



**BOARD
OF
DIRECTORS
PUBLIC WORKSHOP**

**SANTA ROSA
NOVEMBER 6, 2010 10:00 AM**

**GLASER CENTER
547 MENDOCINO AVE¹**

WORKSHOP OBJECTIVE

To provide the Board of Directors and the Public with information to support a decision as to how to move forward with the implementation of the 70-Mile rail and pathway project.

SMART PROGRAM COST ESTIMATE REPORT



FUNDING SOURCES SUMMARY

Funding Sources Obtained to Date	Millions of Dollars
Measure Q Sales Tax Bond Proceeds	\$213
Pre-Construction Savings	\$65
Measure M Funding Assuming SCTA Bonding	\$11
Regional Measure 2 Funds	\$35
Proposition 116	\$28
Traffic Congestion Relief Program	\$37
ISTEA	\$10
Joint Development Lease Revenue Pre-Operations	\$6
FTA Earmarks	\$5
TOTAL FUNDING SOURCES	\$410 Million

Table 1a

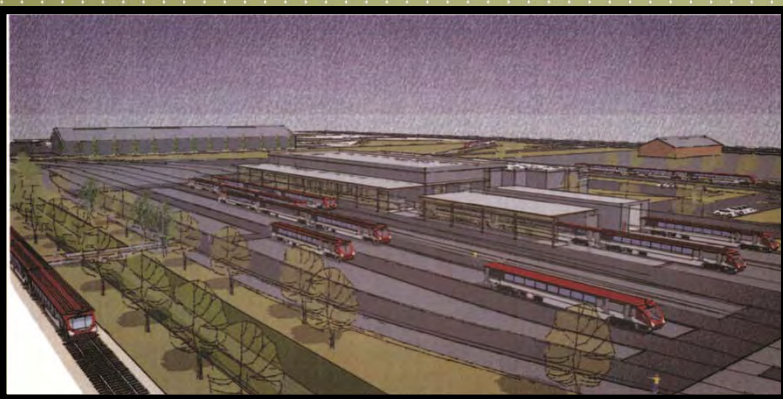


CURRENT FINANCIAL CAPACITY

SMART Program Financial Capacity	October 2010
Total Capacity	\$410 M
Spent to Date (2001 - 2011)	-(\$47) M
Cal Park Hill Tunnel Project	-(\$13) M
TOTAL FUNDS AVAILABLE	\$350 Million

Table 1

WORK IN PROGRESS



SONOMA~MARIN
SMART
AREA RAIL TRANSIT

COST ESTIMATE* COMPARISON

2010 vs. 2009

SMART Program Cost Estimate	October 2010	June 2009	% Change
Total Rail Cost	\$596 M	\$498 M	20%
Total Multi-Use Pathway (MUP) Cost	\$99 M	\$91 M	9%
<u>Detailed Costs Breakdown</u>			
Direct Construction Costs			
Rail	\$314 M	\$227 M	38%
MUP	\$55 M	\$52 M	6%
Vehicles	\$64 M	\$81 M	-21%
Real Estate Acquisition	\$47 M	\$37 M	27%
Contingency	\$67 M	\$72 M	-7%
Engineering & Administration (Design, Permits, Environmental Permitting, Construction Services, Agency Costs, Program Management, Unallocated Contingency)	\$135 M	\$108 M	25%
Cal Park Hill Tunnel Contribution	\$13 M	\$12 M	8%
TOTAL	\$695 Million	\$589 Million	18%

Table 2

*** Peer Reviewed by the Value Engineering Team.**



MAJOR COST DIFFERENCE 2009 VS. 2010

Item Description	Difference in Costs
Track Work (Earthwork, Excavation, Rail Track, Grade Crossings, Minor Bridges, Culverts, Puerto Suelo Tunnel, Special Track Work)	\$50 M
Engineering & Administration	\$27 M
Systems (Signals, Communications, Automated Fare Collection, Electrical, Tunnel Mechanical, Fire & Safety)	\$21 M
Environmental Mitigation Costs	\$13 M
Major Bridges (Gallinas Creek, Haystack & Russian River)	\$13 M
Real Estate Acquisition	\$10 M

