## **Metropolitan Transportation Commission Programming and Allocations Committee**

April 12, 2017 Agenda Item 3a

## MTC Resolution No. 3712, Revised and SMART Integration Plan Update

Subject:

Allocation of \$13 million in Regional Measure 2 (RM2) Capital funds to Sonoma-Marin Area Rail Transit (SMART) for the right-of-way and construction phases of the SMART Downtown San Rafael to Larkspur Extension; Presentation on key findings and recommendations of the SMART Integration Plan.

**Background:** 

## **SMART Downtown San Rafael to Larkspur Extension**

SMART has requested an allocation of \$13.3 million for construction work for the Downtown San Rafael to Larkspur Rail Extension Project. This project will construct the Larkspur station, track, crossings, and systems for the 2.1 mile extension connecting SMART's initial operating segment with ferry services at Larkspur. It will use existing rail right-of-way and run through the Cal Park Hill Tunnel, completed in 2010 using RM2 funds.

## Small Starts Funding and Design/Build Contract

The San Rafael to Larkspur Extension is funded at \$48.7 million (see Attachment 1). The project funding plan relies on \$20 million in Federal Transit Administration (FTA) Small Starts funds in addition to other Federal sources and RM2. The Small Starts Grant Agreement (SSGA) is expected to be signed this summer. FTA requires that all other funding be allocated prior to signing the SSGA.

SMART plans to award a design/build contract, with interim modifications to the San Rafael Transit Center (SRTC) added as a task order. SMART may pursue a limited notice-to-proceed approach that would allow the contractor to continue design and initiate preliminary construction activities prior to the SSGA signing, using RM2 and other funds. Although Small Starts funding for this project was included in the 2016 Federal budget, the funding is not guaranteed until FTA signs the SSGA – a step that is somewhat more uncertain currently given the proposed elimination of the New/Small Starts program for all projects not currently receiving funds, per the President's budget proposal for FY 2018. Thus, MTC would be allocating RM2 funds with the understanding that work done prior to the SSGA signing is at-risk. Further, if the SSGA is not signed, the project would have a \$20 million funding gap.

## Allocation Scope

This bridge toll allocation request will support all design and construction within the design/build contract and systems contract, construction management, testing and project start up. The allocation will also support right-of-way acquisitions with the City of San Rafael, Caltrans and private land holders. Service on the Larkspur Extension is expected to commence in 2019.

## San Rafael Transit Center

In December 2016, the Commission allocated design funding for the SMART Larkspur Extension. The extension would effectively bifurcate the downtown San Rafael Transit Center, rendering a portion of the center unusable for bus operations. SMART, TAM, MTC, the City of San Rafael, and the local bus providers (Marin Transit and GGBHTD) have been working to identify an interim reconfiguration of the transit center that will allow for the current volume of bus operations to continue after the SMART extension is open. The partners have also agreed that an interim

center is likely to be undesirable as a long term solution, and that a permanent relocation of the transit center will also be needed.

SMART has committed \$3.2 million to constructing interim San Rafael Transit Center facilities, via a redirected federal earmark, pending FHWA approval. Should the federal earmark not be approved by FHWA, or should the costs of the interim center exceed the \$3.2 million, MTC, TAM, Marin Transit, GGBHTD, and SMART will need to identify funding to close any gap including possible contributions from the local partners.

Two additional related local efforts remain: (1) TAM, Marin Transit, GGBHTD, and SMART need to develop and agree to a funding strategy for the permanent SRTC, and (2) SMART and GGBHTD need to update their MOU to incorporate interim changes at the SRTC. While staff does not recommend including these as conditions to the allocation, these agreements are still needed to move forward with securing the SSGA and starting the Larkspur Extension construction.

## **SMART Integration Plan**

MTC's Transit Sustainability Project (2012) found that the commencement of Sonoma-Marin Area Rail Transit (SMART) service will alter transit travel patterns in Marin and Sonoma counties, and presents an opportunity to strengthen coordination and service planning in the corridor. MTC staff worked with transit operators and congestion management agencies to develop the SMART Integration Plan. The attached presentation details key findings and recommendations from the report. The SMART initial operating service is planned to begin by this summer.

**Issues:** 

The following conditions are proposed for the RM2 allocation:

- 1. SMART Board approval of Updated Initial Project Report.
- 2. In the event that the Federal Earmark in the amount of \$3.2 million is not secured to pay for interim modifications to the San Rafael Transit Center or if the costs exceed \$3.2 million, then MTC, SMART, GGBHTD, Marin Transit, and TAM will identify funding in a timely manner, allowing for project work to continue expeditiously.

  3. SMART shall only issue a Notice to Proceed for the design-build contract up to the amount of funding presently available (including this allocation of RM2), while

waiting for the project's Small Starts Grant Agreement to be executed.

**Recommendation:** Refer MTC Resolution No. 3712, Revised to the Commission for approval.

**Attachments:** Attachment 1: SMART Larkspur Funding Plan

Presentation

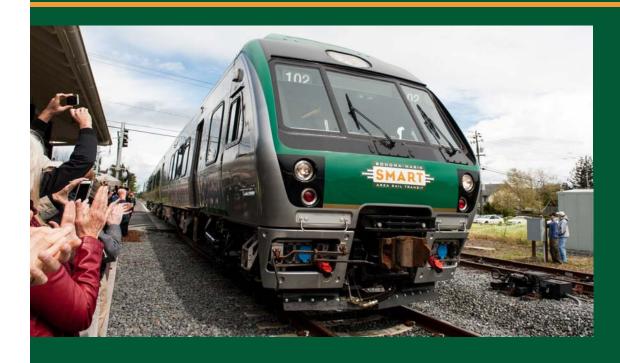
MTC Resolution No. 3712, Revised

SMART Integration Plan - Executive Summary

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## Attachment 1 – SMART Larkspur Funding Plan

Source	Amount	Notes
FTA Small Starts	\$20 million (from FY2015-16 federal budget)	Small Starts Grant Agreement anticipated in 2017
FTA Other	\$2.5 million	Previously-secured planning grant
FRA	\$3 million	For Positive Train Control
FHWA Earmark Repurposing	\$3.2 million	For interim San Rafael Transit Center facilities
RM2	\$13.9 million	Including this proposed allocation and the previous \$0.6 million design allocation
CMAQ	\$6.1 million	Result of previously approved net-zero funding exchange between RM2 funds and federal CMAQ funds
Total	\$48.7	



