

**TRANSPORTATION AUTHORITY OF MARIN
BOARD OF COMMISSIONERS MEETING**

NOVEMBER 30, 2017

7:00 P.M.

**MARIN COUNTY CIVIC CENTER, ROOM 330
3501 Civic Center Drive, San Rafael, California**



AGENDA

900 Fifth Avenue
Suite 100
San Rafael
California 94901

Phone: 415/226-0815
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www.tam.ca.gov

Belvedere
James Campbell

Corte Madera
Diane Furst

Fairfax
John Reed

Larkspur
Dan Hillmer

Mill Valley
Stephanie Moulton-Peters

Novato
Eric Lucan

Ross
P. Beach Kuhl

San Anselmo
Tom McInerney

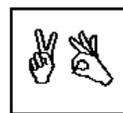
San Rafael
Gary Phillips

Sausalito
Ray Withy

Tiburon
Alice Fredericks

County of Marin
Damon Connolly
Katie Rice
Kathrin Sears
Dennis Rodoni
Judy Arnold

1. Convene in Open Session
2. Adjourn to Closed Session
PUBLIC EMPLOYEE PERFORMANCE EVALUATION
Title: Executive Director
California Government Code section 54957(b)(1)
3. Reconvene to Open Session – Announcement from Closed Session
4. Chair’s Report (Discussion)
5. Commissioner Matters Not on the Agenda (Discussion)
6. Executive Director’s Report (Discussion)
 - a. Richmond-San Rafael Bridge Third Lane and Multi-Use Path Report
7. Commissioner Reports (Discussion)
 - a. MTC Report - Commissioner Connolly
 - b. Marin Transit Report – Commissioner Rice
 - c. SMART – Commissioner Sears



Late agenda material can be inspected in TAM’s office between the hours of 8:00 a.m. and 5:00 p.m.
The TAM Office is located at 900 Fifth Avenue, Suite, 100, San Rafael.

The meeting facilities are accessible to persons with disabilities. Requests for special accommodations (assisted listening device, sign language interpreters, etc.) should be directed to Denise Merleno, 415-226-0820 or email: dmerleno@tam.ca.gov **no later than 5 days** before the meeting date.

The Marin County Civic Center is served by several bus lines including Marin Transit Routes 45, 45K, 49, 233, and 259. Route 45 provides service to the Civic Center Hall of Justice Arch until 8:43 PM. In the evening, Golden Gate Transit provides service until 11:24 PM with routes 70 and 80 along Highway 101 from the San Pedro Road bus pads, which are about a half mile away. To access the San Pedro bus pad NB, walk south down San Pedro Rd and take the footpath to the NB 101 onramp where the bus stop is located. To access the SB pad, walk down San Pedro Rd and under the freeway, turn right on Merrydale and then take the footpath near the SB onramp to the bus pad. For arrival and departure times, call 511 or visit www.marintransit.org, or www.goldengate.com

8. Open time for public expression, up to three minutes per speaker, on items not on the Board of Commissioners' Agenda. (While members of the public are welcome to address the Board, under the Brown Act, Board members may not deliberate or take action on items not on the agenda, and generally may only listen.)
9. CONSENT CALENDAR (Action) – **Attachment**
 - a. Approve TAM Board Meeting Minutes October 26, 2017
 - b. Allocate Transportation Sales Tax (Measure A) Funds from Reserve Funds for the West Sir Francis Drake Boulevard Project
 - c. Review and Acceptance of FY2016-17 Draft Financial Statements and Single Audit Report
 - d. Review and Acceptance of 2017 Measure A Compliance Audit Results
 - e. Adoption of the Draft TAM Human Resources Policies and Procedure Manual
 - f. Approve Extension on State Legislative Contract (Action)
10. Adopt the Revised Draft Strategic Vision Plan (Action) - **Attachment**
11. Accept 2016 System Monitoring Report and the 2017 Congestion Management Program Report (Action) - **Attachment**
12. Project Applications for Senate Bill 1 Local Partnership Program Funding (Action) - **Attachment**
13. Caltrans Report (Discussion)

MEETING OF THE
TRANSPORTATION AUTHORITY OF MARIN
TAM

OCTOBER 26, 2017
7:00 PM

MARIN COUNTY CIVIC CENTER, ROOM 330
3501 CIVIC CENTER DRIVE
SAN RAFAEL, CALIFORNIA



MEETING MINUTES

Members Present:

Stephanie Moulton-Peters, Mill Valley City Council, TAM Chair
Judy Arnold, Marin County Board of Supervisors, TAM Vice Chair
Alice Fredericks, Tiburon Town Council
Beach Kuhl, Ross Town Council
Damon Connolly, Marin County Board of Supervisors
Dennis Rodoni, Marin County Board of Supervisors
Diane Furst, Corte Madera Town Council
Dan Hillmer, Larkspur City Council
Eric Lucan, Novato City Council
James Campbell, Belvedere City Council
John Reed, Fairfax Town Council
Katie Rice, Marin County Board of Supervisors
Ray Withy, Sausalito City Council
Tom McInerney, San Anselmo Town Council

Members Absent:

Gary Phillips, San Rafael City Council
Kate Sears, Marin County Board of Supervisors

Staff Members Present

Dianne Steinhauser, Executive Director
Bill Whitney, Deputy Executive Director
Dan Cherrier, Principal Project Delivery Manager
David Chan, Manager of Programming and Legislation
Derek McGill, Planning Manager
Li Zhang, Chief Financial Officer
Nick Nguyen, Principal Project Delivery Manager
Molly Graham, Public Outreach Coordinator
Scott McDonald, Senior Transportation Planner

Chair Moulton-Peters called the meeting to order at 7:05 p.m.

1. Convene in Open Session

Chair Moulton-Peters indicated the Board would be adjourning to a Closed Session and then would be reconvening for the rest of agenda items.

2. Adjourn to Closed Session

Conference with Legal Counsel – Anticipated Litigation – Significant Exposure to Litigation

There is significant exposure to litigation against the Agency pursuant to Government Code section 54956.9(d)(2)

Number of Cases: 1

3. Reconvene in Open Session – Announcement

The Board reconvened in Open Session at 7:25 p.m. and Chair Moulton-Peters noted that a closed session was held, but the report and discussion of the item would occur later in the meeting. She also asked for a motion and a second to change the agenda order slightly and move Item #12 right after Item #10.

Vice Chair Arnold moved to change the agenda order and move Item #12 just after Item #10. Commissioner Furst seconded the motion, which was unanimously approved.

4. Chair's Report (Discussion)

Chair Moulton-Peters gave a brief report on the many wildfires that have been and continue to be a threat in many areas in the region. She mentioned the heroic efforts of the many agencies and volunteers that have worked so hard to defeat the fires. She also acknowledged the challenges still ahead in the rebuilding that will be necessary.

She announced as well the upcoming ribbon-cutting, “Meet Me on Miller” road improvement celebration on Saturday, November 4th, along Miller Avenue in Mill Valley, and she shared a flyer with further details of the event.

5. Commissioner Matters Not on the Agenda (Discussion)

There were none.

6. Executive Director's Report (Discussion)

Executive Director (ED) Dianne Steinhauser commented on the written report included as part of the supplemental packet on the dais and on the agenda table for the public. She gave an overview of some upcoming activities – three projects are in construction and progressing - the Almonte Shoreline bikeway, improvements on E. Sir Francis Drake Blvd. in Larkspur, and the Marin-Sonoma Narrows (MSN); projects that TAM is designing and managing, - improvements in connection with the approaches to the San Rafael Bridge at the Bellam off-ramp and adding another lane through the signal, design underway thru Board approved OBAG [One Bay Area Grant] funding for completion of the Marin-Sonoma Narrows, continued work on the I-580/Hwy-101 connector specifically outreach to the surrounding neighborhoods, and continued work on the North-South Greenway multi-use paths in the Larkspur/ Corte Madera area); and she concluded with information about ongoing projects/programs such as the new Strategic Vision Plan, a new employer-employee outreach campaign to share information with commuters about alternative modes of transportation, updated information on how the Lyft service is working in terms of providing first/last mile passengers from SMART, bike plan updates all around Marin, update on San Rafael's community-based transportation plans, and a comprehensive report on the work of the Expenditure Plan Advisory Committee.

ED Steinhauser also discussed dates of the Board meetings for November and December noting that the dates had changed to November 30 and December 11.

a. Richmond – San Rafael Bridge Third Lane and Multi-Use Path Report

ED Steinhauser confirmed that the opening of the third lane is still expected to be the end of December this year. She acknowledged ongoing traffic issues especially during this, the busiest time of year. Chair Moulton-Peters asked why that was so, which ED Steinhauser explained. She noted a number of factors including that schools are in session, the strong economy currently underway, and more people may be choosing to drive rather than bike due to the approaching winter weather.

There was no public comment on the Executive Director Report.

7. Commissioner Reports (Discussion)

a. Metropolitan Transportation Commission (MTC) Report

Commissioner Connolly discussed at length MTC's reaction to TAM's position to not condition state gas tax transportation funding based on housing production. He reviewed the revised provisions that were presented as an alternative due to the broad dissatisfaction of MTC member agencies and also commented on the issues that remain for TAM as well as new concerns with some of the new requirements. He indicated it will be a difficult issue to resolve and likely won't be settled for perhaps another year, and there could be strong opposition to TAM's requests.

b. Marin Transit Report

Commissioner Rice reported that Marin Transit just released its Draft Short-Range Transit Plan (SRTP), its goals specifically a 10-year plan that could outlive TAM if there is no extension to the Measure A sales tax, and its conservative and sound projections. She noted that Marin Transit will have a public hearing on the matter on November 20 followed by a presentation to the TAM Board for action at a future meeting.

Commissioner Rice also reviewed ridership and route performance statistics, which although there is a decline in ridership, she pointed out that MT has made revisions to their routes resulting in fewer transfers, as well as changes to how they count passengers with no new or expanded service

c. SMART

Vice Chair Arnold discussed a letter written by Friends of SMART to the chair of the Highway 37 Policy Committee asking that plans specifically show the use of the right-of-way for passenger rail service. She indicated it will be discussed at the upcoming SMART Board, and she requested that TAM take no action on the issue tonight.

8. Open Time for Public Expression

Cindy Winter, Greenbrae, commented on a letter regarding the North-South Greenway she had sent for distribution to the Board. She noted she had since talked with the project manager who said there was additional information she had not known. She will revise the letter accordingly.

Ms. Winter also expressed appreciation for the report on Marin Transit given by Commissioner Rice, specifically because of the information on transit decline. She noted that a professor from UC Berkeley has recently raised the

possibility that the decline in the use of public transit was perhaps due to the increased use of rideshare. She suggested that ED Steinhauser contact the professor for more information.

9. CONSENT CALENDAR (Action)

- a. Approve TAM Board Minutes of September 28, 2017
- b. Budget Increase for the TAM Junction Project.
- c. Programming of 2017 TFCA and TDA Article 3 Funds
- d. Acceptance of the FY2017-18 First Quarter Financial Report and Proposed Budget Amendments
- e. Allocate Transportation Sales Tax (Measure A) Interest Funds to Marin Transit for the Ferry “Wave Shuttle” Connector

Regarding the Board Minutes of September 28, 2017, Commissioner Fredericks clarified comments she made that were mentioned on page 9 of the Board packet, last paragraph, second sentence. She suggested it be worded, “*She expressed it seems that state legislators want to support affordable housing policies without enacting legislation that would help local jurisdictions overcome many of the constraints over which they have no control.*”

Commissioner Arnold moved to approve the Consent Calendar with the correction to the Minutes. Commissioner Lucan seconded the motion, which was approved unanimously.

10. Review and Accept the TAM and LGS/RGS Separation Action Plan and Provide Comments on the Draft TAM Human Resources Policies and Procedure Manual (Action)

ED Steinhauser introduced the item which recommended that 1) the TAM Board reviews and accepts the TAM and Local Government Services (LGS)/Regional Government Services (RGS) Separation Action Plan; and 2) The TAM Board reviews and provides comments on the Draft TAM Human Resources Policies and Procedures Manual. Any comments/edits received will be incorporated into the final document, which will be brought back to the Board for adoption.

She expressed the hope that the actions on this Item and Item #12 would be successful in resolving the issues that have arisen as TAM has endeavored to separate from LGS and become a separate, independent employer. She explained, as well, the purpose and makeup of the HR Ad Hoc Committee, which is providing oversight of the process, and she thanked them for their work.

ED Steinhauser added that this report is intended as an overview of the process, and expressed the hope that the separation process will be finished by the end of this year. She also indicated that Chief Financial Officer Li Zhang would present the staff report.

Ms. Zhang echoed ED Steinhauser in thanking the Ad Hoc Committee, County Counsel Brian Case, and consultant Terry Matsumoto for all their assistance, as well. She acknowledged the many steps still remaining that need to be completed before TAM achieves its goal of becoming its own employer under CalPERS. She reviewed background information, a summary of action items, the process thus far and timeline for each remaining item, and the action requested of the Board at this meeting.

ED Steinhauser explained the purpose and role of the HR Procedure Manual and the associated legal requirements. She also confirmed that staff was looking for any issues that the Board might have or need clarification on, but no formal action on the manual was being taken at this time.

Commissioner Lucan thanked Ms. Zhang for the information presented. He asked whether it was possible to tell whether the cost estimates for the process and moving forward in the future would be more than what it was with LGS, less or about the same. Ms. Zhang confirmed that the final outcome can't be known for sure yet, but TAM will have more control over the payroll and HR processes and it is hoped that there will be cost efficiencies as well.

ED Steinhauser confirmed that the one unknown is health care costs under the Affordable Care Act, which staff and the HR Ad Hoc are still reviewing options.

Commissioner Rice asked, and Ms. Zhang confirmed that she was confident that the remaining items were achievable. Commissioner Rice also asked about the hiring of new staff to handle the payroll and human resources functions, which Ms. Zhang had mentioned. Ms. Zhang explained that the new staff would be handling more than payroll tasks and that TAM has needed additional assistance in the Accounting Department ever since the accounting and finance functions were brought inhouse. She added that TAM's timesheet tracking system is extremely complex given its many fund sources. Commissioner Rice commended Ms. Zhang for doing the necessary due diligence.

Chair Moulton-Peters discussed next steps in the process, noting that the Commissioners were free to read through the materials and come back next month ready to have questions answered and vote on the issue. She also thanked staff for their hard work as well, especially the thoughtful and detailed presentation.

Item # 12 taken out of order.

12. Final Actions for TAM to Enter into a Contract with CalPERS for Retirement Benefits (Action)

Consultant Terry Matsumoto presented the staff report which requested that the TAM Board: Approve Final Actions for TAM to enter into a contract with CalPERS for retirement benefits as follows:

- a. Adopt a Resolution Authorizing a Contract with CalPERS for retirement benefits (Action)
- b. Adopt a Resolution to Tax Defer Member Paid Contributions - IRC 414(h)(2) Employer Pickup (Action)
- c. Authorize the Board Chair to execute a Letter Agreement in connection with LGS's execution of the CalPERS Reallocation Agreement
- d. Adopt a Resolution Authorizing TAM to Provide Termination Notices to LGS and RGS Effective January 1, 2018, subject to LGS signing the CalPERS Reallocation Agreement

There was no public comment on the item.

Commissioner Rice moved to adopt a resolution, authorizing a contract with CalPERS for retirement benefits, effective January 1, 2018. Commissioner Rodoni seconded the motion, which was approved unanimously.

Vice Chair Arnold moved to adopt a resolution to tax defer member-paid employee contributions (employer pickup), and Commissioner Fredericks seconded the motion. It carried unanimously.

Commissioner Rice moved to authorize the Board Chair to execute a letter of agreement subject to with RGS/LGS execution of the CalPERS reallocation agreement. Commissioner Arnold seconded the motion, and it was unanimously approved.

Vice Chair Fredericks moved to approve a resolution authorizing TAM to provide termination notices to RGS/LGS, effective January 1, 2018, and Commissioner Rodoni seconded the motion. It carried unanimously.

Chair Moulton-Peters thanked LGS/RGS for their cooperation with TAM to resolve the issues, Mr. Matsumoto and Mr. Case for their assistance, and TAM staff for their hard work and patience with the process.

11. Receive an Update and Presentation on the Metropolitan Transportation Commission (MTC) Draft Corridor Plan Financial Opportunities to Fund State Route (SR) 37 Corridor Improvements
(Discussion)

ED Steinhauser reviewed the background of the SR 37 Draft Corridor Plan before handing the item to Principal Project Delivery Manager Nick Nguyen. She noted that the Counties of Marin, Napa and Sonoma have been collaborating for 2 years under an MOU to address congestion relief and sea level rise. The report at this meeting was prepared by the Bay Area Toll Authority (BATA)/Metropolitan Transportation Commission (MTC). She noted that comment letters received so far are included in the packet.

Mr. Nguyen noted that SR 37, as a key corridor connecting Highways 101 and 80, has seen continued planning efforts. He reviewed factors that have contributed to accelerated planning efforts including the formation of a policy committee 2 years ago and a three-week closure in January of 2017, an MTC study called the “Sea Level Rise and Transportation Analysis Study”, the draft corridor plan, the three segments from west to east, and the key findings including congestion, flooding potential, sea level rise, strength of the levees, endangered species in the bay lands and wetlands in the corridor.

Mr. Nguyen discussed the consultants’ three stages of planning and options considered for each - “Retreating” (or “Abandoning”), “Adapting” and “Accommodating.” After reviewing the consultant’s vision statement which integrated transportation needs, sea level rise, wildlife mitigation, and multi-modal access, he gave the report’s ultimate solution as a raised roadway at a cost of \$1.6 - \$4.6 billion. He noted that Segment B from SR 121 at Sears Point to Mare Island was deemed to be the priority area, and he previewed options, starting from an additional reversible lane, all the way to a full four-lane roadway with bike path design. He pointed out that an integrated design with levees, causeways, wetland channels, and wildlife corridors would mitigate/restore a healthy bay environment, and phasing would likely include a temporary roadway built to the side.

Mr. Nguyen reported that the consultants identified \$43 million worth of short term potential improvements to the corridor. These include flood protection (such as seawalls) in Marin County, enhancements to the SR121 interchange, as well as interchange improvements at Mare Island.

He briefly touched on the potential to connect Bay Trail segments. Timelines could include short-term work through 2030, with the longer term comprehensive projects extending to and beyond 2050. He stated that the policy committee will tackle some of these issues at the next meeting on November 2.

Commissioner Hillmer asked staff to verify the long-term cost estimates. Mr. Nguyen confirmed that the estimates were correct.

Commissioner Campbell commented on a recent workshop in Belvedere where a Netherlands representative expressed concerns with sea level rise and infrastructure. In that regard he asked where the public might view the analysis rejecting the “retreat” from the existing corridor option. Mr. Nguyen referred the Commission to the packet for the draft Corridor Plan. Under that heading, the existing highway corridors, rail, and ferry services were considered not viable to address the needs. He reminded the commissioners that in these early stages, nothing is “set in stone,” and comments received will be included in the process. He reviewed comments that have proposed

an inland route, a bridge, and a rail solution. Specifically, Mr. Nguyen said he did not believe that new roads or improvements to existing ones had been scientifically analyzed.

Commissioner Lucan reported on an earlier meeting he attended with the League of Women Voters and the Water Resources Board where other alignments were proposed. Mr. Nguyen said he had heard some of them including over-the-water and a tunnel route. He advised that a UC Davis study had ruled some of them out on the basis of engineering/cost.

Commissioner Rice remarked that she was glad that nothing was set in stone, in view of the pace of change in technology and human behavior variables. She felt that even ten-year projections fail to take into account changes in the way we travel. Even as the committee looked at short-term needs, she asked if there would be “off-ramps” to allow modifications as the long-term picture changes.

Regarding the implementation time-line, Chair Moulton-Peters asked whether it reflected expedited toll funds or Caltrans funding alone. Mr. Nguyen confirmed it depended on expedited toll funding, not through federal or state funds such as county STIP funding.

Mr. Nguyen continued the presentation with a discussion of ongoing outreach activities related to the Corridor throughout neighboring jurisdictions. He also reported that Solano County transportation officials have said they were ready to go forward with planning for Segment B, including funding discussions with MTC, and plans for the environmental work. He also discussed the overall funding for the Corridor, which will be divided among the four counties, as well as a planning grant that TAM had applied for with Marin County and will be used for projects in Segment A.

In response to a question from Vice Chair Arnold, Mr. Nguyen discussed the scope of projects that would likely be included under the planning grant; notably that it was to be dedicated to levee review and watershed impacts in Segment A. Regarding the environmental review that would be necessary, ED Steinhauser explained that it was unclear at this time whether a single study for the whole corridor would be sufficient or if individual documents would be required for individual areas.

The Chair thanked staff for the report.

12. Caltrans Report (Discussion)

ED Steinhauser acknowledged the many challenges facing Caltrans currently, as well as the full agendas in the near future for TAM, but she indicated she is still working to have them come and update the Board on their activities in and around Marin.

The meeting was adjourned at 8:50 p.m.

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DATE: November 30, 2017

TO: Transportation Authority of Marin Board of Commissioners

FROM: Dianne Steinhauser, Executive Director
David Chan, Programming Manager

SUBJECT: Allocate Transportation Sales Tax (Measure A) Funds from Reserve Funds for the West Sir Francis Drake Boulevard Project (Action), Agenda Item No. 9b

RECOMMENDATION

Allocate a total of \$35,305 in Transportation Sales Tax (Measure A) funds from Reserve to Marin County for the West Sir Francis Drake (SFD) Boulevard Project from Lagunitas Road and Wild Iris Drive.

BACKGROUND

With the initial adoption of the Measure A Strategic Plan in 2006, the TAM Board established a 5% annual reserve for the first five years of the Strategic Plan, collecting \$5.382 million in the first five-year period. Those funds have been available since that time as an emergency reserve.

In the Fall of 2016, Marin Transit requested funds from TAM for an urgent need - the award of a contract for the Redwood and Grant Bus Facility in Novato. In December 2016, the TAM Board agreed to allow Marin Transit's share of the Reserve Funds to be released for the award of the contract.

TAM staff set a target of \$3.5 million in Reserve Funds to remain, which left approximately \$1.882 million for programming to the four strategies established in the Measure A Expenditure Plan. Marin Transit was allocated its share of nearly \$1.12 million. The remaining shares were programmed to Strategies 3 and 4 in February 2017. Strategy 2 was not being considered for its share of the Reserve because the lone project in Strategy 2, Highway 101 Gap Closure Project, is complete and funding commitments have been fulfilled.

Of the \$1.882 million in programming, approximately \$1.12 million was made available for Strategy 1 (Transit), \$539,000 is available for Strategy 3 (Streets and Roads), and \$224,000 is available for Strategy 4 (Safe Routes to Schools).

Of the \$539,000 available for Strategy 3, \$269,502 is available for Strategy 3.1 for major roads and \$269,502 is available for Strategy 3.2 for local roads. The apportionment for each jurisdiction with these Reserve Funds follows the same formula used for Strategy 3.2, which is based on a 50/50 split derived from lanes miles maintained and population.

The major road category is divided by five planning areas (North, Central, South, Ross Valley, and West). Based on the 50/50 split, the West Planning Area was programmed \$35,305 of the \$269,502 available for the major road category as shown in the below table.

Planning Area	% Share	Measure A Reserve Funds
North	19.90%	\$53,631
Central	25.40%	\$68,454
South	20.00%	\$53,900
Ross Valley	21.60%	\$58,213
West	13.10%	\$35,305
Total	100.00%	\$269,502

Reserve funds for Transit (Strategy 1), Local Roads (Strategy 3.2), and Safe Pathway (Strategy 4.3) categories have been allocated to the respective agencies since the TAM Board programmed these funds on February 23, 2017.

WEST SIR FRANCIS DRAKE BOULEVARD PROJECT

In the West Planning Area, the Measure A Strategic Plan identified two projects on Sir Francis Drake Boulevard with a project from Shafter Bridge to Platform Bridge Road as the first prioritized project and a project from Samuel P. Taylor Park to the Fairfax limit as the second prioritized project. The first prioritized project was completed in 2013.

The County has since started work on the second prioritized project on a segment between Lagunitas Road and Nicasio Valley Road. This segment is 2.25 miles long at a cost of \$2.1 million. Work includes pavement resurfacing, repairing base failures, roadway widening where possible, minor drainage improvements, guardrail upgrades, and new pedestrian facilities.

TAM has allocated \$802,000 in Measure A funds for a smaller segment of the project between Lagunitas Road and Wild Iris Drive. This was the remaining amount available in the West Planning Area from the Major Road Category of Measure A. The County has managed to secure other funds to complete the project but still has a small deficit. Completion of this project would represent the final segment along Sir Francis Drake Blvd. to be improved from the White's Hill Bridge through Samuel P. Taylor State Park.

Staff is recommending allocating Measure A Reserve funds of \$35,305 to Marin County for the completion of the SFD Blvd project from Lagunitas Road to Nicasio Valley Road. This allocated amount along with other County local funds will help defray the existing deficit and support this project being completed.

As noted above, TAM has already programmed the Reserve funds on February 23, 2017 to all eligible recipients of Measure A funds. This action would allow staff to allocate the funds to Marin County by issuing a supplemental funding agreement for \$35,305.

FISCAL IMPACTS

The FY 17/18 TAM Budget had anticipated the allocation of Measure A Reserve funds and had been budgeted accordingly. No further action is needed.

NEXT STEP

If approved by the TAM Board, a supplemental funding agreement for the amounts listed will be issued to Marin County.



DATE: November 30, 2017

TO: Transportation Authority of Marin Board of Commissioners

FROM: Dianne Steinhauser, Executive Director
Li Zhang, Chief Financial Officer

SUBJECT: Review and Acceptance of FY2016-17 Draft Financial Statements and Single Audit Report (Action), Agenda Item No. 9c

RECOMMENDATION:

The TAM Board reviews and accepts the Draft TAM FY2016-17 Financial Statements and Single Audit Report.

Staff, along with the audit team from Vavrinek, Trine, Day & Co., LLP, presented the FY2016-17 Financial Statements and the Single Audit Report to the TAM Finance and Policy Executive Committee at its November 13, 2017 meeting. The Committee reviewed and voted unanimously to refer the items to the TAM Board for acceptance.

BACKGROUND:

TAM is required by its Measure A ½ Cent Transportation Sales Tax Expenditure Plan and PUC Code 180105(c) to conduct an annual financial audit. TAM staff, along with TAM’s audit team from Vavrinek, Trine, Day & Co., LLP, started the work on the FY2016-17 financial audit in June of this year and the final field visit was conducted the first week of October. As required by the Measure A ½ Cent Transportation Sales Tax Expenditure Plan, the COC will review the final audit report at its November 20, 2017 meeting and report the results to the Marin citizens in its FY2016-17 COC Annual Report.

DISCUSSION/ANALYSIS:

Components of the FY2016-17 Financial Audit and Single Audit Reports

The Draft Financial Audit Report includes the following elements: Independent Auditors’ Report, Management’s Discussion and Analysis, Basic Financial Statements, Notes to Basic Financial Statements, Independent Auditor’s Report on Internal Control over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance with Government Auditing Standards, and Independent Auditor’s Report on Compliance.

November 30, 2017

The Draft Single Audit report includes the following elements: Independent Auditor's Report, Schedule of Expenditure of Federal Awards, Notes to the Schedule of Expenditures of Federal Awards, Schedule of Findings and Questioned Cost, and Summary Schedule of Prior Year Audit Findings, if any.

Results of the FY2016-17 Financial and Single Audits

The Auditor has certified that all of TAM's financial statements are presented fairly in all material aspects, has certified the financial position of the governmental activities and each major fund on June 30, 2017, and the respective changes in financial position thereof and the budgetary comparison for the special revenue funds for the year in conformity with U.S. generally accepted accounting principles, as well as the accounting system prescribed by the State Controller's Office and state regulations governing special districts.

The auditor also confirmed that its tests during the Single Audit process disclosed no instances of non-compliance or other matters that are required to be reported under Government Auditing Standards.

Confirmation of Compliance of the 5% Administration Cost Cap Requirement in Measure A

The Expenditure Plan allows TAM to use up to 5% of the Measure A revenue for administration costs, of which 1% can be used for salaries and benefits for administrative staff and 4% can be used for overall project/program support. The Measure A compliance audit conducted for FY2016-17 confirmed that TAM is in compliance with the 5% overall administration cost ceiling and under the 1% administrative staff cost cap mandated by Measure A.

FISCAL CONSIDERATION:

The audit is being conducted within budget.

NEXT STEPS:

N/A

ATTACHMENTS:

Attachment 1: Draft TAM FY2016-17 Financial Statements

Attachment 2: Draft TAM FY2016-17 Single Audit Report

Attachment 3: Auditor's Communication Letter

**TRANSPORTATION AUTHORITY
OF MARIN
ANNUAL FINANCIAL REPORT
FOR THE YEAR ENDED
JUNE 30, 2017**

TRANSPORTATION AUTHORITY OF MARIN

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JUNE 30, 2017

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TRANSPORTATION AUTHORITY OF MARIN

BOARD OF COMMISSIONERS

JUNE 30, 2017

STEPHANIE MOULTON-PETERS

JUDY ARNOLD

DAMON CONNOLLY

KATIE RICE

KATHRIN SEARS

DENNIS RODONI

ALICE FREDERICKS

DAN HILLMER

DIANE FURST

ERIC LUCAN

TOM MCINERNEY

GARY PHILLIPS

JOHN REED

RAY WITHY

P. BEACH KUHL

JAMES CAMPBELL

FINANCIAL SECTION

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INDEPENDENT AUDITOR'S REPORT

Board of Commissioners of the
Transportation Authority of Marin
San Rafael, California

Report on the Financial Statements

We have audited the accompanying financial statements of the governmental activities and each major fund of the Transportation Authority of Marin (Authority) as of and for the year ended June 30, 2017, and the related notes to the financial statements, which collectively comprise the Authority's basic financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express opinions on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

Opinions

In our opinion, the financial statements referred to above present fairly, in all material respects, the respective financial position of the governmental activities and each major fund of the Authority, as of June 30, 2017, and the respective changes in financial position thereof for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Other Matters***Required Supplementary Information***

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis and the budgetary comparison schedules as listed in the table of contents be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated [REDACTED], 2017, on our consideration of the Authority's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering of the Authority's internal control over financial reporting and compliance.

Palo Alto, California
[REDACTED], 2017

TRANSPORTATION AUTHORITY OF MARIN

MANAGEMENT'S DISCUSSION AND ANALYSIS

JUNE 30, 2017

This section of the Transportation Authority of Marin's (Authority) financial statements presents management's overview and analysis of the financial activities of the Authority for the fiscal year ended June 30, 2017. We encourage the reader to consider the information presented here in conjunction with the financial statements as a whole.

FINANCIAL HIGHLIGHTS

The Authority collected a total of \$36.7 million in revenues in FY2016-17, of which \$25.8 million, or 70.2% is Measure A ½ Cent Transportation Sales Tax revenue. We have seen steady growth of the sales tax revenue in Marin County for the last six years. The Authority's \$25.8 million Measure A ½ Cent Transportation Sales Tax collection in 2016-17 is \$0.1 million, or 0.2% higher than the \$25.7 million collected in FY2015-16. This continuing health revenue improvement will help the financial picture of all the transportation projects and programs in Marin County. A total of \$2.4 million was collected under Measure B, the \$10 Vehicle Registration Fee (VRF) program in FY2016-17. The Measure A Sales Tax and Measure B VRF revenues are the two dedicated local transportation funding sources and vital to the successful implementation of all transportation projects and programs in Marin County.

Besides the Measure A ½ Cent Transportation Sales Tax revenues and the Measure B VRF revenue collection for carrying various transportation-related projects and programs in the County, the Authority also received about \$8.1 million for all its Congestion Management Authority (CMA) related activities. As the CMA for Marin County, the Authority collected about \$0.8 million from the Metropolitan Transportation Commission (MTC) in Congestion Management Planning and Programming and Priority Development Area (PDA) funds. Cities, towns, and the County of Marin also contributed \$0.6 million for the various services/support the Authority provides as the CMA. A total of \$5.6 million Regional Measure 2 (RM2) funds were received for various RM2 capital projects in Marin County. The Authority collected about \$0.4 million in Transportation Funds for Clean Air (TFCA) funds, a program funded by a \$4 surcharge on motor vehicles registered in the Bay Area. A total of \$0.7 million of STIP Regional Improvement Program (RIP) and Highway Bridge Program funds were received from the State and Federal Highway Administration (FHWA) for the various Marin Sonoma Narrows projects.

The Authority holds investments with the CalTRUST pool amounts to \$47,090,753. Total interest revenue received from various CalTRUST funds during FY2016-17 is \$526,338. As of June 30, 2017, the unrealized loss from the various accounts is \$403,863. Including the funds in the Bank of Marin and CalTRUST, the Authority has a total cash/investment balance of \$50.5 million as of June 30, 2017.

Total FY2016-17 expenditures for the Authority were \$39.8 million, of which \$27.7 million was in the Measure A Sales Tax Fund, and consisted of \$1.4 million for administration, \$0.8 million for professional services, \$25.5 million for Measure A projects and programs and \$0.1 million for others. Expenditures for all Measure B VRF programs were \$3.8 million. The other \$8.3 million expenditures are for various CMA planning/programming activities and major capital projects.

TRANSPORTATION AUTHORITY OF MARIN

MANAGEMENT'S DISCUSSION AND ANALYSIS

JUNE 30, 2017

OVERVIEW OF THE BASIC FINANCIAL STATEMENTS

This discussion and analysis is intended to serve as an introduction to the Authority's audited financial statements, which are comprised of the basic financial statements.

The required financial statements include the Government-wide Financial Statements which include the Statement of Net Position and the Statement of Activities. The Governmental Fund financial statements include Governmental Funds Balance Sheet, and the Governmental Fund Statement of Revenues, Expenditures and Changes in the Fund Balances. These statements are supported by notes to the financial statements. All sections must be considered together to obtain a complete understanding of the financial picture of the Authority.

THE BASIC FINANCIAL STATEMENTS

The Basic Financial Statements contain the Governmental-wide Financial Statements and the Fund Financial Statements; these two sets of financial statements provide two different views of the Authority's financial activities and financial position.

The Government-wide Financial Statements provide a long-term view of the Authority's activities as a whole, and include the Statements of Net Position and Statement of Activities. The Statement of Net Position provides information about the financial position of the Authority as a whole, including all of its capital assets and long-term liabilities on the full accrual basis of accounting, similar to that used by corporations. The Statement of Activities provides information about all the Authority's revenues and expenses, also on the full accrual basis of accounting, with the emphasis on meeting net revenues or expenditures of the Authority's programs. The Statement of Activities explains in detail the change in Net Position for the fiscal year.

All of the Authority's activities are grouped into Governmental Activities, as explained below.

The Fund Financial Statements report the Authority's operation in more detail than the Governmental-wide Financial Statements and focus primarily on the short-term activities of the Authority's Major Funds. The Fund Financial Statements measure only current revenues and expenditures and fund balances and exclude capital assets, long-term debt and other long-term amounts.

Major Funds account for the major financial activities of the Authority and are presented individually. All funds of the Authority qualify or have been selected to be Major Funds and are explained below.

THE GOVERNMENT-WIDE FINANCIAL STATEMENTS

Government-wide Financial Statements are prepared on the full accrual basis of accounting, which means they measure the flow of all economic resources of the Authority as a whole. The Statement of Net Position and the Statement of Activities present information about the following:

Government Activities

The Authority's basic services are considered to be governmental activities. These services are supported by various transportation funding sources from various federal, state and local funding agencies.

TRANSPORTATION AUTHORITY OF MARIN

MANAGEMENT'S DISCUSSION AND ANALYSIS

JUNE 30, 2017

FUND FINANCIAL STATEMENTS

The Fund Financial Statements provide detailed information about each of the Authority's most significant funds, called Major Funds. The concept of Major Funds, and the determination of which are Major Funds, was established by Governmental Accounting Standards Board (GASB) Statement No. 34 and replaces the concept of combining like funds and presenting them in total. Instead, each Major Fund is presented individually, with all Non-major Funds summarized and presented only in a single column. Major Funds present the major activities of the Authority for the fiscal year, and may change from year to year as a result of changes in the pattern of the Authority's activities.

The Authority currently has four active governmental funds. Following is a discussion of the results of operations of each fund during FY2016-17.

General Fund

This Fund accounts for the revenues and expenditures of the Authority's congestion management activities, primarily congestion management planning and programming work elements, and the management of various capital projects. The Fund spent a total of \$7.9 million for various transportation planning and programming activities, and capital projects management, and received a total of \$7.7 million in revenue in FY2016-17.

The fund's fiscal year-end balance is \$1.8 million. The Fund balance represents funds that have not yet been expended but are restricted for various congestion management activities.

BAAQMD/ TFCA Fund

This Fund accounts for the revenues and expenditures for the Transportation for Clean Air (TFCA) capital grant that the Authority receives from the Bay Area Air Quality Management District (BAAQMD). The purpose of the TFCA grant is to fund studies related to the monitoring of air quality control, and any capital improvements that can contribute to the improvement of air quality. Revenue received in FY2016-17 is \$367,644. The Fund spent \$344,236 on such activities in FY2016-17.

The Fund's fiscal year-end balance is \$1.1 million, representing funds that have not yet been expended but are restricted for air quality control and improvement projects.

Measure A Sales Tax Fund

This fund accounts for the revenues and expenditures for the projects and programs set forth by the voters in the Authority's Measure A Transportation Sales Tax Expenditure Plan, approved by Marin voters in November 2004. \$25.8 million in revenue was collected in FY2016-17. The Fund spent \$27.7 million on various Measure A related activities, with \$1.4 million for administration, \$0.8 million for professional services, \$25.5 million for Measure A projects and programs and \$0.1 million for others.

The Fund's fiscal year-end balance is \$40.2 million, representing funds that have not yet been expended but are restricted for various projects and programs according to the Measure A Expenditure Plan.

TRANSPORTATION AUTHORITY OF MARIN**MANAGEMENT'S DISCUSSION AND ANALYSIS****JUNE 30, 2017**

Measure B Vehicle Registration Fee

Under Senate Bill 83, the CMA may place an initiative on the County ballot to obtain up to \$10 in additional revenue from vehicle registration payments. In 2009, the Authority began evaluating the viability for obtaining revenues and the possibility of supporting a variety of underfunded transportation efforts. The process resulted in a ballot measure, Measure B, for simple majority approval to fund various exciting transportation projects and programs through the vehicle registration fee increases in the November 2010 election. With the strong support for the much needed transportation projects/programs around the County, Measure B, the \$10 vehicle registration fee increase, was passed successfully with a 63.5% approval rate.

Revenue collected from the Measure B program will help reduce traffic congestion, maintain roads, improve safety, and reduce air pollution by maintaining local and residential streets and pathways; funding transportation options for seniors and disabled persons; funding local pothole repair; providing school crossing guards and safe access to schools; and reducing commute trip congestion and supporting a cleaner environment. The Fund collected \$2.4 million in FY2016-17 and spent over \$3.8 million on various Measure B programs. Fund balance as of June 30, 2017 is \$2.5 million.

Governmental Fund Financial Statements are prepared on the modified accrual basis, which means they measure only current financial resources and uses. Capital assets and other long-lived assets, along with long-term liabilities, are not presented in the Governmental Statements.

Comparisons of Budget and Actual financial information are presented for all Funds of the Authority.

TRANSPORTATION AUTHORITY OF MARIN**MANAGEMENT'S DISCUSSION AND ANALYSIS****JUNE 30, 2017**

ANALYSES OF GENERAL FUNDS BUDGET**Original Budget Compared to Final Budget**

During the year there was no need for any significant amendments to increase either the original estimated revenues or original budgeted appropriations.

Final Budget Compared to Actual Results

Total general fund expenditures for FY2016-17 were \$7.9 million, \$3.5 million lower than the budgeted amount. Spending level for the Administration Category was almost the same as the \$1.5 million budgeted. The Authority spent \$2.1 million under the Professional Services Category; \$1.3 million lower than budgeted, mostly due to the slower than expected project spending for various capital projects as well as several planning efforts. The Authority spent approximately \$4.4 million for the Program/project category whereas the budgeted amount was about \$2.1 million higher than the actual spending. This was because the revenue related to the project of Central Marin Ferry Connector was not recognized and accordingly the corresponding expenditures were not spent in the current fiscal year.

Total general fund revenues were \$7.7 million, \$3.3 million lower than the budgeted amount, which is mostly a combination of the non-recognition of the project revenue of Central Marin Ferry Connector for \$4.5 million, which was mostly recognized in FY2015-16, and a \$0.7 million shortage of MTC's STP/CMAQ Planning Fund and OBAG Grants offset by a surplus of Regional Measure 2 revenues for \$2.8 million.

