

The SMART Rail & Pathway Project

Eastside Rail Corridor Regional Advisory Council July 31, 2013





SMART Overview

- I. Background
- II. Current Project
- **III.** Active Construction
- **IV. Remaining Work**
- V. Operational Considerations





What is SMART?



Voter Approved Rail & Pathway

- Created by State Law
- Measure Q passed in 2008 with 69.6 % in two-county district
- Over 10 different funding partners including State of California



Passenger Train Service

- Trains run in both directions during peak commute hours
- Mid-day train
- Weekend service



Bicycle-Pedestrian Pathway

- Transportation Alternatives
- Recreation
 Opportunities
- Links new, existing and planned segments
- Creates one of longest continuous Pathway systems in U.S.



Available Resource

- The SMART right-ofway is owned by the public.
- Upgrading existing line can be done with minimum impacts and costs.



Why SMART?









A Fast, Reliable Trip

- Alternative to unpredictable drive times
- Top speed 79 mph, average 40 mph including stops
- Santa Rosa to San Rafael in about an hour

Alternatives to Congestion

- Southbound Highway 101 remains among the Top 3 most
- congested corridors in the Bay Area.
- Train and Pathway provide options

Health and Environment Benefits

- Reduces green house gas emissions
- Encourages and enhances the use of other transportation modes

Jobs

- Local economic stimulus package.
- Local businesses benefit through dollars entering the economy





Mobility Alternative









Northwestern Pacific (NWP) right-of-way brought into public ownership – 1980's, 1990's





SMART Commission Formed - 1998

- 2 County Representation
- Early Planning Work: Alignments, Stations, Vehicles
- Initiated Environmental Impact Report
- Ground Work for the Creation of the District
- Financial Planning







SMART District Formed – Jan 2003



- Created by State Legislature
- Boundaries are Marin and Sonoma Counties
- 12 Member Board of Directors (local officials)
- Taxation powers (with voter approval)
- Eminent domain powers
- Power to own and operate rail service









Cost Estimates

	2008	2010
	Estimate	Estimate
Construction		
Rail	\$498 M	\$596 M
Pathway	\$91 M	\$99 M
TOTAL	\$589 M	\$695 M
<u>Annual Operations</u>	\$25.5M	\$25.5M





Project Phasing

Initial Operating Segment (IOS)

- 38.5 Miles (out of 70)
- Downtown San Rafael to North Santa Rosa
- 9 Stations (out of 14)
- Operations & Maintenance Facility
- Serves 70-80% of estimated ridership for total system
- Service start-up: 2016

Phase 1 Funding Plan

	Funding Source	Funding Amount (Millions)
Local & Regional Funds	2012 Bond Proceeds	\$171.0
	Measure Q Revenues	101.0
	Bridge Tolls	32.0
	SCTA Measure M	11.0
	Vehicle Funds - OBAG/SCTA	6.6
State Funds	Proposition 116	28.0
	State-Local Partnership Program Funds	8.0
	Environmental Enhance & Mitigation Program (EEMP)	0.7
	Bay Trail Funds	0.4
Federal Funds	ISTEA Funds	11.0
	Transportation Enhancement Program (TE) Funds	3.0
	Total	\$373 million



Vehicle Order



✓ Self-propelled DMUs

- Manufacturer:
 Sumitomo Corp. of
 America/Nippon
 Sharyo
- ✓ Manufactured in <u>Rochelle</u>, Illinois
- "Buy America" compliant
- Environmentally
 friendly Tier 4 engines
- ✓ Level Boarding
- ✓ ADA Compliant



Vehicle Order



- 14 vehicles ordered(7, two-car train sets)
- ✓ \$46M Total
- ✓ \$3.3M per vehicle







Two-car train set - up to 158 seated passengers, 160 standing passengers and 24 bicycles (depending on mix of bikes, wheelchairs & strollers and use of flip seats)















Existing SMART Wood Tie Track Reconstructed Concrete Tie Track



Grade Crossings





Existing Grade Crossing

Reconstructed Grade Crossing



Bridges and Culverts







Existing Timber Trestle

Precast Concrete Trestle



















Placing Concrete Ties Onto Bottom Ballast





Threading Rail and Ties









Threading Rail and Ties









IOS-1 Status



•	Construction Start Date	May 9, 2012
•	Started Track Rebuilding	July 7, 2012
•	Total Track Rebuilt	16.5 miles
•	Bridges Rebuilt	2
•	Bridges Repaired	4
•	Grade Crossings Rebuilt	24



Made in USA



- Concrete ties made in Spokane, WA
- Trains made in Rochelle, IL
- Rails made in Pueblo, CO
- Ballast Forestville, CA

San Rafael, CA



SMART Sustainability Details

- New rail has majority recycled content
- 100% of old track materials are being salvaged for re-use or recycled
- Rails and ties being shipped by rail

 One ton of freight can be shipped nearly 500 miles on one gallon of fuel



Construction – What's Next

- Complete Track Construction: 22 miles remaining
- Replacement of Moveable Bridge
- Operations & Maintenance Facility
- Station Finishes
- Systems, Signaling & Positive Train Control
- SMART Pathway







Haystack Bridge

STATUS

- 100yr Old Swing Span
- Contemplated Rehabilitation





Haystack Bridge

STATUS

- Relocated to California
- Finalizing Alignment with US Coast Guard
- Preliminary Engineering
- Permitting
- Complete Design
- Construction











Phase 1 Stations



- Santa Rosa
- Guerneville Road Railroad Square
- Rohnert Park Rohnert Park Expressway
- Cotati East Cotati Avenue
- Petaluma Downtown
- Novato Novato North (Atherton) Novato South (Hamilton)
- San Rafael Marin Civic Center Downtown



Pathway Implementation



- Current allocation -\$28M for new pathway
- Path being cleared under NEPA
- Seeking to leverage grant opportunities
- Partner with Local Municipalities



Bike and Train Synergy

- Pathway helps provide access to rail stations
- Trains can accommodate bikes on board
- Train + bikes allow for longer, multimodal trips that would be tough on a bike alone









Key Operating Details

- 79mph Top Speed
- 30 trains per day (15 in each direction)
- 1/2 hr. headways during peak periods
- Two-way operation on a single track railroad Requires "passing sidings" (double track segments)
- 6 train concept requires 5 meets (passing points) to support 30-minute service





Freight Service



- Shared Track
- Freight has its own spurs and sidings
- Freight Operator has an operating easement over most of SMART line
- SMART will dispatch both passenger and freight service



Extending beyond the IOS – South End



- SMART pursuing Federal "Small Starts" funds for San Rafael to Larkspur segment
- Currently working on NEPA clearance



Extending beyond the IOS – North End



- Pursuing any available funds to extend rail service
- Developed "SMART Connector" service to mimic train service in areas not yet served by rail.





Questions?