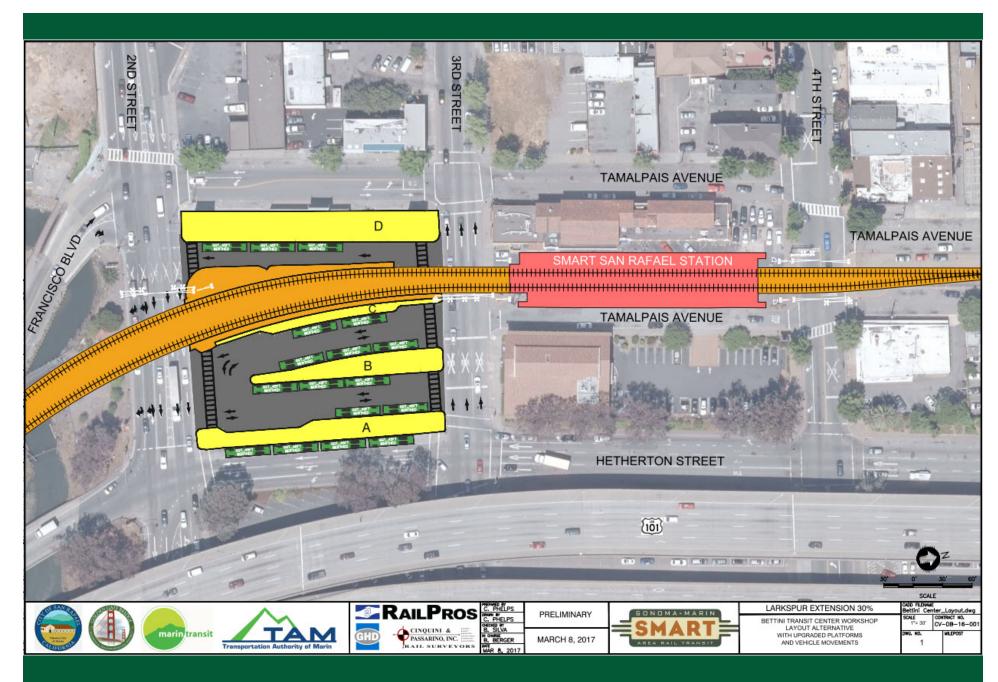
SMART Downtown San Rafael to Larkspur Extension Proposed Regional Measure 2 Allocation and

**SMART Integration Plan** 



# Larkspur Extension

- 2 mile extension from Downtown San Rafael to Larkspur
- San Rafael Transit Center interim reconfiguration
- "Francisco Flip" swap SMART tracks and Francisco Blvd
- Funded with RM2 (\$14M), CMAQ (\$6M), FTA Small Starts (\$20M)



# RM2 Allocation Proposed Conditions

## Summary:

- 1. SMART Board approval of RM2 Request.
- 2. Interim San Rafael Transit Center: if Federal Earmark of \$3.2 million is not secured or if the costs exceed \$3.2 million, then MTC and local partners will identify funding.
- 3. SMART shall only issue a Notice to Proceed for the design-build contract up to the amount of funding presently available, until the Small Starts Grant Agreement is executed.

# SMART Integration Plan – Process

- Outgrowth of Transit Sustainability Project (2012)
- Worked closely with transit operators, congestion management agencies and SMART
- Brought together SMART Strategic Plan, station plans, operating plan, ridership forecast, transit agency operating plans, and local planning frameworks
- In-person workshops in both counties
- Final report issued in late 2016

# Key Findings/Recommendations

- 1. Focus on building ridership
- 2. Integrate SMART with transit, over time
- 3. Improve station access for all modes, with focus on customer safety/experience

# 1. Ridership Development

- Marketing and recruiting effort recruit early adopters
- Work with area employers and institutions to provide first/last mile solutions between station sites and destinations
- Opportunity: SMART Eco-Pass
  - Discounted annual pass through institutions

# 2. Integrate SMART with Transit

- Transit operators are focused on optimizing service and accommodating SMART:
  - Marin Transit schedule and route changes
  - Santa Rosa CityBus Reimagining CityBus project
  - Sonoma County Transit modifying routes for airport station; circulator route
  - <u>Petaluma Transit</u> proposed route changes to serve SMART station
- Unified Customer Information
- Clipper-only on SMART for fares



# 3. Station Access

## **Current Integration Conditions**

Station	Transit service connectivity	Bus stop placement	Kiss-and- Ride	Employer Shuttle Provisions	Pedestrian Connectivity	Bicycle Connectivity
Sonoma County Airport	•	•	•	•	•	•
Santa Rosa North	0	•	•	•	$\odot$	0
Santa Rosa Downlown	•	0	0	•	•	•
Rohnert Park	$\circ$	•	0	•	•	•
Cotati	0		0	0	-	•
Petaluma Downtown	•	0	0	•		•
Novato San Marin	•	•		0	-	0
Novato Hamilton	$\bigcirc$	•	0	•	C	0
Marin Civic Center	0	•	•	0	•	•
San Rafael	•	•		$\overline{}$	0	0

# Actions going forward

- Focus on efforts to build ridership through outreach
- Monitor transit integration as SMART service starts up, adjust as necessary
- Focus on priority capital improvements at station areas over time

Date: July 27, 2005

W.I.: 1255 Referred by: PAC

Revised: 04/25/07-C 03/26/08-C

04/28/10-C 09/28/11-C 10/26/11-DA 03/28/12-C 09/23/15-C 12/21/16-C

04/26/17-C

## **ABSTRACT**

MTC Resolution No. 3712, Revised

This resolution approves the allocation of Regional Measure 2 funds for the Sonoma Marin Area Rail Transit District (SMART) Corridor Ferry Extension project sponsored and implemented by the SMART.

This resolution includes the following attachments:

Attachment A - Allocation Summary Sheet

Attachment B - Project Specific Conditions for Allocation Approval

Attachment C - MTC staff's review of Sonoma Marin Area Rail Transit District's Initial Project Report (IPR) for this project

Attachment D - RM2 Deliverable/Useable Segment Cash Flow Plan

This resolution was amended on April 25, 2007 to approve \$600,000 in supplemental final design funds and \$400,000 for right-of-way funds for subproject 1, Cal Park Hill Tunnel Rehabilitation and Multi-Use Pathway Improvement project.

This resolution was amended on March 26, 2008 to allocate \$7.8 million in construction funds for subproject 1: Cal Park Hill Tunnel Rehabilitation and Multi-Use Pathway Improvement project, Phase A.

This resolution was amended on April 28, 2010 by Commission action to rescind \$2.5 million from Phase A of the Cal Park Hill Tunnel Rehabilitation and Multi-Use Pathway Improvement project, and to allocate \$6.1 million in construction funds for Phase B of the same project.

This resolution was revised on September 28, 2011 to allocate \$23.1 million towards the design/construction of the SMART Initial Operating Segment.

This resolution was revised via Delegated Authority on October 26, 2011 to rescind a total of \$155,025 in savings from prior allocations to the Cal Park Hill Tunnel Rehabilitation and Multi-Use Pathway Improvement project and reallocate the same amount towards the design/construction of the SMART Initial Operating Segment.

This resolution was revised on March 28, 2012, to modify the scope of the SMART project allocation to add an intermediate station and extend the line to Santa Rosa North, as were included in the Initial Operating Segment construction contract awarded by SMART.