TRANSPORTATION AUTHORITY OF MARIN

MANAGEMENT'S DISCUSSION AND ANALYSIS
JUNE 30, 2017

Table 1
Condensed Statement of Net Position

	<u>June 30, 2017</u>	<u>June 30, 2016</u>	<u>June 30, 2015</u>
Assets			
Cash and Investments	\$ 50,499,865	\$ 51,884,455	\$ 43,884,026
Sales Tax Receivable	4,969,768	4,670,503	4,687,979
Accounts Receivable	6,587,704	5,403,878	3,456,392
Prepaid Items	21,444	21,444	40,496
Total Assets	<u>62,078,781</u>	<u>61,980,280</u>	<u>52,068,893</u>
Liabilities			
Current Liabilities			
Accounts Payable	12,238,425	9,187,709	5,644,771
Unearned Revenue	3,183,868	3,063,343	3,128,343
Noncurrent Liabilities			
Due within One Year	-	-	953,855
Total Liabilities	<u>15,422,293</u>	<u>12,251,052</u>	<u>9,726,969</u>
Net Position			
Restricted	46,656,488	49,729,228	42,341,924
Total Net Position	<u>\$ 46,656,488</u>	<u>\$ 49,729,228</u>	<u>\$ 42,341,924</u>

The Statement of Net Position summarizes the Authority's assets and liabilities with the difference of the two reported as net position. Table 1 summarizes the net position of governmental activities for the fiscal year ended June 30, 2017, June 30, 2016 and June 30, 2015.

The Authority's governmental net position was \$46.7 million as of June 30, 2017, and comprised of the following:

- Cash and Investments of \$50.5 million in the CalTRUST and deposits with financial institutions.
- Receivables and Prepaid Items of \$11.6 million in sales tax and other accounts receivables.
- Liabilities, including all accounts payables and unearned revenues, totaling \$15.4 million.
- Total net position for the Authority was \$46.7 million as of June 30, 2017, which were all restricted for various transportation projects and programs.

TRANSPORTATION AUTHORITY OF MARIN

MANAGEMENT'S DISCUSSION AND ANALYSIS
JUNE 30, 2017

Table 2
Condensed Statement of Activities

	<u>FY 2017</u>	<u>FY 2016</u>	<u>Change</u>
Revenues			
Program Revenue:			
Operating Grants and Contributions	\$ 8,024,309	\$ 8,535,259	\$ (510,950)
Total Program Revenues	8,024,309	8,535,259	(510,950)
General Revenue:			
Sales Tax	26,147,374	25,698,829	448,545
Vehicle Registration Fee	2,399,640	2,376,492	23,148
Interest	-	37,220	(37,220)
Investment Income (CalTrust)	526,338	351,877	174,461
Investment Unrealized Gain/(Loss)	(403,863)	293,173	(697,036)
Total General Revenues	28,669,489	28,757,591	(88,102)
Expenses			
Administration	3,013,630	2,857,963	155,667
Professional Services	2,965,064	1,717,395	1,247,669
Program/Project	29,260,871	20,413,522	8,847,349
Interagency Agreement	4,526,973	4,902,359	(375,386)
Other	-	14,308	(14,308)
Total Expenses	39,766,538	29,905,547	9,860,991
Changes in Net Position	(3,072,740)	7,387,303	(10,460,043)
Net Position - Beginning	49,729,228	42,341,925	7,387,303
Net Position - Ending	\$ 46,656,488	\$ 49,729,228	\$ (3,072,740)

The Statement of Activities presents program revenues and expenses and general revenues in detail. All of these elements in the Changes in Governmental Net Position are summarized below.

As Table 2 shows, \$8.0 million or 21.9% of the Authority's FY2016-17 governmental revenues, came from program revenues and \$28.7 million, or 78.1%, came from general revenues such as Measure A sales taxes, Measure B vehicle registration fee (VRF) and interest revenue.

Measure A Sales Tax revenues are the largest revenue for the Authority, and represent about 71.3% of the Authority's FY2016-17 revenues. Sales tax revenues are general revenues that are spent under the guidelines of the Expenditure Plan approved by Marin County voters in November 2004. Measure B VRF revenue is another voter approved dedicated transportation fund source for Marin County. \$2.4 million was collected in FY2016-17 under this funding source. Interest earnings are also part of the general revenues.

TRANSPORTATION AUTHORITY OF MARIN

MANAGEMENT'S DISCUSSION AND ANALYSIS JUNE 30, 2017

Program revenues include both Operating Grants and Contributions and Capital Grants. Cities and County Contributions are part of the Operating Grants and contributions revenues. Other Operating Grants and Contributions include STP/CMAQ planning funds from MTC, the STIP/PPM funds from the California Transportation Commission (CTC). Total Operating Grants and Contribution for FY2016-17 is \$8.0 million.

Economic Outlook and Future Projections

The Authority will continue to maintain a watchful eye over expenditures and remain committed to sound fiscal management practices to deliver the highest quality services to the residents of Marin County.

With the steady growth of the Measure A sales tax revenues collection and reliable revenue stream from the Measure B VRF, the Authority will be able to continue many of the vital transportation projects/programs in Marin. The Authority hopes funding level from various federal and state resources will be stabilized in the upcoming fiscal year. All those steady revenue sources will help the financial picture of all the transportation projects and programs in Marin County.

On the expenditure side, the Authority was able to find adequate cash for the needs of various capital projects in FY2017-18 and expects this to remain the same in the upcoming fiscal year.

Request for Information

This Financial Report is intended to provide citizens, taxpayers and creditors with a general overview of the Authority's finances. Questions concerning any of the information provided in this report or requests for additional financial information should be directed to the Transportation Authority of Marin, 900 Fifth Ave, Suite 100, San Rafael, CA 94901; (415) 226-0815.

TRANSPORTATION AUTHORITY OF MARIN

**STATEMENT OF NET POSITION
JUNE 30, 2017**

	Governmental Activities
ASSETS	
Cash and Investments	\$ 50,499,865
Sales Tax Receivable	4,969,768
Accounts Receivable	6,587,704
Prepaid Items	21,444
Total Assets	62,078,781
LIABILITIES	
Accounts Payable	12,238,425
Unearned Revenue	3,183,868
Total Liabilities	15,422,293
NET POSITION	
Restricted for:	
BAAQMD-TFCA Project	1,148,177
Measure A Sales Tax Project	41,151,805
Measure B VRF Projects	2,548,561
Congestion Management Projects	1,807,945
Total Net Position	\$ 46,656,488

The accompanying notes are an integral part of the financial statements.

TRANSPORTATION AUTHORITY OF MARIN

**STATEMENT OF ACTIVITIES
FOR THE YEAR ENDED JUNE 30, 2017**

Functions/Programs	Expenses	Program Revenues		Net (Expense) Revenue and Changes in Net Position
		Operating	Grants and Contributions	
Governmental Activities:				
Congestion Management:				
Administration	\$ 3,013,630	\$ 1,398,923		\$ (1,614,707)
Professional Services	2,965,064	2,176,633		(788,431)
TFCA Programs/Projects	276,856	361,471		84,615
Measure A Sales Tax Programs/Projects	25,351,395	-		(25,351,395)
Measure B VRF Programs/Projects	3,632,620	-		(3,632,620)
Interagency Agreement	4,526,973	4,087,282		(439,691)
Total Governmental Activities	\$ 39,766,538	\$ 8,024,309		(31,742,229)
General Revenues:				
				26,147,374
				2,399,640
				122,475
				28,669,489
				(3,072,740)
				49,729,228
				\$ 46,656,488

The accompanying notes are an integral part of the financial statements.

TRANSPORTATION AUTHORITY OF MARIN
BALANCE SHEET- GOVERNMENTAL FUNDS
JUNE 30, 2017

	General Fund	BAAQMD/ TFCA Fund	Measure A Sales Tax Fund	Measure B VRF Fund	Total Governmental Funds
ASSETS					
Cash and Investments	\$ 3,286,128	\$ 1,236,339	\$ 43,455,143	\$ 2,522,255	\$ 50,499,865
Sales Tax Receivable	-	-	4,969,768	-	4,969,768
Accounts Receivable	5,976,787	186,867		424,050	6,587,704
Prepaid Items	-	-	21,444	-	21,444
Total Assets	\$ 9,262,915	\$ 1,423,206	\$ 48,446,355	\$ 2,946,305	\$ 62,078,781
LIABILITIES, DEFERRED INFLOWS OF RESOURCES AND FUND BALANCES					
Liabilities:					
Accounts Payable	\$ 4,271,102	\$ 275,029	\$ 7,294,550	\$ 397,744	\$ 12,238,425
Unearned Revenues	3,183,868	-	-	-	3,183,868
Total Liabilities	7,454,970	275,029	7,294,550	397,744	15,422,293
Deferred Inflows of Resources:					
Unavailable Revenues	-	-	966,453	-	966,453
Fund Balances:					
Nonspendable	-	-	21,444	-	21,444
Restricted for:					
BAAQMD/TFCA	-	1,148,177	-	-	1,148,177
Measure A Sales Tax	-	-	40,163,908	-	40,163,908
Measure B VRF	-	-	-	2,548,561	2,548,561
Congestion Management	1,807,945	-	-	-	1,807,945
Total Fund Balances	1,807,945	1,148,177	40,185,352	2,548,561	45,690,035
Total Liabilities, Deferred Inflows of Resources and Fund Balances	\$ 9,262,915	\$ 1,423,206	\$ 48,446,355	\$ 2,946,305	\$ 62,078,781

The accompanying notes are an integral part of the financial statements.

TRANSPORTATION AUTHORITY OF MARIN

**RECONCILIATION OF THE GOVERNMENTAL FUNDS
BALANCE SHEET TO THE STATEMENT OF NET POSITION
JUNE 30, 2017**

Amount reported for governmental activities in the statement of net position are different because:

Fund Balances of Governmental Funds		\$ 45,690,035
Revenues collected outside the measurement period of the Governmental Funds are deferred on the Balance Sheet. However, these revenues are considered to be earned on the Statement of Activities.		966,453
Total Net Position - Governmental Activities		\$ 46,656,488

The accompanying notes are an integral part of the financial statements.

TRANSPORTATION AUTHORITY OF MARIN

**STATEMENT OF REVENUES, EXPENDITURES, AND CHANGES IN
FUND BALANCES – GOVERNMENTAL FUNDS
FOR THE YEAR ENDED JUNE 30, 2017**

	General	BAAQMD/TFCA	Measure A	Measure B	Total
	Fund	Fund	Sales Tax Fund	VRF Fund	Governmental
					Funds
REVENUES					
Measure A Sales Tax Revenue	\$ -	\$ -	\$ 25,755,762	\$ -	\$ 25,755,762
Measure B VRF Revenue	-	-	-	2,399,640	2,399,640
Cities/Towns and County Contribution	559,000	-	-	-	559,000
Investment Income (CalTrust)	30,222	14,141	442,120	39,855	526,338
Investment Unrealized Gain/Loss	(18,747)	(7,968)	(348,889)	(28,259)	(403,863)
MTC STP/CMAQ Planning Fund and OBAG Grants	738,309	-	-	-	738,309
PDA Planning Funds	13,000	-	-	-	13,000
MTC Regional Measure 2 Fund	5,597,422	-	-	-	5,597,422
Transportation For Clean Air Funding	-	361,471	-	-	361,471
Federal Highway Bridge Program Fund	82,663	-	-	-	82,663
State STIP/PPM Fund	85,475	-	-	-	85,475
STIP/RTIP/IIP Fund	580,499	-	-	-	580,499
MTC Grant for Youth Transit Program/CMAQ	14,069	-	-	-	14,069
CMFC NTPP/CMAQ Pass-through	(7,599)	-	-	-	(7,599)
Total Revenues	7,674,313	367,644	25,848,993	2,411,236	36,302,186
EXPENDITURES					
Congestion Management - Current:					
Administration	1,380,849	18,074	1,445,699	169,008	3,013,630
Professional Services	2,127,327	49,306	788,431	-	2,965,064
TFCA Programs/Projects	-	276,856	-	-	276,856
Measure A Sales Tax Programs/Projects	-	-	25,351,395	-	25,351,395
Measure B VRF Programs/Projects	-	-	-	3,632,620	3,632,620
Interagency Agreement	4,406,101	-	120,872	-	4,526,973
Total Expenditures	7,914,277	344,236	27,706,397	3,801,628	39,766,538
Net Change in Fund Balances	(239,964)	23,408	(1,857,404)	(1,390,392)	(3,464,352)
Fund Balance - Beginning	2,047,909	1,124,769	42,042,756	3,938,953	49,154,387
Fund Balance - Ending	\$ 1,807,945	\$ 1,148,177	\$ 40,185,352	\$ 2,548,561	\$ 45,690,035

The accompanying notes are an integral part of the financial statements.

TRANSPORTATION AUTHORITY OF MARIN

**RECONCILIATION OF THE STATEMENT OF REVENUES, EXPENDITURES,
AND CHANGES IN FUND BALANCES OF THE GOVERNMENTAL FUNDS
TO THE STATEMENT OF ACTIVITIES
FOR THE YEAR ENDED JUNE 30, 2017**

Amount reported for governmental activities in the statement of activities are different because:

NET CHANGE IN FUND BALANCES	\$ (3,464,352)
Governmental funds defer certain revenues that are not recognized with the Authority's accrual period such as sales tax. On the Statement of Activities, however, the amounts are considered to be earned and are recognized as revenues in the current period.	391,612
Change in Net Position of Governmental Activities	\$ (3,072,740)

The accompanying notes are an integral part of the financial statements.

NOTES TO BASIC FINANCIAL STATEMENTS

TRANSPORTATION AUTHORITY OF MARIN

NOTES TO BASIC FINANCIAL STATEMENTS

JUNE 30, 2017

NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Reporting Entity

On March 2, 2004, the Marin County Board of Supervisors created the Transportation Authority of Marin (the Authority) by Resolution No. 2004-21, pursuant to Section 180050 of the California Public Utilities Code (“PUC”). As required by California PUC Section 180051(a) and California Government Code Section 65089(a), a majority of City and Town Councils of Marin County, representing a majority of the incorporated population of Marin, have concurred on the membership of the Authority and designated the Authority as the Congestion Management Authority for Marin County.

The Authority’s responsibilities include the development and administration of the Transportation Sales Tax Expenditure Plan, approved by Marin voters in November 2004. With the passage of Measure A, the Authority now manages the implementation of the transportation projects and programs financed by the ½-cent, 20 years sales tax. The Authority also serves as the designated Congestion Management Authority (CMA) for Marin County, providing countywide planning and programming for transportation related needs. As both the sales tax authority and the CMA for Marin County, the Authority plays a leading role in planning, financing, and implementation of transportation projects and programs in Marin County.

The Authority’s sixteen member governing board is comprised of representatives from each of the cities and towns in Marin County, and all five members of the County Board of Supervisors. A Technical Advisory Committee (TAC), made up of public works staff, other local government staff, and representatives of diverse interest groups prioritizes infrastructure improvements and makes recommendations to the Authority. A twelve member Citizens’ Oversight Committee, made up of five representatives from the five planning areas and seven representatives from diverse interest groups in Marin County, reports directly to the public on issues related to the Measure A sales tax and Measure B VRF revenues and expenditures.

Basis of Presentation

Government-wide Statements - The Statement of Net Position and the Statement of Activities include the overall financial activities of the Authority. Eliminations have been made to minimize the double counting of internal activities.

The government-wide Statement of Activities presents a comparison between direct expenses and program revenues for each function of the Authority’s activities. Direct expenses are those specifically associated with a program or function and, therefore, are clearly identifiable to a particular function. Program revenues include (a) charges paid by the recipients of goods or services offered by the programs and (b) funds and contributions that are restricted to meeting the operations or capital requirements of a particular program. Revenues not classified as program revenues are presented as general revenues.

Fund Financial Statements - The fund financial statements provide information about the Authority’s funds. Separate statements for each governmental fund are presented. The emphasis of fund financial statements is on major individual funds, each of which is displayed on a separate column.

TRANSPORTATION AUTHORITY OF MARIN

NOTES TO BASIC FINANCIAL STATEMENTS

JUNE 30, 2017

NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES - continued

Major Funds

Generally accepted accounting principles defines major funds and requires that the Authority's major governmental type funds be identified and presented separately in the fund financial statements. The Authority has determined that all of its funds are major funds.

The Authority reported the following major governmental funds in the accompanying financial statements:

CMA General Fund - This fund accounts for revenues and expenditures for the Authority's congestion management activities, primarily congestion management planning and programming work elements, and the management of various capital projects. Major revenues sources for this fund are all programming revenues with the exception of Transportation for Clean Air (TFCA) funds.

BAAQMD/TFCA Fund - This fund accounts for revenues and expenditures for the TFCA capital grant the Authority receives from the Bay Area Air Quality Management District (BAAQMD). The purpose of the TFCA grant is to fund studies related to the monitoring of air quality control, and any capital improvements that can contribute to the improvement of air quality.

Measure A ½ Cent Transportation Sales Tax Fund - This fund accounts for revenues and expenditures for the projects and programs set forth by the voters in the Authority's Transportation Sales Tax Expenditure Plan, approved by Marin voters in November 2004.

Measure B VRF Fund - This fund accounts for revenues and expenditures for the projects and programs set forth by the voters in the Authority's \$10 Vehicle Registration Fee Expenditure Plan, approved by the Marin voters in November 2010.

TRANSPORTATION AUTHORITY OF MARIN

NOTES TO BASIC FINANCIAL STATEMENTS JUNE 30, 2017

NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES - continued

Basis of Accounting

The government-wide financial statements are reported using the economic resources measurement focus and the full accrual basis of accounting. Revenues are recorded when *earned* and expenses are recorded at the time liabilities are *incurred*, regardless of when the related cash flows take place.

Governmental funds are reported using the *current financial resources* measurements focus and the modified accrual basis of accounting. Under this method, revenues are recognized when *measurable and available*. The Authority considers all revenues reported in the governmental funds to be available if the revenues are collected within 180 days after fiscal year-end, except for sales tax revenues which are accrued for if received within sixty days after fiscal year-end. Expenditures are recorded when the related fund liability is incurred, except for principal and interest on long-term debt, claims and judgments, and compensated absences, which are recognized as expenditures to the extent they have matured. Capital assets acquisitions are reported as *expenditures* in governmental funds. Proceeds of long-term debt and acquisition under capital leases or other long-term debt are reported as *other financing sources*.

Non-exchange transactions, in which the Authority gives or receives value without directly receiving or giving equal value in exchange, includes entitlements and donations. Revenues from nonexchange transactions are recognized when they become susceptible and in the accounting period when they become available and measurable in the governmental funds.

The Authority funds certain programs by a combination of specific cost-reimbursement funds, categorical block funds, and general revenues. Thus, when program expenses are incurred, there are both restricted and unrestricted net positions available to finance the program. The Authority's policy is to first apply restricted resources to such programs, followed by general revenues.

Budget and Budgetary Accounting

The budget for expenditures is adopted on the budgetary basis, which is consistent with accounting principles generally accepted in the United States of America. The budget for revenues and expenditures is adopted by the Board annually by fund, therefore the Schedule of Revenues, Expenditures, and Changes in Fund Balances - Budget and Actual is presented for each governmental fund.

Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect certain reported amounts and disclosures. Accordingly, actual results could differ from those estimates.

TRANSPORTATION AUTHORITY OF MARIN

NOTES TO BASIC FINANCIAL STATEMENTS JUNE 30, 2017

NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES - continued

Net Position and Fund Balances

Government-wide Financial Statements

Net Investments in Capital Assets - This amount consists of capital assets net of accumulated depreciation and reduced by outstanding debt if any, that contributed to the acquisition, construction, or improvement of the capital assets.

Restricted Net Position - This amount consists of amounts restricted from external creditors, grantors, contributors, and laws or regulations of other governments.

Unrestricted Net Position - This amount consists of all net assets that do not meet the definition of “net investments in capital assets” or “restricted net position”.

Fund Financial Statements

Fund Balances - Restrictions of fund balances of governmental funds are amounts that can be spent only for the specific purpose stipulated by constitution, external resource providers, or through enabling legislation. The non-spendable fund balance classification includes amounts that cannot be spent because they are either not in a spendable form such as prepaid items or inventories, or are legally or contractually required to be maintained intact. The committed fund balance classification includes amounts that can be used only for the specific purposes determined by a formal action of the government’s highest level of decision-making authority. Amounts in the assigned fund balance classification are intended to be used by the government for specific purposes but do not meet the criteria to be classified as restricted or committed. In governmental funds other than the general fund, assigned fund balance represents the remaining amount that is not restricted or committed. The Authority had no committed or assigned fund balances as of year-end.

Unassigned fund balance is the residual classification for the government’s general fund and includes all spendable amounts not contained in the other classifications.

Spending Order Policy

When expenses are incurred for both restricted and unrestricted fund balances available, the Authority considers restricted funds to have been spent first. When expenditures are incurred for which committed, assigned, or unassigned fund balances are available, the Authority considers amounts to have been spent first out of committed funds then assigned funds, and finally unassigned funds, as needed, unless the governing board has provided otherwise in its commitment or assignment actions.

Unearned Revenue

Under modified accrual basis of accounting used by governmental funds, revenues are recognized as soon as they are measurable and available. Under the full accrual basis of accounting used by the government-wide financial statement, revenues are recognized when earned. Thus, the government-wide statement of net position and governmental funds defer revenue recognition for resources that have been received at fiscal year-end, but not yet earned.

TRANSPORTATION AUTHORITY OF MARIN

NOTES TO BASIC FINANCIAL STATEMENTS

JUNE 30, 2017

NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES - continued

Risk Management

The Authority is exposed to various risks of loss related to torts; theft of, damage to, and destruction of assets; errors and omissions; and natural disasters for which the Authority carries commercial insurance through Alliant Insurance Services, Inc.

Deferred Outflows and Inflows of Resources

In addition to assets, the statement of net position will sometimes report a separate section for deferred outflows of resources. Deferred outflows of resources represent a consumption of net position that applies to a future period(s) and so will not be recognized as an outflow of resources (expense) until then.

In addition to liabilities, the statement of net position and the balance sheet will sometimes report a separate section for deferred inflows of resources. Deferred inflows of resources represent an acquisition of net position or fund balance that applies to a future period(s) and so will not be recognized as an inflow of resources (revenue) until that time. The government has only one type of item, which arises only under a modified accrual basis of accounting, that qualifies for reporting in this category. Accordingly, the item, *unavailable revenue*, is reported only in the governmental funds balance sheet. The governmental funds report unavailable revenues from sales tax. This amount is deferred and recognized as an inflow of resources in the period that the amount is available.

Investment Valuations

The Authority recognizes the fair value measurement of its investments based on the hierarchy established by generally accepted accounting principles. The fair value hierarchy, which has three levels, is based on the valuation inputs used to measure an asset's fair value: Level 1 inputs are quoted prices in active markets for identical assets; Level 2 inputs are significant other observable inputs; Level 3 inputs are significant unobservable inputs. The Authority's investments in the CalTrust Pool are uncategorized as deposits and withdrawals are made on the basis of \$1 and not fair value.

NOTE 2 – CASH AND INVESTMENTS

Classification

Cash and investments are classified in the financial statements as shown below:

Cash and Investments, Statement of Net Position			\$ 50,499,865
Cash and Investments as of June 30, 2017 consist of the following:			
Bank of Marin			\$ 3,409,112
Deposits with CalTrust			47,090,753
Total Cash and Investments			\$ 50,499,865

TRANSPORTATION AUTHORITY OF MARIN

NOTES TO BASIC FINANCIAL STATEMENTS JUNE 30, 2017

NOTE 2 – CASH AND INVESTMENTS - continued

Investment Authority by the California Government Code and the Authority's Investment Policy

The table below identifies the investment types that are authorized for the Authority by the California Government Code. The table also identifies certain provisions of the California Government Code that address interest rate risk and concentration of credit risk. The Authority has adopted a formal investment policy. The allowable investments, according to the Authority's investment policy, are listed below:

Authorized Investment Type	Maximum Remaining Maturity	Maximum Percentage of Portfolio	Maximum Investment in One Issuer
Local Agency Investment Fund (LAIF)	None	None	\$50 million
Certificates of Deposit	2 years	30%	None
U.S. Treasury Obligations	2 years	None	None
U.S. Agency Obligations	2 years	None	None
U.S. Government Securities	2 years	None	None
State of California and Local Agency Bonds	2 years	None	None
Bankers Acceptances	180 days	30%	30%
Medium-Term Notes	2 years	30%	None
Money Market Mutual Funds	None	20%	10%
Commercial Paper	270 days	25%	None
California Investment Trust	None	None	None
Marin County Cash Pool	None	None	None
Repurchase Agreements	1 year	None	None

Disclosures Relating to Interest Rate Risk

Interest rate risk is the risk that changes in market interest rates will adversely affect the fair value of an investment. Generally, the longer the maturity of an investment the greater the sensitivity of its fair value to changes in market interest rates.

Information about the sensitivity of the fair values of the Authority's investments to market interest rate fluctuations is provided by the following table that shows the distribution of the Authority's investments by maturity:

Investment Type	Totals	Remaining Maturity 12 Months or Less
Deposits with CalTrust	47,090,753	47,090,753
Total	\$ 47,090,753	\$ 47,090,753

TRANSPORTATION AUTHORITY OF MARIN**NOTES TO BASIC FINANCIAL STATEMENTS
JUNE 30, 2017**

NOTE 2 – CASH AND INVESTMENTS - continued**Disclosures Relating to Credit Risks**

Credit risk is the risk that an issuer of an investment will not fulfill its obligation to the holder of the investment. This is measured by the assignment of a rating by a nationally recognized statistical rating organization. The Authority's investments with CalTrust are invested in short term and medium term funds for a total of \$47,090,753. CalTrust is unrated but the Authority's investment in the amount of \$1,839,149 in the short term fund is rated AA and the Authority's investment in the medium term fund in the amount of \$45,251,604 is rated A by S&P.

Custodial Credit Risk

Custodial credit risk for deposits is the risk that, in the event of the failure of a depository financial institution, a government will not be able to recover its deposits or will not be able to recover collateral securities that are in the possession of an outside party. The custodial credit risk for investments is the risk, in the event of the failure of the counterparty (e.g. broker-dealer) to a transaction; a government will not be able to recover the value of its investments or collateral securities that are in the possession of another party. The California Government Code does not contain legal or policy requirements that would limit the exposure to custodial credit risk for deposits or investments, other than the following provision for deposits: The California Government Code 53652 requires that a financial institution secure deposits made by state or local government units by pledging securities in an undivided collateral pool held by a depository regulated under state law (unless so waived by the government unit). The fair value of the pledge securities in the collateral pool must equal at least 110% of the total amount deposited by the public agencies. California law also allows financial institution to secure Authority deposits by pledging first trust deed mortgage notes having a value of 150% of the secured public deposits. Of the bank balance, \$250,000 was covered by federal depository insurance and the remaining balance was collateralized by the pledging financial institutions as required by Section 53652 of the California Government Code described above.

NOTE 3 – OPERATING LEASE**Operating Lease**

The Authority entered into a five-year lease to rent 7,621 square feet of office space at 900 Fifth Ave, Suite 100 in Downtown San Rafael in 2015. The base rent commences at \$19,052 per month and ends at \$21,444 per month.

TRANSPORTATION AUTHORITY OF MARIN

NOTES TO BASIC FINANCIAL STATEMENTS

JUNE 30, 2017

NOTE 4 – EMPLOYMENT AGREEMENT

The Authority has no employees of its own. The Authority has entered into an employment agreement with a joint powers authority, Local Government Services (LGS)/Regional Government Service (RGS), for all its eleven employees. LGS/RGS provides staffing, payroll, insurance and various other administrative services to small governmental agencies throughout California. The Authority pays LGS hourly rates for each employee's hours worked during the year. The hourly rates for each employee include salary, fringe benefits, insurance costs, costs of retirement liabilities and other postemployment benefits (OPEB), and a flat administration fee for all service provided. The Authority prepays the expected monthly fee prior to the service month.

Because the Authority has no employees of its own, there are no accrued payroll or compensated absence liabilities on the books of the Authority. Any benefits or accrued compensation due to the employees are the responsibility of LGS / RGS and already reflected in the rates charged.

NOTE 5 – COMMITMENTS AND CONTINGENCIES

The Authority is subject to litigation arising in the normal course of business. In the opinion of the Authority's attorney, there is no pending litigation which is likely to have a material adverse effect on the financial position of the Authority. The Authority has received state and federal funds for specific purposes that are subject to review and audit by the grantor agencies. Although such audits could result in expenditure disallowances under the terms of the grants, it is believed that any required reimbursements will not be material.

The Authority has various cooperative agreements with governmental entities and contracts with vendors. As of June 30, 2017, the Authority's total outstanding commitments were approximately \$59.8 million, with \$43 million expended and \$37.4 million still outstanding as of June 30, 2017.

NOTE 6 – RISK MANAGEMENT

The Authority is exposed to various risks of losses related to torts; theft of; damage to, and destruction of assets; errors and omissions; and natural disasters. The Authority carries commercial insurance through Alliant Insurance Services, Inc. for general liability, automobile, property coverage, and public officials' errors and omissions.

Coverage is as follows:

- a) General liability - \$ 1,000,000 each occurrence.
 - b) Damage to rented premises - \$1,000,000 each occurrence.
 - c) Automobile liability - \$1,000,000 each accident.
 - d) Public officials errors and omissions - \$1,000,000 each occurrence and annual aggregate.
- All deductibles are \$2,500.

Crime coverage for LGS employees is provided by Alteris Insurance and is limited to \$1,000,000, with a \$50,000 deductible. There were no claims that exceeded the insurance coverage amounts in the past three years.

REQUIRED SUPPLEMENTARY INFORMATION

TRANSPORTATION AUTHORITY OF MARIN

SCHEDULE OF REVENUES, EXPENDITURES, AND CHANGES IN FUND BALANCES – BUDGET AND ACTUAL – GENERAL FUND FOR THE YEAR ENDED JUNE 30, 2017

				Variances - Positive (Negative) Final to Actual
	Original	Final	Actual	
REVENUES				
Cities/Towns and County Contribution	\$ 559,000	\$ 559,000	\$ 559,000	\$ -
Interest Revenue	14,000	14,000	30,218	16,218
MTC STIP/CMAQ Planning Fund and OBAG Grants	1,314,740	1,314,740	738,309	(576,431)
PDA Planning Funds	85,729	85,729	13,000	(72,729)
MTC Regional Measure 2 Fund	2,755,516	2,755,516	5,597,422	2,841,906
State STIP PPM Fund	49,986	49,986	85,475	35,489
STIP/RTIP/ITIP Funds	1,262,306	1,262,306	580,500	(681,806)
Federal Highway Bridge Program Fund	247,691	247,691	82,663	(165,028)
Nonmotorized Transportation Pilot Program Fund	27,000	27,000	(7,599)	(34,599)
MTC Climate Initiatives Program Grant/CMAQ	125,000	125,000	14,069	(110,931)
CMFC NTPP/CMAQ Pass-through	4,500,000	4,500,000	-	(4,500,000)
Total Revenues	10,940,968	10,940,968	7,693,057	(3,247,911)
EXPENDITURES				
Administration:				
Salaries & Benefits	1,278,652	1,278,652	1,207,911	70,741
LGS Insurance and HR/Payroll Service Cost	120,627	120,627	134,212	(13,585)
Office Supplies	5,000	5,000	63	4,937
Legal Services	30,000	30,000	24,107	5,893
Document Reproduction	10,000	10,000	3,338	6,662
Memberships	20,000	20,000	2,680	17,320
Travel/Meetings/Conferences	12,000	12,000	6,861	5,139
Carshare Membership	1,500	1,500	-	1,500
Professional Development	2,500	2,500	1,260	1,240
Human Resources/Board Support	10,000	10,000	-	10,000
Misc. Expenses	2,500	2,500	417	2,083
Professional Services:				
CMP Update/Traffic Monitoring	60,000	60,000	107,270	(47,270)
Traffic Model Maintenance & Update	200,000	200,000	108,292	91,708
Trip Monitoring and Reporting	85,000	85,000	-	85,000
Countywide Bike/Pedestrian Plan Update	19,000	19,000	25,645	(6,645)
Project Management Oversight	100,000	100,000	35,287	64,713
MSN B1 Redwood Landfill Interchange Design	10,000	10,000	417	9,583
MSN B3 San Antonio Curve Correction Construction Support	250,000	250,000	134,280	115,720
MSN B6 San Antonio Bridge Replacement Design	200,000	200,000	58,333	141,667
MSN L1A Orange Ave Soundwall Mitigation Design/ Construction	35,000	35,000	11,307	23,693
HOV Gap Closure Irwin Creek Mitigation Design	60,000	60,000	9,620	50,380
HOV Gap Closure Mitigation Irwin Creek Construction Management/Construction	274,231	274,231	246,302	27,929

TRANSPORTATION AUTHORITY OF MARIN

**SCHEDULE OF REVENUES, EXPENDITURES, AND CHANGES IN FUND
BALANCES – BUDGET AND ACTUAL – GENERAL FUND - CONTINUED
FOR THE YEAR ENDED JUNE 30, 2017**

State Legislative Assistance	35,000	35,000	35,000	-
Financial Advisor/Sales Tax Audit Services	5,000	5,000	-	5,000
North-South Greenway Gap Closure PA&ED/PS&E	1,250,000	1,250,000	1,140,540	109,460
TAM Junction CM & Construction	420,000	420,000	38,482	381,518
Public Outreach Service	5,000	5,000	4,046	954
Street Smart Program Implementation	27,000	27,000	-	27,000
Carshare Pilot Program Implementation	140,000	140,000	-	140,000
Highway 101 Ramp Metering Special Study	50,000	50,000	4,351	45,649
Countywide Transportation Strategic Plan	110,000	110,000	103,978	6,022
Consulting Pool	25,000	25,000	61,853	(36,853)
CMFC Onsit Re-Vegetation Mitigation Monitoring & Reporting	-	22,000	2,324	19,676
Interagency Agreements:				
CMFC County Agreement RM2	250,000	250,000	3,966,357	(3,716,357)
CMFC - County Construction Agreement NTPP/CMAQ	4,500,000	4,500,000	-	4,500,000
CMFC - County Parks Mitigation and Monitoring Agreement	400,000	400,000	343,657	56,343
Highway 101 Ramp Metering Local Support	50,000	50,000	-	50,000
San Rafael Transit Needs and Relocation Study Funding Agreement	5,000	5,000	-	5,000
San Rafael Downtown Parking and Wayfinding Study	30,000	30,000	60,102	(30,102)
North-South Greenway (Southern Segment)- County Project Management	750,000	750,000	18,009	731,991
HOV Gap Closure Offsite Landscaping Mitigation Funding Agreement	490,000	490,000	-	490,000
SR 37 Study Funding Contribution - Agreement	-	20,000	17,976	2,024
Total Expenditures	11,328,010	11,370,010	7,914,277	3,455,733
Excess of Revenues Over (Under)				
Expenditures	(387,042)	(429,042)	(221,220)	207,822
Fund Balance - Beginning	2,047,909	2,047,909	2,047,909	-
Fund Balance - Ending - Budgetary Basis	\$1,660,867	\$1,618,867		\$ 207,822
Reconciling item				
GASB 31			(18,744)	
Fund Balance - Ending - GAAP Basis			\$1,807,945	

TRANSPORTATION AUTHORITY OF MARIN

**SCHEDULE OF REVENUES, EXPENDITURES, AND CHANGES IN FUND
BALANCES – BUDGET AND ACTUAL – BAAQMD/TFCA FUND
FOR THE YEAR ENDED JUNE 30, 2017**

				Variances - Positive (Negative) Final to Actual
	Original	Final	Actual	
REVENUES				
Interest Revenue	\$ 1,000	\$ 1,000	\$ 14,141	\$ 13,141
Transportation For Clean Air Funding	356,000	356,000	361,471	5,471
Total Revenues	357,000	357,000	375,612	18,612
EXPENDITURES				
Administration:				
Salaries & Benefits	17,800	17,800	18,074	(274)
Professional Services:				
TAM Junction CM & Construction	-	-	49,306	(49,306)
TFCA Programs/Projects:				
TFCA - TDM Projects/Vanpool Incentive	16,000	16,000	9,660	6,340
TFCA - Reimbursement of Various Capital Projects	414,000	414,000	267,196	146,804
Total Expenditures	447,800	447,800	344,236	103,564
Excess of Revenues Over (Under) Expenditures	(90,800)	(90,800)	31,376	122,176
Fund Balance - Beginning	1,124,769	1,124,769	1,124,769	-
Fund Balance - Ending - Budgetary Basis	\$ 1,033,969	\$ 1,033,969		\$ 122,176
Reconciling item				
GASB 31			(7,968)	
Fund Balance - Ending - GAAP Basis			\$ 1,148,177	

TRANSPORTATION AUTHORITY OF MARIN

**SCHEDULE OF REVENUES, EXPENDITURES, AND CHANGES IN FUND
BALANCES – BUDGET AND ACTUAL – MEASURE A SALES TAX FUND -
FOR THE YEAR ENDED JUNE 30, 2017**

				Variances - Positive (Negative)
	Original	Final	Actual	Final to Actual
REVENUES				
Measure A Sales Tax Revenue	\$ 25,770,000	\$ 25,770,000	\$ 25,755,762	\$ (14,238)
Interest Revenue	200,000	200,000	442,120	242,120
Total Revenues	25,970,000	25,970,000	26,197,882	227,882
EXPENDITURES				
Administration				
Salaries & Benefits	800,849	800,849	881,819	(80,970)
LGS Insurance and HR/Payroll Service Cost	74,514	74,514	97,980	(23,466)
Office Lease	240,000	240,000	239,379	621
Agencywide IT and Computer Equipment Upgrade	10,000	10,000	-	10,000
Equipment Purchase/Lease	10,000	10,000	7,886	2,114
Telephone/Internet/ Web Hosting Services	25,000	25,000	16,742	8,258
Office Supplies	25,000	25,000	26,643	(1,643)
Update/Improvement of TAM Website	30,000	30,000	20,349	9,651
Classification Study	30,000	30,000	-	30,000
Insurance	15,000	15,000	5,863	9,137
Financial Audit	21,000	21,000	20,000	1,000
Legal Services	60,000	60,000	12,418	47,582
Document Reproduction	25,000	25,000	9,897	15,103
Memberships	5,000	5,000	4,560	440
Travel/Meetings/Conferences	12,000	12,000	21,919	(9,919)
Carshare Membership	1,500	1,500	-	1,500
Electric Bike Purchase/Lease	3,000	3,000	-	3,000
Professional Development	2,500	2,500	3,270	(770)
Human Resources/Board Support	60,000	60,000	28,074	31,926
Information Technology Support	40,000	40,000	34,628	5,372
Annual Support & Upgrade of Financial System	15,000	15,000	4,918	10,082
Misc. Expenses	10,000	10,000	9,354	646
Professional Services				
Project Management Oversight	100,000	100,000	71,124	28,876
Financial Advisor/Sales Tax Audit Services	10,000	10,000	3,000	7,000
Public Outreach Service	5,000	5,000	2,280	2,720
Countywide Transportation Strategic Plan	-	-	18,359	(18,359)
Consulting Pool	40,000	40,000	17,917	22,083
Approches to the Richmond-San Rafael Bridge Project	-	950,000	573,750	376,250
580/101 Director Connector Feasibility Study	-	100,000	102,000	(2,000)
Measure A Sales Tax Programs/Projects:				
Measure A Compliance Audit	20,000	20,000	10,500	9,500
Bike/Ped Path Maintenance	137,000	137,000	45,409	91,591
Central Marin Ferry Connector - SMART Insurance Policy	25,000	25,000	15,727	9,273
Substrategy 1.1 - Local Bus Transit Service	10,000,000	10,000,000	9,024,034	975,966
Substrategy 1.2 - Rural Bus Transit System	1,100,000	1,100,000	1,061,315	38,685
Substrategy 1.3 - Special Needs Transit Services	2,572,019	2,572,019	2,180,396	391,623
Substrategy 1.4 - Bus Transit Facilities	3,250,000	3,250,000	950,801	2,299,199

TRANSPORTATION AUTHORITY OF MARIN

**SCHEDULE OF REVENUES, EXPENDITURES, AND CHANGES IN FUND
BALANCES – BUDGET AND ACTUAL – MEASURE A SALES TAX FUND
CONTINUED
FOR THE YEAR ENDED JUNE 30, 2017**

Strategy 2 TE/TLC/STP Swap Project	250,000	250,000	-	250,000
Substrategy 3.1 - Major Roads	4,820,000	4,820,000	6,602,217	(1,782,217)
Substrategy 3.2 - Local Roads	3,134,400	3,134,400	3,134,400	-
Substrategy 4.1 - Safe Routes to Schools	885,000	885,000	623,921	261,079
Substrategy 4.2 - Crossing Guards	1,126,000	1,174,000	1,016,848	157,152
Substrategy 4.3 - Safe Pathways Plan Development	100,000	100,000	317,583	(217,583)
Substrategy 4.3 - Safe Pathway Capital Projects	1,000,000	1,000,000	368,245	631,755
GGT Ferry Shuttle Service Contribution Through MT	-	85,000	-	85,000
Interagency Agreements:				
County Lower Marin City Drainage Study	-	125,000	120,872	4,128
Total Expenditures	30,089,782	31,397,782	27,706,397	3,691,385
Excess of Revenues Over (Under)				
Expenditures	(4,119,782)	(5,427,782)	(1,508,515)	3,919,267
Fund Balance - Beginning	42,042,756	42,042,756	42,042,756	-
Fund Balance - Ending - Budgetary Basis	\$ 37,922,974	\$ 36,614,974		\$ 3,919,267
Reconciling item				
GASB 31			(348,889)	
Fund Balance - Ending - GAAP Basis			\$ 40,185,352	

TRANSPORTATION AUTHORITY OF MARIN

**SCHEDULE OF REVENUES, EXPENDITURES, AND CHANGES IN FUND
BALANCES – BUDGET AND ACTUAL – MEASURE B VRF FUND
FOR THE YEAR ENDED JUNE 30, 2017**

				Variances - Positive (Negative) Final to Actual
	Original	Final	Actual	
REVENUES				
Measure B VRF Revenue	\$2,350,000	\$2,350,000	\$2,399,640	\$ 49,640
Interest Revenue	15,000	15,000	39,855	24,855
Total Revenues	2,365,000	2,365,000	2,439,495	74,495
EXPENDITURES				
Administration:				
Salaries & Benefits	105,965	105,965	141,860	(35,895)
LGS Insurance and HR/Payroll Service Cost	9,859	9,859	15,762	(5,903)
Telephone/Internet/ Web Hosting Services	-	-	346	(346)
Legal Services	10,000	10,000	7,863	2,137
Document Reproduction	5,000	5,000	675	4,325
Memberships	-	-	615	(615)
Travel/Meetings/Conferences	1,000	1,000	778	222
Misc. Expenses	1,000	1,000	1,110	(110)
Professional Services:				
Project Management Oversight	10,000	10,000	-	10,000
Measure B VRF Programs:				
Element 1.1 - Local Streets	2,507,049	2,507,049	2,507,230	(181)
Element 1.2 - Bike/Ped Pathways Maintenance	110,848	110,848	62,291	48,557
Element 2.1 - Mobility Management Programs	137,578	137,578	74,406	63,172
Element 2.2 - Paratransit & Low Income Scholarships	243,000	243,000	184,807	58,193
Element 2.3 - Paratransit Plus	300,000	300,000	278,097	21,903
Element 2.4 - Volunteer Drive & Gap Grant	256,808	256,808	89,887	166,921
Element 3.1 - Safe Routes to School	274,000	274,000	273,220	780
Element 3.2 - Trans. Demand Management	130,000	200,000	106,328	93,672
Element 3.3 - Discretionary Fuel (EV) Programs	240,000	240,000	56,353	183,647
Total Expenditures	4,342,107	4,412,107	3,801,628	610,479
Excess of Revenues Over (Under)				
Expenditures	(1,977,107)	(2,047,107)	(1,362,133)	684,974
Fund Balance - Beginning	3,938,953	3,938,953	3,938,953	-
Fund Balance - Ending - Budgetary Basis	\$1,961,846	\$1,891,846		\$ 684,974
Reconciling item				
GASB 31			(28,259)	
Fund Balance - Ending - GAAP Basis			\$2,548,561	

INDEPENDENT AUDITOR'S REPORTS

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**INDEPENDENT AUDITOR'S REPORT ON INTERNAL CONTROL OVER
FINANCIAL REPORTING AND ON COMPLIANCE AND OTHER MATTERS
BASED ON AN AUDIT OF FINANCIAL STATEMENTS PERFORMED IN
ACCORDANCE WITH *GOVERNMENT AUDITING STANDARDS***

Board of Commissioners of the
Transportation Authority of Marin
San Rafael, California

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the financial statements of the governmental activities and each major fund of the Transportation Authority of Marin the (Authority) as of and for the year ended June 30, 2017, and the related notes to the financial statements, which collectively comprise the Authority's basic financial statements, and have issued our report thereon dated [REDACTED], 2017.