Table 3

OPERATIONAL COSTS *

Annual Operation Expenses based on a 70-Mile Project	Millions of Dollars
Rail Operations & Maintenance	\$20.4
MUP O&M	\$1.1
Shuttle Service	\$1.3
District Administration	\$4.0
Total Operating Costs	\$26.8

Table 4

*** Peer Reviewed by representatives of Caltrain and Utah Transit Authority.**

POTENTIAL COST SAVINGS

Potential Savings Item	Millions of Dollars
Eliminate need to construct under freight operations	\$10 – 15 M
Staging of Operations & Maintenance Facility	\$10 – 15 M
Elimination of Fiber Optic line for Communication System	\$6 M
Deferral of any selected station (average cost for each)	\$3.5 M
Defer CCTV and PA Systems	\$2 M
On-Board Fare Collection	\$2M
Construction Bids under Engineer's Estimate	?
Contract Out Operations & Maintenance (Savings over 20 years)	\$50 M *

*** Requires legislative changes.**

Table 5

POTENTIAL RISK ITEMS

Potential Risk Item	Millions of Dollars
Higher Costs for PTC System	\$20 M - \$50 M
Track Reconstruction Costs	\$15 M
Additional Environmental Mitigation	\$15 M
Real Estate Costs for additional parcels in San Rafael	\$6 M
Increased costs for Andersen Drive crossing	\$5 M
Adding construction costs for freight sidings and spurs	\$ 5 M - \$10 M
Cost increases due to delays	?
Construction delays due to permitting	?
Increases in materials costs	?
Increased escalation of construction costs	?

Table 6

PROGRAM ALIGNMENT



CONSTRUCTION PHASING ALTERNATIVES

1	Larkspur - Civic Center \$69 M	Civic Center - Railroad Square \$395 M	Railroad Square - Cloverdale \$218 M
2	Larkspur - Civic Center \$69 M	Civic Center - Santa Rosa North \$419 M	SR North - Cloverdale \$194 M
3	Larkspur - San Rafael \$31 M	Downtown San Rafael - Railroad Square \$433 M	Railroad Square - Cloverdale \$218 M
4	Larkspur - San Rafael \$31 M	Downtown San Rafael - Santa Rosa North \$457 M	SR North - Cloverdale \$194 M
5	Larkspur - Civic Center \$69 M	Civic Center to Windsor - Initial Phase \$463 M	Windsor - Cloverdale \$150 M
6	Larkspur - San Rafael \$31 M	Downtown San Rafael to Windsor - Initial Phase \$501 M	Windsor - Cloverdale \$150 M

Table 7

CONSTRUCTION SCENARIO 1



Santa Rosa Railroad Square - Cloverdale

- Total: \$218 M *
- Rail : \$160 M *
- MUP: \$58 M

Marin Civic Center – Santa Rosa Railroad Square

- Total: \$395 M *
- Rail : \$356 M *
- MUP: \$39 M

Larkspur – Marin Civic Center

- Total: \$69 M *
- Rail : \$67 M *
- MUP: \$2 M

* Includes Vehicles

Estimate

Phasing

SONOMA-MARIN
SMART
AREA RAIL TRANSIT

INITIAL PHASE – SCENARIO 1

MARIN CIVIC CENTER – SANTA ROSA RAILROAD SQUARE



This Section Includes:

- Haystack Bridge (Petaluma River)
- Gallinas Creek Bridge
- Novato Creek Bridge
- Operations & Maintenance Facility (OMF)