This resolution was revised on September 23, 2015 to allocate \$6.1 million toward the acquisition of a two-car train set for the SMART Initial Operating Segment and Larkspur Extension.

This resolution was revised on December 21, 2016 to allocate \$625,000 toward the completion of engineering and project development work for the SMART Downtown San Rafael to Larkspur Rail Extension Project.

This resolution was revised on April 26, 2017 to allocate \$13,275,000 for the design/build phase of the SMART Downtown San Rafael to Larkspur Rail Extension Project.

Additional discussion of this allocation is contained in the Executive Director's memorandum to the MTC Programming and Allocations Committee dated July 13, 2005, and the Programming and Allocation Committee Summary Sheets dated March 5, 2008, April 14, 2010, September 14, 2011, March 7, 2012, September 9, 2015, December 14, 2016, and April 12, 2017.

Date: July 27, 2005

W.I.: 1255 Referred by: PAC

Re: Approval of Allocation of Regional Measure 2 funds for the Sonoma Marin Area Rail
Transit District Corridor Ferry Extension

## METROPOLITAN TRANSPORTATION COMMISSION RESOLUTION No. 3712

WHEREAS, pursuant to Government Code Section 66500 et seq., the Metropolitan Transportation Commission ("MTC") is the regional transportation planning agency for the San Francisco Bay Area; and

WHEREAS, Streets and Highways Code Sections 30950 *et seq.* created the Bay Area Toll Authority ("BATA") which is a public instrumentality governed by the same board as that governing MTC; and

WHEREAS, on March 2, 2004, voters approved Regional Measure 2, increasing the toll for all vehicles on the seven state-owned toll bridges in the San Francisco Bay Area by \$1.00, with this extra dollar funding various transportation projects within the region that have been determined to reduce congestion or to make improvements to travel in the toll bridge corridors, as identified in SB 916 (Chapter 715, Statutes of 2004), commonly referred as Regional Measure 2 ("RM2"); and

WHEREAS, RM2 establishes the Regional Traffic Relief Plan and lists specific capital projects and programs and transit operating assistance eligible to receive RM2 funding as identified in Streets and Highways Code Sections 30914(c) & (d); and

WHEREAS, RM2 assigns administrative duties and responsibilities for the implementation of the Regional Traffic Relief Plan to MTC; and

WHEREAS, BATA shall fund the projects of the Regional Traffic Relief Plan by transferring RM2 authorized funds to MTC; and

WHEREAS, MTC adopted policies and procedures for the implementation of the Regional Measure 2 Regional Traffic Relief Plan, which specifies the allocation criteria and project compliance requirements for RM 2 funding (MTC Resolution No. 3636); and

WHEREAS, Sonoma Marin Area Rail Transit District (SMART) has submitted a request for the allocation of RM 2 funds for the SMART Corridor Ferry Extension project; and

WHEREAS, SMART's Corridor Ferry Extension is identified as capital project number 10 under RM 2 and is eligible to receive RM 2 funding as identified in Streets and Highways Code Sections 30914(c); and

WHEREAS, SMART has submitted an Initial Project Report ("IPR"), as required pursuant to Streets and Highway Code Section 30914(e), to MTC for review and approval; and

WHEREAS, Attachment A to this resolution, attached hereto and incorporated herein as though set forth at length, lists the project and phase for which the SMART is requesting RM2 funding and the reimbursement schedule and amount recommended for allocation by MTC staff; and

WHEREAS, Attachment B to this resolution, attached hereto and incorporated herein as though set forth at length, lists the required project specific conditions which must be met prior to execution of the allocation and any reimbursement of RM2 funds; and

WHEREAS, Attachment C to this resolution, attached hereto and incorporated herein as though set forth at length, includes MTC staff's review of SMART's Initial Project Report (IPR) for this project; and

WHEREAS, Attachment D attached hereto and incorporated herein as though set forth at length, lists the cash flow of RM2 funds and complementary funding for the deliverable/useable RM2 project segment; and

WHEREAS, the claimants to which funds are allocated under this resolution have certified that the projects and purposes listed and recorded in Attachment A are in compliance with the requirements of the California Environmental Quality Act (Public Resources Code Section 21000 et seq.), and with the State Environmental Impact Report Guidelines (14 California Code of Regulations Section 15000 et seq.); now, therefore, be it

<u>RESOLVED</u>, that MTC approves MTC staff's review of SMART's IPR for this project as set forth in Attachment C; and be it further

RESOLVED, that MTC approves the allocation and reimbursement of RM2 funds in accordance with the amount and reimbursement schedule for the phase, and activities as set forth in Attachment A; and, be it further

<u>RESOLVED</u>, that the allocation and reimbursement of RM2 funds as set forth in Attachment A are conditioned upon SMART complying with the provisions of the Regional Measure 2 Regional Traffic Relief Plan Policy and Procedures as set forth in length in MTC Resolution 3636; and be it further

RESOLVED, that the allocation and reimbursement of RM2 funds are further conditioned upon the project specific conditions as set forth in Attachment B; and, be it further

RESOLVED, that the allocation and reimbursement of RM2 funds as set forth in Attachment A are conditioned upon the availability and expenditure of the complementary funding as set forth in Attachment D; and be it further

RESOLVED, that reimbursement of RM2 funds as set forth in Attachment A is subject to the availability of RM2 funding; and be it further

<u>RESOLVED</u>, that a certified copy of this resolution, shall be forwarded to the project sponsor.

METROPOLIFAN TRANSPORTATION COMMISSION

Jon Rubin, Chair

The above resolution was entered into by the Metropolitan Transportation Commission at the regular meeting of the Commission held in Oakland, California, on July 27, 2005.

December 21, 2016 Attachment A-4 MTC Resolution No. 3712 Org Key #840-8810-04 Page 1 of 1 Revised: 04/26/17-C

## REGIONAL MEASURE 2 PROGRAM Allocation of Funds

Project Title: SMART Downtown San Rafael to Larkspur Rail Extension Project

Sponsor: Sonoma - Marin Area Rail Transit District

Project Number: 10.4

## Allocation No. 10.4-1

## Activities to be funded with Allocation #1:

This allocation will fund engineering and project development work for the SMART Downtown San Rafael to Larkspur Rail Extension Project, including the completion of the design package for Design/Build Request for Qualifications/Proposals, support during permit acquisition, design management support during Design/Build procurement process and award, and design management support during Design/Build submittals of 65%, 95%, and 100% design.

## Funding Information for Allocation #1:

<u> </u>					
Allocation	Approval			Reimbursement	Cumulative
Instruction No.	Date	Amount	Phase	Year	Total To Date
17371209	21-Dec-16	\$ 625,000	PSE	FY 2016-17	\$ 625,000

### Allocation No. 10.4-2

## Activities to be funded with Allocation #2:

This allocation will fund minor right-of-way acquisitions necessary for the project (City of San Rafael, Caltrans, and private land holders), all design and construction within the design/build contract and systems contract, as well as construction management, testing and project start up. The expected right-of-way amount is \$2,430,000 and the expected design/build amount is \$10,845,000.