Internal Control Over Financial Reporting

In planning and performing our audit of the financial statements, we considered the Authority's internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinions on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the Authority's internal control. Accordingly, we do not express an opinion on the effectiveness of the Authority's internal control.

A deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. *A material weakness* is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the financial statements will not be prevented, or detected and corrected, on a timely basis. *A significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

Compliance and Other Matters

As part of obtaining reasonable assurance about whether the Authority's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

Purpose of This Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the Authority's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

Palo Alto, California
 , 2017



Vavrinek, Trine, Day & Co., LLP
Certified Public Accountants

VALUE THE DIFFERENCE

**INDEPENDENT AUDITOR'S REPORT ON COMPLIANCE
WITH THE 5% ADMINISTRATION CAP AND TRANSPORTATION DEVELOPMENT ACT**

Board of Commissioners of the
Transportation Authority of Marin
San Rafael, California

Report on Compliance

We have audited the Transportation Authority of Marin's the (Authority) compliance with the 5% administration cost cap limit (the Limit) contained in the Marin County Transportation Sales Tax Expenditure Plan and the Authority's compliance with the Transportation Development Act for the fiscal year ended June 30, 2017.

Management's Responsibility

Compliance with the requirements referred to above is the responsibility of Authority's management.

Auditor's Responsibility

Our responsibility is to express an opinion on the Authority's compliance based on our audit. We conducted our audit of compliance in accordance with auditing standards generally accepted in the United States of America; the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States; the Public Utilities Code Article 3 section 99245 and rules and regulations of the Transportation Development Act as required by Section 6667 of Title 21 of the California Code of Regulations. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether noncompliance with the compliance requirements referred to above could have occurred. An audit includes examining, on a test basis, evidence about Authority's compliance with those requirements and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion. Our audit does not provide a legal determination of Authority's compliance with those requirements.

Opinion

In our opinion, the Authority complied, in all material respects, with the requirements referred to above for the fiscal year ended June 30, 2017.

The purpose of this report on compliance is solely to describe the scope of our testing over compliance and the results of that testing based on the Public Utilities Code Article 3 Section 99245, administered by California Department of Transportation. Accordingly, this report is not suitable for any other purpose.

Palo Alto, California
 , 2017

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TRANSPORTATION AUTHORITY OF MARIN

Single Audit Report on
Federal Awards

For The Year Ended June 30, 2017

TRANSPORTATION AUTHORITY OF MARIN

For The Year Ended June 30, 2017

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**INDEPENDENT AUDITOR'S REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING
AND ON COMPLIANCE AND OTHER MATTERS BASED ON AN AUDIT OF FINANCIAL
STATEMENTS PERFORMED IN ACCORDANCE WITH
GOVERNMENT AUDITING STANDARDS**

Board of Commissioners of
Transportation Authority of Marin
San Rafael, California

We have audited, in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States, the financial statements of the governmental activities and each major fund of the Transportation Authority of Marin (Authority) as of and for the year ended June 30, 2017, and the related notes to the financial statements, which collectively comprise the Authority's basic financial statements, and have issued our report thereon dated **December 1, 2017**.

Internal Control Over Financial Reporting

In planning and performing our audit of the financial statements, we considered the Authority's internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinions on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the Authority's internal control. Accordingly, we do not express an opinion on the effectiveness of the Authority's internal control.

A deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A *material weakness* is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the financial statements will not be prevented, or detected and corrected, on a timely basis. A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

Compliance and Other Matters

As part of obtaining reasonable assurance about whether the Authority's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, including the applicable provisions of Section 6666 of Title 21 of the California Code of Regulations, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

Purpose of This Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the Authority's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

Palo Alto, California

December 1, 2017



INDEPENDENT AUDITOR'S REPORT ON COMPLIANCE WITH REQUIREMENTS THAT COULD HAVE A DIRECT AND MATERIAL EFFECT ON EACH MAJOR FEDERAL PROGRAM, REPORT ON INTERNAL CONTROL OVER COMPLIANCE AND REPORT ON THE SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS IN ACCORDANCE WITH THE UNIFORM GUIDANCE

Board of Commissioners of
Transportation Authority of Marin
San Rafael, California

We have audited the Transportation Authority of Marin's (Authority) compliance with the types of compliance requirements described in the *OMB Compliance Supplement* that could have a direct and material effect on each of the Authority's major federal programs for the year ended June 30, 2017. The Authority's major federal programs are identified in the summary of auditor's results section of the accompanying schedule of findings and questioned costs.

Management's Responsibility

Management is responsible for compliance with federal statutes, regulations, and the terms and conditions of its federal awards applicable to its federal programs.

Auditor's Responsibility

Our responsibility is to express an opinion on compliance for each of the Authority's major federal programs based on our audit of the types of compliance requirements referred to above. We conducted our audit of compliance in accordance with auditing standards generally accepted in the United States of America; the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States; and the audit requirements of Title 2 U.S. Code of Federal Regulations Part 200, *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards* (Uniform Guidance). Those standards and the Uniform Guidance require that we plan and perform the audit to obtain reasonable assurance about whether noncompliance with the types of compliance requirements referred to above that could have a direct and material effect on a major federal program occurred. An audit includes examining, on a test basis, evidence about the Authority's compliance with those requirements and performing such other procedures as we considered necessary in the circumstances.

We believe that our audit provides a reasonable basis for our opinion on compliance for each major federal program. However, our audit does not provide a legal determination of the Authority's compliance.

Opinion on Each Major Federal Program

In our opinion, the Authority, complied, in all material respects, with the types of compliance requirements referred to above that could have a direct and material effect on each of its major federal programs for the year ended June 30, 2017.

Report on Internal Control Over Compliance

Management of the Authority is responsible for establishing and maintaining effective internal control over compliance with the types of compliance requirements referred to above. In planning and performing our audit of compliance, we considered the Authority's internal control over compliance with the types of requirements that could have a direct and material effect on each major federal program to determine the auditing procedures that are appropriate in the circumstances for the purpose of expressing an opinion on compliance for each major federal program and to test and report on internal control over compliance in accordance with the Uniform Guidance, but not for the purpose of expressing an opinion on the effectiveness of internal control over compliance. Accordingly, we do not express an opinion on the effectiveness of the Authority's internal control over compliance.

A deficiency in internal control over compliance exists when the design or operation of a control over compliance does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, noncompliance with a type of compliance requirement of a federal program on a timely basis. A *material weakness in internal control over compliance* is a deficiency, or combination of deficiencies, in internal control over compliance, such that there is a reasonable possibility that material noncompliance with a type of compliance requirement of a federal program will not be prevented, or detected and corrected, on a timely basis. A *significant deficiency in internal control over compliance* is a deficiency, or a combination of deficiencies, in internal control over compliance with a type of compliance requirement of a federal program that is less severe than a material weakness in internal control over compliance, yet important enough to merit attention by those charged with governance.

Our consideration of internal control over compliance was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control over compliance that might be material weaknesses or significant deficiencies. We did not identify any deficiencies in internal control over compliance that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

The purpose of this report on internal control over compliance is solely to describe the scope of our testing of internal control over compliance and the results of that testing based on the requirements of the Uniform Guidance. Accordingly, this report is not suitable for any other purpose.

Report on Schedule of Expenditures of Federal Awards Required by the Uniform Guidance

We have audited the governmental activities and each major fund of the Authority as of and for the year ended June 30, 2017, and the related notes to the financial statements, which collectively comprise the Authority's basic financial statements. We issued our report thereon dated **December 1, 2017**, which contained unmodified opinions on those financial statements. Our audit was conducted for the purpose of forming opinions on the financial statements that collectively comprise the basic financial statements. The accompanying schedule of expenditures of federal awards is presented for purposes of additional analysis as required by the Uniform Guidance and is not a required part of the financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the financial statements. The information has been subjected to the auditing procedures applied in the audit of the financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the financial statements or to the financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the schedule of expenditures of federal awards is fairly stated in all material respects in relation to the financial statements as a whole.

Palo Alto, California
December 1, 2017

TRANSPORTATION AUTHORITY OF MARIN

**SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS
FOR THE YEAR ENDED JUNE 30, 2017**

Federal Grantor/Pass-through Grantor/Program or Cluster Title	Federal CFDA Number	Grant Identifying Number	Federal Expenditures
U.S. DEPARTMENT OF TRANSPORTATION			
Highway Planning and Construction			
Passed through Metropolitan Transportation Commission STP/CMAQ Planning	20.205	CMA Planning Agreement FY2013-17	\$ 738,309
Passed through California Department of Transportation			
Car Share Pilot Program	20.205	Proj# CML-6406(016)	14,069
PDA Grants	20.205	Proj # RSTPL- 6406(014)	13,000
HBRRF Highway Bridge Fund	20.205	Proj# BRL0-5927(104)	82,663
Non-motorized Transportation Pilot Program	20.205	Proj# NMPTL 6406(006)	10,492
Total U.S. Department of Transportation			<u>\$ 858,533</u>

See accompany notes to the schedule of expenditures of federal awards

TRANSPORTATION AUTHORITY OF MARIN

NOTES TO SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS YEAR ENDED JUNE 30, 2017

1. REPORTING ENTITY

The financial reporting entity consists of the primary government, Transportation Authority of Marin (Authority).

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Accounting

Funds received under the various grant programs have been recorded within the general fund, special revenue funds, and capital project funds of the Authority. The Authority utilizes the modified accrual method of accounting for the general and special revenue funds. The accompanying Schedule of Expenditures of Federal Awards (Schedule) has been prepared accordingly. The Authority has not elected to use the 10-percent de minimis indirect cost rate as allowed under the Uniform Guidance.

Schedule of Expenditures of Federal Awards

The accompanying schedule presents the activity of all federal financial assistance programs of the Authority. Federal financial assistance received directly from federal agencies as well as federal financial assistance passed through the MTC and the State of California are also included in the schedule.

The schedule was prepared from only the accounts of various grant programs and, therefore, does not present the financial position or results of operations of the Authority.

3. PROGRAM DESCRIPTIONS

U. S. Department of Transportation Highway Planning and Construction

The Highway Planning and Construction program assists State transportation agencies in the planning and development of an integrated, interconnected transportation system important to interstate commerce and travel by constructing and rehabilitating the National Highway System (NHS), including the Eisenhower Interstate System (EIS); and for transportation improvements to most other public roads; to provide aid for the repair of Federal-aid highways following disasters; to foster safe highway design; to replace or rehabilitate deficient or obsolete bridges; and to provide for other special purposes.

TRANSPORTATION AUTHORITY OF MARIN

**SCHEDULE OF FINDINGS AND QUESTIONED COSTS
YEAR ENDED JUNE 30, 2017**

I. SUMMARY OF AUDITOR'S RESULTS

FINANCIAL STATEMENTS		
Type of auditor's report issued:		Unmodified
Internal control over financial reporting:		
Material weakness identified?		No
Significant deficiency identified?		None reported
Noncompliance material to financial statements noted?		No
FEDERAL AWARDS		
Internal control over major programs:		
Material weakness identified?		No
Significant deficiency identified?		None reported
Type of auditor's report issued on compliance for major programs:		Unmodified
Any audit findings disclosed that are required to be reported in accordance with Section 200.516(a) of the Uniform Guidance		No
Identification of major programs:		
<u>CFDA Number(s)</u>	<u>Name of Federal Program or Cluster</u>	
20.205	Highway Planning and Construction	
Dollar threshold used to distinguish between Type A and Type B programs:		\$ 750,000
Auditee qualified as low-risk auditee?		Yes

TRANSPORTATION AUTHORITY OF MARIN

**SCHEDULE OF FINDINGS AND QUESTIONED COSTS
YEAR ENDED JUNE 30, 2017**

II. FINANCIAL STATEMENT FINDINGS

None reported.

TRANSPORTATION AUTHORITY OF MARIN

**SCHEDULE OF FINDINGS AND QUESTIONED COSTS
YEAR ENDED JUNE 30, 2017**

III. FEDERAL AWARDS FINDINGS AND QUESTIONED COSTS

None reported.

TRANSPORTATION AUTHORITY OF MARIN

**SUMMARY SCHEDULE OF PRIOR AUDIT FINDINGS
YEAR ENDED JUNE 30, 2017**

None reported.

TRANSPORTATION AUTHORITY OF MARIN

Required Communications

June 30, 2017



Board of Commissioners of
Transportation Authority of Marin
San Rafael, California

We have audited the financial statements of the governmental activities and each major fund of the Transportation Authority of Marin (Authority) for the year ended June 30, 2017. Professional standards require that we provide you with information about our responsibilities under generally accepted auditing standards, *Government Auditing Standards* and OMB Compliance Supplement, as well as certain information related to the planned scope and timing of our audit. Professional standards also require that we communicate to you the following information related to our audit.

Significant Audit Findings

Qualitative Aspects of Accounting Practices

Management is responsible for the selection and use of appropriate accounting policies. The significant accounting policies used by the Authority are described in Note 1 to the financial statements.

We noted no transactions entered into by the Authority during the year for which there is a lack of authoritative guidance or consensus. All significant transactions have been recognized in the financial statements in the proper period.

Accounting estimates are an integral part of the financial statements prepared by management and are based on management's knowledge and experience about past and current events and assumptions about future events. Certain accounting estimates are particularly sensitive because of their significance to the financial statements and because of the possibility that future events affecting them may differ significantly from those expected. The most sensitive estimates affecting the financial statements were:

There were no significant accounting estimates made on the financial statements.

The financial statements disclosures are neutral, consistent, and clear.

Difficulties Encountered in Performing the Audit

We encountered no difficulties in dealing with management in performing and completing our audit.

Disagreements with Management

For purposes of this letter, a disagreement with management is a financial accounting, reporting, or auditing matter, whether or not resolved to our satisfaction, that could be significant to the financial statements or the auditors' report. We are pleased to report that no such disagreements arose during the course of our audit.

Management Representations

We have requested certain representations from management that are included in the management representation letter dated December 1, _____.

Management Consultations with Other Independent Accountants

In some cases, management may decide to consult with other accountants about auditing and accounting matters, similar to obtaining a "second opinion" on certain situations. If a consultation involves application of an accounting principle to the Authority's financial statements or a determination of the type of auditors' opinion that may be expressed on those statements, our professional standards require the consulting accountant to check with us to determine that the consultant has all the relevant facts. To our knowledge, there were no such consultations with other accountants.

Other Audit Findings or Issues

We generally discuss a variety of matters, including the application of accounting principles and auditing standards, with management each year prior to retention as the governmental unit's auditors. However, these discussions occurred in the normal course of our professional relationship and our responses were not a condition to our retention.

Other Matters

We applied certain limited procedures to management's discussion and analysis, and the schedule of revenues, expenditures, and changes in fund balances – budget and actual for general and special revenue funds, which are required supplementary information (RSI) that supplements the basic financial statements. Our procedures consisted of inquiries of management regarding the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We did not audit the RSI and do not express an opinion or provide any assurance on the RSI.

We were engaged to report on the Schedule of Expenditures of Federal Awards, which accompany the financial statements but are not RSI. With respect to this supplementary information, we made certain inquiries of management and evaluated the form, content, and methods of preparing the information to determine that the information complies with accounting principles generally accepted in the United States of America, the method of preparing it has not changed from the prior period, and the information is appropriate and complete in relation to our audit of the financial statements. We compared and reconciled the supplementary information to the underlying accounting records used to prepare the financial statements or to the financial statements themselves.

Restriction on Use

This report is intended solely for the information and use of the Authority's Board, management, and others within the organization, and is not intended to be and should not be used by anyone other than these specified parties.

Palo Alto, California
December 1, _____

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DATE: November 30, 2017

TO: Transportation Authority of Marin Board of Commissioners

FROM: Dianne Steinhauser, Executive Director
Li Zhang, Chief Financial Officer

SUBJECT: Review and Acceptance of 2017 Measure A Compliance Audit Results (Action) -
Agenda Item No. 9d

RECOMMENDATION:

The TAM Board reviews and accepts the 2017 Measure A compliance audit results.

Staff, along with the audit team from Vavrinek, Trine, Day & Co., LLP, presented the audit results to the TAM Finance and Policy Executive Committee at its November 13, 2017 meeting. The Committee reviewed and voted unanimously to refer the item to the TAM Board for acceptance.

BACKGROUND:

TAM has a fiduciary responsibility to the voters of Marin County to ensure that the ½-Cent Measure A Transportation Sales Tax funds are spent appropriately and has carried out this responsibility diligently since the inception of Measure A in 2005. The Measure A Expenditure Plan provided TAM with the authority to audit all Measure A fund recipients for their use of the sales tax proceeds. An independent compliance audit is explicitly permitted under the terms and conditions of TAM's funding agreement/contract with all Measure A funding recipients. The COC played a critical role in the development of the Measure A Compliance Audit Policy and the final Policy was adopted by the TAM Board at its October 28, 2010 Board meeting. The implementation of the Policy started with the FY2011-12 and prior Measure A funding activities.

The TAM Board approved the five Measure A Transportation Sales Tax fund recipients that were selected for the seventh round of compliance audits in June 2017, as shown in the table below. This audit cycle covers Measure A revenue and expenditure activities occurred in or prior to FY2016-17.

Measure A Fund Recipients Selected for the 2017 Compliance Audit Cycle		
No.	Fund Recipient	Measure A Funding Strategy
Interest Revenue Funding Usage		
	None	
Strategy 1 Local Bus Transit System		
1	Marin Transit	Local Transit, for all Measure A funds received for its FY2016-17 transit operation and capital needs
Strategy 2 Highway 101 Gap Closure		
	None	
Strategy 3 Local Transportation Infrastructure		
2	County of Marin	Strategy 3.1, Major Roads, for Sir Francis Drake Boulevard Rehabilitation in Ross Valley
3	Town of San Anselmo	Strategy 3.2, Local Roads, for its usage of the Measure A Local Roads funds in or prior to FY2016-17
Strategy 4 School Related Congestion and Safer Access to Schools		
4	Town of Corte Madera	Strategy 4.3, Safe Pathways to School, major capital project, for Measure A funds received for Tamalpais Drive Pedestrian Crossing Enhancement Project
5	Town of Fairfax	Strategy 4.3, Safe Pathways to School, small capital project, for Measure A funds received for Sir Francis Drake Blvd and Taylor Road Rectangular Rapid Flash Beacons

DISCUSSION/ANALYSIS:

Measure A Compliance Audit Process:

The annual Measure A Compliance Audit Workshop was conducted on September 1, 2017. Staff, along with the audit team from Vavrinek, Trine, Day & Co., LLP, reviewed the requirements of the Measure A Expenditure Plan, the compliance audit policy adopted, and explained the process and timeline. Representatives from five different fund recipients attended the workshop and provided staff with valuable questions and feedback.

The audit team, along with TAM staff, started the initial pre-audit meetings with the fund recipients selected in September, field visits were completed by the end of October, and draft audit results were presented to TAM staff for review in early November. Staff is very pleased to report that there is no non-compliance findings discovered during this round of the compliance audit.

Measure A Compliance Audit Results By Fund Recipients:

The main purpose of the compliance audit is to verify all Measure A Transportation Sales Tax funds were spent according to the requirements of the Measure A Transportation Sales Tax Expenditure Plan/Strategic Plan and the funding agreements/contracts. Results from the audits can also help TAM staff to continue improving the fund programming and allocation process.

Compliance audit results for the five fund recipients selected for this round of audit effort are presented below for your review.

Interest Revenue: No Audit Conducted

Strategy 1: Marin Transit, Measure A Funds for Local Transit

Measure A Expenditure Audited:

Compliance audit for Marin Transit covers all Measure A expenditures that occurred in FY2016-17.

Measure A Allocation				
Allocation Period	Agreement Number	Measure A Strategy	Agreement Date	Available Amount
FY 16/17	A-FY17-03	1	7/1/2016	\$ 16,393,369
Measure A Expenditures				
Project Name	Measure A Strategy	Amount		
Local Bus Transit	1.1	\$ 9,024,034		
Local Bus Transit Service	1.2	1,061,315		
Rural Bus Transit System	1.3	2,180,396		
Capital Improvements	1.4	950,801		
Total Project Cost		<u>\$ 13,216,546</u>		

Result:

The results of the auditor’s procedures disclosed no instances of noncompliance with the Measure A Expenditure Plan and the funding agreement between Marin Transit and TAM.

Follow-up Meeting and/or Action:

Not needed.

Strategy 2 – Highway 101 Gap Closure - No Audit Conducted

Strategy 3.1 – County of Marin, Major Roads: Sir Francis Drake Boulevard Rehabilitation in Ross Valley

Measure A Expenditure Audited:

The Compliance audit for the County of Marin covers Measure A expenditures under the Strategy 3.1 Major Roads allocation, which was spent in FY2016-17.

Measure A Allocation				
Allocation Period	Agreement Number	Measure A Strategy	Agreement Date	Available Amount
FY 15/16 and FY 16/17	2013-002	3.1	9/10/2013	\$ 1,350,000
Measure A Expenditures				
Project Name	Measure A Strategy	Amount		
Sir Francis Drake Boulevard Rehabilitation in Ross Valley	3.1	\$	727,684	

Result:

The results of the auditor’s procedures disclosed no instances of noncompliance with the Measure A Expenditure Plan and the funding agreement between the County of Marin and TAM.

Follow-up Meeting and/or Action:

Not needed

Strategy 3.2 – Town of San Anselmo, Local Roads funds in or prior to FY2016-17

Measure A Expenditure Audited:

The compliance audit for the Town of San Anselmo covers Measure A expenditures under the Strategy 3.2 Local Streets and Roads allocation, which were spent in FY2016-17.

Measure A Allocation				
Allocation Period	Agreement Number	Measure A Strategy	Agreement Date	Available Amount
FY 16/17	A-FY17-12	3.2	11/1/2016	\$ 143,571
Measure A Expenditures				
Project Name	Measure A Strategy	Amount		
2016 Pavement Rehabilitation and Preservation Project repaving Bank Street, Arroyo Ave. and slurry sealing Sir Ffrancis Drake from Tamalpais to Center and from Sunny Hills Dr. to Saunders Ave.	3.2	\$	143,571	

Result:

The results of the auditor’s procedures disclosed no instances of noncompliance with the Measure A Expenditure Plan and the funding agreement between the Town of San Anselmo and TAM.

Follow-up Meeting and/or Action:

Not needed.

November 30, 2017

Strategy 4.2 – Town of Corte Madera, Safe Pathways to School, Major Capital Project: Tamalpais Drive Pedestrian Crossing Enhancement Project

Measure A Expenditure Audited:

The compliance audit for the Town of Corte Madera covers Measure A expenditures under the Strategy 4.3 Safe Pathways to School allocation, which were spent in FY2016-17.

Measure A Allocation				
Allocation Period	Agreement Number	Measure A Strategy	Agreement Date	Available Amount
FY 15/16 and FY 16/17	2015-002	4.3	6/7/2015	\$ 90,000
Measure A Expenditures				
Project Name	Measure A Strategy	Amount		
Tamalpais Drive Pedestrian Crossing Enhancement Project	4.3	\$	85,872	

Result:

The results of the auditor’s procedures disclosed no instances of noncompliance with the Measure A Expenditure Plan and the funding agreement between the Town of Corte Madera and TAM.

Follow-up Meeting and/or Action:

Not needed.

Strategy 4.3 – Town of Fairfax, Safe Pathways to School, small capital project: Sir Francis Drake Blvd and Taylor Road Rectangular Rapid Flash Beacons

Measure A Expenditure Audited:

The compliance audit for Town of Fairfax covers Measure A expenditures under the Strategy 4.3 Safe Pathways to School allocations, which were spent in FY2016-17.

Measure A Allocation				
Allocation Period	Agreement Number	Measure A Strategy	Agreement Date	Available Amount
FY 16/17	2015-003	4.3	5/18/2015	\$ 25,000
Measure A Expenditures				
Project Name	Measure A Strategy	Amount		
Sir Francis Drake Blvd and Taylor Road Rectangular Rapid Flash Beacons (RRFB)	4.2	\$	25,000	

Result:

November 30, 2017

The results of the auditor's procedures disclosed no instances of noncompliance with the Measure A Expenditure Plan and the funding agreement between the Town of Fairfax and TAM.

Follow-up Meeting and/or Action:

Not needed.

FISCAL CONSIDERATION:

The Measure A compliance audit was conducted within budget and on schedule.

NEXT STEPS:

The eighth Measure A compliance audit cycle will start in May 2018.

ATTACHMENTS:

- Attachment 1 Measure A Compliance Audit Report – Marin Transit
- Attachment 2 Measure A Compliance Audit Report – County of Marin
- Attachment 3 Measure A Compliance Audit Report – Town of San Anselmo
- Attachment 4 Measure A Compliance Audit Report – Town of Corte Madera
- Attachment 5 Measure A Compliance Audit Report – Town of Fairfax



**INDEPENDENT AUDITOR'S REPORT ON COMPLIANCE AND ON
 INTERNAL CONTROL OVER COMPLIANCE**

Board of Commissioners of
 Transportation Authority of Marin
 San Rafael, California

Compliance

We have audited Marin Transit's (Agency) compliance with the types of compliance requirements described in the Measure A Expenditure Plan and the respective funding agreement with the Transportation Authority of Marin (Authority) applicable to the Agency's Schedule of Allocations and Expenditures for the year ended June 30, 2017.

Management's Responsibility

Compliance with the requirements referred to above is the responsibility of management of the Agency.

Auditor's Responsibility

Our responsibility is to express an opinion on the Agency's compliance based on our audit.

We conducted our audit of compliance in accordance with auditing standards generally accepted in the United States of America; the standards applicable to compliance audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States; the Measure A Expenditure Plan issued by the County of Marin, and the respective funding agreement between the Agency and the Authority. Those standards and the Measure A Expenditure Plan issued by the County of Marin, and the respective funding agreement between the Agency and the Authority require that we plan and perform the audit to obtain reasonable assurance about whether noncompliance with the compliance requirements referred to above that could have a material effect on the Agency's Schedule of Allocations and Expenditures. An audit includes examining, on a test basis, evidence about the Agency's compliance with those requirements and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion. Our audit does not provide a legal determination of the Agency's compliance with those requirements.

Opinion

In our opinion, the Agency complied, in all material respects, with the compliance requirements referred to above that are applicable to the Agency's Schedule of Allocations and Expenditures for the year ended June 30, 2017.

Report on Internal Control Over Compliance

Management of the Agency is responsible for establishing and maintaining effective internal control over compliance with the compliance requirements referred to above. In planning and performing our audit, we considered the Agency's internal control over compliance to determine the auditing procedures for the purpose of expressing our opinion on compliance, but not for the purpose of expressing an opinion on the effectiveness of internal control over compliance. Accordingly, we do not express an opinion on the effectiveness of the Agency's internal control over compliance.

A deficiency in internal control over compliance exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, noncompliance on a timely basis. A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance. A *material weakness* in internal control over compliance is a deficiency, or combination of deficiencies in internal control over compliance, such that there is a reasonable possibility that material noncompliance with a compliance requirement will not be prevented, or detected and corrected, on a timely basis.

Our consideration of internal control over compliance was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be deficiencies, significant deficiencies, or material weaknesses in internal control over compliance. We did not identify any deficiencies in internal control over compliance that we consider to be a significant deficiency or material weaknesses, as defined above.

The purpose of this report on internal control over compliance is solely to describe the scope of our testing of internal control over compliance and the results of that testing based on the Measure A Expenditure Plan issued by the County of Marin, and the respective funding agreement between the Agency and the Authority. This report is intended solely for the information of the Board of Commissioners, Citizens' Oversight Committee, Management of the Authority, and Management of the Agency. Accordingly, this report is not suitable for any other purpose.

Vavrinek, Trine Day & Co., LLP
November ____, 2017

MARIN TRANSIT**MEASURE A COMPLIANCE REPORT AND NOTES
JUNE 30, 2017**

NOTE 1 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES**Financial Reporting Entity**

Marin Transit is an agency formed by vote by the people of Marin County that provides local transit services within Marin County.

Basis of Accounting

The Agency utilizes the accrual basis of accounting, whereby revenues are recognized when earned and expenses are recognized when incurred.

NOTE 2 - MEASURE A SALES TAX

The Measure A sales tax is a 1/2 cent set forth by voters as a step in implementing a 1.6 billion dollar “transportation vision” set forth by the County of Marin as a plan to alleviate traffic congestion, reinvent the public transportation system, provide addition pedestrian and bike pathways, provide safer routes to school and many other additional transit related goals. Citizens’ Advisory Committees in each part of the County, representing the many diverse interests in Marin, provided input that result in a draft expenditure plan. The draft plan was presented to each of Marin’s City/Town Councils and to numerous stakeholder groups. Their comments prompted refinements reflected in the Final Measure A Transportation Sales Tax Expenditure Plan (Plan).

The Plan is administered by the Transportation Authority of Marin (Authority). Its 16-member board consists of the Board of Supervisors and a council member of each incorporated City/Town. The Authority is accountable to a 12-member Citizens’ Oversight Committee (Committee), created with the assistance of the League of Women Voters. The Committee reviews all expenditures and reports annually to the public.

MARIN TRANSIT**ATTACHMENT A – PROCEDURES PERFORMED AS APPLICABLE
JUNE 30, 2017**

1. Obtained original Funding Agreement/Contract, Allocation Request, and Funding Agreement/Contract Amendments for the audit period or for the period during which funding was utilized for an approved project.
2. Reviewed Funding Agreement/Contract, Allocation Request, and Funding Agreement/Contract Amendments to determine total funding provided by the applicable Strategy for the audit period or for the projects being audited.
3. Interviewed finance staff regarding internal controls in the following areas, specific to, but not limited to, accounting for Measure A funding, to obtain an understanding of the entity's operations:
 - a. Cash Disbursements – Reviewed policies and procedures regarding approval, defacements, accounts payable check processing, and other matters related to the disbursement of funds.
 - b. Cash Receipts – Reviewed policies and procedures regarding cash handling of over-the-counter receipts and cash receipts received through the mail, bank deposits, bank reconciliations, and other matters related to the receipt of funds.
4. Obtained all invoices submitted to the Authority for reimbursements, if applicable.
5. Obtained supporting documentation for a sample of invoices submitted to the Authority for reimbursements, including construction, personnel, project management, consultants, and other related costs.
6. Obtained general ledger detail for revenue and expenditures charged to the Measure A funding source or equivalent reports where income and expenses associated with Measure A funds can be clearly identified.
7. Reviewed remittances from the Authority to ensure that all revenues are correctly coded to the specific cost center or fund code designated for Measure A funding.
8. For reimbursement-based agreements, we reviewed a sample of invoices submitted to the Authority to ensure that the costs being billed on the invoices reconcile with the ones being charged to the specific Measure A cost center in the entity's financial accounting system.
9. For reimbursement-based agreements/contracts, expenditures charged to the specific cost center or fund code designated for Measure A funding were selected on a random basis were and tested for the following attributes:
 - a. Approval – Reviewed invoices and supporting documentation to ensure that the proper review and approval process occurred and is documented on the invoice.
 - b. Invoice – Reviewed invoices and supporting documentation to ensure that they are mathematically accurate, properly addressed to the auditee, and have sufficient detail to justify the amounts being charged and the cost center or fund code to which it is being charged to.

MARIN TRANSIT**ATTACHMENT A – PROCEDURES PERFORMED AS APPLICABLE
JUNE 30, 2017**

- c. Coding – Reviewed invoices and supporting documentation to ensure that they have been correctly coded to the specific cost center or fund code designated for Measure A funding.
 - d. Allowable – Reviewed invoices and supporting documentation to ensure that the costs being charged to the specific cost center or fund code designated for Measure A funding are allowable costs based on the Measure A Expenditure Plan, the entity’s funding agreement with the Authority, and specific requirements of the Strategy for which the funds were restricted for. Also reviewed expenditures to ensure that all costs are direct costs and not indirect costs or allocations of any kind.
10. For entities receiving funding in advance for Strategy 3 under a Measure A funding agreement, we reviewed, in summary form, various invoices to verify that expenditures being charged to the specific cost center or fund code restricted for Measure A are reasonable for the project. In addition, expenditures are also tested in the same fashion as outlined in step 9 of this list.
11. For entities where capital construction projects were funded utilizing Measure A Strategy 3 and 4 funding, we obtained the necessary project files and reviewed them for the following requirements:
- a. Procurement Process – Reviewed procurement process of the project to ensure that the project was properly advertised in publications, internet, trade journals and/or other acceptable means. If other means of procurement, such as selective RFP submittals were followed, we determined whether the process is adequate in regards to the project. Reviewed any other evidence of procurement when appropriate, such as fax logs or mailing lists.
 - b. Bids and Proposals – Reviewed bids and proposals received to ensure that sufficient bids were received in regards to the project.
 - c. Bid Award – Reviewed Transit agency’s Agendas and Minutes and/or related reports in regards to the bid award to ensure that the contract for the project was properly approved by Department Heads and the Transit agency’s Council and was properly documented in a public forum. Also, we reviewed bidding results to ensure that the lowest bid was selected, and if the lowest bid was not selected, that there is sufficient documentation for any other selection process utilized.
12. For entities where professional service contracts were paid utilizing Measure A funding, with regards to construction projects or other purposes, we reviewed the policies and procedures of the entity in question to ensure that internal policies and procedures were followed in regards to the selection of professional service firms.
13. For entities where capital construction projects were paid utilizing Measure A Strategy 3 and 4 funding, we reviewed any applicable environmental review requirements and reviewed documentation to verify that all reports and reviews were performed prior to the start of any construction.

MARIN TRANSIT**ATTACHMENT A – PROCEDURES PERFORMED AS APPLICABLE
JUNE 30, 2017**

14. For entities where personnel costs were charged to the specific cost center or fund code designated for Measure A funding, we selected a representative sample of charges for personnel costs and tested for the following:
 - a. Recalculation – Reviewed and reconciled wage rates from personnel costs charged to Measure A cost center or fund code to the entity’s payroll registers to ensure that wage rates being charged were accurate and properly approved; reviewed all benefits and fringe costs being allocated in addition to wage rates to ensure that they are accurate and appropriate; recalculated personnel costs utilizing wage rates and hours being charged to ensure that the amounts are mathematically accurate; review the calculation to ensure no indirect costs are included in the reimbursement request.
 - b. Timesheet – Reviewed timesheets for selected personnel costs to ensure that hours being charged to Measure A are properly supported with an approved timesheet. All charges to Measure A funding must be clearly documented on timesheets, detailing the number of hours and the funding source, on a daily basis. We also reviewed timesheets for selected personnel costs to ensure that signatures of both the employee and supervisor are present. Electronic time documentation methods must also have similar electronic signatures.
15. Obtained close-out reports, from completed capital construction projects, submitted to the Authority.
16. Reviewed close-out reports to ensure that they were submitted within 90 days and were properly certified in accordance with the entity’s funding agreement/contract with the Authority.

MARIN TRANSIT

**ATTACHMENT B – FINDINGS AND OBSERVATIONS
JUNE 30, 2017**

No findings noted.

MARIN TRANSIT

**ATTACHMENT C – SCHEDULE OF ALLOCATIONS AND EXPENDITURES
 JUNE 30, 2017**

Measure A Allocation				
<u>Allocation Period</u>	<u>Agreement Number</u>	<u>Measure A Strategy</u>	<u>Agreement Date</u>	<u>Available Amount</u>
FY 16/17	A-FY17-03	1	7/1/2016	\$ 16,393,369
Measure A Expenditures				
<u>Project Name</u>	<u>Measure A Strategy</u>	<u>Amount</u>		
Local Bus Transit	1.1	\$	9,024,034	
Local Bus Transit Service	1.2		1,061,315	
Rural Bus Transit System	1.3		2,180,396	
Capital Improvements	1.4		950,801	
Total Project Cost			<u>\$ 13,216,546</u>	



**INDEPENDENT AUDITOR'S REPORT ON COMPLIANCE AND ON
INTERNAL CONTROL OVER COMPLIANCE**

Board of Commissioners of
Transportation Authority of Marin
San Rafael, California

Compliance

We have audited the County of Marin's (County) compliance with the types of compliance requirements described in the Measure A Expenditure Plan and the respective funding agreement with the Transportation Authority of Marin (Authority) applicable to the County's Schedule of Allocations and Expenditures for the year ended June 30, 2017.