Phases

Estimate



FINANCIAL STRATEGY FOR INITIAL PHASE – SCENARIO 1

COST	Millions of Dollars
Initial Phase Cost – Scenario 1	\$395
Rail	\$302
MUP	\$39
Vehicles	\$54

FUNDING	Millions of Dollars
Current Financial Capacity	\$350
Shortfall Gap Difference	- \$45
Potential Cost Savings (Table 5)	\$35
Measure Q MUP Implementation Plan (2/3 - 1/3)	\$13
Initial Phase Ending Capital Balance	\$3

Table 8

Phases

Estimate



SOUTH PHASE – SCENARIO 1

LARKSPUR – MARIN CIVIC CENTER



This Segment Includes:

- Cal Park Hill Tunnel Construction
- Puerto Suelo Tunnel Rehabilitation
- Larkspur Station as currently defined
- San Rafael Station as currently defined

Does NOT Include:

- Expanded scope for stations or Park & Ride facilities
- Additional Real Estate Acquisition
- Andersen Drive Crossing Resolution
- Expanded scope for ferry connection
- Expanded OMF

Funding Strategy:

- FTA Small Starts
- Grant Funds
- State/Regional contributions

Interim Transportation Solutions:

- Shuttle/Bus Bridge to Downtown San Rafael and Larkspur

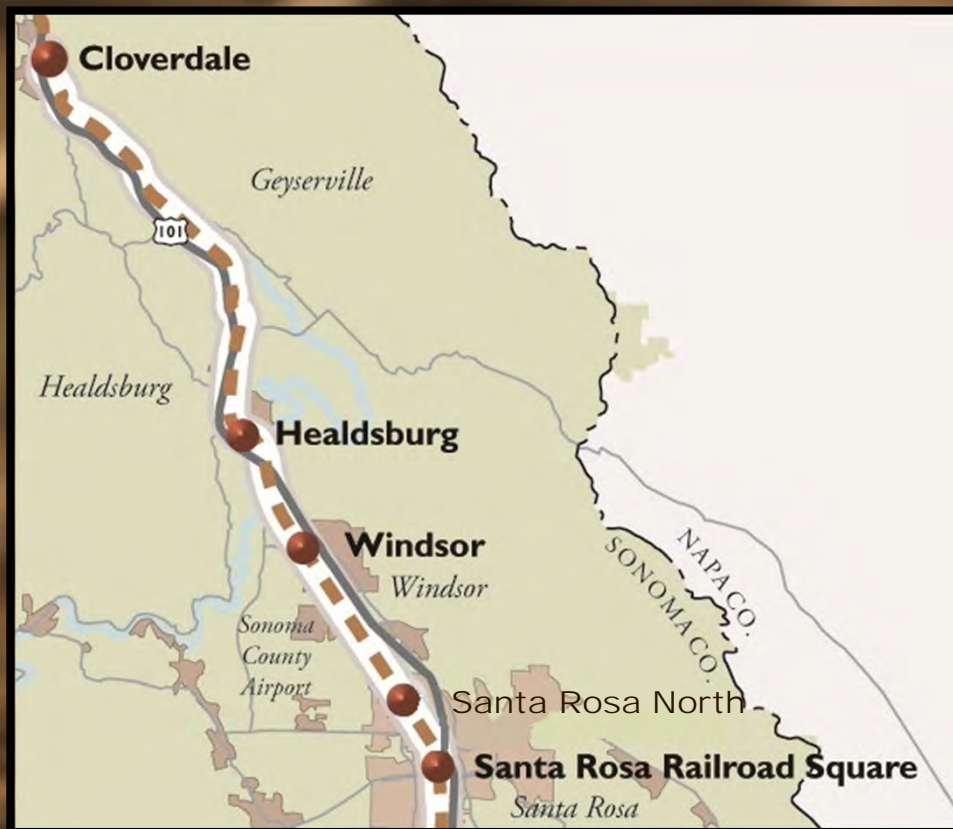
Phases

Estimate



NORTH PHASE – SCENARIO 1

SANTA ROSA NORTH - CLOVERDALE



This Section Includes:

- Russian River Bridge
- Stations at Santa Rosa North, Windsor, Healdsburg, and Cloverdale

Funding Strategy:

- Reauthorization Bill (\$50M - \$75M)
- USDA Loans
- Potential 2nd Bond Issue
- Grant Funds

Interim Transportation Solutions:

- Slow Train
- Bus Bridge

Phases

Estimate



TARGET COMPLETION DATES



Santa Rosa Railroad Square - Cloverdale

2016 - 2018

Marin Civic Center - Santa Rosa Railroad Square

Fall 2014

Larkspur - Marin Civic Center

2016 - 2018

Estimate

Phasing

SONOMA-MARIN

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AREA RAIL TRANSIT

NEXT STEPS

Board directs staff to begin work on initial segment.

Release initial Construction Packages.

Establish priorities for extensions to Initial Segment.

NEPA (National Environmental Policy Act) Clearance for segments that require federal funding.

Revise Strategic Plan.

Aggressively pursue additional funding and project cost savings.

Table 10

COMMUTER RAIL & MUP PROGRAM FUTURE



SONOMA~MARIN

SMART

AREA RAIL TRANSIT



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SMART

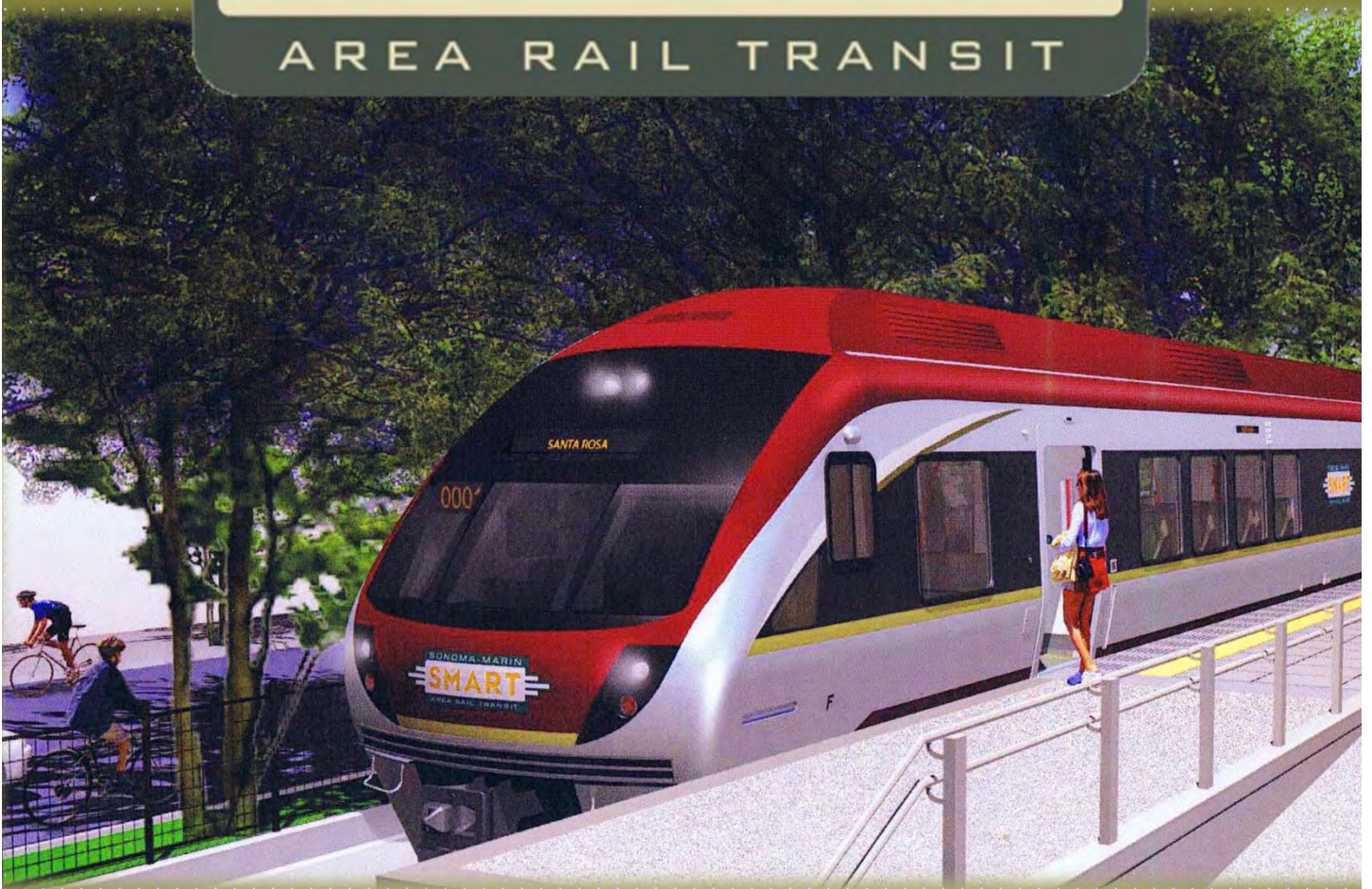
AREA RAIL TRANSIT



SONOMA~MARIN

SMART

AREA RAIL TRANSIT



THE FUTURE IS HAPPENING

SONOMA~MARIN

SMART

AREA RAIL TRANSIT



COST ESTIMATE BREAKDOWN BY STATION SEGMENT

DESCRIPTION	RAIL	MUP	TOTAL Rail + MUP