## Funding Information for Allocation #1:

Allocation	Approval			Reimbursement	Cumulative
Instruction No.	Date	Amount	Phase	Year	Total To Date
17371210	26-Apr-17	\$ 13,275,000	ROW/CON	FY 2016-17	\$ 13,900,000

December 21, 2016 Attachment B-4 MTC Resolution No. 3712 Page 1 of 1 Revised: 04/26/17-C

## REGIONAL MEASURE 2 PROGRAM Project Specific Conditions

Project Title: SMART Downtown San Rafael to Larkspur Rail Extension Project

Sponsor: Sonoma - Marin Area Rail Transit District

Project Number: 10.4

The allocation of RM2 funds for the above project are conditioned upon the following:

- 1. For Allocation #1, SMART may be reimbursed for expenses fitting the allocation scope incurred beginning July 1, 2016.
- 2. Pending completion of the environmental review for the North South Greenway project, SMART agrees to authorize the use of a portion of their right of way for the purpose of constructing a multi-use pathway generally following the existing footprint of the railroad track within the southern segment (Corte Madera Creek to Wornum Drive).
- 3.Pending completion of the environmental review for the North South Greenway project, TAM and SMART agree to enter into a Memorandum of Understanding regarding payment to compensate for future lost lease revenues, future removal of the pathway in the event SMART extends rail south of Larkspur, and absolving SMART of responsibility for maintaining the multi-use pathway until such time as SMART is operating rail service in this segment. The MOU must be substantially complete before entering into final design for the pathway. In the event the pathway is removed for a rail extension in the future, SMART is to pay for removal using funds from this right-of-way payment. SMART shall not seek additional funds as compensation for the future path removal.

The April 26, 2017 allocation of RM2 funds for the above project is conditioned upon the following:

- 1. SMART Board approval of Updated Initial Project Report.
- 2. In the event that the Federal Earmark in the amount of \$3.2 million is not secured to pay for interim modifications to the San Rafael Transit Center or if the costs exceed \$3.2 million, then MTC, SMART, GGBHTD, Marin Transit, and TAM will identify funding in a timely manner, allowing for project work to continue expeditiously.
- 3. SMART shall only issue a Notice to Proceed for the design-build contract up to the amount of funding presently available (including this allocation of RM2), while waiting for the project's Small Starts Grant Agreement to be executed.

RM2 Project Number: 10.4

## **SMART Downtown San Rafael to Larkspur Rail Extension**

Lead Sponsor Other Sponsors(s) Implementing Agency (if applicable)

Sonoma - Marin Area Rail Transit District N/A N/A

### **Legislated Project Description**

Sonoma-Marin Area Rail Transit District (SMART). Construct rail system from San Rafael to Santa Rosa and make improvements to the Cal Park Hill Tunnel to allow for future extension to Larkspur; construct Larkspur extension and related elements. Thirty-five million dollars (\$56,500,000). The project sponsor is SMART.

#### RM2 Legislated Funding (in \$1,000)

Total Estimated Sub-Project Cost (in \$1,000)

10.1 Cal Park Hill Tunnel - \$13,250

\$48,738

10.2 SMART Corridor Ferry Extension - \$23,249

10.3 Train Set - \$6,100

10.4 Larkspur Extension - \$13,900

### **Project Purpose and Description**

The purpose of this project is to construct civil track, crossings, bridges, systems, one station, and other work associated with the construction of the 2.1 mile SMART commuter rail extension from Downtown San Rafael to Larkspur.

#### **Funding Description**

Committed Funds: RM2, CMAQ, FTA Section 5309 (Small Starts), FRA, FHWA Earmark

Uncommitted Funds: N/A

TBD Funds: N/A

Operating Capacity: This project will be maintained by the Sonoma-Marin Area Rail Transit District.

### **Overall Project Cost and Schedule**

Phase	Scope	End	Cost (in \$1,000)
1	Final Environmental Document	05/2015	N/A
2	Plans, Specifications and Estimates	07/2017	\$3,125
3	Right-of-Way	07/2017	\$2,430
4	Construction	07/2019	\$43,183

Total: \$48,738

## **Total Project Funding Plan: Committed and Uncommitted Sources**

(Amounts Escalated in Thousands)

Project Title	SMART Downtown San Rafael to Larkspur	Project No. 10.4
Lead Sponsor	Sonoma - Marin Area Rail Transit District	

	1			T.	Т	T		Т		1
Fund Source	Phase	Prior	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	Future	Total
Committed										
FTA 5309	PSE		2,500							2,500
Regional Measure 2	PSE				625					625
CMAQ	CON			6,100						6,100
FTA 5309	CON				20,033					20,033
Regional Measure 2	ROW/CON				13,275					13,275
FHWA Repurposed Earmark	CON				3,205					3,205
FRA Positive Train Control	CON				3,000					3,000
										0
										0
										0
										0
										0
										0
										0
										0
Total:		0	2,500	6,100	40,138	0	0	0	0	48,738
Uncommitted										
										0
Total:	'	0	0	0	0	0	0	0	0	0
Total Project Committed and U	ncommitted									
		Prior	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	Future	Total
Total:		0	2,500	6,100	40,138	0	0	0	0	48,738

## REGIONAL MEASURE 2 PROGRAM Project Cash Flow Plan

Project Title: SMART Downtown San Rafael to Larkspur Rail Extension Project

Sponsor: Sonoma - Marin Area Rail Transit District

Project Number: 10.4

RM2 Project # 10.4	PRIOR	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FUTURE	TOTAL
RM2 Funds Total	-	-	-	13,900	-	-	-	-	13,900
Environmental (ENV)	0	0	0	0	0	0	0	0	0
									0
									0
									0
First Pasing (POSE)			0.500	005					0.405
Final Design (PS&E) RM2	0	0	2,500	<b>625</b> 625	0	0	0	0	<b>3,125</b> 625
FTA 5309			2,500	023					2,500
			_,						0
									0
									0
Right of Way	0	0	0	2,430	0	0	0	0	2,430
RM2				2,430					2,430
									0
									U
Construction	0	0	0	43,183	0	0	0	0	43,183
RM2				10,845					10,845
CMAQ				6,100					6,100
FRA PTC FHWA Earmark				3,000 3,205					3,000 3,205
FTA 5309				20,033					20,033
				==,000					0
									0
									0
TOTAL FUNDING									
Environmental	0		0	0	0		0	0	0
Final Design (PS&E)	0		2,500	625	0		0	0	3,125
Right of Way	0		0	2,430 43,183	0		0	0	2,430
Construction PROJECT TOTAL	0		•	43,183 46,238	0		0	0	<b>43,183</b> 48,738
PROJECTIOTAL	0	U	∠,500	40,238	0	U	U	U	4ö,738



August 2016



## **EXECUTIVE SUMMARY**

Sonoma-Marin Area Rail Transit (SMART) rail service will connect many of the cities and towns within the counties of Marin and Sonoma beginning in 2016. At full build-out, the 70-mile commuter rail line and parallel bicycle and pedestrian pathway will stretch from Cloverdale in northern Sonoma County to Larkspur in Marin County, where a ferry connection to San Francisco will be available via the Larkspur Ferry Terminal. The SMART line is one of the transit capital expansion projects adopted by MTC in their Resolution 3434 transit capital expansion program, adopted by MTC initially in 2001.