Management's Responsibility

Compliance with the requirements referred to above is the responsibility of management of the County.

Auditor's Responsibility

Our responsibility is to express an opinion on the County's compliance based on our audit.

We conducted our audit of compliance in accordance with auditing standards generally accepted in the United States of America; the standards applicable to compliance audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States; the Measure A Expenditure Plan issued by the County of Marin, and the respective funding agreement between the County and the Authority. Those standards and the Measure A Expenditure Plan issued by the County of Marin, and the respective funding agreement between the County and the Authority require that we plan and perform the audit to obtain reasonable assurance about whether noncompliance with the compliance requirements referred to above that could have a material effect on the County's Schedule of Allocations and Expenditures. An audit includes examining, on a test basis, evidence about the County's compliance with those requirements and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion. Our audit does not provide a legal determination of the County's compliance with those requirements.

Opinion

In our opinion, the County complied, in all material respects, with the compliance requirements referred to above that are applicable to the County's Schedule of Allocations and Expenditures for the year ended June 30, 2017.

Internal Control Over Compliance

Management of the County is responsible for establishing and maintaining effective internal control over compliance with the compliance requirements referred to above. In planning and performing our audit, we considered the County's internal control over compliance to determine the auditing procedures for the purpose of expressing our opinion on compliance, but not for the purpose of expressing an opinion on the effectiveness of internal control over compliance. Accordingly, we do not express an opinion on the effectiveness of the County's internal control over compliance.

A deficiency in internal control over compliance exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, noncompliance on a timely basis. A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance. A *material weakness* in internal control over compliance is a deficiency, or combination of deficiencies in internal control over compliance, such that there is a reasonable possibility that material noncompliance with a compliance requirement will not be prevented, or detected and corrected, on a timely basis.

Our consideration of internal control over compliance was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be deficiencies, significant deficiencies, or material weaknesses in internal control over compliance. We did not identify any deficiencies in internal control over compliance that we consider to be a significant deficiency or material weaknesses, as defined above.

The purpose of this report on internal control over compliance is solely to describe the scope of our testing of internal control over compliance and the results of that testing based on the Measure A Expenditure Plan issued by the County of Marin, and the respective funding agreement between the County and the Authority. This report is intended solely for the information of the Board of Commissioners, Citizens' Oversight Committee, Management of the Authority, and management of the County. Accordingly, this report is not suitable for any other purpose.

Vavrinek, Trine Day & Co., LLP
November __, 2017

COUNTY OF MARIN**MEASURE A COMPLIANCE REPORT AND NOTES
JUNE 30, 2017**

NOTE 1 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES**Financial Reporting Entity**

The County receives funding under the Measure A Expenditure Plan.

Basis of Accounting

The County utilizes the current resources measurement focus basis of account, whereby revenues are recognized when measurable and available. The County considers all revenues reported to be available if the revenues are collected within sixty days after the fiscal year end. Expenditures are recorded when the related fund liability is incurred. Capital assets acquisitions are reported as expenditures in the governmental funds.

NOTE 2 - MEASURE A SALES TAX

The Measure A sales tax is a 1/2 cent set forth by voters as a step in implementing a 1.6 billion dollar “transportation vision” set forth by the County of Marin as a plan to alleviate traffic congestion, reinvent the public transportation system, provide addition pedestrian and bike pathways, provide safer routes to school and many other additional transit related goals. Citizens’ Advisory Committees in each part of the County, representing the many diverse interests in Marin, provided input that result in a draft expenditure plan. The draft plan was presented to each of Marin’s City/Town Councils and to numerous stakeholder groups. Their comments prompted refinements reflected in the Final Measure A Transportation Sales Tax Expenditure Plan (Plan).

The Plan is administered by the Transportation Authority of Marin (Authority). Its 16-member board consists of the Board of Supervisors and a council member of each incorporated City/Town. The Authority is accountable to a 12-member Citizens’ Oversight Committee (Committee), created with the assistance of the League of Women Voters. The Committee reviews all expenditures and reports annually to the public.

COUNTY OF MARIN**ATTACHMENT A – PROCEDURES PERFORMED AS APPLICABLE
JUNE 30, 2017**

1. Obtained original Funding Agreement/Contract, Allocation Request, and Funding Agreement/Contract Amendments for the audit period or for the period during which funding was utilized for an approved project.
2. Reviewed Funding Agreement/Contract, Allocation Request, and Funding Agreement/Contract Amendments to determine total funding provided by the applicable Strategy for the audit period or for the projects being audited.
3. Interviewed finance staff regarding internal controls in the following areas, specific to, but not limited to, accounting for Measure A funding, to obtain an understanding of the entity's operations:
 - a. Cash Disbursements – Reviewed policies and procedures regarding approval, defacements, accounts payable check processing, and other matters related to the disbursement of funds.
 - b. Cash Receipts – Reviewed policies and procedures regarding cash handling of over-the-counter receipts and cash receipts received through the mail, bank deposits, bank reconciliations, and other matters related to the receipt of funds.
4. Obtained all invoices submitted to the Authority for reimbursements, if applicable.
5. Obtained supporting documentation for a sample of invoices submitted to the Authority for reimbursements, including construction, personnel, project management, consultants, and other related costs.
6. Obtained general ledger detail for revenue and expenditures charged to the Measure A funding source or equivalent reports where income and expenses associated with Measure A funds can be clearly identified.
7. Reviewed remittances from the Authority to ensure that all revenues are correctly coded to the specific cost center or fund code designated for Measure A funding.
8. For reimbursement-based agreements, we reviewed a sample of invoices submitted to the Authority to ensure that the costs being billed on the invoices reconcile with the ones being charged to the specific Measure A cost center in the entity's financial accounting system.
9. For reimbursement-based agreements/contracts, expenditures charged to the specific cost center or fund code designated for Measure A funding were selected on a random basis and tested for the following attributes:
 - a. Approval – Reviewed invoices and supporting documentation to ensure that the proper review and approval process occurred and is documented on the invoice.
 - b. Invoice – Reviewed invoices and supporting documentation to ensure that they are mathematically accurate, properly addressed to the auditee, and have sufficient detail to justify the amounts being charged and the cost center or fund code to which it is being charged to.

COUNTY OF MARIN

ATTACHMENT A – PROCEDURES PERFORMED AS APPLICABLE JUNE 30, 2017

- c. Coding – Reviewed invoices and supporting documentation to ensure that they have been correctly coded to the specific cost center or fund code designated for Measure A funding.
 - d. Allowable – Reviewed invoices and supporting documentation to ensure that the costs being charged to the specific cost center or fund code designated for Measure A funding are allowable costs based on the Measure A Expenditure Plan, the entity’s funding agreement with the Authority, and specific requirements of the Strategy for which the funds were restricted for. Also reviewed expenditures to ensure that all costs are direct costs and not indirect costs or allocations of any kind.
10. For entities receiving funding in advance for Strategy 3 under a Measure A funding agreement, we reviewed, in summary form, various invoices to verify that expenditures being charged to the specific cost center or fund code restricted for Measure A are reasonable for the project. In addition, expenditures are also tested in the same fashion as outlined in step 9 of this list.
11. For entities where capital construction projects were funded utilizing Measure A Strategy 3 and 4 funding, we obtained the necessary project files and reviewed them for the following requirements:
- a. Procurement Process – Reviewed procurement process of the project to ensure that the project was properly advertised in publications, internet, trade journals and/or other acceptable means. If other means of procurement, such as selective RFP submittals were followed, we determined whether the process is adequate in regards to the project. Reviewed any other evidence of procurement when appropriate, such as fax logs or mailing lists.
 - b. Bids and Proposals – Reviewed bids and proposals received to ensure that sufficient bids were received in regards to the project.
 - c. Bid Award – Reviewed City/Town Council or County’s Agendas and Minutes and/or supporting documentation in regards to the bid award to ensure that the contract for the project was properly approved by Department Heads and the City/Town or County’s Council and was properly documented in a public forum. Also, we reviewed bidding results to ensure that the lowest bid was selected, and if the lowest bid was not selected, that there is sufficient documentation for any other selection process utilized.
12. For entities where professional service contracts were paid utilizing Measure A funding, with regards to construction projects or other purposes, we reviewed the policies and procedures of the entity in question to ensure that internal policies and procedures were followed in regards to the selection of professional service firms.
13. For entities where capital construction projects were paid utilizing Measure A Strategy 3 and 4 funding, we reviewed any applicable environmental review requirements and reviewed documentation to verify that all reports and reviews were performed prior to the start of any construction.

COUNTY OF MARIN**ATTACHMENT A – PROCEDURES PERFORMED AS APPLICABLE
JUNE 30, 2017**

14. For entities where personnel costs were charged to the specific cost center or fund code designated for Measure A funding, we selected a representative sample of charges for personnel costs and tested for the following:
 - a. Recalculation – Reviewed and reconciled wage rates from personnel costs charged to Measure A cost center or fund code to the entity’s payroll registers to ensure that wage rates being charged were accurate and properly approved; reviewed all benefits and fringe costs being allocated in addition to wage rates to ensure that they are accurate and appropriate; recalculated personnel costs utilizing wage rates and hours being charged to ensure that the amounts are mathematically accurate; review the calculation to ensure no indirect costs are included in the reimbursement request.
 - b. Timesheet – Reviewed timesheets for selected personnel costs to ensure that hours being charged to Measure A are properly supported with an approved timesheet. All charges to Measure A funding must be clearly documented on timesheets, detailing the number of hours and the funding source, on a daily basis. We also reviewed timesheets for selected personnel costs to ensure that signatures of both the employee and supervisor are present. Electronic time documentation methods must also have similar electronic signatures.
15. Obtained close-out reports, from completed capital construction projects, submitted to the Authority.
16. Reviewed close-out reports to ensure that they were submitted within 90 days and were properly certified in accordance with the entity’s funding agreement/contract with the Authority.

COUNTY OF MARIN

**ATTACHMENT B – FINDINGS AND OBSERVATIONS
JUNE 30, 2017**

No findings noted.

COUNTY OF MARIN

**ATTACHMENT C – SCHEDULE OF ALLOCATIONS AND EXPENDITURES
JUNE 30, 2017**

Measure A Allocation				
Allocation Period	Agreement Number	Measure A Strategy	Agreement Date	Available Amount
FY 15/16 and FY 16/17	2013-002	3.1	9/10/2013	\$ 1,350,000
Measure A Expenditures				
Project Name	Measure A Strategy	Amount		
Sir Francis Drake Boulevard Rehabilitation in Ross Valley	3.1	\$	727,684	



**INDEPENDENT AUDITOR'S REPORT ON COMPLIANCE AND ON
INTERNAL CONTROL OVER COMPLIANCE**

Board of Commissioners of
Transportation Authority of Marin
San Rafael, California

Compliance

We have audited the Town of San Anselmo (Town) compliance with the types of compliance requirements described in the Measure A Expenditure Plan and the respective funding agreement with the Transportation Authority of Marin (Authority) applicable to the Town's Schedule of Allocations and Expenditures for the year ended June 30, 2017.

Management's Responsibility

Compliance with the requirements referred to above is the responsibility of management of the Town.

Auditor's Responsibility

Our responsibility is to express an opinion on the Town's compliance based on our audit.

We conducted our audit of compliance in accordance with auditing standards generally accepted in the United States of America; the standards applicable to compliance audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States; the Measure A Expenditure Plan issued by the County of Marin, and the respective funding agreement between the Town and the Authority. Those standards and the Measure A Expenditure Plan issued by the County of Marin, and the respective funding agreement between the Town and the Authority require that we plan and perform the audit to obtain reasonable assurance about whether noncompliance with the compliance requirements referred to above that could have a material effect on the Town's Schedule of Allocations and Expenditures. An audit includes examining, on a test basis, evidence about the Town's compliance with those requirements and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion. Our audit does not provide a legal determination of the Town's compliance with those requirements.

Opinion

In our opinion, the Town complied, in all material respects, with the compliance requirements referred to above that are applicable to the Town's Schedule of Allocations and Expenditures for the year ended June 30, 2017.

Internal Control Over Compliance

Management of the Town is responsible for establishing and maintaining effective internal control over compliance with the compliance requirements referred to above. In planning and performing our audit, we considered the Town's internal control over compliance to determine the auditing procedures for the purpose of expressing our opinion on compliance, but not for the purpose of expressing an opinion on the effectiveness of internal control over compliance. Accordingly, we do not express an opinion on the effectiveness of the Town's internal control over compliance.

A deficiency in internal control over compliance exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, noncompliance on a timely basis. A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance. A *material weakness* in internal control over compliance is a deficiency, or combination of deficiencies in internal control over compliance, such that there is a reasonable possibility that material noncompliance with a compliance requirement will not be prevented, or detected and corrected, on a timely basis.

Our consideration of internal control over compliance was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be deficiencies, significant deficiencies, or material weaknesses in internal control over compliance. We did not identify any deficiencies in internal control over compliance that we consider to be a significant deficiency or material weaknesses, as defined above.

The purpose of this report on internal control over compliance is solely to describe the scope of our testing of internal control over compliance and the results of that testing based on the Measure A Expenditure Plan issued by the County of Marin, and the respective funding agreement between the Town and the Authority. This report is intended solely for the information of the Board of Commissioners, Citizens' Oversight Committee, Management of the Authority, and management of the Town. Accordingly, this report is not suitable for any other purpose.

Vavrinek, Trine, Day & Co., LLP
November ____, 2017

TOWN OF SAN ANSELMO**MEASURE A COMPLIANCE REPORT AND NOTES
JUNE 30, 2017**

NOTE 1 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES**Financial Reporting Entity**

The Town is an incorporated Town that receives funding under the Measure A Expenditure Plan as a member of the County of Marin.

Basis of Accounting

The Town utilizes the current resources measurement focus basis of account, whereby revenues are recognized when measurable and available. The Town considers all revenues reported to be available if the revenues are collected within sixty days after the fiscal year end. Expenditures are recorded when the related fund liability is incurred. Capital assets acquisitions are reported as expenditures in the governmental funds.

NOTE 2 - MEASURE A SALES TAX

The Measure A sales tax is a 1/2 cent set forth by voters as a step in implementing a 1.6 billion dollar “transportation vision” set forth by the County of Marin as a plan to alleviate traffic congestion, reinvent the public transportation system, provide addition pedestrian and bike pathways, provide safer routes to school and many other additional transit related goals. Citizens’ Advisory Committees in each part of the County, representing the many diverse interests in Marin, provided input that result in a draft expenditure plan. The draft plan was presented to each of Marin’s Town/Town Councils and to numerous stakeholder groups. Their comments prompted refinements reflected in the Final Measure A Transportation Sales Tax Expenditure Plan (Plan).

The Plan is administered by the Transportation Authority of Marin (Authority). Its 16-member board consists of the Board of Supervisors and a council member of each incorporated Town/Town. The Authority is accountable to a 12-member Citizens’ Oversight Committee (Committee), created with the assistance of the League of Women Voters. The Committee reviews all expenditures and reports annually to the public.

TOWN OF SAN ANSELMO**ATTACHMENT A – PROCEDURES PERFORMED AS APPLICABLE
JUNE 30, 2017**

1. Obtained original Funding Agreement/Contract, Allocation Request, and Funding Agreement/Contract Amendments for the audit period or for the period during which funding was utilized for an approved project.
2. Reviewed Funding Agreement/Contract, Allocation Request, and Funding Agreement/Contract Amendments to determine total funding provided by the applicable Strategy for the audit period or for the projects being audited.
3. Interviewed finance staff regarding internal controls in the following areas, specific to, but not limited to, accounting for Measure A funding, to obtain an understanding of the entity's operations:
 - a. Cash Disbursements – Reviewed policies and procedures regarding approval, defacements, accounts payable check processing, and other matters related to the disbursement of funds.
 - b. Cash Receipts – Reviewed policies and procedures regarding cash handling of over-the-counter receipts and cash receipts received through the mail, bank deposits, bank reconciliations, and other matters related to the receipt of funds.
4. Obtained all invoices submitted to the Authority for reimbursements, if applicable.
5. Obtained supporting documentation for a sample of invoices submitted to the Authority for reimbursements, including construction, personnel, project management, consultants, and other related costs.
6. Obtained general ledger detail for revenue and expenditures charged to the Measure A funding source or equivalent reports where income and expenses associated with Measure A funds can be clearly identified.
7. Reviewed remittances from the Authority to ensure that all revenues are correctly coded to the specific cost center or fund code designated for Measure A funding.
8. For reimbursement-based agreements, we reviewed a sample of invoices submitted to the Authority to ensure that the costs being billed on the invoices reconcile with the ones being charged to the specific Measure A cost center in the entity's financial accounting system.
9. For reimbursement-based agreements/contracts, expenditures charged to the specific cost center or fund code designated for Measure A funding were selected on a random basis were and tested for the following attributes:
 - a. Approval – Reviewed invoices and supporting documentation to ensure that the proper review and approval process occurred and is documented on the invoice.
 - b. Invoice – Reviewed invoices and supporting documentation to ensure that they are mathematically accurate, properly addressed to the auditee, and have sufficient detail to justify the amounts being charged and the cost center or fund code to which it is being charged to.

TOWN OF SAN ANSELMO

ATTACHMENT A – PROCEDURES PERFORMED AS APPLICABLE JUNE 30, 2017

- c. Coding – Reviewed invoices and supporting documentation to ensure that they have been correctly coded to the specific cost center or fund code designated for Measure A funding.
 - d. Allowable – Reviewed invoices and supporting documentation to ensure that the costs being charged to the specific cost center or fund code designated for Measure A funding are allowable costs based on the Measure A Expenditure Plan, the entity’s funding agreement with the Authority, and specific requirements of the Strategy for which the funds were restricted for. Also reviewed expenditures to ensure that all costs are direct costs and not indirect costs or allocations of any kind.
10. For entities receiving funding in advance for Strategy 3 under a Measure A funding agreement, we reviewed, in summary form, various invoices to verify that expenditures being charged to the specific cost center or fund code restricted for Measure A are reasonable for the project. In addition, expenditures are also tested in the same fashion as outlined in step 9 of this list.
11. For entities where capital construction projects were funded utilizing Measure A Strategy 3 and 4 funding, we obtained the necessary project files and reviewed them for the following requirements:
- a. Procurement Process – Reviewed procurement process of the project to ensure that the project was properly advertised in publications, internet, trade journals and/or other acceptable means. If other means of procurement, such as selective RFP submittals were followed, we determined whether the process is adequate in regards to the project. Reviewed any other evidence of procurement when appropriate, such as fax logs or mailing lists.
 - b. Bids and Proposals – Reviewed bids and proposals received to ensure that sufficient bids were received in regards to the project.
 - c. Bid Award – Reviewed Town Council Agendas and Minutes and/or related reports in regards to the bid award to ensure that the contract for the project was properly approved by Department Heads and the Town and was properly documented in a public forum. Also, we reviewed bidding results to ensure that the lowest bid was selected, and if the lowest bid was not selected, that there is sufficient documentation for any other selection process utilized.
12. For entities where professional service contracts were paid utilizing Measure A funding, with regards to construction projects or other purposes, we reviewed the policies and procedures of the entity in question to ensure that internal policies and procedures were followed in regards to the selection of professional service firms.
13. For entities where capital construction projects were paid utilizing Measure A Strategy 3 and 4 funding, we reviewed any applicable environmental review requirements and reviewed documentation to verify that all reports and reviews were performed prior to the start of any construction.

TOWN OF SAN ANSELMO**ATTACHMENT A – PROCEDURES PERFORMED AS APPLICABLE
JUNE 30, 2017**

14. For entities where personnel costs were charged to the specific cost center or fund code designated for Measure A funding, we selected a representative sample of charges for personnel costs and tested for the following:
 - a. Recalculation – Reviewed and reconciled wage rates from personnel costs charged to Measure A cost center or fund code to the entity’s payroll registers to ensure that wage rates being charged were accurate and properly approved; reviewed all benefits and fringe costs being allocated in addition to wage rates to ensure that they are accurate and appropriate; recalculated personnel costs utilizing wage rates and hours being charged to ensure that the amounts are mathematically accurate; review the calculation to ensure no indirect costs are included in the reimbursement request.
 - b. Timesheet – Reviewed timesheets for selected personnel costs to ensure that hours being charged to Measure A are properly supported with an approved timesheet. All charges to Measure A funding must be clearly documented on timesheets, detailing the number of hours and the funding source, on a daily basis. We also reviewed timesheets for selected personnel costs to ensure that signatures of both the employee and supervisor are present. Electronic time documentation methods must also have similar electronic signatures.
15. Obtained close-out reports, from completed capital construction projects, submitted to the Authority.
16. Reviewed close-out reports to ensure that they were submitted within 90 days and were properly certified in accordance with the entity’s funding agreement/contract with the Authority.

TOWN OF SAN ANSELMO

**ATTACHMENT B – FINDINGS AND OBSERVATIONS
JUNE 30, 2017**

No findings noted.

TOWN OF SAN ANSELMO

**ATTACHMENT C – SCHEDULE OF ALLOCATIONS AND EXPENDITURES
JUNE 30, 2017**

Measure A Allocation				
Allocation Period	Agreement Number	Measure A Strategy	Agreement Date	Available Amount
FY 16/17	A-FY17-12	3.2	11/1/2016	\$ 143,571
Measure A Expenditures				
Project Name	Measure A Strategy	Amount		
2016 Pavement Rehabilitation and Preservation Project repaving Bank Street, Arroyo Ave. and slurry sealing Sir Francis Drake from Tamalpais to Center and from Sunny Hills Dr. to Saunders Ave.	3.2	\$ 143,571		



**INDEPENDENT AUDITOR'S REPORT ON COMPLIANCE AND ON
INTERNAL CONTROL OVER COMPLIANCE**

Board of Commissioners of
Transportation Authority of Marin
San Rafael, California

Compliance

We have audited the Town of Corte Madera (Town) compliance with the types of compliance requirements described in the Measure A Expenditure Plan and the respective funding agreement with the Transportation Authority of Marin (Authority) applicable to the Town's Schedule of Allocations and Expenditures for the year ended June 30, 2017.

Management's Responsibility

Compliance with the requirements referred to above is the responsibility of management of the Town.

Auditor's Responsibility

Our responsibility is to express an opinion on the Town's compliance based on our audit.

We conducted our audit of compliance in accordance with auditing standards generally accepted in the United States of America; the standards applicable to compliance audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States; the Measure A Expenditure Plan issued by the County of Marin, and the respective funding agreement between the Town and the Authority. Those standards and the Measure A Expenditure Plan issued by the County of Marin, and the respective funding agreement between the Town and the Authority require that we plan and perform the audit to obtain reasonable assurance about whether noncompliance with the compliance requirements referred to above that could have a material effect on the Town's Schedule of Allocations and Expenditures. An audit includes examining, on a test basis, evidence about the Town's compliance with those requirements and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion. Our audit does not provide a legal determination of the Town's compliance with those requirements.

Opinion

In our opinion, the Town complied, in all material respects, with the compliance requirements referred to above that are applicable to the Town's Schedule of Allocations and Expenditures for the year ended June 30, 2017.

Internal Control Over Compliance

Management of the Town is responsible for establishing and maintaining effective internal control over compliance with the compliance requirements referred to above. In planning and performing our audit, we considered the Town's internal control over compliance to determine the auditing procedures for the purpose of expressing our opinion on compliance, but not for the purpose of expressing an opinion on the effectiveness of internal control over compliance. Accordingly, we do not express an opinion on the effectiveness of the Town's internal control over compliance.

A deficiency in internal control over compliance exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, noncompliance on a timely basis. A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance. A *material weakness* in internal control over compliance is a deficiency, or combination of deficiencies in internal control over compliance, such that there is a reasonable possibility that material noncompliance with a compliance requirement will not be prevented, or detected and corrected, on a timely basis.

Our consideration of internal control over compliance was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be deficiencies, significant deficiencies, or material weaknesses in internal control over compliance. We did not identify any deficiencies in internal control over compliance that we consider to be a significant deficiency or material weaknesses, as defined above.

The purpose of this report on internal control over compliance is solely to describe the scope of our testing of internal control over compliance and the results of that testing based on the Measure A Expenditure Plan issued by the County of Marin, and the respective funding agreement between the Town and the Authority. This report is intended solely for the information of the Board of Commissioners, Citizens' Oversight Committee, Management of the Authority, and management of the Town. Accordingly, this report is not suitable for any other purpose.

Vavrinek, Trine Day & Co., LLP
November __, 2017

TOWN OF CORTE MADERA**MEASURE A COMPLIANCE REPORT AND NOTES TO THE MEASURE A
JUNE 30, 2017**

NOTE 1 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES**Financial Reporting Entity**

The Town is an incorporated town that receives funding under the Measure A Expenditure Plan as a member of the County of Marin.

Basis of Accounting

The Town utilizes the current resources measurement focus basis of account, whereby revenues are recognized when measurable and available. The Town considers all revenues reported to be available if the revenues are collected within sixty days after the fiscal year end. Expenditures are recorded when the related fund liability is incurred. Capital assets acquisitions are reported as expenditures in the governmental funds.

NOTE 2 - MEASURE A SALES TAX

The Measure A sales tax is a 1/2 cent set forth by voters as a step in implementing a 1.6 billion dollar “transportation vision” set forth by the County of Marin as a plan to alleviate traffic congestion, reinvent the public transportation system, provide addition pedestrian and bike pathways, provide safer routes to school and many other additional transit related goals. Citizens’ Advisory Committees in each part of the County, representing the many diverse interests in Marin, provided input that result in a draft expenditure plan. The draft plan was presented to each of Marin’s City/Town Councils and to numerous stakeholder groups. Their comments prompted refinements reflected in the Final Measure A Transportation Sales Tax Expenditure Plan (Plan).

The Plan is administered by the Transportation Authority of Marin (Authority). Its 16-member board consists of the Board of Supervisors and a council member of each incorporated City/Town. The Authority is accountable to a 12-member Citizens’ Oversight Committee (Committee), created with the assistance of the League of Women Voters. The Committee reviews all expenditures and reports annually to the public.

TOWN OF CORTE MADERA**ATTACHMENT A – PROCEDURES PERFORMED AS APPLICABLE
JUNE 30, 2017**

1. Obtained original Funding Agreement/Contract, Allocation Request, and Funding Agreement/Contract Amendments for the audit period or for the period during which funding was utilized for an approved project.
2. Reviewed Funding Agreement/Contract, Allocation Request, and Funding Agreement/Contract Amendments to determine total funding provided by the applicable Strategy for the audit period or for the projects being audited.
3. Interviewed finance staff regarding internal controls in the following areas, specific to, but not limited to, accounting for Measure A funding, to obtain an understanding of the entity's operations:
 - a. Cash Disbursements – Reviewed policies and procedures regarding approval, defacements, accounts payable check processing, and other matters related to the disbursement of funds.
 - b. Cash Receipts – Reviewed policies and procedures regarding cash handling of over-the-counter receipts and cash receipts received through the mail, bank deposits, bank reconciliations, and other matters related to the receipt of funds.
4. Obtained all invoices submitted to the Authority for reimbursements, if applicable.
5. Obtained supporting documentation for a sample of invoices submitted to the Authority for reimbursements, including construction, personnel, project management, consultants, and other related costs.
6. Obtained general ledger detail for revenue and expenditures charged to the Measure A funding source or equivalent reports where income and expenses associated with Measure A funds can be clearly identified.
7. Reviewed remittances from the Authority to ensure that all revenues are correctly coded to the specific cost center or fund code designated for Measure A funding.
8. For reimbursement-based agreements, we reviewed a sample of invoices submitted to the Authority to ensure that the costs being billed on the invoices reconcile with the ones being charged to the specific Measure A cost center in the entity's financial accounting system.
9. For reimbursement-based agreements/contracts, expenditures charged to the specific cost center or fund code designated for Measure A funding were selected on a random basis were and tested for the following attributes:
 - a. Approval – Reviewed invoices and supporting documentation to ensure that the proper review and approval process occurred and is documented on the invoice.
 - b. Invoice – Reviewed invoices and supporting documentation to ensure that they are mathematically accurate, properly addressed to the auditee, and have sufficient detail to justify the amounts being charged and the cost center or fund code to which it is being charged to.

TOWN OF CORTE MADERA**ATTACHMENT A – PROCEDURES PERFORMED AS APPLICABLE
JUNE 30, 2017**

- c. Coding – Reviewed invoices and supporting documentation to ensure that they have been correctly coded to the specific cost center or fund code designated for Measure A funding.
 - d. Allowable – Reviewed invoices and supporting documentation to ensure that the costs being charged to the specific cost center or fund code designated for Measure A funding are allowable costs based on the Measure A Expenditure Plan, the entity’s funding agreement with the Authority, and specific requirements of the Strategy for which the funds were restricted for. Also reviewed expenditures to ensure that all costs are direct costs and not indirect costs or allocations of any kind.
10. For entities receiving funding in advance for Strategy 3 under a Measure A funding agreement, we reviewed, in summary form, various invoices to verify that expenditures being charged to the specific cost center or fund code restricted for Measure A are reasonable for the project. In addition, expenditures are also tested in the same fashion as outlined in step 9 of this list.
11. For entities where capital construction projects were funded utilizing Measure A Strategy 3 and 4 funding, we obtained the necessary project files and reviewed them for the following requirements:
- a. Procurement Process – Reviewed procurement process of the project to ensure that the project was properly advertised in publications, internet, trade journals and/or other acceptable means. If other means of procurement, such as selective RFP submittals were followed, we determined whether the process is adequate in regards to the project. Reviewed any other evidence of procurement when appropriate, such as fax logs or mailing lists.
 - b. Bids and Proposals – Reviewed bids and proposals received to ensure that sufficient bids were received in regards to the project.
 - c. Bid Award – Reviewed Town Council Agendas and Minutes and/or other related reports in regards to the bid award to ensure that the contract for the project was properly approved by Department Heads and the Town Council and was properly documented in a public forum. Also, we reviewed bidding results to ensure that the lowest bid was selected, and if the lowest bid was not selected, that there is sufficient documentation for any other selection process utilized.
12. For entities where professional service contracts were paid utilizing Measure A funding, with regards to construction projects or other purposes, we reviewed the policies and procedures of the entity in question to ensure that internal policies and procedures were followed in regards to the selection of professional service firms.
13. For entities where capital construction projects were paid utilizing Measure A Strategy 3 and 4 funding, we reviewed any applicable environmental review requirements and reviewed documentation to verify that all reports and reviews were performed prior to the start of any construction.

TOWN OF CORTE MADERA**ATTACHMENT A – PROCEDURES PERFORMED AS APPLICABLE
JUNE 30, 2017**

14. For entities where personnel costs were charged to the specific cost center or fund code designated for Measure A funding, we selected a representative sample of charges for personnel costs and tested for the following:
 - a. Recalculation – Reviewed and reconciled wage rates from personnel costs charged to Measure A cost center or fund code to the entity’s payroll registers to ensure that wage rates being charged were accurate and properly approved; reviewed all benefits and fringe costs being allocated in addition to wage rates to ensure that they are accurate and appropriate; recalculated personnel costs utilizing wage rates and hours being charged to ensure that the amounts are mathematically accurate; review the calculation to ensure no indirect costs are included in the reimbursement request.
 - b. Timesheet – Reviewed timesheets for selected personnel costs to ensure that hours being charged to Measure A are properly supported with an approved timesheet. All charges to Measure A funding must be clearly documented on timesheets, detailing the number of hours and the funding source, on a daily basis. We also reviewed timesheets for selected personnel costs to ensure that signatures of both the employee and supervisor are present. Electronic time documentation methods must also have similar electronic signatures.
15. Obtained close-out reports, from completed capital construction projects, submitted to the Authority.
16. Reviewed close-out reports to ensure that they were submitted within 90 days and were properly certified in accordance with the entity’s funding agreement/contract with the Authority.

TOWN OF CORTE MADERA

**ATTACHMENT B – FINDINGS AND OBSERVATIONS
JUNE 30, 2017**

No findings noted.

TOWN OF CORTE MADERA**ATTACHMENT C – SCHEDULE OF ALLOCATIONS AND EXPENDITURES
JUNE 30, 2017**

Measure A Allocation				
Allocation Period	Agreement Number	Measure A Strategy	Agreement Date	Available Amount
FY 15/16 and FY 16/17	2015-002	4.3	6/7/2015	\$ 90,000
Measure A Expenditures				
Project Name	Measure A Strategy	Amount		
Tamalpais Drive Pedestrian Crossing Enhancement Project	4.3	\$	85,872	



**INDEPENDENT AUDITOR'S REPORT ON COMPLIANCE AND ON
INTERNAL CONTROL OVER COMPLIANCE**

Board of Commissioners of
Transportation Authority of Marin
San Rafael, California

Compliance

We have audited the Town of Fairfax (Town) compliance with the types of compliance requirements described in the Measure A Expenditure Plan and the respective funding agreement with the Transportation Authority of Marin (Authority) applicable to the Town's Schedule of Allocations and Expenditures for the year ended June 30, 2017.

Management's Responsibility

Compliance with the requirements referred to above is the responsibility of management of the Town.

Auditor's Responsibility

Our responsibility is to express an opinion on the Town's compliance based on our audit.

We conducted our audit of compliance in accordance with auditing standards generally accepted in the United States of America; the standards applicable to compliance audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States; the Measure A Expenditure Plan issued by the County of Marin, and the respective funding agreement between the Town and the Authority. Those standards and the Measure A Expenditure Plan issued by the County of Marin, and the respective funding agreement between the Town and the Authority require that we plan and perform the audit to obtain reasonable assurance about whether noncompliance with the compliance requirements referred to above that could have a material effect on the Town's Schedule of Allocations and Expenditures. An audit includes examining, on a test basis, evidence about the Town's compliance with those requirements and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion. Our audit does not provide a legal determination of the Town's compliance with those requirements.

Opinion

In our opinion, the Town complied, in all material respects, with the compliance requirements referred to above that are applicable to the Town's Schedule of Allocations and Expenditures for the year ended June 30, 2017.

Internal Control Over Compliance

Management of the Town is responsible for establishing and maintaining effective internal control over compliance with the compliance requirements referred to above. In planning and performing our audit, we considered the Town's internal control over compliance to determine the auditing procedures for the purpose of expressing our opinion on compliance, but not for the purpose of expressing an opinion on the effectiveness of internal control over compliance. Accordingly, we do not express an opinion on the effectiveness of the Town's internal control over compliance.

A deficiency in internal control over compliance exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, noncompliance on a timely basis. A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance. A *material weakness* in internal control over compliance is a deficiency, or combination of deficiencies in internal control over compliance, such that there is a reasonable possibility that material noncompliance with a compliance requirement will not be prevented, or detected and corrected, on a timely basis.

Our consideration of internal control over compliance was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be deficiencies, significant deficiencies, or material weaknesses in internal control over compliance. We did not identify any deficiencies in internal control over compliance that we consider to be a significant deficiency or material weaknesses, as defined above.

The purpose of this report on internal control over compliance is solely to describe the scope of our testing of internal control over compliance and the results of that testing based on the Measure A Expenditure Plan issued by the County of Marin, and the respective funding agreement between the Town and the Authority. This report is intended solely for the information of the Board of Commissioners, Citizens' Oversight Committee, Management of the Authority, and management of the Town. Accordingly, this report is not suitable for any other purpose.

Vavrinek, Trine Day & Co., LLP
November ____, 2017

TOWN OF FAIRFAX**MEASURE A COMPLIANCE REPORT AND NOTES TO THE MEASURE A
JUNE 30, 2017**

NOTE 1 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES**Financial Reporting Entity**

The Town is an incorporated town that receives funding under the Measure A Expenditure Plan as a member of the County of Marin.

Basis of Accounting

The Town utilizes the current resources measurement focus basis of account, whereby revenues are recognized when measurable and available. The Town considers all revenues reported to be available if the revenues are collected within sixty days after the fiscal year end. Expenditures are recorded when the related fund liability is incurred. Capital assets acquisitions are reported as expenditures in the governmental funds.

NOTE 2 - MEASURE A SALES TAX

The Measure A sales tax is a 1/2 cent set forth by voters as a step in implementing a 1.6 billion dollar “transportation vision” set forth by the County of Marin as a plan to alleviate traffic congestion, reinvent the public transportation system, provide addition pedestrian and bike pathways, provide safer routes to school and many other additional transit related goals. Citizens’ Advisory Committees in each part of the County, representing the many diverse interests in Marin, provided input that result in a draft expenditure plan. The draft plan was presented to each of Marin’s City/Town Councils and to numerous stakeholder groups. Their comments prompted refinements reflected in the Final Measure A Transportation Sales Tax Expenditure Plan (Plan).

The Plan is administered by the Transportation Authority of Marin (Authority). Its 16-member board consists of the Board of Supervisors and a council member of each incorporated City/Town. The Authority is accountable to a 12-member Citizens’ Oversight Committee (Committee), created with the assistance of the League of Women Voters. The Committee reviews all expenditures and reports annually to the public.

TOWN OF FAIRFAX**ATTACHMENT A – PROCEDURES PERFORMED AS APPLICABLE
JUNE 30, 2017**

1. Obtained original Funding Agreement/Contract, Allocation Request, and Funding Agreement/Contract Amendments for the audit period or for the period during which funding was utilized for an approved project.
2. Reviewed Funding Agreement/Contract, Allocation Request, and Funding Agreement/Contract Amendments to determine total funding provided by the applicable Strategy for the audit period or for the projects being audited.
3. Interviewed finance staff regarding internal controls in the following areas, specific to, but not limited to, accounting for Measure A funding, to obtain an understanding of the entity's operations:
 - a. Cash Disbursements – Reviewed policies and procedures regarding approval, defacements, accounts payable check processing, and other matters related to the disbursement of funds.
 - b. Cash Receipts – Reviewed policies and procedures regarding cash handling of over-the-counter receipts and cash receipts received through the mail, bank deposits, bank reconciliations, and other matters related to the receipt of funds.
4. Obtained all invoices submitted to the Authority for reimbursements, if applicable.
5. Obtained supporting documentation for a sample of invoices submitted to the Authority for reimbursements, including construction, personnel, project management, consultants, and other related costs.
6. Obtained general ledger detail for revenue and expenditures charged to the Measure A funding source or equivalent reports where income and expenses associated with Measure A funds can be clearly identified.
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8. For reimbursement-based agreements, we reviewed a sample of invoices submitted to the Authority to ensure that the costs being billed on the invoices reconcile with the ones being charged to the specific Measure A cost center in the entity's financial accounting system.
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 - a. Approval – Reviewed invoices and supporting documentation to ensure that the proper review and approval process occurred and is documented on the invoice.
 - b. Invoice – Reviewed invoices and supporting documentation to ensure that they are mathematically accurate, properly addressed to the auditee, and have sufficient detail to justify the amounts being charged and the cost center or fund code to which it is being charged to.

TOWN OF FAIRFAX**ATTACHMENT A – PROCEDURES PERFORMED AS APPLICABLE
JUNE 30, 2017**

- c. Coding – Reviewed invoices and supporting documentation to ensure that they have been correctly coded to the specific cost center or fund code designated for Measure A funding.
 - d. Allowable – Reviewed invoices and supporting documentation to ensure that the costs being charged to the specific cost center or fund code designated for Measure A funding are allowable costs based on the Measure A Expenditure Plan, the entity’s funding agreement with the Authority, and specific requirements of the Strategy for which the funds were restricted for. Also reviewed expenditures to ensure that all costs are direct costs and not indirect costs or allocations of any kind.
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11. For entities where capital construction projects were funded utilizing Measure A Strategy 3 and 4 funding, we obtained the necessary project files and reviewed them for the following requirements:
- a. Procurement Process – Reviewed procurement process of the project to ensure that the project was properly advertised in publications, internet, trade journals and/or other acceptable means. If other means of procurement, such as selective RFP submittals were followed, we determined whether the process is adequate in regards to the project. Reviewed any other evidence of procurement when appropriate, such as fax logs or mailing lists.
 - b. Bids and Proposals – Reviewed bids and proposals received to ensure that sufficient bids were received in regards to the project.
 - c. Bid Award – Reviewed Town Council Agendas and Minutes and/or other related reports in regards to the bid award to ensure that the contract for the project was properly approved by Department Heads and the Town Council and was properly documented in a public forum. Also, we reviewed bidding results to ensure that the lowest bid was selected, and if the lowest bid was not selected, that there is sufficient documentation for any other selection process utilized.
12. For entities where professional service contracts were paid utilizing Measure A funding, with regards to construction projects or other purposes, we reviewed the policies and procedures of the entity in question to ensure that internal policies and procedures were followed in regards to the selection of professional service firms.
13. For entities where capital construction projects were paid utilizing Measure A Strategy 3 and 4 funding, we reviewed any applicable environmental review requirements and reviewed documentation to verify that all reports and reviews were performed prior to the start of any construction.

