time for Various Fare Rates**





The anticipated fare is \$0.50, consistent with the existing Sacramento RT discounted fare, with the ticket being part of the integrated RT and YoloBus fare structure. Convenient ticketing (on-board or off-board) would be designed into the system.

## 2.10 Capital and Operating and Maintenance Costs

Using basic assumptions about route, vehicle type, headways, and hours of operation, the project team was able to develop preliminary estimates of the cost to build the system (capital costs) and to operate and maintain it.

### 2.10.1 Capital Cost

The capital costs include construction of the track, electrical power system and signals, stop shelters and passenger amenities, and purchase of the vehicles, as well as the soft costs associated with the final engineering, design and construction of the preferred project. For the preferred route, the estimated capital cost is \$53,132,000 or approximately \$14,966,000 per track mile. The Planning Criterion was a project cost to not exceed \$50,000,000, so the estimate is within 6 percent of the targeted planning budget.

*Table 1. Capital Cost Summary*

Capital Costs	Cost in Dollars
Track	\$ 15,257,000
Power, systems, and signals	11,192,000
Stations	1,190,000
Vehicles (replica), maintenance facility	10,000,000
Final design, construction management, construction soft costs	10,601,000
Contingency (15%)	4,892,000
<b>Total</b>	<b>\$53,132,000</b>

(2007 dollars)

The project could be redesigned to meet the budget by reducing track length, but this would have consequences for both ridership and the ability to finance the project. The preferred route selection was made with the understanding that the Planning Criterion on cost would be flexed to allow a slightly more expensive, but significantly more viable project.

### 2.10.2 Operating Costs

Operating costs are those recurring costs associated with the operations and maintenance of the preferred route. Such costs are comprised of vehicle operations (hours and miles generated), vehicle maintenance, non-vehicle maintenance, administration, and a contingency. As currently planned, the estimated annual costs for an eight car fleet, with 10 minute peak-time headways and 15-minute off-peak headways, are \$3.55 million.



**Table 2. Operating Cost Summary**

Estimated Annual Cost – preferred operating scenario	
Vehicle operations (38%)	\$1,349,000
Vehicle maintenance (19%)	675,000
Non-vehicle maintenance (12%)	426,000
Management and support (31%)	1,100,000
<b>Total</b>	<b>\$3,550,000</b>

## 2.11 Finance and Management

Once the capital and operating costs were estimated, the next step was to develop a funding program. From the beginning, the intent was to fund this streetcar project without federal New Starts transit funds and with active private participation. The primary focus is to identify the potential funding tools likely to be available to support each type of project cost. The following group of criteria was used to select the most appropriate funding tools: ease of implementation; potential revenue generation; timing; projected political support; fairness; predictability; and successful use on streetcar lines elsewhere. Because the project spans two cities and two transit districts, the institutional issues are complex. The objective in this feasibility study and report is to offer a range of possible approaches to be refined and recommended in the next phase of the project.

## 2.12 Capital Funding Tools

This section identifies a “short list” of potential streetcar funding mechanisms. Each was evaluated for preliminary feasibility and appropriateness for the Downtown/Riverfront Streetcar project. The list of funding tools does not include those that were considered inappropriate (whether for legal, political, technical, or other reasons) for the project. The fund sources are grouped by the potential source – Development Related, City, County/Region, and State and Federal.

The analysis of potential funding revealed there are several suitable and available fund sources to finance final design, construction, and operation of the project. Following the brief description and a possible range of each funding source, Table 3 demonstrates the estimated low-to-high range of funding by potential source.

### 2.12.1 Development Related

- **Community Facilities District** - A community facilities district (CFD or Mello-Roos CFD) assesses property owners to pay for specific infrastructure that benefits the district.
- **Special Assessment District** - Like a CFD, special assessment districts are geographical areas in which property owners receive a special benefit from new publicly-financed infrastructure, and assessments are made on property in order to build and sometimes operate that infrastructure.