The Metropolitan Transportation Commission (MTC) adopted the Transit Sustainability Project (TSP) in 2012. The SMART Integration Plan was developed based on the following TSP recommendation, included in MTC Resolution 4060:

Marin/Sonoma: The commencement of SMART service in Marin and Sonoma counties will alter transit travel patterns. This presents an opportunity to strengthen coordination and service planning among Marin and Sonoma transit providers serving the 101 Corridor and local connections. In coordination with the SRTP process, MTC will work with transit operators and the Marin and Sonoma County CMAs to develop a two-county corridor transit plan for submittal and presentation to the Commission.

This plan is the outcome of local transit agencies working with SMART to develop integrated service, primarily between existing bus service and the new rail service, but with an eye out for pedestrian, bicycle, and Park and Ride considerations, at each station that will open in Phase 1.

## **Alignment and Station Locations**

SMART will operate along a legacy Northwestern Pacific Railroad alignment, serving a total of 15 stations with 30-minute headways in each direction during morning and evening peak hours. The majority of the right-of-way will be single-tracked, though strategically placed passing tracks will enable simultaneous northbound and southbound operations.

Under Phase 1 of the project (opening in 2016), trains will travel from Airport Boulevard near the Sonoma County Airport to Downtown San Rafael, connecting with transit at ten stations, as shown in Figure 1.

## Station Plans

SMART has detailed station plans for Phase 1 of the project and most of the stations are already under construction. Plans include the design and location of rail platforms, parking facilities, bus transfer facilities, a bicycle and pedestrian path, bicycle parking and storage, pedestrian connectivity, and passenger pick-up and drop-off areas. The existing conditions, challenges, and recommended plans for each Phase 1 station are included in Section 3 of this report.

HEALDSBURG WINDSOR

Sonoma County Airport

SCT

SCT

MINDSOR

MINDSO GUERNEVILLE Santa Rosa Downtown Santa Rosa North sct (1) Rohnert Park Cotati PetalumaTransit Petaluma Downtown Novato San Marin Novato Hamilton Marin Civic Center San Rafael PHASE 1

Figure 1 SMART Phase 1 Implementation Corridor

Metropolitan Transportation Commission

## **Opportunity**

SMART presents a unique travel opportunity to capture commuters traveling along Redwood Highway (US-101) in Marin and Sonoma counties. The rail line, which runs parallel to the highway, offers access to some of the busiest hubs and most populated areas of the two counties. Counties, communities, and transit agencies have been working together to ensure the new service meets its full potential.

Transit operators of the area are embracing this investment as an opportunity to strengthen mobility options for community residents. Pre-implementation planning has uncovered potential for improvements that will enhance SMART's role in the communities. Post implementation monitoring will further define how to optimize the service over the next several years. A full list of recommendations by station can be found in Section 4.

## **Transit Schedule Integration**

Schedule integration is a practice that makes switching between transportation modes and companies seamless for the customer. Without it, a potential SMART customer coming by bus might have to wait too long to deem the trip worth considering. To be clear, local transit agencies are implementing service changes directly related to SMART integration on opening day. The agencies will continue to monitor and adjust as customer experience is accumulated.

## Why is Schedule Integration Challenging?

For commuter rail operations throughout North America, the percentage of passengers who access commuter rail by bus is typically in the range of 20-30% of all commuter rail passengers. In some instances, the flow of passengers is predominantly directional; people commute from suburb-to-city center in the morning and reverse in the evening. In the case of SMART, the expectation is that at a single station people are as likely to board the train as they are to alight from the train. Furthermore, that activity is very likely to occur in both directions, with commuters headed to and from both northbound and southbound trains within a single commuting period. While that is one of the strengths of the design and operating plan for SMART, it is also creates challenges for coordinating schedules between SMART and local transit agencies. The coordination of rail and bus transit service is not as straightforward as shifting bus trips to meet an incoming train.

The vast majority of local bus transit in the North Bay is operating at the same or lower levels of service than SMART. Buses operating at 30-minute frequencies mean it is nearly impossible to serve passengers boarding and alighting from both northbound and southbound train service, as schedules will be offset due to the single track configuration of SMART. For example, local transit route schedules with 30-minute headways that deliver passengers to the SMART station in time to catch a departing southbound train may not be able to serve passengers alighting from that train, let alone passengers for a northbound train arriving at a different time. Even when northbound and southbound train arrivals are closely timed, multiple buses may not have adequate space to wait in the station area.

In addition, these are mature transit systems with established ridership patterns and current customer expectations. Modification of current services may result in undesirable side effects for current customers. For example, stopping a bus to wait for a train connection—even for five minutes—may cause unacceptably adverse impacts for customers, ranging from missed

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connections to being late for work and appointments and even causing adverse perceptions of how long a transit trip requires, thus discouraging ridership. The goal is to modify current schedules to improve mobility and access in the region, for new and existing bus customers.

## **Examples of Schedule Integration Challenges**

To make the point a little more tangible, consider what a customer who wants to use both bus and SMART would experience today at Santa Rosa's Downtown Station using current schedules. This case is exemplary only—nearly every mid-line station will have similar issues.

The SMART Santa Rosa Downtown Station is about ½ mile from the Santa Rosa Downtown Transit Mall, which is host to the majority of Santa Rosa CityBus, GGT, and SCT routes. By design, the routes are scheduled to meet, with each bus waiting five minutes to facilitate passenger transfers between routes. Some routes operate on 30-minute frequencies, arriving at the Transit Mall at 0:10 and 0:40 past the hour and departing at 0:15 and 0:45 past the hour.

Consider a southbound SMART trip that is scheduled to depart Sonoma
 County Airport Station at 6:49 AM.

Two passengers board the train at Sonoma County Airport Station. The first passenger's destination is the Northpoint Business Park in Santa Rosa (located to the southwest of the Santa Rosa Downtown Station), and the second passenger's ultimate destination is in Downtown Santa Rosa. The two passengers arrive at the SMART Santa Rosa Downtown Station platform at about 7:01 AM and walk about two minutes to the bus stop on 3<sup>rd</sup> Street at Wilson.