TOWN OF FAIRFAX**ATTACHMENT A – PROCEDURES PERFORMED AS APPLICABLE
JUNE 30, 2017**

14. For entities where personnel costs were charged to the specific cost center or fund code designated for Measure A funding, we selected a representative sample of charges for personnel costs and tested for the following:
 - a. Recalculation – Reviewed and reconciled wage rates from personnel costs charged to Measure A cost center or fund code to the entity’s payroll registers to ensure that wage rates being charged were accurate and properly approved; reviewed all benefits and fringe costs being allocated in addition to wage rates to ensure that they are accurate and appropriate; recalculated personnel costs utilizing wage rates and hours being charged to ensure that the amounts are mathematically accurate; review the calculation to ensure no indirect costs are included in the reimbursement request.
 - b. Timesheet – Reviewed timesheets for selected personnel costs to ensure that hours being charged to Measure A are properly supported with an approved timesheet. All charges to Measure A funding must be clearly documented on timesheets, detailing the number of hours and the funding source, on a daily basis. We also reviewed timesheets for selected personnel costs to ensure that signatures of both the employee and supervisor are present. Electronic time documentation methods must also have similar electronic signatures.
15. Obtained close-out reports, from completed capital construction projects, submitted to the Authority.
16. Reviewed close-out reports to ensure that they were submitted within 90 days and were properly certified in accordance with the entity’s funding agreement/contract with the Authority.

TOWN OF FAIRFAX

**ATTACHMENT B – FINDINGS AND OBSERVATIONS
JUNE 30, 2017**

No findings noted.

TOWN OF FAIRFAX

**ATTACHMENT C – SCHEDULE OF ALLOCATIONS AND EXPENDITURES
 JUNE 30, 2017**

Measure A Allocation				
Allocation Period	Agreement Number	Measure A Strategy	Agreement Date	Available Amount
FY 16/17	2015-003	4.3	5/18/2015	\$ 25,000
Measure A Expenditures				
Project Name	Measure A Strategy	Amount		
Sir Francis Drake Blvd and Taylor Road Rectangular Rapid Flash Beacons (RRFB)	4.2	\$ 25,000		



DATE: November 30, 2017

TO: Transportation Authority of Marin Board of Commissioners

FROM: Dianne Steinhauser, Executive Director
Li Zhang, Chief Financial Officer

SUBJECT: Adoption of the TAM Human Resources Policies and Procedure Manual (Action), Agenda Item No.9e

RECOMMENDATION:

The TAM Board adopts the TAM Human Resources Policies and Procedure Manual.

BACKGROUND:

The draft was presented to the TAM Board at its October 26, 2017 meeting. The Board and all staff were provided with 30 days for review and comments. No comments were received during the time period. Staff recommends that the Board adopts the first TAM Human Resources Policies and Procedure Manual, which is one of the most important documents for the agency as an employer of record, expected to be effective on January 1, 2018.

DISCUSSION/ANALYSIS:

Staff presented the following list of items of TAM would have to put in place in order to become its own employer of record, and effectively manage all the related functions in house at the October 26, 2017 Board meeting.

- Item 1: Create HR Management Capacity
- Item 2: Implement Payroll Services
- Item 3: Develop Agency HR Manual and Establish Direct Employment Relationship with all LGS/RGS Employees Currently Assigned to TAM
- Item 4: Develop Various Employee Benefit Programs
- Item 5: Obtain Other Required Agency Insurances

The HR Manual is one of the most important documents for TAM as its own employer of record. It brings in house all required policies and procedures for TAM as a public agency, including the hiring and management of employees. It includes all policies required by law, regulation and policy, and updates all such policies and procedures currently administered by LGS/ RGS. The Manual also includes all of the benefits that TAM offers to its employees.

Staff has been working on TAM's first HR Policies and Procedures Manual beginning in the summer of 2017. The first draft was reviewed by the Ad Hoc Committee at its September 26 meeting and reviewed it again at its October 19 meeting. TAM's legal team at County Counsel also reviewed the Manual and provided its comments/edits, which have been incorporated.

FISCAL CONSIDERATION:

None

NEXT STEPS:

Under the guidance of the HR Ad Hoc Committee, with the approval of the TAM Board, all TAM staff will be asked to officially review and accept the HR Manual. This process assures staff accept required policies as well as recognize their benefit structure. Offer letters will be developed by TAM and provided to all current LGS/RGS employees who will terminate their employment with LGS/RGS and be hired by TAM directly, effective January 1, 2018.

ATTACHMENTS:

The draft TAM Human Resources Policies and Procedures Manual was provided at the October 26, 2017 Board meeting. Since no changes were made since then, hard copies will only be provided upon request.



DATE: November 30, 2017

TO: Transportation Authority of Marin Board of Commissioners

FROM: Dianne Steinhauser, Executive Director
David Chan, Programming and Legislation Manager

SUBJECT: Approve Extension on State Legislative Contract (Action), Agenda Item 9f

RECOMMENDATION

Approve the fourth one-year extension with Khouri Consulting for State Legislative Services not to exceed \$38,500.

BACKGROUND

When TAM's state legislative contract with the firm of Shaw Yoder Antwih ended in November 2013, the TAM Board approved a contract with Khouri Consulting to provide state legislative consulting services for one year with an option for four one-year extensions at TAM's discretion. Gus Khouri was TAM's lead contact while he was at the firm of Shaw Yoder Antwih, so he was already providing needed services. The contract with Khouri Consulting commenced on January 1, 2014 and expired on December 31, 2014. The TAM Board approved the first one-year extension in November 2014, the second one-year extension in December 2015, and the third one-year extension in December 2016. The third one-year extension expires on December 31, 2017.

The primary reason for issuing a one-year contract with four one-year extensions by the TAM Board was because Khouri Consulting was a newly formed firm that came into existence in 2013. While Mr. Khouri's experience and credentials on transportation and related issues were unquestioned, staff felt that it was prudent to issue a shorter-term contract with a new firm until familiarities had been established. The four one-year extensions allowed the relationship to continue beyond the first year if the relationship proved to be mutually beneficial.

DISCUSSION

After three years with Khouri Consulting, staff is recommending the TAM Board approve the fourth and final one-year extension of the four-year option and proposing to increase the annual amount from \$35,000 to \$38,500. Staff is recommending an increase of \$3,500 from \$35,000 annually to \$38,500 annually on the fourth one-year extension because Khouri Consulting has been with TAM for four years and consider it reasonable to allow an increase after many years of service. When TAM retained Khouri Consulting in 2013, Khouri Consulting was a new firm and the rate was reflective of a relatively inexperienced firm. Khouri Consulting has grown and developed a reputable presence in the state legislature so staff feels that a modest increase is warranted.

In the past year, Mr. Khouri has been actively and consistently monitoring issues and supporting TAM direction on legislation germane to TAM, particularly with the passage of SB 1 and SB 595 (Regional Measure 3). He helped communicate positions on these bills that were advantageous to TAM. He has provided prudent advice on complex issues and he was readily available to provide legislative service when requested. Staff believes that a continued relationship with Khouri Consulting would be beneficial to TAM instead of seeking a new consultant.

If the TAM Board decides not to extend this contract with Khouri Consulting, a Request for Proposals (RFP) would be issued immediately to solicit service for state legislative services. The process to select another consultant for the TAM Board's consideration would take approximately three months.

As noted, if approved, this would be the last one-year option on the existing contract that will expire on December 31, 2018. Sometime in the Fall of 2018, staff will issue a Request for Proposals (RFP) for State Legislative Services. A recommended consultant selected from the RFP process will be presented to the TAM Board for approval before the end of 2018.

FISCAL IMPACTS

This work element has been budgeted in TAM's FY 17/18 budget, approved by the TAM Board in June 2017 for \$35,000. The FY 17/18 budget would be amended to accommodate the contract increase for the remaining six months for FY 17/18.

NEXT STEP

If approved, issue an amendment for Khouri Consulting to extend the existing contract for one year at an amount not to exceed \$38,500 for 2018.



DATE: November 30, 2017

TO: Transportation Authority of Marin Board of Commissioners

FROM: Dianne Steinhauser, Executive Director
Derek McGill, Planning Manager

SUBJECT: Adopt the Revised Draft Strategic Vision Plan (Action), Agenda Item 10

RECOMMENDATION

Adopt the final TAM Strategic Vision Plan incorporating changes from public and agency comments received.

This item was presented to both TAM Executive Committees and their changes have been included in this revised document.

BACKGROUND

In 2003 TAM's predecessor agency, the Marin County Congestion Management Agency prepared "Moving Forward: a 25-year Transportation Vision for Marin County." This 2003 Vision Plan provided direction for planning activities and future revenue discussions, ultimately assisting in the development of TAM's ½-cent Transportation Sales Tax Expenditure Plan. As many of the projects and programs envisioned have been carried out, an update to the original Vision Plan was warranted. The process to update this vision plan was approved by the TAM Board in February 2015.

The overall goal of the vision plan is to build consensus around "what we want to accomplish in the future." The update to this plan, known as the Strategic Vision Plan:

- Details the past developments and accomplishments made to Marin's transportation system,
- Provides an updated Vision for transportation based on a substantial amount of planning and studies on our local and regional transportation issues,
- Details the expansive public outreach and stakeholder outreach that has occurred recently to develop this vision,
- Provide guidance and strategies for new revenue sources,
- Incorporates examples of technological advancement and innovations.

TAM staff have brought forth elements of the plan in pieces, beginning in May 2015 with the Public Outreach Plan for the Regional Transportation Plan (RTP) and Strategic Vision Plan (SVP) outreach of 2015. Since that time TAM has:

- Conducted Round 1 of Outreach - Summer 2015
- Adopted Principles of RTP/SVP - July 2015
- Submitted Long Range Projects for RTP - October 2015

- Revised Long Range Projects - June 2016
- Board Discussion on Transportation Setting - April 2016
- Conducted Round 2 of Public Outreach - Fall 2016
- Board Discussion on Public Outreach - January 2017
- TAM Innovation Workshop - February 2017
- Board Discussion on Vision Development – April 2017
- Release of the Draft Vision Plan – July 2017

DISCUSSION/ANALYSIS

In July 2017, TAM released for public comment the Draft Strategic Vision Plan, a long-range plan providing a vision for all modes of transportation in Marin County. This vision consists of programs specifically developed and tailored to Marin's unique needs, history, and culture, resulting in a strategy to protect and enhance Marin's quality of life and natural beauty. As a Vision Plan, this report articulates a shared consensus around what our transportation system will look like in the future from the perspectives of the public, who relies on the system, and of our local transportation providers, who plan, maintain and operate our transportation infrastructure.

As a comprehensive look at the range of transportation topics, TAM solicited input on the Draft Vision Plan through multiple rounds of public outreach, agency coordination, TAM Board and TAM Executive Committees discussions. This draft was circulated for Public and Agency review in July of 2017 and the comment period extended until September 22, 2017.

TAM received 30 distinct comments on the final Draft Vision Plan by the September 22nd 2017 close of comment period. Note that this followed two rounds of successful public outreach in 2015, with a public workshop and survey effort, followed by 2016's online survey with 3,800 unique responses. A response to comments matrix has been developed (**Attachment A**) that summarizes these comments and provides a response to these comments noting changes to the report where applicable. A full listing of the comments received (with personal information redacted) is included at the following link: <https://www.tam.ca.gov/wp-content/uploads/2017/10/TAM-StrategicVisionPlan-Comments.pdf>

A revised draft of the Strategic Vision Plan (**Attachment B**) has been prepared based on these comments, reflecting a common consensus around Marin's Vision for its transportation network. In general, commenters mentioned a wide range of topics and policies to consider in the plan. A group of commenters indicated a desire for policies to complete regional bike path networks and safer facilities for bicycle and pedestrian users. Commenters also noted a range of improvements to Highway 101 and HOV lanes hours of operation, and desire for a countywide transportation plan.

The Strategic Vision Plan will serve to inform future policy discussions and provide a framework for decision making by the TAM Board of Commissioners in upcoming policy discussions. The original 2003 Vision Plan has served Marin well in describing and envisioning improvements to our transportation system, and the updated Strategic Vision Plan will serve a similar function. The Vision Plan is intended to be updated on a regular basis (4-year cycle). TAM staff is currently working on developing innovation plans to advance a key portion of the vision, to be presented in 2018.

TAM staff have distributed a copy of this revised draft to City/Town Managers, Public Works and Planning Directors.

TAM Executive Committee Comments

This item was presented to both of TAM's Executive Committees on November 13, 2017, and both committees recommended acceptance by the TAM Board pending changes requested. TAM staff have revised the report to reflect these changes as noted below:

- Clarification to the discussion on local trips and regional commute patterns in Chapter 2. Text was revised in the travel behavior section of Chapter 2 to clarify local trip rates and the impact of cross county trips at county gateways.
- Revise introduction to land use section of Chapter 2. Language was added to this section.
- Revise color scheme of tables/charts to better distinguish information. Charts were updated in multiple places in the report.
- Regional transit service on the Tiburon peninsula to SF was updated in the text.
- Include 2nd and 3rd Street in San Rafael to identify regional traffic and congestion in downtown San Rafael, particularly at the SMART crossings. Language was added to Chapter 5 Subsection for major roads to reflect modernization of intersections and corridor operational improvements in the 2nd and 3rd street corridor, and 2nd-street on ramp was included under the Highways Subsection as needed operational improvements examples.
- Add Bike/Ped section of Chapter 2 to Table of Contents. Table of comments was updated.
- Update Figure 23 to specify which funds are specific to Marin. This table was updated.
- Additional text changes were requested and these have all been updated.

Goals for the TAM Board to Consider

In addition to the comments above, the TAM Board chair requested consideration of goals included as **Attachment C**. TAM staff are reviewing these goals as they relate to our existing programs and projects, and will work with our member agencies and transit operators over the next 6 months to vet these goals. TAM staff will incorporate items into TAM work plans for FY 2018-19 and TAM's budget, as feasible based on these discussions, and a final version will be brought back to the TAM Board.

FISCAL CONSIDERATION

Work to complete the plan with associated outreach has been completed within the budget allocated by the TAM Board for this effort. Portions of recent work have been performed in-house by TAM staff to complete the document, as the budget has been fully expended.

NEXT STEPS

TAM staff will incorporate any additional changes as directed by the TAM Board upon adoption at its November 30th meeting and finalize the report.

ATTACHMENTS

- Attachment A** – Comment Response Matrix
- Attachment B** – Revised Draft Strategic Vision Plan
- Attachment C** - TAM Chair sample 3-5 Year Goals

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This matrix references the comments received regarding the Strategic Vision plan from the public Comment period extending from July 28th, 2017 until September 22nd, 2017. For each comment, the matrix includes a response describing, if necessary, how it has been addressed. Response to comments were developed based on a review by a working group of TAM staff.

Comment Letter ID	Name	Summary of Comments and Necessary Actions	Response to Comment and Action Taken
1	Kia Mcpherson	Support for reopening the Alto Tunnel for bike and ped use.	Additional language added to chapter 2, to further describe the needs of the north south greenway, and advances made in completing the greenway. In chapter 5, language was added to reflect the needs of the greenway, strategy to attract outside funding, and continue progress in completing Marin's bike networks.
2	Alan Zahradnik	TAM should acknowledge regional travel responsibilities further. Expand the county Gateway Discussion to acknowledge needs for WB 580 to SB US 101 traffic, and GGB toll plaza expansion to provide sufficient capacity.	The report has been updated to reflect comments including additional data on county gateways and updated graphics to better describe traffic flows regionally. Language has been updated to describe agency and regional coordination.
3	Cindy Winter	Innovations needed, and text changes to innovation section	The innovation discussion in the chapter 3 and in chapter 4 has been modified to reflect these comments.
4	Janet Furman	Reopen the alto tunnel	Additional language added to chapter 2, to further describe the needs of the north south greenway, and advances made in completing the greenway. In Chapter 5, language was added to reflect the needs of the greenway, strategy to attract outside funding, and continue progress in completing Marin's bike networks.
5	Frank Leahy	Overall comments include great report, however the discussion is missing high speed buses or trams on east west corridors and a noting that the roadway is limited in expansion. A detailed listing of comments and request for changes to sections of the report to expand detail were requested throughout the document.	The working group reviewed each comment for inclusion into the report. Due to the detailed list of comments, many of which requested additional information, TAM staff incorporated changes as feasible and appropriate to the report.

This matrix references the comments received regarding the Strategic Vision plan from the public Comment period extending from July 28th, 2017 until September 22nd, 2017. For each comment, the matrix includes a response describing, if necessary, how it has been addressed. Response to comments were developed based on a review by a working group of TAM staff.

Comment Letter ID	Name	Summary of Comments and Necessary Actions	Response to Comment and Action Taken
6	Kate Powers, Marin Conservation League	TAM should prioritize GHG mitigation equal to traffic congestion, and emphasize GHG reduction strategies.	TAM has updated Chapters 4 and 5 of the report environmental strategy to include GHG reduction as an integral part of TAM's transportation planning efforts, and note the environments impact on the equity and the economy strategies.
7	Bob Goralka, County of Marin Department of Public Works	Please consider additional planning framework discussion including climate action plans, SB 743 and VMT implementation, MTC's implementation of housing policy and PCI discussions. additional text edits and clarifications have been requested.	The vision plan informs future policy discussion and considers Marin planning framework as a basis for its development. TAM supports a wide range of planning functions, including coordination with climate action plans, MTC housing policy considerations and VMT discussions at a county wide level. This work influences the vision as a policy basis. Text changes have been made to the document to reflect comments received as practicable.
8	Mill Valley - Daniele Staude	Suggested changes to the report was provided with comments, generally providing clarity for readers.	The working group reviewed each comment for inclusion into the report. TAM staff incorporated changes as feasible and appropriate to the report.
9	RG Langenhan	Address local traffic by considering vertical parking structures and vertical highways.	Comment noted. congestion relief projects are identified in Section 5 of the report.
10	John Carapiet	Address the traffic crisis and provide two lanes to the Richmond San Rafael Bridge on East Sir Francis Drake	Comment noted. congestion relief projects are identified in Section 5 of the report.
11	Ben Lang	Abolish Carpool Lanes and promote passing on the right only.	Comment noted, MTC and Caltrans are currently reviewing HOV operations on US 101.
12	Cynthia Morris	Consider changing Carpool to 3+	Comment noted, MTC and Caltrans are currently reviewing HOV operations on US 101.

This matrix references the comments received regarding the Strategic Vision plan from the public Comment period extending from July 28th, 2017 until September 22nd, 2017. For each comment, the matrix includes a response describing, if necessary, how it has been addressed. Response to comments were developed based on a review by a working group of TAM staff.

Comment Letter ID	Name	Summary of Comments and Necessary Actions	Response to Comment and Action Taken
13	Susan Nawbary	Provide more sustainable transportation options including complete streets, BART from the East bay, faster public transit, increased parking costs and restrictions on parking.	Comment Noted.
14	Brooke Smith	Provide additional biking infrastructure, including widening MUPs to separate modes and completing the north south greenway.	Additional language added to chapter 2, to further describe the needs of the north south greenway, and advances made in completing the greenway. In Chapter 5, language was added to reflect the needs of the greenway, strategy to attract outside funding, and continue progress in completing Marin's bike networks.
15	Bjorn Griepenburg, MCBC	Provide A vision for low stress networks and support for the North South Greenway as the top priority for Active Transportation. Gap closures that remain need to be addressed including: Parallel to Bridgeway in Sausalito between the Sausalito Ferry Terminal and Gate 6 road, Alto Tunnel between the Mill Valley-Sausalito Path and Sandra Marker Trail, Corte Madera Creek crossing, Andersen Drive to Mission Avenue in San Rafael and the unbuilt SMART pathway segments between Los Ranchitos Road in San Rafael and the Novato San Marin SMART Station. Pathways that include the primary network for bikes include the Cross-Marin Bikeway from Fairfax to San Rafael, Corte Madera Creek Path, Northwestern Pacific Railroad Trail in Larkspur, Old Rail Trail in Tiburon, and North-South Bikeway.	Additional language added to chapter 2, to further describe the needs of the north south greenway, and advances made in completing the greenway. In Chapter 5, language was added to reflect the needs of the greenway, strategy to attract outside funding, and continue progress in completing Marin's bike networks.

This matrix references the comments received regarding the Strategic Vision plan from the public Comment period extending from July 28th, 2017 until September 22nd, 2017. For each comment, the matrix includes a response describing, if necessary, how it has been addressed. Response to comments were developed based on a review by a working group of TAM staff.

Comment Letter ID	Name	Summary of Comments and Necessary Actions	Response to Comment and Action Taken
16	Beau Chapman	Consider in the vision providing more origin and destination information, providing transit to connect across counties and provide destinations around transit. Note that sea level rise is exaggerated, and future delivery systems will reduce traffic.	Comment noted, origin and destination information has been included in the report, and delivery systems have been noted in the innovation section of the report.
17	G. Selchau	Please change "meeting" to "metering" on page 80.	Text has been changed to "metering".
18	Kathleen Ellis	Alto Tunnel support, toll for bicyclists	Additional language added to chapter 2, to further describe the needs of the north south greenway, and advances made in completing the greenway. In Chapter 5, language was added to reflect the needs of the greenway, strategy to attract outside funding, and continue progress in completing Marin's bike networks.
19	Conrad Williams	Expand transit access to west Marin communities and China camp.	Comment noted.
20	David Mcpherson	Support for the north south greenway and gap closures	Additional language added to chapter 2, to further describe the needs of the north south greenway, and advances made in completing the greenway. In Chapter 5, language was added to reflect the needs of the greenway, strategy to attract outside funding, and continue progress in completing Marin's bike networks.

This matrix references the comments received regarding the Strategic Vision plan from the public Comment period extending from July 28th, 2017 until September 22nd, 2017. For each comment, the matrix includes a response describing, if necessary, how it has been addressed. Response to comments were developed based on a review by a working group of TAM staff.

Comment Letter ID	Name	Summary of Comments and Necessary Actions	Response to Comment and Action Taken
21	Jean Severinghaus	Overall comments include support for continued investment in North South Greenway, and need for low-stress bicycle networks. Additional policy considerations should include Bicycle parking, health, and coordination with Caltrans for bike planning.	Additional language added to chapter 2, to further describe the needs of the north south greenway, and advances made in completing the greenway. In Chapter 5, language was added to reflect the needs of the greenway, strategy to attract outside funding, and continue progress in completing Marin's bike networks. Bicycle parking, low stress networks and healthy communities have been added to chapter 5 of the report, and agency coordination discussion has been updated.
22	Susan Nawbary	Support for the North South Greenway and gap closures	Comment noted, additional detail has been added to the report.
23	George Topor	Registered vehicle numbers are growing.	Comment noted.
24	Transdef	Plan should prioritize how agency allocates its limited resources, identify steps to achieve vision, include a problem statement, support for managed parking, lifeline services and use of car sharing and ride hailing services	Changes to the executive summary have been made to clarify the intent of the vision plan. the vision plan is intended to set the stage for future policy discussions, and is not a countywide transportation plan. Modifications to chapter 2 to clearly articulate the challenges Marin County faces have been included, including discussion on VMT growth.
25	David Edmundsen	Identify strategic measurable objectives, consider results based management.	Changes to the executive summary have been made to clarify the intent of the vision plan. the vision plan is intended to set the stage for future policy discussions.
26	Transportation Alternatives of Marin	Support for the north south greenway, consider advancing gap closures through the environmental and design phase of projects, complete regional bike networks and project and planning recommendations.	Additional language added to chapter 2, to further describe the needs of the north south greenway, and advances made in completing the greenway. In Chapter 5, language was added to reflect the needs of the greenway, strategy to attract outside funding, and continue progress in completing Marin's bike networks.

This matrix references the comments received regarding the Strategic Vision plan from the public Comment period extending from July 28th, 2017 until September 22nd, 2017. For each comment, the matrix includes a response describing, if necessary, how it has been addressed. Response to comments were developed based on a review by a working group of TAM staff.

Comment Letter ID	Name	Summary of Comments and Necessary Actions	Response to Comment and Action Taken
27	Marin Transit	Suggested changes to the report have been provided. overall comments include local transit continues to serve the needs of the county, and local transit service has responded to the growing diverse needs of the Marin community. A strategy for long term funding of school transportation services is needed.	The working group reviewed each comment for inclusion into the report. TAM staff incorporated changes as feasible and appropriate to the report. School transportation and local transit sections have been updated to reflect these needs.
28	Peter Herzog	Reopen the alto tunnel	Additional language added to chapter 2, to further describe the needs of the north south greenway, and advances made in completing the greenway. In Chapter 5, language was added to reflect the needs of the greenway, strategy to attract outside funding, and continue progress in completing Marin's bike networks.
29	Peter Oppenheimer	The photo on page 7 Tiburon is misidentified as Sausalito. On page 55 Center Blvd in Fairfax is misidentified as Sir Francis Drake Blvd.	Both photo captions have been updated to correct locations.
30	Chris Lang	Suggested changes to the report were provided, generally supporting bike and pedestrian uses and the Alto Tunnel. Additional comments include, make East Sir Francis Drake from US 101 two lanes to I-580, Make 2nd Street from 101 two lanes to Montecito Plaza.	The working group reviewed each comment for inclusion into the report. TAM staff incorporated changes as feasible and appropriate to the report. Additional language added to chapter 2, to further describe the needs of the north south greenway, and advances made in completing the greenway. In Chapter 5, language was added to reflect the needs of the greenway, strategy to attract outside funding, and continue progress in completing Marin's bike networks.



FINAL REPORT | 2017



GETTING AROUND MARIN STRATEGIC VISION PLAN

GETTING AROUND MARIN

ABOUT TAM

The Transportation Authority of Marin (TAM), as a Congestion Management Agency and the Transportation Sales Tax Authority of Marin County, manages transportation projects in Marin County, California, with local, regional, state, and federal funding. According to TAM's mission statement:



TAM is dedicated to making the most of Marin County transportation dollars and creating an efficient and effective system that promotes mobility and accessibility by providing a variety of high quality transportation options to all users.¹

TAM's mandate is clear, and to advance our mission, TAM must balance a wide range of needs, challenges and opportunities across a variety of modes, partners, and networks to create an efficient and effective transportation system. To help guide transportation improvements and remain competitive for project funding, TAM has adopted principles, goals, and objectives that seek to move our mission statement into implementation in the local communities of Marin.

¹ Transportation Authority of Marin, <http://www.tam.ca.gov/index.aspx?page=343>.

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GETTING AROUND MARIN

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Executive Summary

The *Strategic Vision Plan* is a long-range plan that provides a vision for all modes of transportation in Marin County. This vision consists of programs specifically developed and tailored to Marin's unique needs, history, and culture, resulting in a strategy to protect and enhance Marin's quality of life and natural beauty. As a Vision Plan, this report articulates a shared consensus around what our transportation system will look like in the future from the perspectives of the public, who relies on the system, and of our local transportation providers, who plan, maintain and operate our transportation infrastructure.

TAM's vision is to have an efficient and effective transportation system, one that enhances our scenic environment, provides equity for all of our users (including our vulnerable populations), and grows our economy for our residents, visitors, and workforce. This vision responds to our local challenges of aging roads, congestion, and a fragile, limited roadway network to respond to these changes.

Marin's leadership in considering all modes of transportation serves as a building block toward achieving this vision and reflects the local plans and goals of our small towns and cities, transit operators, and transportation providers, while advancing critical new technologies and best practices to address our growing transportation challenges.

The updated Vision supports the previous 2003 Vision Plan with the development of a multimodal transportation system and recognizes that providing incremental but substantial improvements to our transportation system will be more effective than one single project or program to address our challenges in how we get around. Without significant opportunities for substantial increases in roadway capacity, operational enhancements and managing demand through multimodal travel options will be effective in enhancing mobility, both on Highway 101 and on local connector roads.

Perhaps most challenging to plan and envision are the transportation technology and innovative solutions that have arisen in the last few years. As we plan for the future, planning and building "smarter" infrastructure that enhances the safety and mobility of the county will require testing and piloting demonstration projects to adapt to these new technologies.

Additionally, the Vision builds on the existing plans of the transportation system in Marin, like SMART commuter rail, and the Richmond-San Rafael Bridge third lane. The Vision defines needs, challenges, and values that will lay the foundation to build a more flexible and resilient multimodal transportation network throughout Marin County. Above all, the transportation system in Marin will be designed, built, and maintained to sustain the quality of life enjoyed in Marin County.

GETTING AROUND MARIN



Pedestrians enjoying Tiburon's wide sidewalks

OVERVIEW

As an update to the 2003 Vision Plan, *Moving Forward: A 25-Year Transportation Vision for Marin County*, the development of the *Strategic Vision Plan* builds on the foundation established in the original transportation blueprint for Marin County. The *Strategic Vision Plan* reflects the advancements in our transportation system since 2003, and the increased knowledge base from plans, studies, and reports of our local conditions and travel choices. Nearly 15 years of investments and changes to our transportation system have passed since that plan was completed, and while many of today's challenges and mobility needs are similar, the specifics have evolved.

This update provides an opportunity to revisit Marin's transportation planning needs and redefines the Vision Plan from 2003 to match today's' challenges and solutions, and is informed by the following considerations and approaches:

- A track record of completed projects and enhancements made to the transportation system since the 2003 Vision Plan adoption
- Substantial planning efforts and studies that have advanced our understanding of the local and regional issues facing our transportation network
- Ongoing and extensive public and stakeholder outreach and community discussion that began in 2003 on projects, plans, and funding needs
- Opportunities for harnessing rapidly expanding technological advancements and innovation to address our challenges

This document begins with an overview of Marin's transportation challenges and opportunities; followed by an overview of the planning, outreach, and stakeholder engagement processes that have helped shape the Vision; and concludes with a transportation vision and supporting strategies that will address key transportation challenges, improve mobility, and enhance our quality of life. This report considers Marin's planning framework and identifies funding sources, projects, and programs that support implementation of the *Strategic Vision Plan*.

The *Strategic Vision Plan* is designed to be a fluid document that can adapt to changes in the transportation setting. Therefore, this document may be updated, changed, or modified to respond to economic, demographic, technological, and other changes in our society, and does not establish any implementation regulations or requirements. This format provides a status report and a framework for future decision-making regarding transportation investments and improvements in Marin County that reflects current needs, values, and an understanding of future challenges.

GETTING AROUND MARIN



This report considers Marin's planning framework and identifies funding sources, projects, and programs that support implementation of the *Strategic Vision Plan*.

ACCOMPLISHMENTS SINCE 2003 VISION PLAN

In 2003, TAM's predecessor agency, the Marin County Congestion Management Agency, prepared *Moving Forward: A 25-Year Transportation Vision* for Marin County. This 2003 Vision Plan provided direction for planning activities and future revenue discussions, ultimately assisting in the development of TAM's half-cent Transportation Sales Tax Expenditure Plan.

The 2003 Vision Plan aimed to achieve the following goals:

- Create a multimodal transportation system, emphasizing alternatives to single-occupant driving.
- Reduce overall congestion, not just on Highway 101 but also on roads providing connections and alternatives to freeway travel.
- Maximize mobility for all residents of Marin County including seniors, youth, and disadvantaged residents.
- Maintain the quality of life enjoyed in Marin County.
- Maintain flexibility to allow for different needs in different parts of the county and to respond to changing conditions, including changes in funding.

The 2003 Vision Plan's goals and objectives are still relevant today. This clear articulation of vision and goals was instrumental in setting the stage for a transportation sales tax for local transportation investment. Passage of the 1/2-cent transportation sales tax (Measure A) in 2004, and an annual \$10 Vehicle Registration Fee (VRF), provided a reliable funding stream for local streets and roads maintenance, major roadway improvements, Safe Routes to Schools programs, and local transit services. The list below provides an overview of completed and successful efforts, organized by mode of transportation.

LOCAL TRANSIT

- Marin's local public transit system serves the mobility needs of residents and workers who travel within Marin County throughout the day, seven days a week. Without the 1/2-cent transportation sales tax, Marin's public transit would be limited to commute routes designed to serve travel into San Francisco.
- The 1/2-cent transportation sales tax also stabilized and expanded the resources necessary to deliver lifeline paratransit services for Marin's seniors and people with disabilities. Marin Access continues to expand service options for these residents beyond traditional paratransit.
- Major completion of the Sonoma-Marín Area Rail Transit (SMART) rail service to San Rafael and agreement on full funding for the SMART Larkspur Extension.

HIGHWAYS

- Completion of the Highway 101 Gap Closure Project in San Rafael, the high-occupancy vehicle (HOV) lane, and separated (Class I) multi-use path through Central Marin.
- Major progress in the Marin Sonoma Narrows, including extension of segments of the HOV lane, Phase 1 grade separations, redirection of driveways to new frontage roads, and implementation of new Class I and Class II facilities for bicycles and pedestrians.²

² Class 1 bike and pedestrian facilities provide full separation for vehicle traffic; Class 2 facilities are located on street and are striped as a separate lane (conventional bike lanes).

GETTING AROUND MARIN

LOCAL ROADWAYS

- Completion of major road improvements including 4th Street in San Rafael, Miller Avenue in Mill Valley, Sir Francis Drake Boulevard thru Samuel P. Taylor Park in West Marin, and portions of Novato Boulevard in Novato. These projects incorporate complete streets and accommodate for all modes of travel.
- The 1/2-cent transportation sales tax provides flexible and reliable funding streams for local road improvements and maintenance as determined by local jurisdictions.
- Ongoing success of the Safe Routes to Schools Education and Outreach program, with an average of over 50% Green Trips³ in over 55 schools countywide, reducing congestion on our roadways.
- Funding and implementing nearly \$20 million in Safe Pathways capital projects to increase safe access to schools, and placement of 82 crossing guards near schools.
- Bike and pedestrian investments through Regional Measure 2 fund sources including the Central Marin Ferry Connector, Cal Park hill tunnel, Lincoln Hill Pathway, and progress on the North South Greenway throughout Marin.

TRANSPORTATION DEMAND MANAGEMENT

- Transportation improvements can increase capacity, improve operations, or reduce demand. TAM has managed demand on our local roadways by developing mode shift strategies to increase transit use, reduce school trips, and support higher occupancy mode shifts.

- Commute alternatives support programs include a vanpool incentive to support higher occupancies in local vanpools, Emergency Ride Home to guarantee a ride home to commuters who leave their car at home, carpool promotions like TAM's Carma Carpool Pilot program and innovative Lyft incentive program for first and last mile trips to SMART stations.

OTHER EFFORTS

- Passage of the Local Transportation Sales Tax, allowing TAM to leverage local funds to attract regional, state, and federal sources.
- Passage of the Marin \$10 Vehicle Registration Fee to support ongoing road and pathway maintenance needs, mobility for seniors and people with disabilities, commute alternatives, and low-emission vehicle programs.
- Significant planning and investments from Marin County's Federal grant for the Non-Motorized Transportation Pilot Program and regional Measure 2 Bridge Toll Program.



While not an exhaustive list of accomplishments, significant progress has been made in physical changes to the transportation network, enhanced by the availability of local funding sources to attract and leverage regional, state and federal funding.

³ Marin County Safe Routes to Schools Program Evaluation Report, 2016.

Relevant Studies and Plans

While many of the projects and programs envisioned in the 2003 Vision Plan have been implemented, there are a number of other plans, listed below, that inform local knowledge of travel behavior and serve as the basis for delivering transportation services to the County. These plans do not “sit on a shelf” but rather provide an understanding of the cause of our existing challenges, develop potential solutions, and identify the financial resources to implement these issues. Each plan and study furthers our understanding of Marin’s transportation system and supports future programming and funding decisions.

Each of these plans serve critical functions; in some cases plans are developed to improve mobility, some to enhance local communities, and others to prioritize investments. Using this base of knowledge, TAM advances critical projects and programs with a multitude of local, state and federal funding sources to maximize local competitiveness for funding. These plans also define what improvements could be considered in the near term and address current needs while preparing for a future transportation system.

These plans include the following:

TRANSIT AND TRANSIT CORRIDOR PLANS

To assess transit performance and identify how to best improve the transit system, TAM works with Marin Transit and Golden Gate Transit to move commuters, seniors, students, and other transit users to reduce demand on our local roadways. These plans range from needs assessments for local communities and market analysis for the county as a whole to understand what local transit needs are, to service plans like the Short Range Transit Plan that identifies services to be implemented over the next three years, and specific evaluation reports to monitor and improve services like the Muir Woods shuttle.

- Bettini Transit Center Relocation Study
- Short Range Transit Plans for Marin Transit and Golden Gate Bridge, Highway and Transportation District
- Rural Fixed-Route Expansion Plan
- Muir Woods Shuttle Evaluation Reports
- The Central/Southern Marin Transit Study
- Fairfax San Rafael Transit Corridor Study
- Countywide Transit Market Assessment
- Marin Access Strategic Analysis and Recommendations
- Marin Senior Mobility Action and Implementation Plan
- Coordinated School Transportation Study
- Community Needs Assessments (Tiburon and Novato)
- West Marin Transit Needs Assessment
- Metropolitan Transportation Commission’s (MTC) SMART Integration Plan

GETTING AROUND MARIN

ROADWAY PLANS

Roadways in Marin County are prioritized with local jurisdiction staff for improvements and with local dedicated transportation funding support from TAM. Local transportation funds are critical for the planning, design, public engagement and construction of these projects, and can leverage regional, state and other funds to make our roadways safe and accessible for all users.

- General Plans, Capital Improvement Plans
- Congestion Management Plan
- Miller Avenue Streetscape Project
- Sir Francis Drake Boulevard Rehabilitation Project (Highway 101 to Ross)
- Sir Francis Drake Boulevard Rehabilitation Project (West Marin)
- Novato Boulevard Improvement Project

COMMUTE ALTERNATIVES AND CLEAN TECHNOLOGY PLANS

Marin County boasts the second-highest electric vehicle adoption rate per capita in California, and TAM has developed programs and plans that support Marin's goals of environmental stewardship. TAM supports public agency adoption of clean air technology, including public funding of charging stations and clean fuel fleet vehicles with local dedicated transportation funds.

- Siting and placement plans for electric vehicle charging stations in Marin County
- Employer/employee support programs including Guaranteed Ride Home, telework initiatives, innovative carpool pilot programs, and regional rideshare coordination
- SMART MTC Integration Plan and First/Last Mile Plans

BIKE AND PEDESTRIAN PLANS

Marin County has a history of bike and pedestrian planning, with many walkable and bikeable neighborhoods and communities. TAM coordinates many of these plans with our local cities and towns to promote projects for funding through regional and state Active Transportation funding and local Safe Pathways funding. Additionally, TAM supports the development of many multimodal projects incorporating bike and pedestrian planning efforts through complete streets development.

- Safe Routes to Schools Evaluation Report
- Local Jurisdiction Bicycle/Pedestrian Plans
- Bikeshare Feasibility Study
- Non-motorized Transportation Pilot Program
- Multimodal roadway, highway, and transit plans identified above

COMMUNITY BASED TRANSPORTATION PLANS

These plans advance equity-based development of our transportation system, prioritizing projects and programs for funding through Lifeline and other Funding Programs.

- The Canal Neighborhood Community Based Transportation Plan, 2007
- The Marin City Community Based Transportation Plan, 2009, 2015
- The City of Novato Community Based Transportation Plan, 2015

TAM’S GUIDING PRINCIPLES

TAM’s mission statement is provided below:

“TAM is dedicated to making the most of Marin County transportation dollars and creating an efficient and effective system that promotes mobility and accessibility by providing a variety of high quality transportation options to all users.”⁴

TAM’s mission statement highlights two of its key objectives: providing cost-efficient mobility and accessibility and providing a variety of high-quality transportation options. Mobility refers to the transportation system’s capacity to move people and goods from place to place, while accessibility refers to the ease of access for all users. This is more than a semantic difference. By recognizing the importance of both mobility and accessibility, TAM’s mission statement underscores that an effective transportation system must provide efficient travel overall between key destinations, by addressing congestion, while also ensuring an equitable allocation of travel options to provide efficient access regardless of one’s mode of travel.

⁴ Transportation Authority of Marin, <http://www.tam.ca.gov/index.aspx?page=343>.

Figure 1 TAM’s Guiding Principles

PRINCIPLE	GOAL	OBJECTIVE
Economy	Support a growing and sustainable economy in Marin County.	Contributes to economic vitality.
		Contributes to a flexible system that responds to changing technology.
		Contributes to an efficient and effective transportation system.
Environment Health and Safety	Support a healthy and safe quality of life in Marin County.	Promotes a healthy environment and a healthy population.
		Contributes to safer travel.
Equity	Maximize mobility for all people.	Enhances mobility and access for all.