SEGMENT 1 a - LARKSPUR to DOWNTOWN SAN RAFAEL	23		23
SEGMENT 1 b - Cal Park Hill Tunnel	13		13
SEGMENT 2 a - DOWNTOWN SAN RAFAEL to MARIN CIVIC CENTER	35	2	37
SEGMENT 2 b - Puerto Suelo Tunnel	2		2
SEGMENT 3 a - MARIN CIVIC CENTER to SOUTH NOVATO	28	6	34
SEGMENT 3 b - Gallinas Bridge	4		4
SEGMENT 4 - SOUTH NOVATO to CTP Break Point	18		18
SEGMENT 4a - CTP Break Point to NORTH NOVATO	25	5	30
SEGMENT 5 a - Haystack Bridge	35		35
SEGMENT 5 - NORTH NOVATO to PETALUMA CENTRAL	41	2	43
SEGMENT 6 - PETALUMA CENTRAL to PETALUMA CORONA RD.	21	3	24
SEGMENT 7 - PETALUMA CORONA RD. to COTATI	22	11	33
SEGMENT 8 - COTATI to ROHNERT PARK	18	5	23
SEGMENT 9 - ROHNERT PARK to SANTA ROSA RAILROAD SQUARE	28	8	36
Todd Road Maintenance Facility	60		60
Santa Rosa Downtown Station	2		2
SEGMENT 10 - SANTA ROSA RAILROAD SQUARE to SANTA ROSA NORTH	11	1	12
Santa Rosa North Road Station	11		11
SEGMENT 11 a- SANTA ROSA NORTH to WINDSOR	23	9	32
Windsor Depot	4		4
SEGMENT 11 b - WINDSOR to North Windsor Limit	5	3	8
SEGMENT 12 a - North Windsor Limit to HEALDSBURG	16	9	25
SEGMENT 12 b - Russian River Bridge	25		25
SEGMENT 13 - HEALDSBURG to CLOVERDALE	58	35	93
PROJECT WIDE			
Vehicles	63		63
Non-Revenue Vehicles	5		5
TOTAL	\$596	\$99	\$695

Table 9

Phases

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