The passenger headed to Downtown Santa Rosa waits about three minutes and takes Santa Rosa CityBus Route 12, arriving at the Transit Mall at 7:10 AM. SCT Routes 20 and 22 also provide a connection from the bus stop on 3<sup>rd</sup> Street to the Transit Mall, but do not begin service until later in the morning.

The passenger headed to Northpoint Business Park waits for Santa Rosa CityBus Route 9, for approximately 15 minutes (the bus is scheduled to leave on its westbound trip from the Transit Mall at 7:15 AM). The passenger arrives in Northpoint at about 7:28 AM.

While 15 minutes does not sound like a great deal of time, research has shown that transit riders perceive wait time as about twice as long as the actual duration of the wait. The passenger who waits for 15 minutes compares that time to the 12 minutes just spent on board the SMART train between Sonoma County Airport and Santa Rosa Downtown stations. Their perception is that the waiting time for the connecting bus is more than double their travel time on SMART.

 Consider two passengers who want to catch the southbound Santa Rosa Downtown SMART Station train at 7:01 AM.

Ideally, both would arrive at a bus stop at about 6:55 AM and then walk to the SMART station. The first passenger comes from the Downtown Santa Rosa Transit Mall. She has a choice of four bus routes (routes 3, 6, 9, 17) to get her to the SMART Station, all of which leave at 6:45 AM and arrive about 6:50 AM. She has about 11 minutes to walk to the platform and await their train—nearly an ideal connection.

The second passenger is coming from west of the station. He takes CityBus Route 6, departing Westside Transit Center at 6:24 AM, arriving at Santa Rosa Downtown Station at about 6:35 AM. The second passenger has 26 minutes of walking/waiting time before

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the 7:01 AM train departure. It is worthwhile to note that he just missed the southbound SMART departure from Santa Rosa Downtown at 6:31 AM.

Could schedules be adjusted? Of course. However, agencies must consider how it might impact current riders. In the above instances where the wait times for customers transferring between local transit and SMART seem very long, a local transit schedule revision might benefit riders transferring to and from SMART, but work to the disadvantage of existing passengers making transfers at the Santa Rosa Transit Mall or the Westside Transit Center. While this example is specific to the Santa Rosa Downtown Station, similar situations occur up and down the line and represent opportunities, challenges, and potential evolution of the transit network, which will be explored in the following chapters. Changes to existing transit services are also influenced by federal regulation. Commonly referenced as Title VI of the Civil Rights Act of 1964, are civil rights requirements that ensure that changes to transit services do not disproportionately affect protected populations, such as minorities and low income groups. Each change, beyond a threshold of 25% of the route mileage must be evaluated to ensure the change does not have disproportionate impact and if it does, how that impact will be mitigated.

## **OVERVIEW OF RECOMMENDATIONS**

The following provides an overview of areas that can be leveraged to further improve the accessibility and usage of SMART.

## **Transit Specific:**

- Transit Facility Integration—At a few station locations, there remain opportunities to enhance the potential to integrate local transit and SMART services if bus facilities are added in a way that will enable the coordination. The specific instances are identified with the individual station locations described in the text. In those cases the local jurisdiction, the local transit agency, SMART, and MTC should work to identify improvements, prioritize them and secure funding for design and construction of these enhancements.
- Transit Service Integration—Most transit services in the North Bay Area operate at about the same level of service frequency-wise as the initial service plan for SMART. The potential multi-directional passenger demand and north/south time offset of the SMART timetable present significant challenges for local transit and SMART schedule integration. The agencies are universally financially constrained, so adding services on the basis of demand speculation will be the exception rather than the rule. Even so, most transit agencies are planning schedule adjustments and service enhancements in response to SMART service initiation.
- A Process to Improve Integration—Coordination between transit agencies and SMART, and outreach to the public will be crucial to achieving higher percentages of passengers wishing to make connections between services. Employing a strategy that is designed to aggressively seek out customer information, analyze the information, and establish an action plan with absolute implementation dates is an important way to speed up evolution of schedule integration between SMART and local transit agency operations.

## *Initially:*

Transit integration is more likely to occur first at higher ridership stations. Efforts to integrate transit service schedules with SMART service at these stations should include outreach which should begin by identifying people planning to use SMART or who are currently riding transit to understand how these new riders intend to use SMART service. Outreach can take place through a number of channels, including direct work with employers, soliciting information through SMART and local agency websites, and direct passenger surveys once SMART service commences. Some of this work has already occurred and/or is continuing:

- Marin Transit is making schedule and route changes to better serve several stations
- **Petaluma Transit** is asking customers for feedback on proposed route changes that would serve the Petaluma Downtown SMART station. In addition route changes designed to connect important activity centers with the downtown SMART Station are being proposed
- **Santa Rosa CityBus** has conducted the Reimagining CityBus project, where people in Santa Rosa have been asked to provide feedback at multiple points in the larger project that have influenced recommendations effecting SMART connections. These efforts have involved SMART, and have been presented at SMART Board meetings.
- **Sonoma County Transit** is modifying routes to access the Sonoma County Airport station and is planning circulator route to improve access from the station into the surrounding business park and the airport.

In addition to these specific activities coordination efforts continue between SMART, Santa Rosa CityBus, Petaluma Transit, Golden Gate Transit, Marin Transit, and Sonoma County Transit.

## Ongoing:

Ongoing outreach should be led by SMART so that data collection and analysis does not become fragmented over time throughout the service area. Customer needs should be compiled by station and reviewed during transit agencies' regular service changes. This will require regular information sharing between SMART and local transit agencies. A feedback loop for the public should also be a part of the process.

A station-by-station schedule modification priority list should be shared between SMART and the local agencies to ensure full communication between all the parties and customers. The highest priority schedule adjustments should be those that cause the least disruption for current riders and benefit the most riders trying to use both SMART and a local transit agency.

## **Unified Customer Experience:**

• Unified Customer Information—Every transit system that has an interface point with SMART should consciously update transit information to include the locations of each SMART station and the operating schedule for that station. As appropriate to the various

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routes and services provided by the agencies, there should be indications in transit route schedules where connections between local transit and SMART are intended and where connections are guaranteed. Customers must understand that adjacency of lines on the map does not necessarily mean the services are fully coordinated. Customer information should be consistent with regional standards. This information may also be available on existing trip planning applications (such as 511 or Google Transit) to provide coordinated schedule information.

Unified Fares—All Marin and Sonoma county transit operators have Clipper capability
implemented. SMART will only accept Clipper for fare payment. This information needs
to be communicated to customers so that there is an understanding of available fare
options if the rider chooses to transfer between services. Further, agencies will have an
opportunity to develop united fare products or transfer discounts using the Clipper card.