GETTING AROUND MARIN

In the spring of 2015, TAM engaged the public through outreach for Marin’s transportation needs in the Plan Bay Area 2040 update. The outreach effort led to the development of projects and priorities for consideration by the TAM board for future regional, state, and federal funding and informed the adoption of county transportation goals and objectives, which are organized into three principles:

- Economy
- Environmental health and safety
- Equity

These are defined in Figure 1. The *Strategic Vision Plan* builds on these principles and previous outreach to define a long-range vision for Marin County, beyond current projects and priorities.

The regional transportation plan, known as Plan Bay Area, also provides a considerable policy discussion around the long-range needs and priorities for transportation improvements in Marin. As a constrained plan, TAM must make tough choices in regards to the priority and importance of specific transportation investments in Marin.

As a guiding policy document supporting the development of a variety of multimodal transportation projects in Marin, TAM’s *Strategic Vision Plan* works with the transportation element of Plan Bay Area to ensure that our transportation system needs and priorities are reflected in the plan. The *Strategic Vision Plan* provides a framework for future transportation policy decisions and planning efforts.



The SMART train at the Downtown San Rafael Station



Marin Transit Bus

ABOUT TRANSPORTATION FUNDING

Funding plays an important role in the transportation environment. TAM receives federal, state, regional, and local funding for transportation related projects. Funding is distributed based on requirements from each funding source, but many other factors are taken into consideration. These may range from environmental considerations like greenhouse gas and air quality benefits to strategic decisions about future fund availability, project competitiveness for grants and other potential funding sources, and regional, state, and federal policy implementation. Local funds, controlled by local representatives, are of considerable value in leveraging other funding sources dedicated for specified uses. Figure 2 outlines the funding sources Marin County currently receives and the types of projects and programs that these sources can fund.

In addition to these formula funding sources, regional, state, federal, and air district funding is often distributed via competitive grant programs. These grant programs are awarded to projects that meet project readiness and funding requirements, reflect federal policy priorities, and contribute to state, regional, and/or federal policies, such as goals for housing production, greenhouse gas (GHG) emissions reduction, and investments in disadvantaged communities.

GETTING AROUND MARIN

Figure 2 Marin County Funding Sources

FUNDING TYPE	FUNDING SOURCE	PROJECT TYPES
Local (Countywide)	Half-Cent Transportation Sales Tax	<ul style="list-style-type: none"> • Transit capital • Transit operations and maintenance • Safe Routes to Schools • Major roads • Local roads • Highway 101 HOV Gap Closure Project
	\$10 Vehicle Registration Fee	<ul style="list-style-type: none"> • Local road and pathway maintenance • Senior mobility services • Programs to reduce congestion and pollution • Mobility management programs for seniors and people with disabilities
	Marin Transit Property Tax	<ul style="list-style-type: none"> • Transit operations and maintenance • Transit capital
Local (Municipalities)	Sales Tax	<ul style="list-style-type: none"> • Funding availability varies by jurisdiction, often used for local road maintenance
	Parcel Tax/Fee	<ul style="list-style-type: none"> • Funding availability varies by jurisdiction, typically used for local road maintenance or local transportation projects
Regional	Transportation Fund for Clean Air	<ul style="list-style-type: none"> • Transportation projects that meet clean air requirements • Bike, pedestrian and employer/employee support projects
	Bridge Tolls	<ul style="list-style-type: none"> • Projects that provide a nexus to improvements in bridge toll corridors
State	Gas Tax Subventions	<ul style="list-style-type: none"> • Funding directly to local jurisdictions • Used for local road maintenance
	State Transportation Improvement Program (STIP)	<ul style="list-style-type: none"> • Highway and transit capital improvements
	Transportation Development Act Article 3	<ul style="list-style-type: none"> • Bike, pedestrian, and employer/employee support projects
	Transportation Development Act and State Transit Assistance	<ul style="list-style-type: none"> • Transit operations and maintenance • Transit capital projects
Federal (Regional Distributed)	Gas Tax – One Bay Area Grant (OBAG) Program	<ul style="list-style-type: none"> • Various projects that meet federal eligibility requirements and regional policy goals
Federal	FTA Formula Funds	<ul style="list-style-type: none"> • Transit operations and maintenance • Transit capital projects

02

Getting Around Marin Today

Marin County is a bucolic cluster of communities set within rolling hills in the shadow of Mount Tamalpais. Our local towns were first developed as railroad-oriented communities, in the late 19th century and early 20th century. From this history and natural setting, the early development pattern created many of the walkable neighborhoods we enjoy today. Approximately half of all Marin County is federal land, parkland, or protected as open space, providing world-renowned recreation and scenery.

Marin County has a predominantly rural and suburban development pattern, and with the hilly terrain, opportunities for north-south or east-west travel are limited. This topography presents challenges for multiple forms of transportation infrastructure, from operating transit service to large capital projects. Roadways serve as the basis for our local transit systems, provide critical connections for pedestrians and bicyclists, and are the foundation of our transportation network for all users.



GETTING AROUND MARIN



Highway 101 over Richardson Bay in Southern Marin

Overall, our transportation infrastructure presents several key challenges:

- Aging roads and bridges require ongoing maintenance, with much of our infrastructure built as communities incorporated.
- Limited connectivity in both the east-west and north-south directions minimizes redundancy in the network, constraining travel choice in terms of routes available, and flexibility to adjust to network disruptions or changes in circulation patterns.
- Limited housing production and high housing costs have resulted in the importation of workers from northern counties, requiring longer trip distances for workers.
- As housing has become more out of reach for all but high wage households, service workers (including teachers and health care professionals) are increasingly hard to attract and retain.
- Limited access and egress points to a number of communities, such as Sausalito, Mill Valley, Marin City, the Tiburon peninsula, Bel Marin Keys, and others.

- Hilly terrain and sensitive watersheds limit opportunities to increase access across and within many communities.
- Sensitivity to sea level rise due to the location of a number of transportation assets along Bay frontage.
- Limitations to the existing right-of-way available for transportation infrastructure expansion.
- Marin serves as a connection for northern counties to access regional population and job centers of Oakland and San Francisco.

In order to assess the challenges faced in traveling around Marin County, the *Strategic Vision Plan* is informed by an understanding of local population, employment and housing patterns, and the existing transportation setting. The following sections define Marin County’s demographics, development context, roadways, and transit and multimodal networks serving local residents, employees, and visitors.



GETTING AROUND MARIN

DEMOGRAPHICS

The transportation system connects Marin County's residents, employees, and visitors with jobs, services, entertainment, and other opportunities. Supporting TAM's mission statement – providing cost-efficient, effective and high-quality transportation options that provide residents mobility and accessibility – requires a look at how transportation demand might change in the future. Demographic trends illustrate the current demands on Marin's transportation system, and forecasts can inform our understanding of future investment needs because they identify housing and employment growth patterns. This section provides an overview of current and forecast demographic information as they relate to the geographic and modal balance of Marin's transportation investments.

POPULATION

Marin is the second smallest county in the Bay Area, after Napa County, with a current population of approximately 261,200 people. There are approximately 112,000 homes with an average of 2.4 people per household and a median income of \$91,500. Marin is a

slow-growth county, and the population has remained relatively constant between 2010 and 2015, as shown in Figure 3.⁵ This growth pattern was reflected in school enrollment during that period, and is expected to continue with 1.3% of Bay Area housing growth and 2.7% of Bay Area job growth forecasted for Marin County over the next 40 years.

Nearly one in five (19%) of Marin's residents are over the age of 65, while more than one-third (34%) of residents are over the age of 55. The median age in Marin County is 45.

Marin serves as home to one of the most widely visited National Recreation Areas in the United States, with approximately 3.5 million annual visitors to the Golden Gate National Recreation Area.^{6,7} This influx in visitors is acutely felt in many southern Marin communities like Sausalito and Mill Valley as well as in communities along Highway 1 on Marin's coast.

5 American Community Survey, 2011-2015 Five-Year Estimates.

6 <https://irma.nps.gov/Stats/Reports/Park>

7 <http://www.cnn.com/2017/03/10/travel/most-popular-national-park-service-sites-2016/>



Students participating in TAM's Safe Routes to Schools Program

Figure 3 Marin County Municipalities and Local Job Totals

EMPLOYMENT

Marin County is currently home to approximately 98,100 jobs, and economic growth is anticipated to outpace housing growth, with approximately 16,800 jobs added over the 30-year forecast period. This employment growth rate of 6.5%, or 560 jobs per year between 2010 and 2040, is higher than the housing forecast, thus requiring Marin to continue importing workers from surrounding counties. Compared to state economic records, the number of jobs has grown by approximately 13,500 between 2010 and 2015, providing an accounting for significant growth already received beyond regional forecasts and predictions.⁸

⁸ <http://www.labormarketinfo.edd.ca.gov/cgi/dataanalysis/labForceReport.asp?menuchoice=LABFORCE>

Novato
26,380

Fairfax
1,550

San Anselmo
3,310

Ross
360

Larkspur
7,500

Corte Madera
6,500

Mill Valley
5,980

Sausalito
5,220

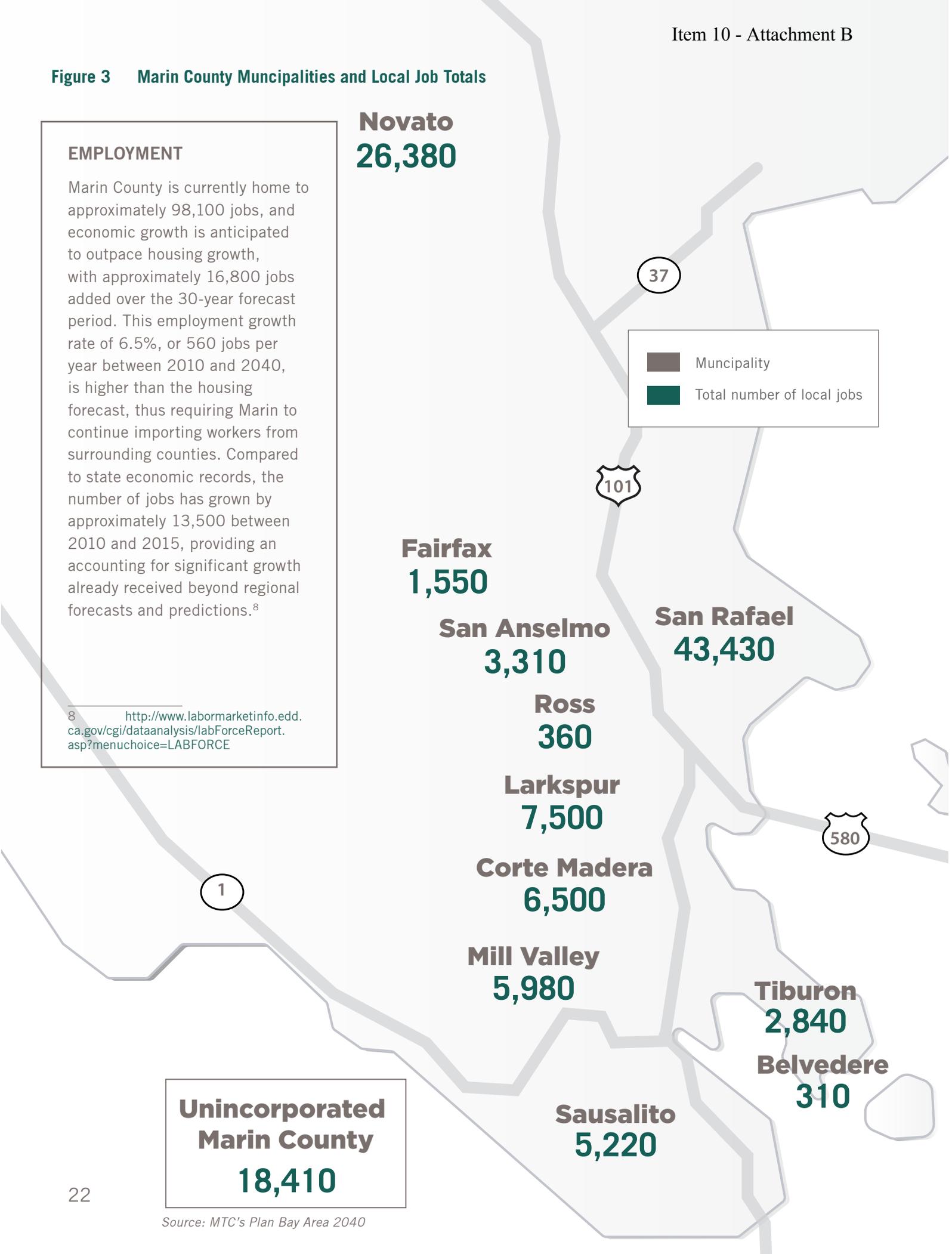
San Rafael
43,430

Tiburon
2,840

Belvedere
310

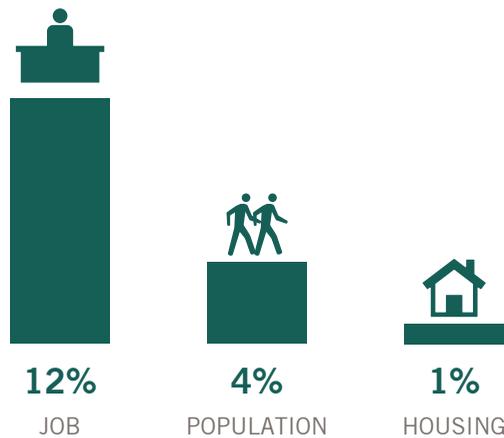
**Unincorporated
Marin County**
18,410

Municipality
Total number of local jobs



GETTING AROUND MARIN

Figure 4 Marin County Job, Population, and Housing Growth, between 2010 and 2016



Source: Vital Signs data for Marin County job, population, and housing growth between 2010 and 2016, <http://www.vitalsigns.mtc.ca.gov/population>. 2010 housing supply is taken from the 2010 Census for Marin County, <https://factfinder.census.gov/>.

LAND USE

Marin's small towns and communities were originally developed as railroad-oriented communities, resulting in walkable downtowns that provide an anchor for civic and social life.

Marin County is located to the north of the Golden Gate Bridge, across from San Francisco, and is renowned for its natural beauty, diverse communities, and progressive attitudes. With 11 cities and towns along Highway 101 and the San Francisco Bay, and in rural communities along the Pacific coast, Marin is the second smallest county in the Bay Area. According to the 2010 census, the county has a total area of 828 square miles, of which 520 square miles (63%) is land. Additionally, 58% of the county's 333,000 acres are protected from development, and much of this land is preserved as park, recreation or public open space areas, or treasured as an agricultural resource for the North Bay.

The central part of Marin is largely agricultural and open space, protected with zoning, agricultural easements, and public stewardship. West Marin along State Highway 1, on the California coast, has seven small rural communities that depend, in part, on tourism.

The Association of Bay Area Governments' Regional Housing Needs Allocation (RHNA) calls for 187,990 units to be built in the Bay Area during the next eight-year period (2014-2022). During the last RHNA cycle, Marin County's cities and towns permitted 32% of the growth forecasted during the 2007-2013 period. This low growth in housing is due to many factors, including the nationwide downturn in residential building associated with the Great Recession.

During the current 2014-2022 RHNA cycle, Marin County's projected growth was the second lowest of all counties in the Bay Area, and was reduced by 52% compared to the previous 2007-2013 RHNA cycle. Marin County will accommodate less than two percent of Bay Area growth (see Figure 5).

Figure 5 Regional Housing Need Allocation, 2014-2022

	2007-2014 RHNA	2014 -2022 RHNA	% CHANGE
Belvedere	17	16	-6%
Corte Madera	244	72	-71%
Fairfax	108	61	-44%
Larkspur	382	132	-66%
Mill Valley	292	129	-56%
Novato	1,241	415	-67%
Ross	27	18	-33%
San Anselmo	113	106	-6%
San Rafael	1,403	1,007	-28%
Sausalito	165	79	-52%
Tiburon	117	78	-33%
Unincorporated Marin County	773	185	-76%
County Totals	4,882	2,298	-53%

Source: Association of Bay Area Governments

Future housing supply plans call for development to be in the largest Marin cities of San Rafael and Novato, accommodating 44% and 18% of the Marin's total development, respectively. Other housing development is anticipated throughout the remaining municipalities.⁹ Development activities in Marin, as manifest in the number of building permits issued, fell below RHNA housing allocations in the 2007-2014 period (see Figure 6). Belvedere and Corte Madera were the only municipalities meeting or exceeding the local RHNA forecasts, while most others issued permits for less than half of their RHNA housing allocations.

⁹ Association of Bay Area Governments, Regional Housing Need Plan for the San Francisco Bay Area: 2014-2022, http://www.abag.ca.gov/planning/housingneeds/pdfs/2014-22_RHNA_Plan.pdf.

GETTING AROUND MARIN

Figure 6 Building Permits Issued, 2007-2014

	2007-2014 RHNA	PERMITS ISSUED	PERCENT OF RHNA MET
Belvedere	17	20	118%
Corte Madera	244	263	108%
Fairfax	108	13	12%
Larkspur	382	136	36%
Mill Valley*	292	163	56%
Novato	1,241	322	26%
Ross	27	8	30%
San Anselmo**	113	36	32%
San Rafael	1,403	167	12%
Sausalito	165	48	29%
Tiburon*	117	12	10%
Unincorporated Marin County*	773	355	46%
County Totals	4,882	1,543	32%

Notes:

* Jurisdiction opted to have 2014 permits counted towards its 2014-2022 RHNA allocation

** Data is available only for 2014

Source: Association of Bay Area Governments

Marin County has 112,295 housing units,¹⁰ and experiences high median home values at \$785,100,¹¹ resulting in limited opportunities for low and middle-wage workers to live in the county. According to a recent UC Davis Study,¹² approximately 8% of the rental and owner-occupied housing in Marin is classified as affordable, with approximately 7,610 housing units. At the same time, low-wage jobs account for roughly 23% of the workforce, or 23,669 jobs.¹³ This unmet need for affordable housing is likely to increase the distance driven for low-wage and other Marin workers who live outside of Marin County.

¹⁰ American Community Survey, 2014 estimate.

¹¹ American Community Survey, 2010 – 2014 Five-Year Estimates

¹² Metropolitan Transportation Commission. 2016. "UC Davis Jobs-Housing Fit (JHFIT) Ratio Indicators." <http://mtc.ca.gov/our-work/fund-invest/federal-funding/obag-2> Retrieved from http://mtc.ca.gov/sites/default/files/UC_Davis_Jobs_Housing_Fit.xlsx

¹³ For the purposes of this analysis, affordable rental units are defined as rental units priced at less than \$750 per month; affordable owned units are defined as owner-occupied or vacant for sale housing units valued at less than \$150,000; and low-wage jobs are defined as those jobs with earnings of \$1,250 per month or less.

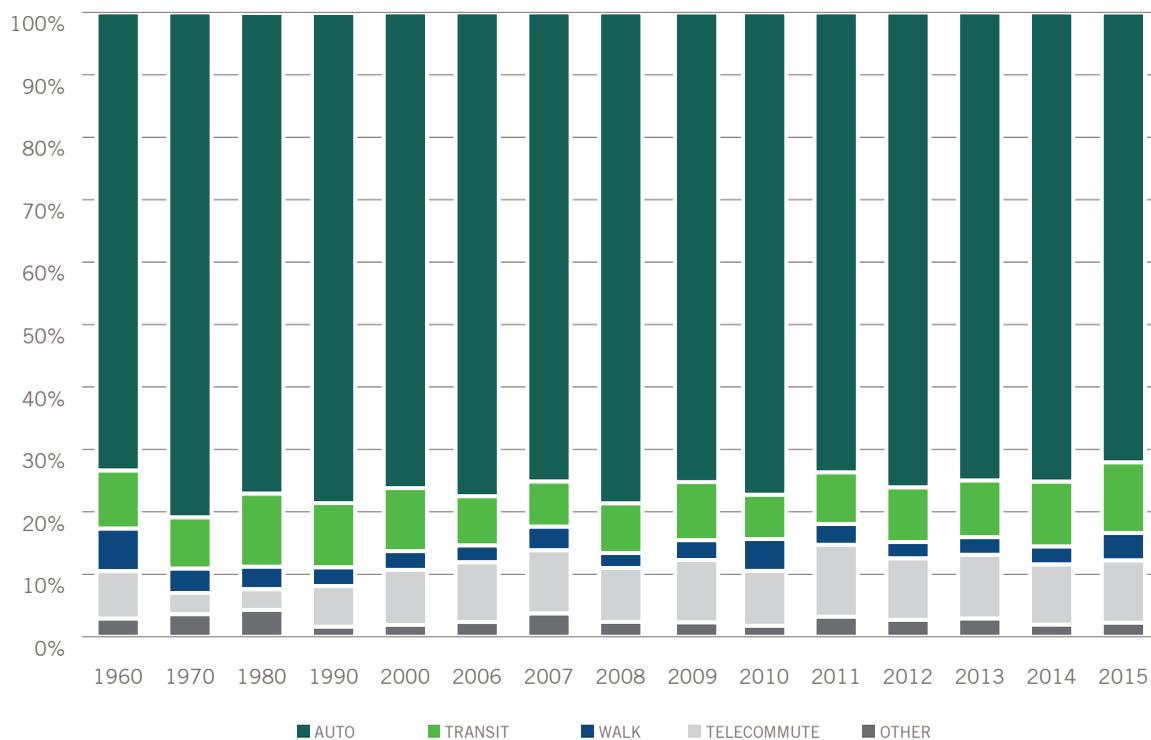
TRANSPORTATION

TRAVEL BEHAVIOR

Marin’s current transportation network includes the roads, transit services, and pedestrian and bike networks that support travel through and across the county. As of 2015, approximately 79% of commute trips were made by car, 10% by transit, and 5% by bike or walking. About 10% of people in Marin County telecommute and do not generate commute trips (see Figure 7).¹⁴ These numbers have been relatively consistent over the past few decades.

¹⁴ Vital Signs, Commute Mode Choice – Marin, <http://www.vitalsigns.mtc.ca.gov/commute-mode-choice>.

Figure 7 Marin Commute Mode Choice



Source: Vital Signs

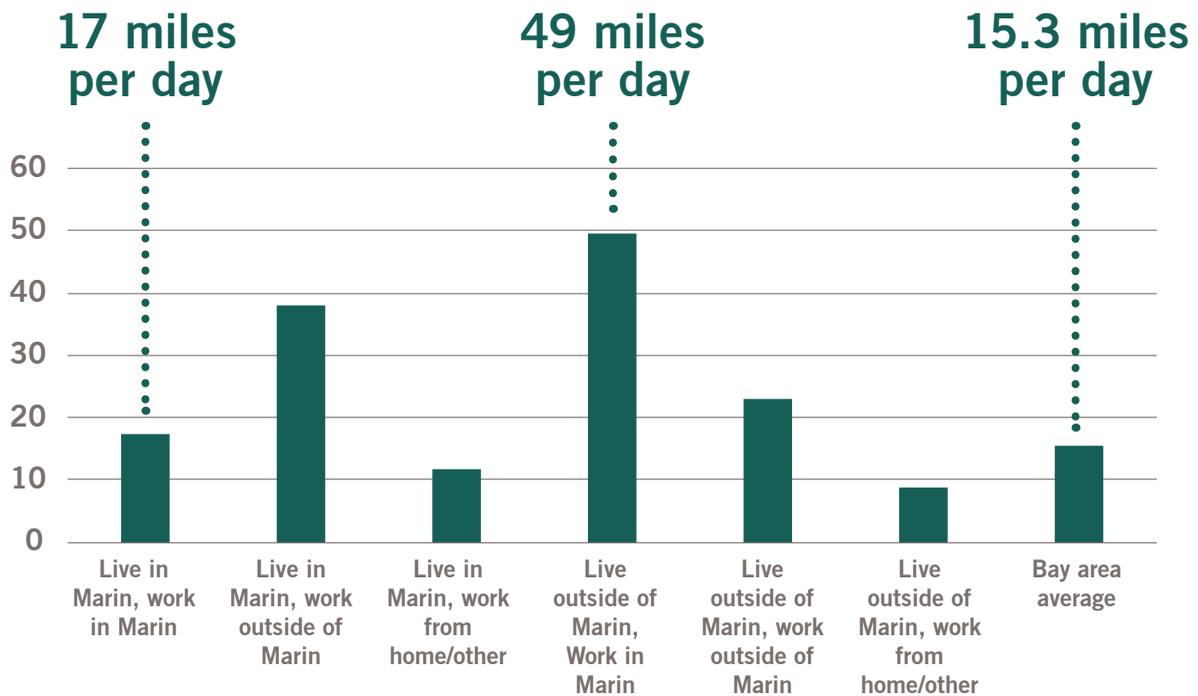
GETTING AROUND MARIN

Estimates for daily per capita vehicle miles traveled (VMT) show that Marin residents who work in the county drive approximately 17 miles per day, significantly less than non-resident workers who drive approximately 49 miles per day.

According to Plan Bay Area, MTC anticipates Marin County to have the highest VMT per capita of any county in the Bay Area by 2040. This trend directly strains Marin’s ability to reduce congestion, maintain our roadways, and protect the environment.

15 Bay Area Air Quality Management District. 2015. Vehicle Miles Traveled by Jurisdiction. <http://capvmt.us-west-2.elasticbeanstalk.com/>

Figure 8 Daily Per Capita Vehicle Miles Traveled (VMT)



Source: Metropolitan Transportation Commission, 2010
 Note: for non-commercial passenger vehicle miles only

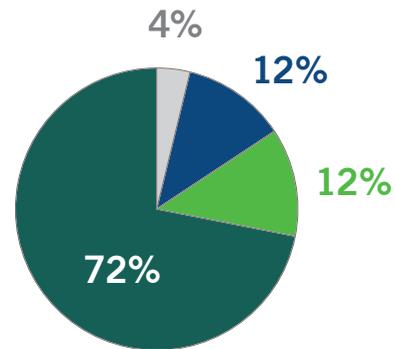
ORIGIN AND DESTINATION INFORMATION

In 2017, TAM took a comprehensive look at the origin and destinations of Marin’s residents, workers, and visitors.

Marin residents are the primary users of our local road system, with approximately 72% of trips made locally, starting or ending within the county. As a central part of the Bay Area economy, Marin’s highways and roadways also carry trips that pass through the county, starting and ending outside of Marin. These trips passing through the County account for roughly 4% of morning and afternoon peak period trips.

Flows of workers across county lines to and from Marin County create traffic impacts at our local gateways. The most significant of these commute flows include in-flows of workers from Sonoma County (35.3% of in-flows, or 15,958 workers) and Contra Costa County (18.4% of in-flows, or 8,315 workers) and out-flows of workers into San Francisco at (61% of out-flows, or 24,331 workers).¹⁶ These directional flows have significant impacts on many of our heaviest traveled corridors, including southbound Highway 101 in the morning, and northbound Highway 101 and eastbound I-580 in the afternoon. Marin also experiences large visitor and recreational

Figure 9 Afternoon Vehicle Trips (3-7pm)



- Passing through Marin County
- Trips entering Marin County (start elsewhere)
- Trips leaving Marin County (start in Marin)
- Intra-county trips (start and end in Marin)

trip volumes during weekend and off-peak hours, especially for access to the Golden Gate National Recreation Area in southern Marin, where volumes on Saturdays and Sundays approach weekday peaks. Marin serves as gateway to the Redwood Empire, and Highway 101 experiences heavy volumes on Fridays and Sundays, as visitors travel to various vacation destinations in the North Bay.

¹⁶ American Community Survey, 2010-2014 Five-Year Estimates.



Aerial view of the Central Marin Ferry Connector

GETTING AROUND MARIN

Due to the County's location across the Bay from major economic centers of San Francisco and Oakland, Marin residents have average daily trip lengths that are 17% longer than the Bay Area average. Of all of Marin's jurisdictions, Novato has the longest average trip length. At the same time, many of the local Marin County trips are short, with 57% of the trips within the county under five miles.

The Highway 101 corridor is the most frequently congested roadway in Marin County, with other areas of high congestion along major arterials. At locations on Highway 101, volumes can exceed 200,000 vehicles per day. Volumes are a function of roadway capacity, and the highest volumes are recorded in central Marin, north of San Rafael (both on Highway 101 and primary arterials), where significant roadway supply provides capacity.

In many cases, county gateways are among the most congested roadways in Marin during the peak commute periods. During the morning peak hours, the 11th worst commute of the Bay Area occurs on southbound Highway 101 between Rowland Boulevard and Lincoln Avenue (including the Highway 37 and I-580 interchanges). Vehicle delay is also high on the southbound approach to the Golden Gate Bridge during morning commute hours. During the afternoon

peak hours, vehicle delay in southern Marin on Highway 101 backs up from the Richmond-San Rafael Bridge approaches towards Sausalito; on northbound Highway 101, travel into Sonoma County during evening commute hours also faces significant delays. The eastbound approaches to the Richmond-San Rafael Bridge are regularly congested during the afternoon commute period, with segments of Highway 101 near the bridge approach congested during both morning and afternoon commute periods. Figure 7 illustrates frequently congested road segments with highest traffic volumes during morning and afternoon commute hours.

There are 243,069 registered vehicles, or approximately 1 car per resident and 2.2 vehicles per Marin household.¹⁷ Approximately 75% of commuters drive alone,¹⁸ with an average travel time to work of 29.4 minutes.

¹⁷ Department of Motor Vehicles, 2014 DMV Forecasting Unit, https://www.dmv.ca.gov/portal/wcm/connect/add5eb07-c676-40b4-98b5-8011b059260a/est_fees_pd_by_county.pdf?MOD=AJPERES

¹⁸ <http://www.vitalsigns.mtc.ca.gov/commute-mode-choice>



Figure 10 Regional Commute Patterns at Marin County Gateways



Source: Caltrans Performance Measurement System (PeMS) Data (2016)

GETTING AROUND MARIN

ROAD NETWORK

The lack of redundancy available in the road network means that many Marin communities rely upon just a single highway or arterial road to connect with employment centers or other major travel generators. Congestion often occurs during peak hours on the handful of major travel corridors such as Highway 101, the Richmond-San Rafael Bridge, and Sir Francis Drake Boulevard, along with the interchanges that connect our local roads to our highways. Regional gateways including the Richmond San Rafael Bridge and Golden Gate Bridge are experiencing growing reverse commutes, a trend that is expected to grow as jobs are added to Marin in coming years.

Many of our local roadways connect local neighborhoods, but do not provide alternate routes between cities and across the county, restricting traffic flows and increasing delay in peak periods. Roads throughout the county are aging, with poor pavement conditions and limited multimodal facilities.

In 2016, MTC estimated that \$890 million is needed beyond currently available revenues to bring Marin's roadways up to State of Good Repair levels. In addition, on our highways and roadways along the Bay, the network is susceptible to damage from flooding and sea level rise impacts. Highway 37 in Marin flooded during the winter of 2017, causing unprecedented closures for three weeks and severely disrupting travel options between Marin County and Sonoma, Napa, and Solano Counties. Risk of flooding on Highway 37 and other Bay frontage roads, including Highway 1 in southern Marin, continues to increase along with sea level rise and unpredictable weather patterns.

In 2017, a third lane will open on the Richmond San Rafael Bridge in the eastbound direction during peak hours, and is expected to provide congestion relief for many Marin workers living in the East Bay. This major change is also supported by a pair of ongoing projects on the approaches to the Richmond-San Rafael Bridge, which will improve access to the bridge's third lane by improving the Bellam Boulevard off-and on-ramps to I-580 and Sir Francis Drake Boulevard.

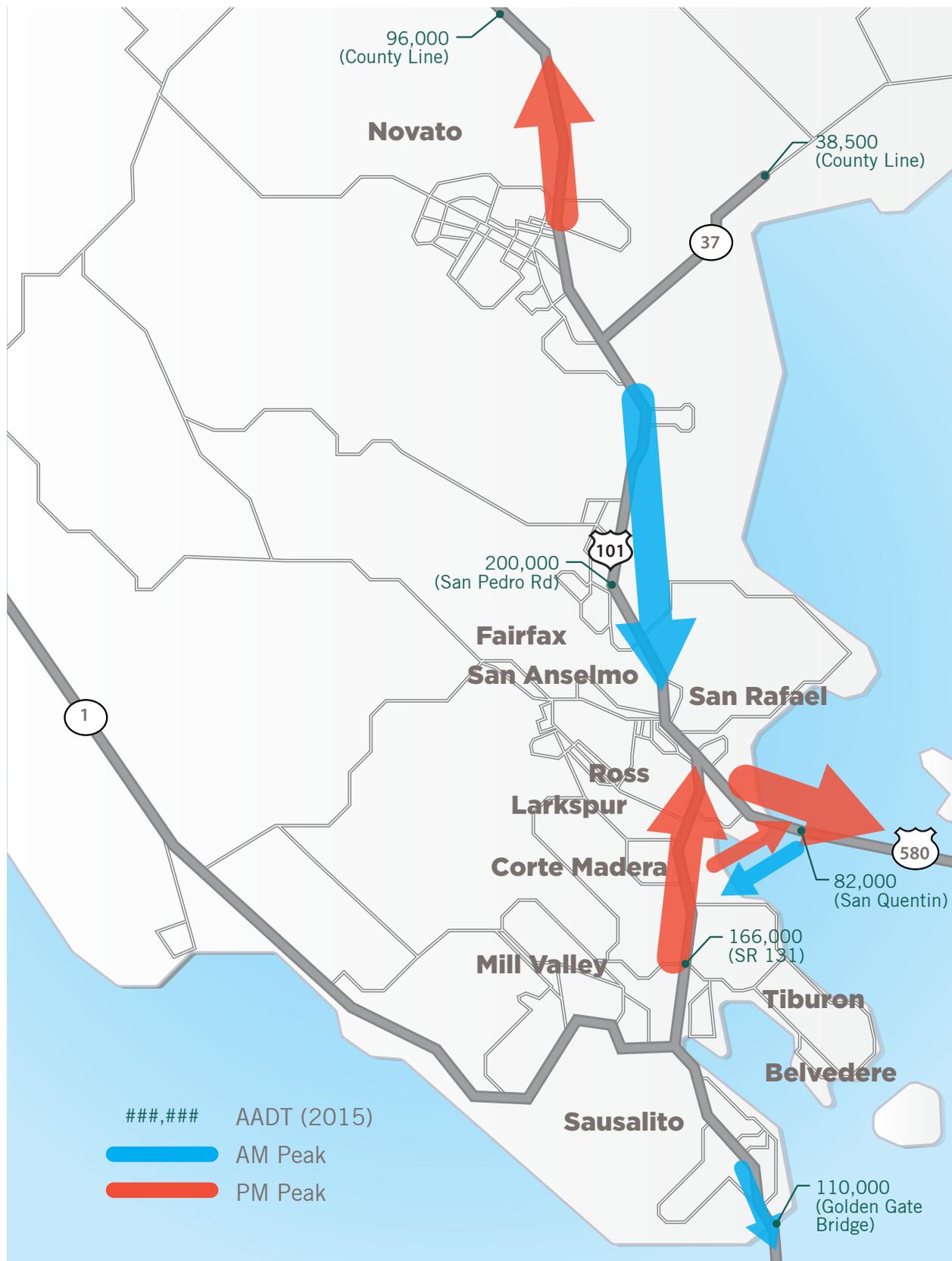


Highway 37 flooded in Marin during winter 2017



Larkspur Ferry Terminal

Figure 11 Annual Average Daily Traffic (2015)



Source: Caltrans Data (2015)

GETTING AROUND MARIN

Transit

The hilly terrain and suburban development in Marin makes it difficult to provide bus service to many outlying residential communities. As a result, most bus service is concentrated along Highway 101 and major arterials. Additionally, many residents drive to park-and-ride facilities, which are often over capacity, to access transit and ferry service.

Marin County is served by both local fixed route and regional transit service, including bus, ferry, and the new Sonoma-Marín Area Rail Transit (SMART) commuter rail service. The main transit providers in Marin are:

- Marin Transit: Local fixed-route, rural fixed-route, supplemental school, Muir Woods and community shuttle services, Senior Mobility programs, ADA and paratransit services through Marin Access, including Dial-a-Ride (demand-response), volunteer driver, and subsidized taxi (Catch-a-ride) services administered by Marin Transit
- Golden Gate Transit: Regional and express bus service with connections to San Francisco, Contra Costa, and Sonoma Counties
- Golden Gate Ferry: Regional ferry service to San Francisco County
- SMART: Regional commuter rail service, expected to begin in 2017 with service between Marin and Sonoma Counties

Primary or high ridership bus routes are summarized in Figure 12 and Figure 13.

Marin Transit is the primary provider of bus transit service for trips that begin and end in Marin County. Golden Gate Transit is the primary provider of regional bus and ferry services, connecting Marin and Sonoma Counties with San Francisco and the East Bay. Each operator serves a total of approximately 3.5 million passengers annually. In addition to local and rural fixed-route services, Marin Transit operates Marin Access, which offers door-to-door paratransit, curb-to-curb Dial-a-Ride (demand-response), volunteer driver, and subsidized taxi (Catch-a-ride) services for seniors and people with disabilities and to residents in several of its more rural communities, including Point Reyes, Dillon Beach/Tomales, and West Novato.

Travel between Marin County and San Francisco is an important aspect of Marin's transportation network. Among Marin Transit's bus routes, those that provide a direct connection to San Francisco have the highest ridership. Golden Gate Ferry provides service between Marin and San Francisco; between 2005 and 2015, ridership increased 50% at the Sausalito terminal and 30% at the Larkspur Terminal.

Regional bus transit services are provided by the Golden Gate Bridge Highway and Transportation District (GGBHTD) under the banner of Golden Gate Transit, which serve 3.7 million passengers per year (regional bus routes only). Ferry Services provided by Golden Gate Ferry serve 2.5 million passengers annually out of the Larkspur and Sausalito ferry terminals and recently expanded to Tiburon. Regional bus services are available primarily along Highway 101, with regional commute bus routes serving Mill Valley, Novato, the Tiburon peninsula, and the Sir Francis Drake corridor.

Figure 12 Golden Gate Transit Bus Routes with Highest Ridership (Fiscal Year 2015)

ROUTE	DESCRIPTION	ANNUAL RIDERSHIP (FY2015)
Route 70	Novato – San Rafael – San Francisco	720,467
Route 101	Santa Rosa – Novato – San Francisco	490,614
Route 4	Mill Valley – San Francisco	352,695
Route 54	San Marin – San Francisco	200,512
Route 80	Santa Rosa Novato – San Francisco	161,839

Source: Golden Gate Transit SRTP, <http://goldengatetransit.org/services/documents/srtp-fy2017-2026.pdf>

Local bus services are provided by Marin Transit, and serve 3.5 million passengers per year, including a number of demand responsive and senior mobility programs.