- **Development Impact Fees** - These fees cover the capital cost of the infrastructure needed to serve new development and the people who occupy or use the new development.
- **Real Estate Transfer Fees** – Transfer fees are currently collected by each city upon the sale of real property, however these funds are already dedicated to existing programs. Separate private real estate transfer fees are also allowed and have been used by builders to fund a wide range of improvements. Controlled through deed restrictions, the fees can range from 0.5 percent to 1.75 percent of the sales price.

### 2.12.2 City Sources

- **West Sacramento ¼ cent Sales Tax** - By renewing (with voter approval) the portion of a citywide sales tax scheduled to expire in 2013, significant revenues would continue to be generated, a portion of which could be bonded and dedicated to the streetcar.
- **Tax Increment Financing** - All of the streetcar alignment is within redevelopment districts in Sacramento and West Sacramento. However, budgets in both districts are overcommitted with projects, and other project funding priorities would need to be delayed in order to add the streetcar to the project list.
- **City General Funds** - General funds are always in tight supply, but such funds have been used to partially pay for a number of streetcar systems, including Portland and Charlotte.

### 2.12.3 County/Regional Sources

The Sacramento Area Council of Governments (SACOG) is the only source of regional resources. Once planning and engineering is complete, West Sacramento (or whichever agency will be responsible for construction) could pursue a grant from the Community Design program. Regarding County Sources, there is discussion of a future Sacramento County sales tax proposal to fund a variety of transportation improvements.

### 2.12.4 State/Federal Sources

- **Proposition 1B (Transportation Bond Package)** - California's Transportation Bond Package (Proposition 1B) was approved by voters in November 2006 and later enacted by Senate Bill 1266, allocating \$19.9 billion to a wide variety of transportation-related projects around the state, of which \$4.0 billion is specifically directed towards public transportation fleet expansion and capital improvement. The majority of the \$4.0 billion public transportation fund will be allocated according to formulas.
- **Proposition 1C** - Passed in November 2006, Proposition 1C will provide funding for housing, with specific applications to transit-oriented development (TOD). Pending further legislative definition of applicable projects, this funding source could potentially be used for infrastructure (such as streetcars) that supports TOD and housing.



- **State Grants and Federal Earmarks** - Such earmarks have been used in other transit systems and the streetcar would seemingly be a good candidate. Earmarks or any other federal funding sought for this project are assumed not to include Federal Transit Administration New Starts grants, since other projects in the region will be seeking such funding.

### 2.12.5 Summary of Potential Capital Funding Sources

Table 3 summarizes the range of potential funding from the sources identified above. A combination of these funding sources will need to be secured to reach a projected capital cost of \$53 million. The potential funding from the new Propositions 1B and 1C introduces a significant unknown opportunity. The high range potential from all of these sources totals more than twice the projected capital cost of the streetcar. Therefore, there should be room to adjust the mix of funding tools as more information becomes available about each one and as they are tested more thoroughly with property owners, businesses, and public agencies.

*Table 3. Summary of Potential Capital Funding Sources*

Funding Type (Listed from Local to Federal)	Range (millions)		Location	
	Low	High	Sac	W. Sac.
<b>Development-Related</b>				
CFD and/or Assessment District	\$5.0	\$50.0	✓	✓
TIF (Sac)	2.0	10.0	✓	
TIF (West Sac)	2.0	10.0		✓
Development Impact Fees	1.0	5.0	✓	✓
<b>City</b>				
W. Sac ¼-cent Sales Tax Extension	4.0	9.4		✓
W. Sac General Fund	1.0	3.0		✓
Sac General Fund	1.0	3.0	✓	
Parking Revenues	TBD	TBD	✓	
<b>County / Region</b>				
SACOG Community Design Grant	0.5	2.0	✓	✓
Future Sacramento County Transportation Sales tax	TBD	TBD		
<b>State/Federal</b>				
Prop 1B	0.0	10.0	✓	✓
Prop 1C	0.0	20.0	✓	✓
Legislative Earmark	0.0	20.0	✓	✓
<b>TOTAL</b>	<b>\$16.5</b>	<b>\$142.4</b>		