## **Other Considerations:**

- Early Adopters and Employer Shuttles—To a substantial degree, the process of working with local employers has already begun. This effort should continue to identify specific employer shuttle needs (pre- and post- implementation) at specific stations. Presently, facilities to support employer shuttle options have not been identified at most stations, but in most cases options can be reasonably developed to support an initial level of service. Evidence from other Bay Area communities strongly suggests this planning be done intentionally rather than being allowed to develop organically. While an organic approach is desirable from the perspective of adaptability, the physical location and early station area development strongly indicate a need for a coordinated approach to ensure employer shuttles are a welcomed addition to SMART integration without causing substantial station area circulation issues.
- Passenger Drop off and Pick up Locations—If SMART demand develops in a manner that is similar to most other regional rail systems in the US, passenger pick up and drop off is likely to occur at every station location and at significant volume. Some stations have designed in provision for this activity, while others do not. North American experience suggests that passenger drop-off often occurs on an informal basis, even when facilities have been provided to accommodate the activity off-street. This potential needs to be evaluated at every station location to ensure the informal activity does not cause delay or safety issues for the trains, local bus transit services, adjacent roadways, or passengers being dropped off.
  - Whereas a driver leaves upon dropping off a passenger, passenger pick-up often involves the driver waiting at a location for the passenger to arrive. Again, some stations have space for this built in while others do not. It is worth evaluating this situation at each station to ensure there is at least some minimum number (two is suggested as a starting point) of passenger pick up parking stalls located and signed as such. Further, the use of taxis and ride-sourcing companies, such as Lyft and Uber, will put similar demands on passenger pick-up and drop-off infrastructure.
- Pedestrian and Bicycle Wayfinding and Pathway Improvement—Specific needs
  for enhanced safety of pedestrians and bicyclists were identified in the vicinity of nearly
  every SMART station. Conflicts between pedestrians/bicyclists and vehicles have not yet
  been fully evaluated. A fuller understanding of those conflict points must be developed to
  reasonably ensure the pathway and wayfinding improvements function within the context

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of the station locations as pedestrian/bicycle activity generators. SMART should coordinate with each relevant jurisdiction to complete an evaluation of pedestrian and bicycle connectivity and access, and identify and prioritize solutions. A collaborative effort to fund and construct the highest-priority solutions should follow. A further consideration in pedestrian access is ensuring pedestrian improvements are consistent with Americans with Disability Act regulations and guidelines.

Planning efforts led by SMART are currently underway to accommodate and implement bike parking at stations and will result in a Bicycle Parking Investment Plan for SMART stations. Preliminary estimates based on bicycle ridership and station area characteristics show 40% of stations will have medium demand and another 40% will have high demand for bicycle parking.

- Pedestrian Wayfinding and Pathway Improvement—One of the disadvantages of using what has been historically a freight rail line is that pedestrians have not only been not accommodated, in most cases pedestrian activity has been discouraged by design to minimize train/pedestrian conflict points. However, the station locations are now evolving to become pedestrian magnets. Municipalities in particular need to evaluate pedestrian facilities, including illumination (most SMART trips will occur in hours of darkness during winter months) and pedestrian wayfinding. SMART, MTC, and several of the jurisdictions have already completed station area plans for the SMART stations. These plans, if executed, will partially address some of these issues. However, to ensure consistency of message and look and feel, SMART should take the lead on implementing a consistent wayfinding program that will assist passengers in identifying opportunities for intermodal connection points along the corridor.
- Vanshare—Employees themselves, rather than employers, can operate shuttles. In a few commuter rail station locations in the Puget Sound region, Sounder Commuter Rail customers alight from their train, gather into vans provided by the local transit agency and drive themselves to their nearby employment sites. At some stations the activity is so popular that the number of vans left overnight will exceed twenty vans.
  - There are currently no publicly-funded vanpool operations in the communities along the SMART corridor and as such, initiating a publicly-funded vanpool program could be a substantial challenge that will require further investigation. Vanpool programs currently offered in the Bay Area by organizations such as 511.org could serve as a model for local programs. Vanpools providing access from SMART stations to employment sites may also require additional coordination with local employers. Another part of the strategy may require that vans be left overnight in the immediate station vicinity.
  - Still, this model may be one of the faster and more economical ways of providing last-mile connectivity to employment sites. This potential should be evaluated at SMART stations as yet another potential strategy to help meet the demand for connectivity between SMART stations and employment sites.
- Bikeshare—While adding bikeshare programs to every station site is unrealistic on opening day, Marin County and the Sonoma County Transportation Authority have conducted bike share feasibility studies and will be forming action plans based on that assessement. Among stations with the highest potential for bikeshare programs, one or two station locations should be selected for implementation of pilot programs to test acceptance of bikeshare as a last mile strategy. Potential future integration with Bay Area Bike Share should be evaluated, as well as opportunities for smaller, locally-operated

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- bikeshare options (including private systems run by institutions). These efforts should be done in coordination with existing plans to bring bike share to the region. For example, Marin County has already conducted a bike share feasibility study.
- **Carshare**—Each station location should be assessed for the potential to dedicate parking spaces for carshare activity. This would not be necessary on opening day, but is likely to arise as an option many SMART riders will expect. To have pre-identified locations for carshare will allow expedited implementation once demand is more known.
- Parking Opportunities—North American experience with regional rail systems suggests heavy reliance on park-and-ride as the single largest segment of station access mode. Sound financial planning has led SMART to invest in park-and-ride facilities in a very measured way. However, the demand is very likely to outstrip supply in the earliest days of implementation at some locations. Options to provide additional parking availability for each station should be developed so that issues can be addressed quickly based on plans and strategies in place the day the first train begins revenue service. SMART and local jurisdictions should also look for opportunities for cooperative use of existing privately-owned parking near stations, as feasible.

## STATION ACCESS AND INTEGRATION

Physical geography, land uses, density, infrastructure, and transit availability influence the transportation mode people will use to get to and from SMART stations. Figure 2 shows the predicted station access modes for Phase 1 based on SMART's 2014 STOPS model. Note that the year of projection is 2015 as that was the projected day of opening when these forecasts were completed.

Figure 2 Predicted Station Access Modes (2015)

Station	Bike/Walk	Kiss-and-Ride	Park-and-Ride	Transit Transfer	Predicted Daily Ridership
Sonoma County Airport	19%	16%	60%	5%	359
Santa Rosa North	64%	6%	25%	5%	197
Santa Rosa Downtown	53%	6%	0%	41%	215
Rohnert Park	73%	11%	15%	1%	213
Cotati	47%	9%	40%	3%	373
Petaluma Downtown	59%	24%	0%	16%	265
Novato San Marin	28%	11%	38%	22%	247
Novato Hamilton	81%	5%	9%	4%	187
Marin Civic Center	92%	3%	3%	2%	253
San Rafael	49%	1%	2%	48%	575

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Sonoma County Airport is expected to have the highest drive alone rate (park-and-ride) because of its location as the north end terminus in Phase 1 of SMART. Sonoma County Airport is the northernmost station, which means it will serve as the catchment area for southbound SMART riders coming from points north. Driving to the station is expected to be low in city areas like San Rafael, where parking availability is lower, and at Santa Rosa North and Novato San Marin due to the physical geography and layout of the stations.