**Figure 13 Marin Transit Bus Routes with Highest Ridership (Fiscal Year 2013/2014)**

ROUTE	DESCRIPTION	ANNUAL RIDERSHIP (FY13/14)
Route 35	Canal – San Rafael	574,669
Route 71	Highway 101 Corridor	341,105
Route 23	Fairfax – San Rafael – Canal	339,118
Route 17	Sausalito – Mill Valley – San Rafael	322,826
Route 22	San Rafael – Marin City	281,761

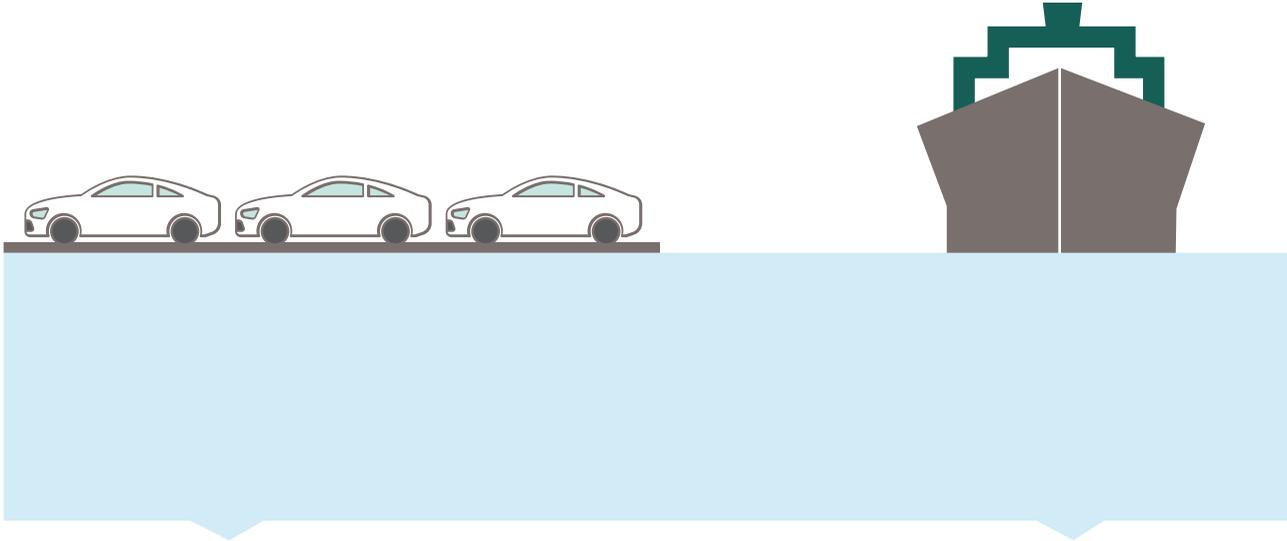
Source: Marin Transit SRTP, http://marintransit.org/pdf/SRTP/2016-2025/2016-2025SRTP_FINAL.pdf

Marin Transit also operates the Muir Woods Shuttles on weekends year-round and daily during the summer, which move approximately 103,052 weekend visitors. Supplemental school bus service provided by Marin Transit operate during school hours. Annual ridership for supplemental school bus service is approximately 197,000 riders.¹⁹

In 2016, MTC released estimates of revenue needs to bring the transit system up to State of Good Repair and maintain that level for the 24 year period from 2017 through the Plan Bay Area forecast year of 2040. Golden Gate Ferry and Transit systems would require an estimated \$707 million, and Marin Transit would require \$106 million above currently identified funding levels to reach this level.

¹⁹ Marin Transit, 2016-2025 Short Range Transit Plan, July 2015.

GETTING AROUND MARIN

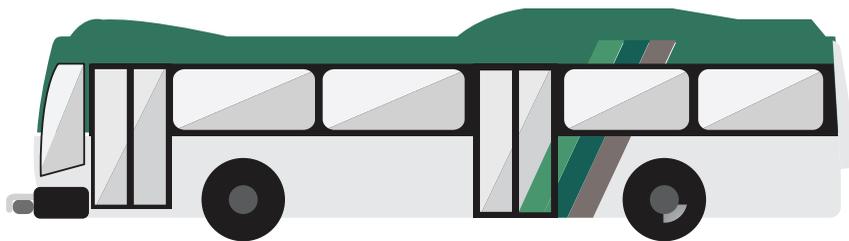


10,300

During Fiscal Year 2016/2017, there were approximately 10,300 passenger trips per weekday on Golden Gate Transit's regional bus service serving the Highway 101 corridor. This includes passengers traveling in or through Marin County.

50%

Between 2005 and 2015, Golden Gate Ferry ridership increased 50% at the Sausalito Terminal and 30% at the Larkspur Terminal.



“ Marin Transit local riders have a significantly lower income and a lower proportion identify as white/Caucasian compared to all Marin County residents.²⁰

²⁰ Marin Transit, 2016-2025 Short Range Transit Plan, July 2015.



Redwood and Grant Transit Improvement Project

“ Marin has reduced annual VMT by an estimated 7.9 million miles, or more than 21,000 miles each day, through investments in our bike and pedestrian networks.²¹

²¹ Marin Department of Public Works. 2014. Nonmotorized Transportation Pilot Program (NTPP). <https://www.marincounty.org/main/county-press-releases/press-releases/2014/nonmotorized>

GETTING AROUND MARIN

Walking and Biking Network

The Marin County bicycle network provides community connections that support our downtown areas and neighborhoods in Marin County. These connections offer benefits to all users, from children going to school to our most senior of citizens.

The Marin County bicycle network includes both regional and local networks consisting of shared lanes, on-street bike lanes, and off-street paths. Southern Marin County sees a heavy influx of recreational bicyclists on weekends, an economic generator for local shops and communities.

Marin has a long history of supporting regional bike and pedestrian networks including the North-South Greenway, the Bay Trail, the Cross Marin Trail, and the Marin Headlands Trails. Together with local jurisdictions, bicycle advocates and communities of Marin have advanced regional bike networks including critical portions through Puerto Suello Hill and Cal Park Hill. These regional connections are still incomplete in many areas. Closing these gaps will provide low-stress and safe bicycle travel across Marin's communities, support our public health, encourage riders of all ages and abilities to use our paths, and reduce vehicle travel. Efforts to advance the planning and design of these segments can attract regional, federal, and state funding sources that would not otherwise be available to Marin County. Primary challenges for the walking and biking communities include closing the gaps in our regional bike and trail networks to connect our communities, crossing Highway 101, accessing regional transit facilities on Highway 101, traversing downtown San Rafael, and flooding from sea level rise on the Mill Valley Sausalito Pathway.

Our local jurisdictions develop local bike and pedestrian plans prioritizing local and regional improvements to the bike and pedestrian network. Marin's hilly terrain and indirect travel routes limit the range of walking trips connecting

residential neighborhoods and jobs, services, and recreation areas. Crashes involving pedestrians and bicyclists occurred most frequently in Sausalito and along Sir Francis Drake Boulevard, between San Rafael and Fairfax. Cities and neighborhoods along the Highway 101 corridor have lower pedestrian mode shares in relation to the county as a whole, though there are pockets with higher trips in larger town centers. Communities with above-average walking mode shares include San Anselmo (10%), Strawberry (10%), Marin City (9%), and San Rafael (8%).²²

22 American Community Survey 2011-2015 Five-Year Estimates. Table B08301



Charles McGlashen Multiuse Path



The recently opened Central Marin Ferry Connector in Larkspur

School Transportation

Marin County is a leader in expanding transportation choices for school trips, with an award-winning Safe Routes to Schools program that has been in place since 2000 and includes 52 schools.²³ Currently, 11 school districts participate in the Safe Routes to School program, a primary goal of which is to encourage non-driving trips to school and reduce congestion, and five school districts offer yellow school bus service. Countywide, there has been an 8% mode shift from single-student vehicle trips to sustainable modes; the county as a whole has maintained over 50% non-drive school trips between 2011 and 2015.²⁴

²³ Transportation Authority of Marin, Marin County Safe Routes to Schools Program Evaluation, November 2013, <http://www.tam.ca.gov/Modules/ShowDocument.aspx?documentid=4517>.

²⁴ Ibid.



More than
50 School Districts
now participate

83 Crossing
Guards



34 yellow school
buses operating



Source for the 83 crossing guards data point: (<https://www.tam.ca.gov/projects-programs/crossing-guard-program/>)

Number of schools participating in SR2S: Transportation Authority of Marin, Marin County Safe Routes to Schools Program Evaluation Report, 2016 (<https://www.tam.ca.gov/projects-programs/safe-routes-to-school/>)

Number of yellow school buses operating: 34 (<https://www.marincounty.org/~media/files/departments/bs/district-1/2016/coordinated-countywide-school-transportation-workshop-presentation-marin-transit-12115.pdf?la=en>)



GETTING AROUND MARIN

School districts further encourage non-driving travel choices through participation in Marin Transit's Youth Pass program, which offers discounted transit passes to registered students under 18 years of age. Eight school districts participate in Marin Transit's Youth Pass program and five school districts receive transportation service through Marin Transit.

In addition to these services, Marin Transit, Marin County Office of Education, and TAM participated in the development of a coordinated countywide student transportation study. The purpose is to support local jurisdictions in determining the most effective and appropriate programs for transporting students to school. As a result of this process, yellow bus programs have been instituted to support student transportation in the Ross Valley, Tiburon Peninsula, and Mill Valley areas. These pilot programs are in addition to the district-provided yellow school bus services in San Rafael and West Marin. Marin

Transit provides school districts with operational, planning, and management support to run these yellow bus programs. In communities and school districts where Safe Routes walking and biking programs are not feasible, school district decisions on transportation-related topics like bell times, school calendars, district boundaries, and enrollment policies supporting neighborhood schools play a large role in the support available for school transportation services.



Students promoting TAM's Safe Routes to Schools Programs



School bus service on the Tiburon Peninsula

Senior Mobility

The average age of residents in Marin County is the oldest among Bay Area counties, and the population is aging faster than the rest of California. The number of senior Marin County residents – those over the age of 65 – has doubled since 2000 and is projected to increase an additional 41% over the next decade. As these residents live longer and shift their travel behavior to rely on non-driving modes, there will need to be cost effective and convenient options to keep this population active, healthy, and engaged with our community.²⁵

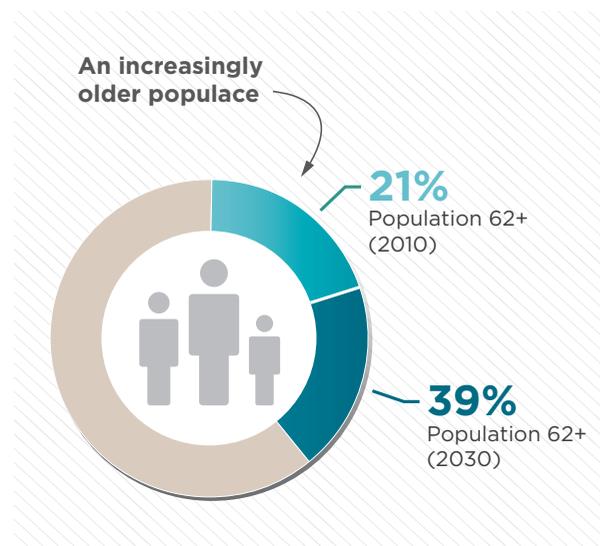
Marin Transit provides a mobility management program called Marin Access that provides transit service and information for older adults and persons with disabilities. The Travel Navigators Program is part of Marin Access and serves as a one-stop resource for transportation information and eligibility for seniors, people with disabilities, and low-income residents who are unable to drive themselves. The Travel Navigators program has a telephone hotline where trained guides provide personalized recommendations on the transportation programs best suited for individuals’ unique needs and assist customers through the eligibility and application processes.

²⁵ 2016 Marin Access Strategic Analysis and Recommendations, August 2016, <http://marintransit.org/pdf/planning/FINAL%20Marin%20Access%20Strategic%20Analysis%20and%20Recommendations%202016.pdf>.

The following senior transportation services are available in Marin:

- Marin Access Paratransit (operated by Whistlestop Wheels) provides local and inter-county trips
- Marin Access volunteer driver reimbursement programs that provide 1,300 rides per month to seniors who have difficulty using fixed-route or paratransit programs
- Travel training that provides free in-person group presentations and one-on-one transit tours on accessible transit options
- Community-based volunteer driver programs that provide an additional 8,000+ rides per year.
- Catch-a-Ride “voucher-less” discount taxi service, which provides 1,878 rides per month

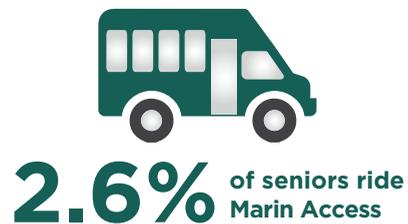
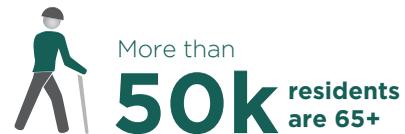
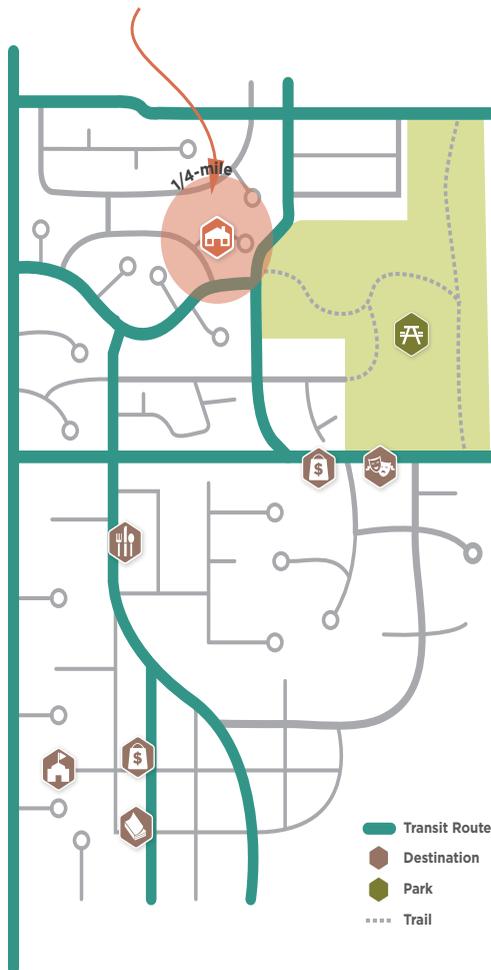
Figure 14 Senior Populace, from 2010 to 2030



GETTING AROUND MARIN

“ ADA-eligible riders who are low-income and receive Social Security are eligible for 20 free rides within Marin County per quarter, thanks to funding from Marin’s Measure B vehicle registration fee. Measure B also funds the Catch-a-Ride discounted taxi service.

77% of seniors live within ¼ mile of a bus stop



Source: (<http://marintransit.org/pdf/planning/FINAL%20Marin%20Access%20Strategic%20Analysis%20and%20Recommendations%202016.pdf>)

03

Public Participation and Outreach

Since its founding as the Congestion Management Agency and Sales Tax Authority for Marin County, TAM has continued to work closely with local jurisdictions, elected officials, transit agencies, community-based organizations, and the general public to maximize input into both regional and local planning efforts. The transportation vision presented in this report considers the previous planning processes, an analysis of existing conditions, and ongoing agency and stakeholder engagement including direct input from the community and broad outreach.



GETTING AROUND MARIN



The Bettini Transit Center in Downtown San Rafael

PUBLIC OUTREACH 2015

In 2015, TAM conducted extensive outreach to represent our local residents' priorities and related projects in MTC's Regional Transportation Plan update and to kick off the *Strategic Vision Plan* process. A public workshop, with over 80 participants, helped define the transportation projects and priorities considered by the TAM board, transit operators, and local cities and towns. This workshop was widely publicized to reach a broad range of Marin communities. Outreach included:

- Interactive outreach efforts to various elected and community organizations
- An input solicitation survey (online and paper) with over 600 responses
- An informational booth at the Marin County Fair
- A public agency workshop for city managers, public works directors, and planning directors
- Flyer and fact sheet distribution
- Educational board items from January 2015 to June 2015 on transportation topics

The public outreach in 2015 identified a number of projects that were subsequently added to the Regional Transportation Plan, namely:

- Highway projects including the 101/580 Direct Connector, completion of the Marin Sonoma Narrows, ramp metering, and interchange improvements
- Roadway projects including improvements to local congested roads such as Tam Junction, Sir Francis Drake Boulevard, and Tiburon Boulevard/ East Blithedale Avenue
- Transit projects like the completion of SMART, improved East Bay and Sonoma bus transit connections, shuttles to major transit hubs, and additional ferry service

- Bike and pedestrian projects such as the North South Greenway, upgrading the bike path between Mill Valley and Sausalito, completion of the full SMART bicycle/pedestrian pathway project, the Grand Avenue Bridge connecting the Canal neighborhood to 2nd Street in San Rafael, and improvements to Andersen Drive and Sir Francis Drake Boulevard.

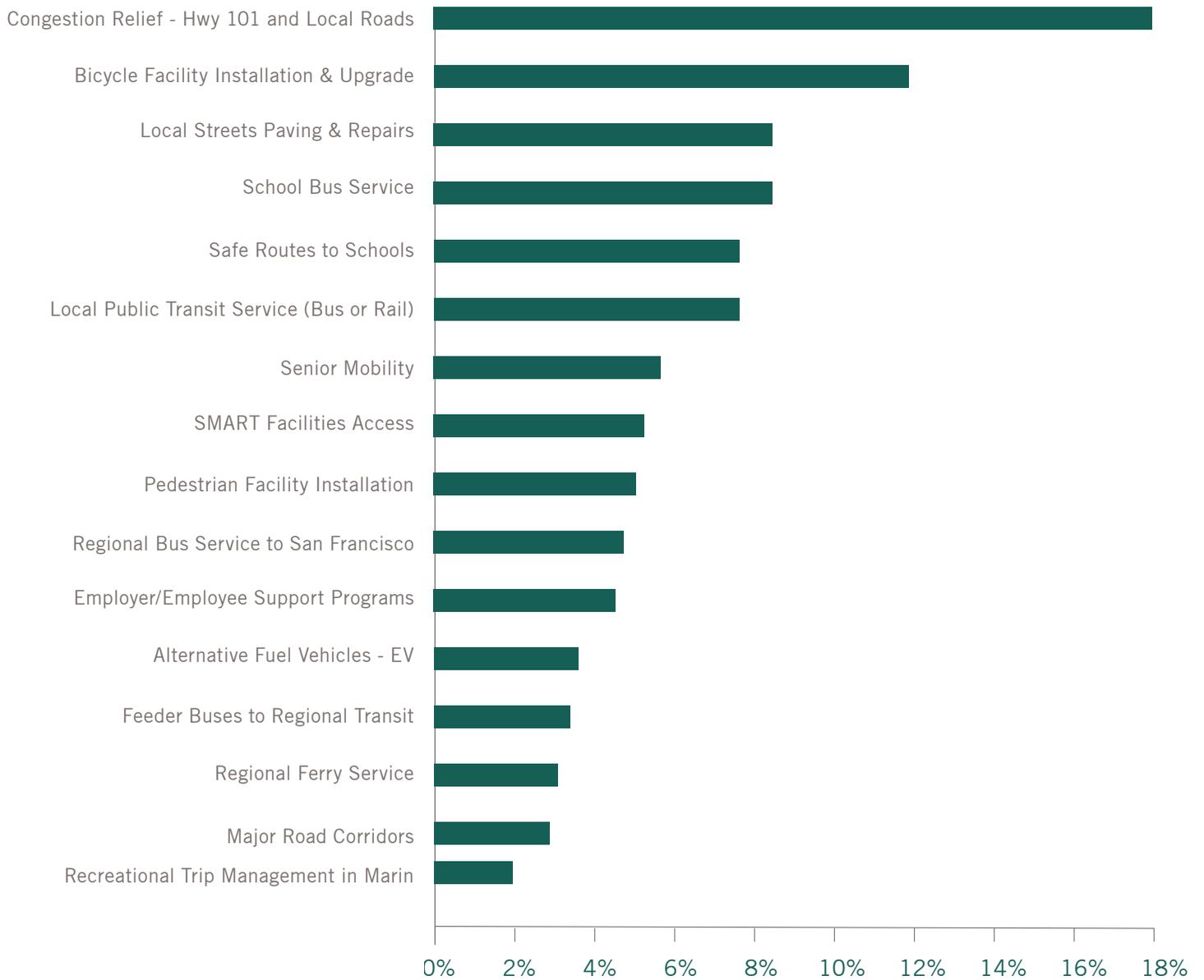
Additionally, this outreach identified the following considerations for funding:

- Enhanced senior transportation options
- School buses and transportation options for children
- Improved transit service, including increased transit speed, increased frequency, transit only lanes, reduced fares, and improved weekend service
- Programming for the people with disabilities and those without a car
- Rehabilitation of the Alto Tunnel for bikes and pedestrians
- Additional parking, particularly in downtown San Rafael and the Larkspur Ferry Terminal area

Priorities in this original 2015 round of outreach were determined with the "TAM Bucks" format, where limited funding was allocated to specified categories. TAM Bucks is a participatory budgeting survey in which Marin residents take part in a democratic process to directly decide how to spend part of TAM's transportation budget. This effort showed significant support for congestion relief (18.4%), bike facilities (11.5%), and local road repair (8.2%).

GETTING AROUND MARIN

Figure 15 Marin 2015 Outreach Priorities



TRANSPORTATION VISION ONLINE SURVEY

In the fall of 2016, TAM reached out to the public to understand individual preferences and values in moving around Marin. TAM partnered with local governments, transit agencies, and community groups across the county to distribute and encourage participation in an online survey, “Getting Around Marin.” Administered in both English and Spanish, the survey invited Marin residents and commuters to identify transportation values and priorities, consider trade-offs between potential investments and policies, and provide feedback about local and regional mobility.

The Getting Around Marin survey received nearly 4,000 responses, nearly 90% of which came from Marin residents, and results were screened out for repeat submittals. Nearly half of survey respondents (46%) said that they both live and work in Marin.

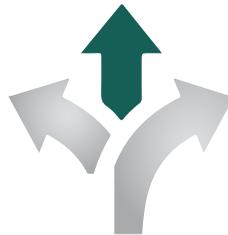
The survey asked respondents to identify their top three most important values with respect to transportation, from the following: travel time, cost, flexibility, safety, comfort, and the environment. Of these values, the top three most commonly selected values were travel time, flexibility, and safety.

The top three most commonly selected transportation values were:



71%

TRAVEL TIME



53%

FLEXIBILITY



29%

SAFETY

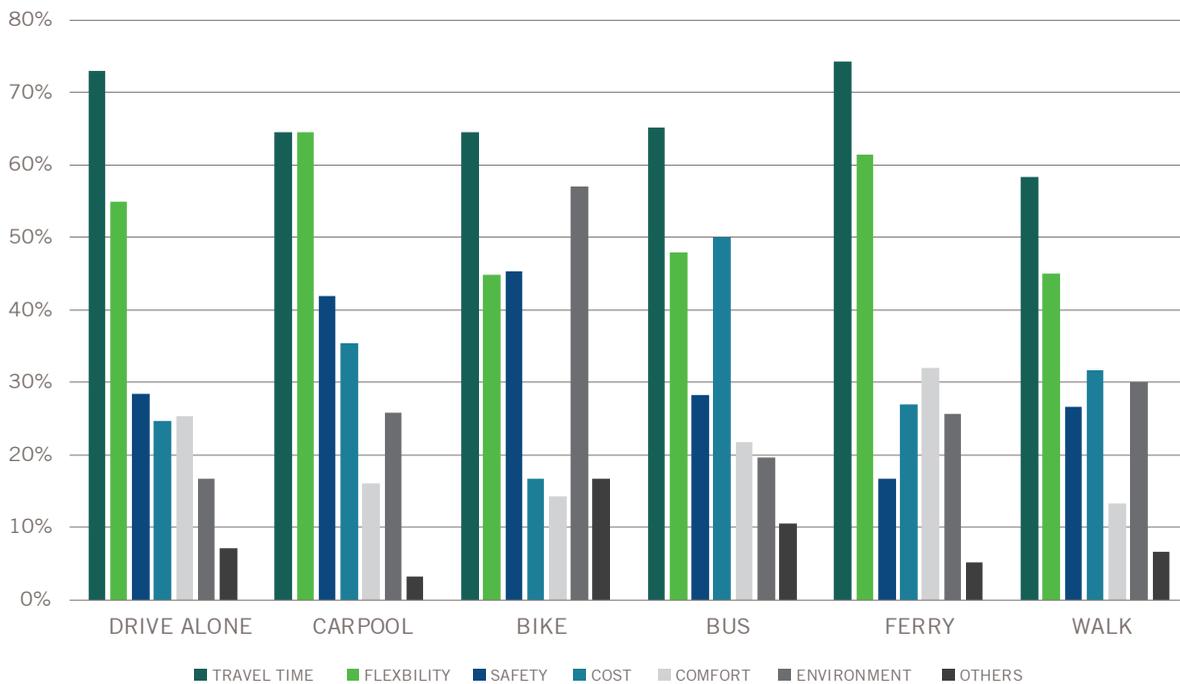
GETTING AROUND MARIN

These top values remained remarkably consistent regardless of respondents' place of residence. Travel time is universally held as the most important transportation value, regardless of the mode of travel. However, other value differences are evident based on respondents' primary mode of travel. A majority of bus riders (50%) expressed cost as a top value, the only category of road users to make this choice. Bicyclists were about three times as likely as the general survey population to regard the environment as a top value (57% compared to 19%). They were also more likely to choose safety than those who primarily drive alone (45% and 28% made this value selection, respectively). Ferry riders were the only group to select comfort as one of

their top three values, with 32% of ferry riders making this choice versus 24% in the general survey population. Carpoolers were most likely to state flexibility as a top value (65% selected), compared to just 53% of all respondents who selected flexibility as their most important value. These results are summarized in Figure 15, which displays the percentage of respondents who selected each value as among their top three, sorted by their primary mode of travel.

Overall, making transit trips faster serves the greatest common value. However, providing flexibility in travel choices is also a key factor in changing the way people travel around and through Marin.

Figure 16 Most Common Transportation Values, by Primary Travel Mode





The survey highlighted variations in transportation values and investment priorities based on respondents' place of residence, age, and preferred mode of travel. Residents of more suburban areas reported transportation priorities and values distinct from residents of more rural areas.²⁶ Similar splits were observed between older and younger Marin residents. For instance, residents of more suburban Marin communities choose walking as a secondary travel mode at nearly twice the rate of residents of more rural communities, as shown in Figure 17. *Marin residents over the age of 35 are twice as likely as those under 35 to choose bicycling as a secondary travel mode* (see following sections for mode split details).

Survey respondents were also asked to indicate the extent to which they agreed or disagreed with a series of hypothetical mobility choice statements using a numeric scale, zero to 100, where zero indicates strong disagreement and 100 indicates strong agreement. An average score of 60, for instance, indicates that roughly 60% of respondents agree with the statement, and 40% disagree. These hypothetical "trade-off" statements covered a wide range of travel options, and they help to illuminate the mobility-related values of Marin residents by compelling them to choose between two distinct options in plausible scenarios. The full results of these survey questions are shown in Figure 18.

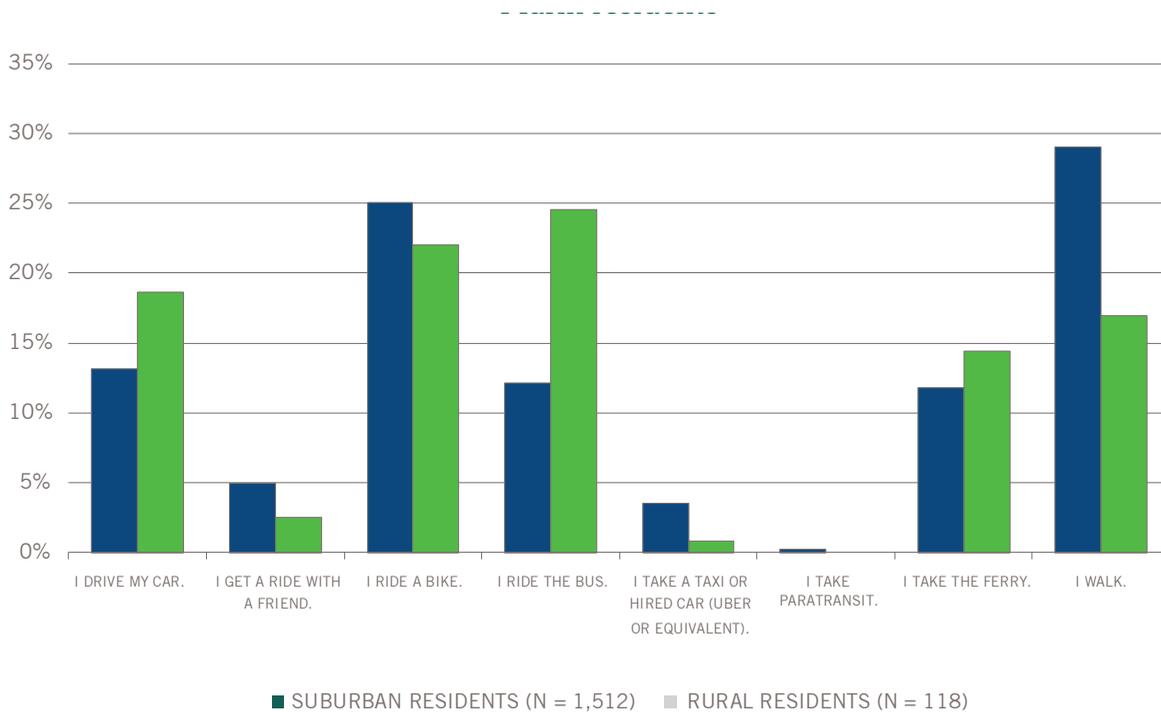
²⁶ Suburban areas are defined as the communities of Belvedere, Corte Madera, Fairfax, Kentfield, Larkspur, Marin City, Mill Valley, Novato, Ross, San Anselmo, San Rafael, Sausalito, Strawberry, and Tiburon. All other communities were classified as "rural."

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Princess Drive in Sausalito

Figure 17 Secondary Mode Split, by Place of Residence



General themes of feedback collected from those surveyed are grouped by travel mode(s).

TRANSIT

While just 4% of Marin residents who responded to the online survey report taking transit as their primary form of travel, the survey showed transit is increasingly common as a secondary mode among both younger and rural demographics. Rural residents are more likely to choose transit as their secondary mode than suburban residents (24% vs. 12%, respectively). Transit is also a more common secondary travel mode among younger respondents (under 35); 20% of those between the ages of 18 and 35 take the bus as a secondary mode, compared to just 12% of those over 35 and 11% of those over 65.

The survey asked respondents to indicate their

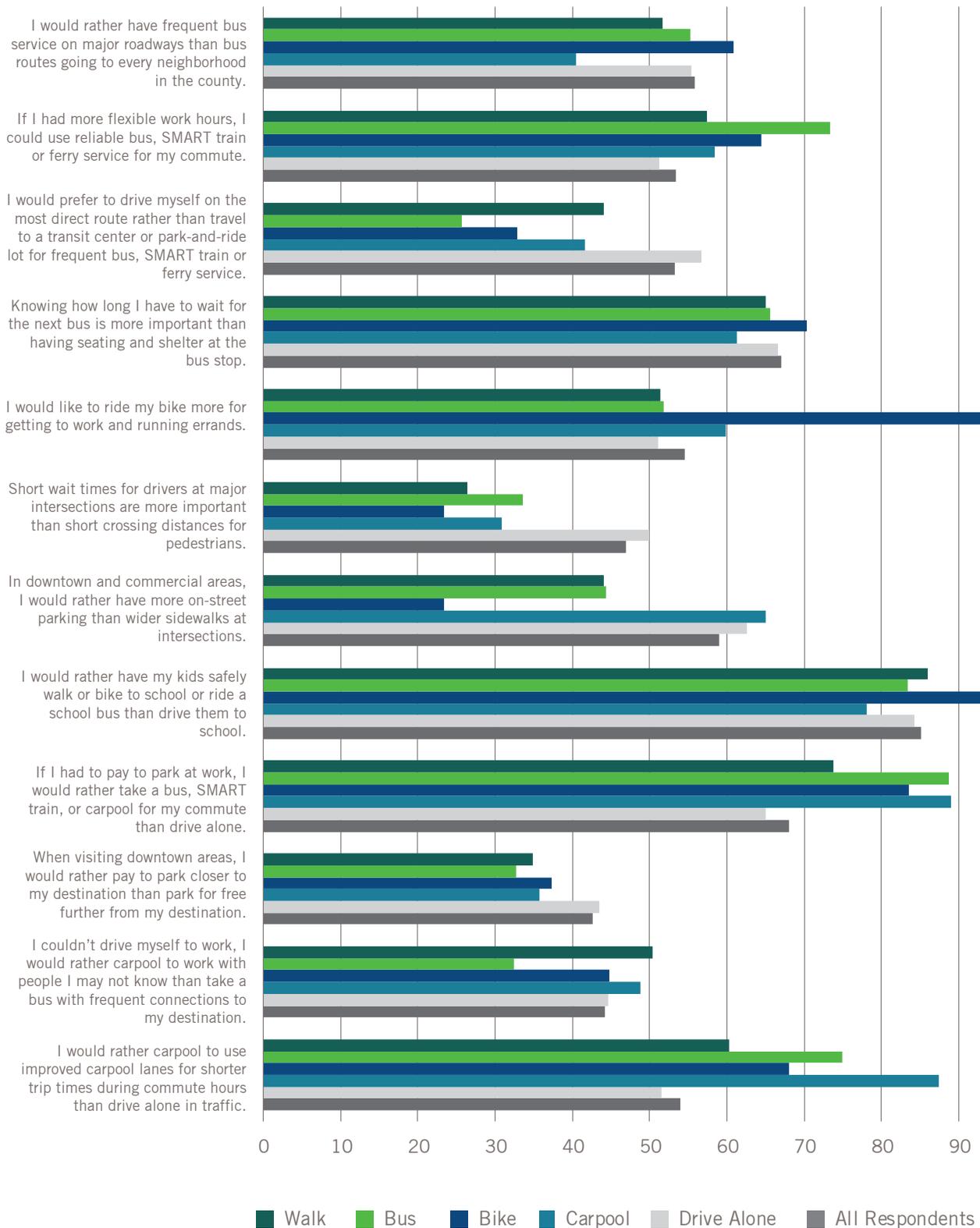
preference in a tradeoff between installing real-time information displays and providing additional seating at bus stops (Figure 18). *Real-time arrival information is a highly sought-after transit amenity and widely preferred over seating at bus stops.* This preference is especially strong for residents age 18 to 35 and those who take transit occasionally, and it may be an effective incentive for occasional transit riders to ride more regularly. While preference for real-time arrival information over bus stop seating is strong across all groups, occasional bus riders exhibit the strongest preference in this area. Three-quarters of occasional bus riders prefer real-time arrival information, compared to a 67% among those who regularly drive alone and 66% among regular bus riders. Respondents age 18 to 35 were most likely to favor real-time arrival information over bus stop seating (76% support), while 66% of those over 35 and 55% of older adults over 65 preferred real-time information.



Marin Transit bus stop in Marin City

GETTING AROUND MARIN

Figure 18 Percent of Respondents Who Agree with the Following Statements, by Primary Travel Mode



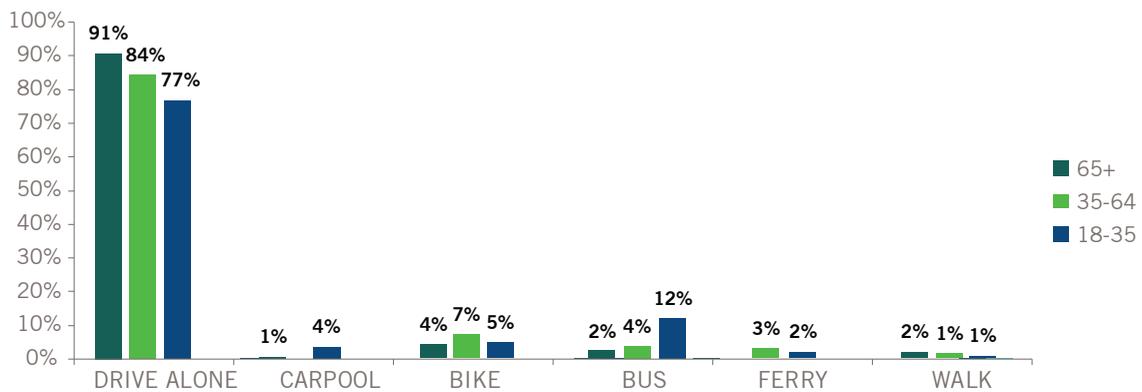
ROADWAY AND HIGHWAY PROJECTS

Based on the survey responses, the most dominant mode of travel in Marin County is driving alone (Figure 19), though the extent of its dominance is slowly declining as younger adults increasingly pursue transit, walking, and biking. *About 85% of survey respondents living in both suburban and rural Marin get to work by driving alone.* Driving alone is also the predominant mode among non-resident respondents commuting to Marin (88%), likely due to the longer trip distances and lack of transit connectivity between their origins and destinations. However, alternatives to drive-alone travel are more popular among younger Marin residents; *just 77% of Marin residents between ages 18 and 35 get around by driving alone, compared to 84% of residents between the ages of 35 and 64 and 91% of residents over 65.* This demographic shift in primary travel modes is shown in Figure 20.

Figure 19 Primary Mode Split of Survey Respondents



Figure 20 Primary Mode Split of Survey Respondents, by Age Group



GETTING AROUND MARIN

Having to pay for parking at work is a strong stimulus for residents of all demographic groups to use alternative modes of travel. The survey shows a broad preference for taking transit or carpooling over paying for parking at work. As shown in Figure 18 more than two-thirds (68%) of respondents would prefer to take transit or carpool over paying for parking at work. While carpooling is a generally unpopular travel mode in Marin - less than two percent of respondents travel around Marin regularly this way - residents between 18 and 35 years old show an above-average preference to carpool over paying for parking at work, compared with other groups. Respondents of the 18-35 demographic, are nearly twice as likely as adults over 65 to prefer carpooling or taking transit over paying for parking at work. This indicates that parking management strategies tailored for major employers or retail business districts may have significant impact on reducing drive-alone commuting.

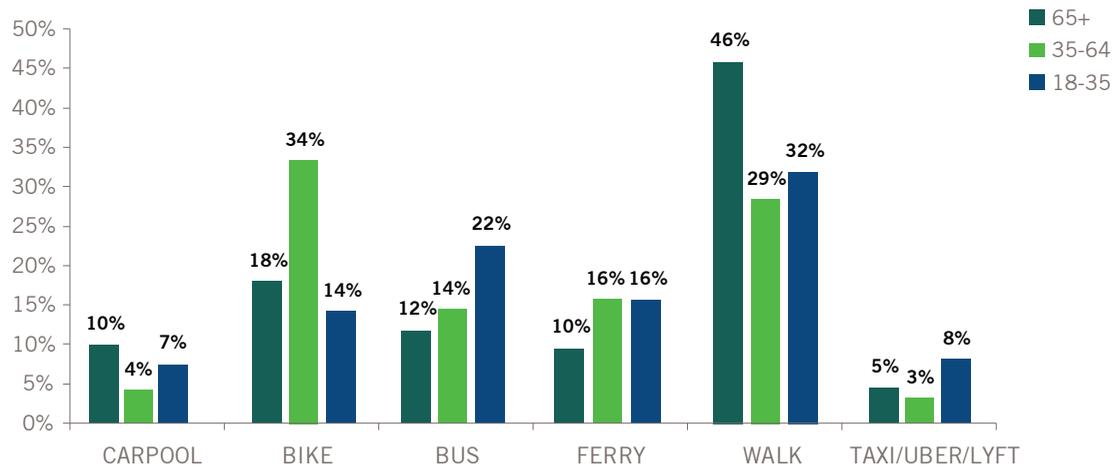
Several respondents commented that the carpool lanes on Highway 101 are often as congested as the general traffic lanes. Abuse of carpool lanes by single-occupancy vehicles is also a frequently mentioned challenge on the Highway 101 corridor.

Congestion on Sir Francis Drake Boulevard is the most frequently-mentioned challenge to vehicular travel in Marin. Nearly 100 respondents mentioned the corridor by name as Marin's most significant transportation challenge. Concerns about congestion on Sir Francis Drake were most frequently mentioned in relation to access to Highway 101 and I-580. In particular, the lack of a highway-to-highway connection from Highway 101 northbound to eastbound lanes of I-580 causes significant congestion on arterial streets in Larkspur and San Rafael. Access to the Richmond-San Rafael Bridge is a regional bottleneck and the focal point of many respondents' perceptions of congestion in Marin. Residents and commuters alike believe long queues on the approach to the Bridge are the cause of much of the congestion on northbound Highway 101 in southern Marin, especially during peak commute times.

ACTIVE TRANSPORTATION/ SAFE ROUTES TO SCHOOL

With its picturesque landscapes and extensive network of on-street bike lanes and recreational trails, Marin County has a strong culture of recreational cycling.

As a recreational destination, Marin also receives high volumes of tourists on bikes in southern Marin, especially in Sausalito. Safe facilities for these users can help manage the influx of visitors of all abilities. Even among Marin residents who responded to the survey, biking accounted for more than a quarter (27%) of the secondary mode choices reported, second only to walking (32%). Biking as a secondary mode becomes more common as residents age; among respondents under 35, 13% say they bike as a secondary mode, while 26% of those over 35 said they bike occasionally (Figure 20).

Figure 21 Secondary Mode Split of Survey Respondents, by Age Group

Among bicyclists who reported biking as their primary or secondary travel modes, respondents shared a strong desire to bike more for non-recreational trips like commuting and running errands. Regular (primary) bicyclists expressed a nearly unanimous preference (95%) to ride more (Figure 16), while 86% of occasional (secondary) bicyclists favored doing so. The general Marin population as a whole, however, was neutral on this question, 55% of whom expressed preference to bike more for these types of trips. These findings suggest there is significant latent demand for non-recreational bike travel among Marin residents who already bike. However, increasing the prevalence of bike travel in Marin may require the support of targeted investments in bike infrastructure improvements to achieve two key behavior shifts: to persuade occasional bicyclists to bike with more regularity, and to encourage those who do not currently bike to become occasional bicyclists.