There is opportunity for pick up and drop offs (kiss-and-ride) at all stations and other than San Rafael, most stations are expected to see a moderate to high amount of passenger drop-off activity.

SMART Stations that already have significant existing transit options such as San Rafael, Santa Rosa Downtown, and Petaluma will have a higher propensity for transit mode share (transfers) than areas where service may be realigned at a later date.

Mode share for walking is predicted to be higher near downtown stations, or stations near residential neighborhoods with built infrastructure to ensure a comfortable walk environment, such as San Rafael, and Santa Rosa, or in the case of the Marin Civic Center, proximity to a major trip destination such as the Civic Center.

Although not included in the STOPS model, employer shuttles are expected to be important at Sonoma County Airport, Santa Rosa North, Santa Rosa Downtown, Petaluma Downtown, and Marin Civic Center, due to their proximity to major employers, or dense population and job centers. Bicycles are expected to be used most at Santa Rosa Downtown, San Rafael, and Petaluma. Predicted mode splits are not necessarily in line with the conditions necessary to make employer shuttle programs successful. For example, there are no facilities for employer shuttles at Santa Rosa North Station. Other factors may also influence development of employer shuttles including the nature of the employer and where their employees reside. For example, based on lack of employer interest expressed to date, Petaluma downtown may seem to have high potential, but other influencing factors may blunt that potential. Figure 3 presents a general overview of the expected conditions on the first day of service based on current plans. As one can see, some locations are well prepared while other locations are in need of additional attention to make them as functional or attractive as other station locations. The details of each of overall "Consumer Reports" grading can be found in Section 4 of the main report.

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Transit **Employer** 

Figure 3 **Summary of Integration Conditions at Phase 1 Stations** 

Station	service connectivity	Bus stop placement	Kiss-and- Ride	Shuttle Provisions	Pedestrian Connectivity	Bicycle Connectivity			
Sonoma County Airport	•	-	-	•	•	-			
Santa Rosa North	0	$\overline{\bullet}$	•	•	$\overline{}$				
Santa Rosa Downtown	•	0	0	•	•	•			
Rohnert Park			•	•		•			
Cotati		•	•	0	•	•			
Petaluma Downtown	•	0	•	•		•			
Novato San Marin	•	•			$\overline{}$				
Novato Hamilton	$\circ$	$\overline{\bullet}$	•	•	$\circ$	$\circ$			
Marin Civic Center		•		$\overline{}$		•			
San Rafael	•	•		$\overline{}$	•	•			
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## **SUMMARY**

When implemented, the recommendations described above will create an environment in which SMART can thrive. Enlisting early adopters, a base of riders at the beginning of service, through partnerships with employers and large institutions before the start of service is a key to ensuring a robust start up for SMART. Equally important, information about rider experiences and expectations can clearly guide early development of SMART and how it is integrated with local transit, neighborhoods, and other transportation options. In every location investigated for this report there was obvious coordination and collaboration between SMART, the local transit agency(s), and the local jurisdictions. The recommendations below do not list specific lead agencies as those could be different in each location and will, almost certainly evolve over time. The important consideration is for the project partners to retain the level of coordination and collaboration shown to date.

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It is recommended that the pursuit of riders be accomplished through a marketing campaign in the first two years of SMART operation, working directly with employers who are interested in providing additional options for how their employees arrive at work each day, or "early adopters." High-ridership stations such as Sonoma County Airport, Santa Rosa North, Santa Rosa Downtown, Petaluma Downtown, Novato Hamilton, Marin Civic Center and San Rafael should be targeted. Actual potential riders should be identified through working with these employers. The campaign should also seek to work directly with potential riders. This way, not only are needs that describe the employment end of the trip known, but the needs of the home end of the trip can also be collected and catalogued by station. This activity can occur in advance of commencement of SMART service and should be timed to begin when the in-service date for SMART can be announced.

High priority considerations for stations and topics discussed with potential riders in this early stage of development should include:

- Pedestrian crossings in station vicinities
- Adjacent passenger drop off and pick up locations and access routes in station vicinities
- Adjacent bus stop locations in station vicinities that offer comfortable access to SMART platforms

This report recognizes that every station has different opportunities and challenges in differing measure, and seeks to document and prioritize projects in an effort to integrate SMART service.

## HIGHEST PRIORITY PROJECTS FOR PHASE 1

Based on a combination of the predicted station access modes and station integration needs, the following represents the consultant's recommendation for the top priority projects to launch Phase 1 in the most successful manner possible:

Ridership Development- All Stations:

- Fund a Substantial Marketing and Recruiting Effort Recruiting early adopters, riders who will use SMART starting opening day.
- Work with area employers to provide first mile/last mile solutions between station sites and employment sites.

Station Specific Infrastructure Needs:

- **Sonoma County Airport and Santa Rosa North** High potential for employer shuttles and passenger drop offs and pick-ups, identity and improve locations as necessary to ensure these are easily and safely accommodated.
- **Santa Rosa North** Conduct pedestrian path audit and access improvements to reach the Northside Transfer Center at Coddingtown.
- Santa Rosa Downtown Identify staging location(s) for employer shuttles.
- Novato San Marin Improve transit access. Add bus stop proximate to the station and
  devise a bus turnaround. The station pick-up drop-off area is already constructed with a
  paved surface and geometrics not suited for bus turnaround activity. The option of
  developing a roundabout at Redwood Boulevard and Rush Landing Rd. should be
  pursued.
- **Cotati** Bike path solution that addresses having to cross the railroad tracks twice to continue on the multi-use path.

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- **Petaluma Downtown** Improve pedestrian path between transit center and SMART station. May require installation of bus stops in locations more adjacent to the station platform (this project is under construction).
- **Marin Civic Center** Improve pedestrian infrastructure to ensure ease of access to employment sites. Some of these efforts are already under construction.
- Sonoma County Airport Relocate bus stops for adjacency to station platform and improve pedestrian environment by installing marked pedestrian crossings. If SCT moves ahead with the airport area shuttle, location of bus stops close to the station will be very important to assist in successful implementation.
- **Santa Rosa Downtown** Improve bus stop placement on Third Street in both directions adjacent to SMART station.
- San Rafael San Rafael Transit Center Improve safety and circulation in the station area for SMART Phase 1. Identify short- and long-term solutions for the Transit Center in Phase 2, when SMART tracks extended to Larkspur will physically divide the present transit center. A separate study is underway to identify short- and long-term solutions which may involve partial or full relocation of the transit center. While this report does not focus on those solutions, the project partners have identified resolving the needs of this station and station area as a high priority.

A summary of selection criteria used to determine the priority of these top projects can be found in Appendix C. Stations with expected high usage and high needs top the list.