Respondents who primarily bike to get around Marin frequently stated that the lack of a safe, contiguous network of bike lanes and paths impeded their desire to bike more often. Many bicyclists strongly supported completing the Alto Tunnel, a proposed bike/pedestrian tunnel along a former rail corridor between Corte Madera and Mill Valley. Lower-cost, intersection-level bike improvements on arterial or residential streets may facilitate short, non-recreational cycling trips more than longer, segregated off-street paths. Respondents expressed support for intersection-level bicycle and pedestrian improvements at the following locations:

- Bellam Boulevard, between Andersen Drive and Francisco Boulevard East
- Andersen Drive and 2nd Street
- Bike lockers at park-and-ride locations

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- Protected bike lanes and walking paths along Sir Francis Drake Boulevard
- Civic Center Drive, between SMART crossing and San Pedro Road
- San Pedro Road, westbound between Highway 101 northbound ramp and Merrydale Road; eastbound between Pilgrim Way and Highway 101 off-ramp
- D Street corridor, particularly where it is mostly residential between Antoinette Avenue and 1st Street
- Blithedale Avenue/Tiburon Boulevard crossing over Highway 101



Center Boulevard in Fairfax



Grant Avenue in Downtown Novato

Walking as a primary mode of travel is uncommon, due to the hilly terrain, low-density patterns of development, and lack of sidewalks in many areas of Marin. Less than two percent of respondents reported walking as their primary mode of travel. However, walking is the most common secondary or occasional mode of travel reported in the survey. Suburban residents are nearly twice as likely as those in rural areas to choose walking as a secondary travel mode (29% vs. 17%).

Intersection-level improvements to shorten crossing distances provide complementary benefits to bicyclists and pedestrians that both groups are about equally likely to support. The survey asked respondents to choose between shorter pedestrian crossing distances and shorter wait times for drivers at intersections. Bicyclists and pedestrians prefer shorter crossing distances over shorter wait times for drivers at intersections by an almost equal margin. As shown in Figure 16, 77% of cyclists and 74% of pedestrians prefer shorter crossing distances. Respondents who drive alone were neutral on this issue, as a slight majority (51%) preferred shorter wait times over shorter crossing distances.

The most noticeable divide on mobility-related values emerged based on respondents' preferred mode of travel, where regular bicyclists shared values that diverged from most other Marin residents. The survey asked respondents to choose between wider sidewalks at intersections and on-street parking in downtown areas, a trade-off between allocating additional roadway space for vehicles and reallocating space for other travel modes. Regular bicyclists are the only cohort that prefers wider sidewalks at intersections to more on-street parking in downtown areas. A clear majority of bicyclists (77%) were in favor of wider sidewalks. Pedestrians who walk as their primary travel mode, who would most directly benefit from wider sidewalks, showed a slimmer majority as 56% preferred wider sidewalks. Overall, respondents favored more on-street parking by a margin of 59% to 41% who preferred wider sidewalks. Respondents who drive alone favored on-street parking in downtown areas to wider sidewalks by a slightly larger margin, 62% to 38%.

There is a broad preference among both suburban and rural residents that their children walk or bike to school rather than being driven by their parents (87% of suburban residents vs. 80% of rural residents).



TAM's Crossing Guard at San Jose Middle School in Novato

GETTING AROUND MARIN

INNOVATION

Over the last several years, the transportation industry has seen rapid changes in mobility from the use of smartphones and advances in autonomous vehicle technologies. These new mobility services present both opportunities and challenges. This change is led by a wave of mobile applications like Uber, Lyft, and Waze, and the increasingly rapid deployment of autonomous vehicles. These technologies are shifting the way people move around the suburban portions of Marin County and will continue to influence future travel behaviors. Coupled with the maturity of clean, electric vehicle technologies, autonomous vehicles and smartphone technology create possibilities for improved mobility and access while reducing greenhouse gas and particulate emissions. However, ensuring these services provide equitable access to all users, and developing appropriate infrastructure, sustainability and labor issues are challenges that will need to be addressed.

TAM is taking a leadership role in strategically adopting emerging technologies. For example, TAM has developed a pilot program partnership with a ride-hailing service (Lyft) to promote first/last mile connections to SMART rail stations as a low-cost solution alternative to more expensive shuttles and fixed-route transit services. In addition to using shared mobility services, Marin County residents are already investing in clean fuel technology, with the second-highest rate of electric vehicle adoption in the state.

On February 24, 2017, TAM hosted its first innovation workshop to gather industry experts, innovators, and practitioners to develop a further understanding of how a variety of technological changes are likely to influence Marin's transportation network and travel behaviors. TAM will continue to host innovation workshops in the future to provide a collaborative forum for discussion on these topics.

SHARED MOBILITY SERVICES

With the development of smartphones, mobile applications like Uber, Lyft, Scoop, and many others have developed new mobility options that are currently operating in Marin County. Shared mobility services may present transformative innovations, as they have already changed public perceptions of personal vehicle ownership. These services offer the ability to summon a vehicle on-demand, increasing access to vehicles for trips requiring a car and reducing the need for personal vehicle ownership among some user groups.

These services also complement areas with reliable, high-frequency transit services and are likely to shift personal travel behaviors and vehicle ownership rates in these locations. When personal vehicles are required for longer or specialized trips, car-sharing services such as Zipcar can offer short-term, hourly car rentals. For those with a personal vehicle that may be underutilized, peer-to-peer car-sharing services like Turo and Getaround are available to rent out personal vehicles on a short-term basis, decreasing the cost of vehicle ownership. On-demand carpooling apps such as Scoop allow commuters to share rides and use HOV lanes with minimal planning and without a long term commitment.

Shared mobility services are transforming access to bicycles as well as personal vehicles, with bike-share services opening around the country. Bike-share programs showcase the idea of shared mobility as a form of transit service and as a community asset. Many of these services are in dense urban areas and support first- and last-mile connectivity to transit, although suburban bike-share programs are expanding as well.

The future of shared mobility services is still very uncertain. High levels of venture capital investment support many of these companies, and the long-term viability of their business models is unknown. Many of these companies share a vision for the future based on autonomous vehicles and operation of a fleet service to reduce operating costs on a per-trip basis. Ultimately, the impact of these services and the future evolution of these services are unknown.

AUTONOMOUS VEHICLES (AVS)

Nationwide roadway fatalities exceeded 35,000 deaths in 2015 alone.²⁷ By reducing human error, AVs offer a great promise to increase safety on our local roads. In 2016, the first fully autonomous vehicles were tested on the nation's roadways, and some experts predict full rollout of autonomous vehicles in the early 2020s, adoption rates and level of automation in vehicles are uncertain, and will be subject to many state and federal regulation and rule-making decisions. AVs can offer increased roadway capacity and supply in some circumstances, but may also increase VMT and thus roadway wear and congestion in the future. Parking is another area of interest, as local land use and parking management strategies will need to adjust and accommodate the change on parking demand resulting from AVs. There are many unknowns about how this emerging technology will impact local and regional mobility, including fleet adoption, ownership models, and infrastructure needs.

²⁷ <https://www.nhtsa.gov/press-releases/traffic-fatalities-sharply-2015>



TAM partnered with ZipCar and Whistlestop to open a new carshare pod next to the Downtown San Rafael SMART station

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THE DELIVERY ECONOMY

Amazon and other online delivery services are changing the movement of local goods, our travel to local shops, and how deliveries are made daily on our local roads and infrastructure. The increase in delivery trips is a factor in local road traffic demand. In 2017, drone technology was used to deliver packages for the first time, and automated semi-truck fleets made their first delivery in America. These impacts will shift the amount of local trips in Marin County, and may reduce the number of commercial trucks, parking and loading zones, and trips on our roadways.

TAM will continue to explore topics that are likely to inform our local transportation options, and is also looking to shorter term best practices to improve local travel conditions. Many of the innovative changes that can be considered are being tested in other communities across the region, state, and nation, and programs that support the environment, improve our transportation system, and reduce transportation costs will be explored in future efforts.

MOVING INNOVATION FORWARD

TAM envisions that these transportation technology and innovation solutions will enhance mobility and safety for all residents of Marin County, and will reduce vehicle emissions and the reliance on single-occupancy vehicles. This includes building “smart” infrastructure that enhances safety and mobility across the county. TAM can set an example for the rest of the nation through the responsible deployment of demonstration projects and rapid deployment of proven innovations.



04

Transportation Vision

Through the combination of the plans described previously, public outreach, and transportation challenges described in previous chapters, TAM has developed a shared *transportation vision* intended to address ongoing challenges and implementation of multimodal mobility improvements throughout Marin County.



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West Marin Stagecoach in Stinson Beach

The development of this Vision considered the following four questions.

1. What are Marin's existing transportation challenges?
2. What plans are in place to address these challenges?
3. What did we hear from the public?
4. What types of projects are supported by transit operators and local jurisdictions?

This Vision was developed to address these questions and to identify how mobility can be improved throughout the county. The Vision is structured with two parts:

- The broad Vision Statement is an overarching mission to coordinate transportation efforts in the county.
- Three guiding strategies, built around TAM's adopted goals, identify specific tools and programs to support TAM's mission statement and make progress toward achieving the Vision.

PLANNING FRAMEWORK

The *Vision* is intended to reinforce and support TAM's mission to support the economy, environmental health and safety, and ensure equity. This vision seeks to:

- Contribute to economic vitality;
- Create a flexible system that responds to changing technology;
- Develop an efficient and effective transportation system;
- Support a healthy environment and a healthy population;
- Achieve safer travel; and
- Enhance mobility and access for all.

The updated Vision supports the development of a multimodal transportation system, and recognizes that incremental but substantial improvements to our transportation system will have a greater impact on mobility than one single project or program. Without opportunities for substantial increases in roadway capacity, this strategy meets TAM's goals and is effective in enhancing mobility, both on Highway 101 and on local connector roads.

Additionally, the Vision builds on the existing plans of the transportation system in Marin, like SMART commuter rail and the Richmond-San Rafael Bridge third lane. The Vision defines needs, challenges, and values that will lay the foundation to build a more flexible and resilient multimodal transportation network throughout Marin County. Above all, the transportation system in Marin will be designed, built, and maintained to sustain the quality of life enjoyed in Marin County.

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VISION FOR THE FUTURE

The Vision Statement is as follows:

Make it convenient, easy, and safe to travel in Marin County, through strong neighborhood, local and countywide connections that consider the needs for all transportation modes and their users.

As a reflection of TAM's three guiding principles, the Vision Statement also includes three strategies:

1. **Support a strong economy** by making it easy for residents, visitors, and workers to get to work and places they want to be.
2. **Promote equity** by providing transportation that is accessible, affordable, and convenient for all residents and workers in Marin County.
3. **Advance Marin County's leadership in sustainability and protect the environment** by providing choices that make it possible for people to get around without driving alone.

Each of the strategies may be implemented through a variety of projects and programs, supported by public and agency outreach. Together these tools and programs make up the universe of our vision for the future. While it is not feasible to fully implement all of the Vision Strategies at present funding levels, the *Strategic Vision Plan* outlines the anticipated spectrum of mobility needs in Marin that will be prioritized as funding is allocated in the future. The strategies support aspirational goals for the transportation system, to serve Marin needs and reflect our local Marin values.



Larkspur

ECONOMIC STRATEGY

Support a strong economy by making it easy for residents, visitors, and workers to get to work and the places they want to be.

The Economic Strategy emphasizes projects that facilitate economic growth and success in Marin. Marin is a low-growth county with limited housing production and population growth, and is likely to continue this path forward in the future. For Marin to remain economically competitive in the long term, increasing the mobility of Marin residents, visitors, and workers to get to jobs and other destinations will require a number of projects and programs.

Our local roads play a vital role in supporting our economy, and maintaining these roadways is a key component of this vision and a high priority of survey respondents. Maintaining our local roads and fixing potholes countywide follows the region's fix-it-first strategy of investment. Roads throughout the county are in need of repair, including bridge and pavement rehabilitation and replacement. High-quality roadways, especially Highway 101, form the underlying basis for all roadway users.

Modernizing interchanges with local highways can provide Complete Streets that connect our local communities, a benefit to local residents and workers. Highway 101 bisects a large number of our communities in Marin County, and many interchanges are in need of modernization, including Tiburon Boulevard/East Blithedale Avenue, Tamalpais Drive, Freitas Parkway, and Lucas Valley Road, among others. These interchange improvements, with Complete Streets best practices, can benefit all users in Marin County with increased access and enhanced safety for transit users, bikes, and pedestrians.

Marin County's major roadways were identified as a top priority for funding in the 2004 transportation sales tax for funding. Due to limited funding and higher implementation costs, a number of these roadways are still in need of improvements. These projects offer a chance to make important safety-related improvements for all users and improve traffic flow.

Local communities and employer destinations also play a role in managing demand, with parking management as an option to increase transit trips and promote alternatives to commuting alone. Managing parking may encourage alternative forms of transportation such as SMART, regional transit, or vanpools, and increase the efficient movement of traffic on Highway 101.

In order to facilitate regional trips, infrastructure improvements will be required, including:

- Supporting the Marin-Sonoma Narrows high-occupancy vehicle (HOV) lane completion between Marin and Sonoma counties will allow for a unified North Bay approach to regional transit services and carpooling.
- Protecting Highway 37 from sea level rise is also a component of this vision, as the roadway serves as a major thoroughfare for Marin workers from other North Bay counties.
- Completing the direct connector between northbound Highway 101 and eastbound I-580 will reduce travel impacts for residents and workers on our local roadway system in Larkspur and San Rafael as well as substantially improve operations on the highway.
- Shorter-term improvements like bus-on-shoulder, ramp metering, and changes in the hours of HOV lane operations may be helpful in managing traffic flow on the highway.

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Autonomous vehicles (AVs) may increase highway capacity, but their contribution to local concerns like congestion are still unknown and likely to change by regulation and policy development in the future. It is important for the county to keep focus on innovation through best practices, like adaptive signal controls on our local roadways. TAM envisions that these transportation technology and innovation solutions will enhance mobility and safety for all residents of Marin County and will reduce vehicle emissions and single-occupancy vehicle trips. In order to meet this vision, TAM is looking at how innovation can be tested and piloted here in Marin, including options to improve our infrastructure while improving safety across the county. This program would continue TAM's approach to pilot programs, like TAM's Lyft First/Last Mile Partnership currently underway, or serve as a tool to test smart infrastructure that interfaces with connected vehicles.

One of the cornerstones of the Economic Strategy is to provide accessible transit services and increase higher-occupancy vehicle trips on local and regional roadways with regional transit services. These operational improvements can support the regional transit connections and attract "choice riders" that would otherwise choose to commute in single-occupancy vehicles. Operational improvements could include:

- Higher-frequency transit service on major roads and high performing routes.
- More regional and express bus services connecting the Marin workforce to job centers.
- Regional facilities like a bus-on-shoulder, operation from Navato to San Rafael, to increase transit attractiveness for regional trips.
- In southern Marin, supporting expansion of park and ride lots can increase carpooling and transit trips into San Francisco, along with increased ferry services out of the Larkspur Ferry Terminal.
- Expansion of ferry service in Marin County translates into less cars driving into regional job centers or along congested corridors.
- Short-term improvements for regional and local public transit to increase the attractiveness of transit include providing real-time traffic information in the county and building safety and access improvements to transit facilities around the county, including SMART stations.

These transit trips depend on a new Transit Center in San Rafael, currently relocating to accommodate SMART's Larkspur Extension. A new bus maintenance and operations facility is also needed to reduce ongoing transit operations costs. As the newest transit option for the Bay Area, SMART commuter rail is an asset to provide alternative commute choices in Marin County.

EQUITY STRATEGY

Promote equity by providing transportation that is accessible, affordable, and convenient for all residents and workers in Marin County.

The Equity Strategy emphasizes accessibility and mobility options, for all residents and visitors to get around. This strategy aims to increase access and mobility for all modes of travel and for all users in Marin, with particular care and consideration to the most vulnerable populations.

Marin City and the Canal Neighborhood are identified as regional communities of concern, and the needs of these areas are integral to advancing equity in transportation in Marin. Recognizing these varied groups of users who depend on our transportation system, and the impacts of our transportation choices on vulnerable populations, this strategy also includes components related to maintaining and protecting our existing system.

The Equity Strategy aims to support transit operations and capital improvements through ongoing local community transit services, which can serve as a lifeline service for many users. These services include community shuttles, demand responsive services, and senior mobility services. A core component of the Equity Strategy is the continued maintenance, enhancement, and expansion of transit services throughout Marin, with a particular focus on improving access for transit-dependent populations. Partnerships and service enhancements through shared mobility providers may offer one means of providing enhanced transit service in certain areas. Locating a local transit operations and maintenance facility in order to lower costs will be critical for future delivery of these services.

To increase mobility options, this strategy includes creating bus-on-shoulder facilities to facilitate attractive transit services that provide travel time savings, optimize yellow school bus service, provide yellow school bus parking facilities, expand yellow school bus services for school trips that are outside of walking and biking distance from schools, extend Safe Routes to Schools education and outreach programs, support crossing guards for school trips, and support bike and pedestrian access to transit services. Providing safe and accessible pathways to transit, including SMART stations, will maximize our investments in a new mobility option in the North Bay, and ensure accessibility for all populations.

Finally, the Equity Strategy is centered on continued support for regional and local bike

path development. Connecting our communities with key regional facility gap closures will allow for users to travel to employment centers and avoid reliance on vehicles for travel around the county. Local bike and pedestrian paths that support connections within communities are also included in this strategy. Supporting recreational trail access to support walking and biking for all users is also critical.

ENVIRONMENTAL STRATEGY

Advance Marin County's leadership in sustainability and protect the environment by providing choices that make it possible for people to get around without driving alone.

Improvements identified in the Environmental Strategy support Marin County's goals of reducing transportation-related pollution and providing sustainability through resiliency. The Environmental Strategy meets these goals with programs and projects that support transit use and active transportation, while increasing vehicle occupancy and expanding the adoption of clean fuel vehicles.

Marin County has historically invested local sales tax funds that are dedicated to local transit services and Safe Routes to School programs in an environmental and sustainable fashion. Projects that have been funded by TAM incorporate complete streets projects to increase our green commutes. Continuing to focus and prioritize greenhouse gas reduction in our planning efforts and local jurisdiction climate action plans benefits the environment, equity, and the economy.

Supporting our existing transit services through multimodal access to transit is a key tool to provide easy and safe access. Increasing first- and last-mile connectivity to SMART and local and regional transit services is a tool to encourage 'green commutes'. Supporting transit connectivity through bike and pedestrian access and additional transit connections, and providing

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bike-sharing, ridesharing, and new mobility options that encourage transit use, are all identified in this strategy.

In addition to supporting new transit connectivity, bike and pedestrian projects that further complete gaps in our regional and local bike system also support this strategy. By providing safe and accessible facilities, more trips can be made by bike and pedestrian modes. Extending the reach of Safe Routes to Schools education and outreach in local communities will reduce congestion on neighborhood streets from parents picking up or dropping off schoolchildren. Completion of robust bike and pedestrian networks that connect schools with surrounding communities will help ensure that greater proportions of schoolchildren travel to and from school safely via non-driving modes.

Protecting our transportation assets from sea level rise requires network resiliency and greenhouse gas emissions reductions to minimize our carbon footprint. We achieve resiliency by protecting our local roadways and highways from the effects of rising seas, while reducing harmful emissions from gasoline powered single-occupancy vehicles. Investments such as employer/employee programs that support carpooling, ridesharing and transit trips, and promote clean technology vehicles, like electric vehicles, help attain these goals.

Sea level rise adaptation efforts are underway, including vulnerability assessments on the impact of sea level rise on transportation. Sea level rise adaptation plans are being brought forth in Marin, including: Highway 37 and low-lying portions of Novato, critical areas around Richardson Bay, and the Canal neighborhood in San Rafael. Additional sea level rise adaptation programs will address flooding on our local roads and in southern Marin, namely Manzanita Park-and-Ride, which floods periodically. Even our highways are part of this strategy, including completing the Marin Sonoma Narrows HOV lanes and multi-use path system, which will encourage regional transit use, increase the occupancy and efficiency of all vehicles, and expand the regional bicycle network.

To support transit use, increasing vehicle occupancy through carpooling, ridesharing, and other services is an opportunity to innovate and work with private-sector companies to expand offerings and reduce the need to own a vehicle. There is currently rapid innovation in the carpool sector, and this is likely to continue in the future as trends of vehicle ownership change to allow for reliance on vehicles on an as-needed basis. Carsharing and ride-hailing companies offer a way for households to reduce vehicle ownership while still giving people easy access to vehicles for occasional and necessary trips.

Electric vehicles (EVs) offer a significant opportunity to reduce greenhouse gas emissions. The Environmental Strategy identifies workplace electric vehicle charging stations and public fleet replacement as key tools to support adoption locally. With limited new development occurring in the County, identifying ways to encourage or incentivize existing workplaces to provide charging stations to their employees overcomes a key hurdle in increasing EV adoption rates. Charging electric vehicles mid-day also lowers demand on the electrical grid during costly evening peak periods. In the shorter term, alternative fuels, such as renewable diesel, support greenhouse gas emissions reductions without the need for fleet turnover in municipal agencies. Golden Gate Transit and Marin Transit have piloted options, such as Marin Transit's electric bus pilot and use of hybrid electric buses, resulting in immediate greenhouse gas reductions for both agencies.

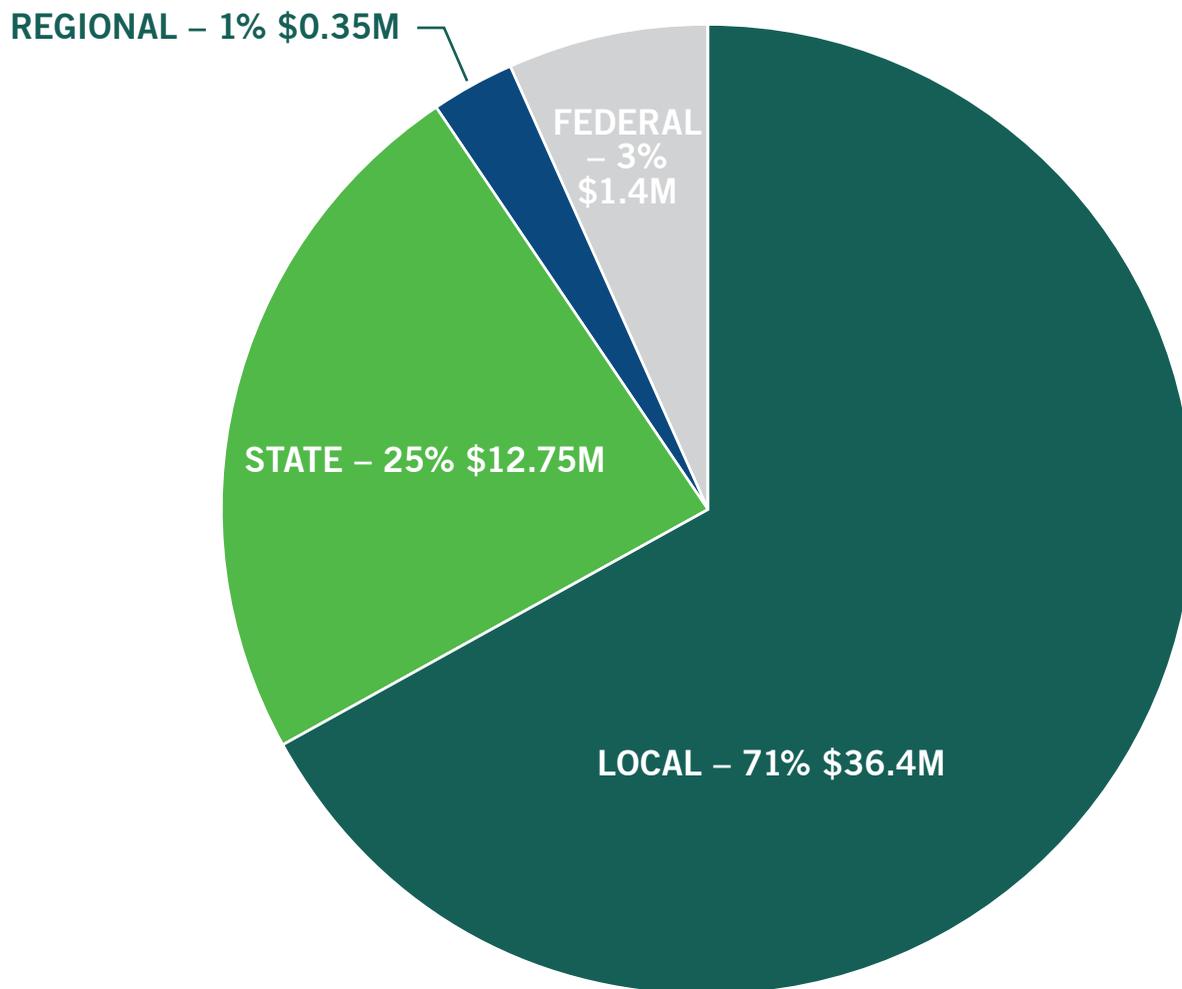
05

How Do We Get There?

Planning for the comprehensive improvements to our transportation system will require multiple funding sources, including local, regional, state, and federal transportation funding streams to implement projects and programs. Local funds are key to attracting other public financing and can leverage regional, state, and federal funding. The existing local funding provided in Marin makes up the largest share of transportation funding available to Marin's projects and programs, as shown in Figure 22.

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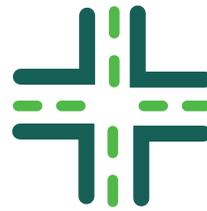
Figure 22 Estimated Transportation Funding Sources for Marin County (2016-2017)



LOCALLY GENERATED FUNDS

TAM receives funding from locally generated sources, including a local voter approved half-cent countywide sales tax that generates approximately \$25 million annually for local transportation projects and programs approved by Marin voters. About 80% of these funds are dedicated to ongoing operations and maintenance of our transportation system, local transit operations, Safe Routes to Schools programs, and local road maintenance and improvements. This sales tax is Marin County’s largest ongoing source of revenue for transportation, and it will expire in 2024 unless reauthorized by Marin’s voters.

The countywide half-cent transportation sales tax funds four key strategies and provides approximately \$25 million annually:



55%

LOCAL TRANSIT SERVICES

7.5%

HIGHWAY 101 CARPOOL LANE GAP CLOSURE PROJECT THROUGH SAN RAFAEL (COMPLETED IN 2010)

26.5%

MAJOR ROAD AND LOCAL ROAD IMPROVEMENTS

11%

SAFE ROUTES TO SCHOOLS PROGRAM

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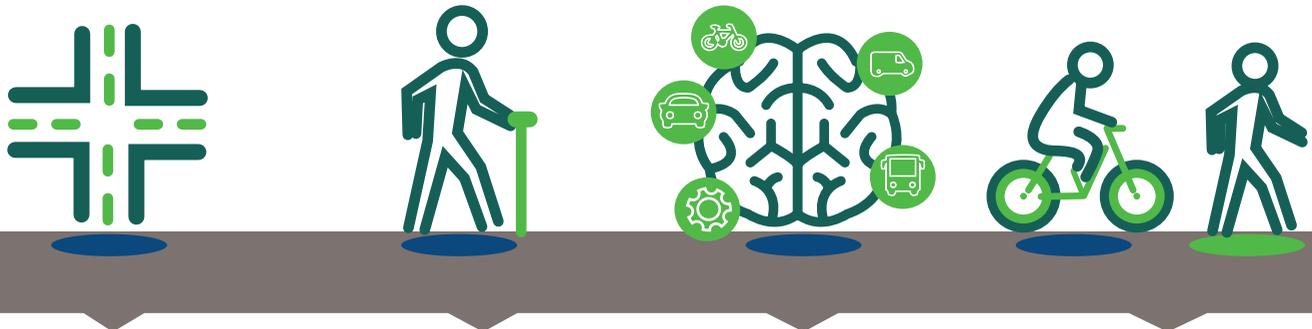
In 2010, Marin County voters also passed a \$10 Vehicle Registration Fee, allocating additional funding for senior mobility programs, crossing guards, local road maintenance, and congestion and pollution reduction programs. Revenues generated from the \$10 Vehicle Registration Fee provides approximately \$2.3 million in annual revenue for transportation.

With the transportation sales tax set to sunset in 2024, the TAM board will consider reauthorization of the sales tax. However, reauthorization of the sales tax alone may not create enough additional funding for new or

ongoing challenges. Given that major capital projects in the original sales tax expenditure plan are complete, TAM will consider seeking voter approval to extend, and possibly augment the sales tax to create new local funds for growing transportation demands.

In addition to these two main funding sources, a number of local jurisdictions also have local transportation sales taxes and development impact fees to provide funding for local road maintenance and other locally identified and approved needs. Marin Transit has a parcel tax countywide that supports transit services.

Revenues generated from the \$10 Vehicle Registration Fee provides approximately \$2.3 million in annual revenues for transportation.



35%

**LOCAL STREETS
MAINTENANCE**

35%

**SENIOR MOBILITY
PROGRAMS**

25%

**CONGESTION
REDUCTION MEASURES
INCLUDING SAFE
ROUTES TO SCHOOLS
IMPROVEMENTS,
EMPLOYER/EMPLOYEE
SUPPORT PROGRAMS,
AND ELECTRIC VEHICLE
CHARGING STATIONS**

5%

**BIKE AND
PEDESTRIAN
IMPROVEMENTS**

REGIONAL FUNDS

MTC is the metropolitan planning organization that distributes federal funding through the Bay Area's nine-county region, and they also have the ability to raise revenues through bridge tolls on the Bay Area bridges (with the exception of the Golden Gate Bridge which is managed by the Golden Gate Bridge Highway and Transportation District).

In 2002, voters approved Regional Measure 2, which provided funding for projects within the toll corridors throughout the Bay Area. The region is considering raising the bridge tolls to address growing needs in the bridge toll corridors; Regional Measure 3, the possible ballot measure associated with this toll increase, is discussed in the following sections under Potential Revenue Sources.

MTC also has legislative authority to increase the gas tax regionally, and has explored this option in the past, but has not proceeded with any such proposal due to limited public support. Lastly, regional fund sources include portions of federal funding retained by MTC and distributed via grants that meet regional policy benefits.

TAM distributes limited funds of approximately \$350,000 annually from the Bay Area Air Quality Management District (BAAQMD), and is eligible to compete for additional competitive grants on behalf of local projects that can show quantifiable air quality improvements.

STATE SOURCES

Funding for transportation from state sources includes funding from a statewide gas tax. State funding comes from the California State Transportation Improvement Program (STIP), Highway Safety Improvement Program (HSIP), and State Highway Operations and Protection Program (SHOPP). These sources provide funding to a variety of capital improvement projects, including highway, transit, local roadway, and bike/pedestrian projects. Marin County has relied on STIP funding as a funding source for the development of highway improvement projects, however recent deficits in this funding program have delayed project delivery and put this funding stream's long-term sustainability for local transportation projects in doubt.²⁸ The SHOPP is responsible for all highway operations and maintenance improvements and is administered solely by Caltrans.

State funds from recently passed SB1 funding legislation restores some capacity for highway projects, although the major focus of this legislation is to support a fix-it first strategy for maintaining our local roads and highways and providing some funding for our transit services. This legislation doubled the amount of funding for local streets and roads distributed directly to cities and towns (referred to as gas tax subventions), and increased the amount of money distributed to transit providers for operations and maintenance through the Transportation Development Act (TDA). State sources also include a variety of grant programs, such as the Cap and Trade Program, with programs benefiting housing, greenhouse gas reduction, and equity policy goals.

²⁸ Weigel, Samantha. "Congestion Cash Crunch: Transportation Projects Facing Program Cuts." The San Mateo Daily Journal, April 21, 2016. <http://www.smdailyjournal.com/articles/news/2016-04-21/congestion-cash-crunch-transportation-projects-facing-program-cuts/1776425162106.html>.

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FEDERAL SOURCES

TAM receives its apportionment of federal gas taxes from MTC on a multi-year cycle. Marin County receives approximate \$10 million over a 5-year cycle from the federal Surface Transportation Program (STP) and Congestion Mitigation and Air Quality (CMAQ) program. The Metropolitan Transportation Commission (MTC) administers the STP/CMAQ funding through its One Bay Area Grant (OBAG) grant program, which provides funding to counties based on a formula of population and regional housing growth and production. As a slow-growth county, Marin is at risk of losing these funds under future OBAG cycles. In addition, 50% of these funds are required to support Priority Development Area's (PDAs) of which Marin has two:

1. The San Rafael Transit Center
PDA in downtown San Rafael
2. The Marin County Unincorporated US 101
Corridor, which contains the neighborhoods of Marin City and California Park

OBAG funds are distributed by the TAM board, and support a wide variety of investments in Marin County including bike and pedestrian projects, transit investments, road rehabilitation and other locally defined needs.

Federal funds are distributed through a formula from the Federal Transit Administration (FTA) to local transit operators for operations and maintenance needs, and include \$1.4 million annually for Marin Transit. Sources also include capital formula funds and capital discretionary grants, such as bus and bus facility funds; in all cases, federal funds require a local match.

An overview of the local funds for transportation is presented in Figure 23.

Figure 23 Funding and Revenue Allocation Overview

FUNDING TYPE	FUNDING SOURCE	PROJECT TYPES	ESTIMATED REVENUE GENERATED ANNUALLY FOR MARIN
Local (Countywide)	Half-Cent Transportation Sales Tax	<ul style="list-style-type: none"> Local transit Safe Routes to Schools Major roads Local roads Highway 101 HOV Gap Closure Project 	\$25,000,000
Local (Countywide)	\$10 Vehicle Registration Fee	<ul style="list-style-type: none"> Local road maintenance Senior mobility services Programs to reduce congestion and pollution 	\$2,300,000
Local (Countywide)	Property Tax	<ul style="list-style-type: none"> Transit operations and maintenance Transit capital 	\$4,000,000
Local (Municipalities)	Sales Tax	<ul style="list-style-type: none"> Funding availability varies by jurisdiction, often used for local road maintenance 	\$4,000,000 (Range varies based on local voter approval)
Local (Municipalities)	Parcel Tax	<ul style="list-style-type: none"> Funding availability varies by jurisdiction, typically used for local road maintenance or local transportation projects 	\$4,000,000 (Range varies based on local voter approval)
Regional	Transportation Fund for Clean Air	<ul style="list-style-type: none"> Transportation projects that meet clean air requirements Bike, pedestrian, and employer/employee support programs 	\$350,000
Regional	Bridge Tolls (including possible Regional Measure 3)	<ul style="list-style-type: none"> Projects that provide a nexus to improvements in Bridge Toll Corridors 	\$100,000,000 per \$1 bridge toll increase for the entire Bay Area
State	Gas Tax Subventions	<ul style="list-style-type: none"> Funding directly to local jurisdictions Used for local road maintenance 	\$8,500,000 (\$16,500,000 including SB1)
State	State Transportation Improvement Program (STIP) – Distributed by Caltrans	<ul style="list-style-type: none"> Capital projects (all modes) 	\$0 until 2024
State	Transportation Development Act Article 3	<ul style="list-style-type: none"> Bike, pedestrian, roadway, and employer/employee support projects 	\$250,000
State	Transportation Development Act and State Transit Assistance	<ul style="list-style-type: none"> Transit operations and maintenance 	\$4,000,000 (\$7,000,000 under SB 1 for Golden Gate Transit and Marin Transit)
Federal (Regional Distributed)	Gas Tax – One Bay Area Grant (OBAG) Program	<ul style="list-style-type: none"> Various projects that meet federal eligibility requirements and regional policy goals 	\$10,000,000 for 2017-2022 (\$2,000,000 annually)
Federal	FTA Formula Funds	<ul style="list-style-type: none"> Transit operations and maintenance Transit capital projects 	\$1,400,000 for Marin Transit

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POTENTIAL REVENUE SOURCES

In order to achieve the vision, increases in funding will be required above current levels. Cities and towns have the ability to pass local sales and parcel taxes, and these funds have historically been used for local road maintenance within the jurisdiction and for specified local needs.

As the half-cent countywide transportation sales tax sunsets in 2024, there may be an opportunity to augment the sales tax by an additional quarter cent. Augmenting the sales tax to a three-quarter cent tax may require legislation, if the TAM board chooses to present voters with a ballot measure to extend and augment the existing transportation sales tax. This one-quarter cent augmentation to the sales tax would generate approximately \$12 million a year in additional funding for needs identified through an expenditure planning process.

Maintaining our system remains a challenge. There remains ongoing shortfalls in all of Marin's transportation needs. These include, highway expansion funds not being available to Marin until 2024, a number of major road corridors are still in need of repair and rehabilitation, and there is an ongoing shortfall in funding for local crossing guards and yellow school bus services. Over the life of the regional transportation plan, \$890 million is identified as necessary for bringing our roadways up to a State of Good Repair and maintaining that level for the 24-year period from 2017 through the Plan Bay Area forecast year of 2040. Transit operating shortfalls over the life of this plan are estimated at \$960 million for local and regional transit services.

SENATE BILL 1

The state passed its first transportation revenue increase in 27 years early in 2017 through SB 1, the Road Rehabilitation and Accountability Act. This much needed transportation bill includes funding for local road maintenance, transit operations and state highway maintenance and improvements. With this major commitment from the state, local funds become an essential source of matching funds to attract and leverage state funding for improvements beyond these ongoing maintenance and operational needs.

Formula funds from SB 1 are expected to go towards:

- Local road maintenance (through gas tax subventions to local jurisdictions)
- Highway maintenance (SHOPP Program)
- State transit assistance funding
- Intercity and commuter rail programs
- State and local partnership funding (50% of this funding is only eligible for counties with local sales tax for transportation, and supports leveraging local dollars)

Competitive Programs under SB 1 will require Marin to compete for funding with other projects around the state, and local funds are essential for competing for these grant programs. These funds, among others, include:

- Active Transportation Planning: Bike and pedestrian projects can compete for these funds.
- Congested Corridors Program: Funds for multimodal highway corridors may provide state funding for projects like Marin Sonoma Narrows, if local matching funds are identified.
- State and Local Partnership Funding: 50% is a grant program administered by the State.

In order to effectively compete with other counties for SB 1 funding, local sales taxes are often used as a match to attract state funds and advance projects through the project development process. This Local match is a critical factor in most grant applications and allows projects to be prioritized for funding sooner.

REGIONAL MEASURE 3

In 2016, MTC announced that they would consider requesting voter approval for increasing the fees paid on the Bay Area Toll Bridges, including the Richmond-San Rafael Bridge. As a fee, over 50% of Bay Area voters would be required to approve any potential measure. In 2017, the TAM board adopted a series of candidate projects for inclusion on any ballot item including the following projects:

- Bettini Transit Center Relocation
– Permanent Facility
- Marin Sonoma Narrows HOV lane completion
- Highway 101/Interstate-580 Direct Connector
- Highway 37 – Sea Level Rise Adaptation
Project environmental clearance

These projects are of regional and statewide importance and require significant amounts of funding to complete. Locally raised funds are a key portion of any statewide or federal funding eligibility, indicating project support from local agencies. As regionally significant projects, these facilities move large numbers of users per day, and would contribute significantly to the achievement of our local transportation Vision.

Federal funding sources are unclear at the moment. Future federal funding bills are likely to include support for public-private partnerships and will likely require local funding commitments.

Path Forward

Navigating a path forward to achieve this Vision will rely on all of Marin's transportation agencies to deliver projects and services that rise to our current challenges. Our transportation agencies must also plan ahead for future challenges and opportunities to maximize local dollars and commitments. As future revenue discussions look to address portions of this vision, close attention to the trade-offs and opportunities to address other needs will require input from all of Marin's transportation partners and operators. Transportation in Marin County need not be a zero-sum game of "winner takes all," but rather a systematic approach to delivering an effective and efficient transportation system.

Innovation will remain a close topic of interest in transportation plans and projects in the future. Now, it is still too preliminary to assess the impact of these services on Marin's local plans and projects. Monitoring the regulations, policies, and potential impacts of these technologies will allow Marin County an opportunity to pilot new technologies and solutions in a low-cost, accessible, and environmentally sensitive way.

GETTING AROUND MARIN

Investments to Support the Vision

“ In order to implement the Vision, Marin County will need to continue investing beyond our existing local sales tax, regional toll programs, or state funds. Addressing our transportation challenges will require a range of mobility solutions including investments in transit operations and maintenance, transit capital, local roadways, highways, active transportation, senior mobility, innovation programs, and employer/employee support programs. These supporting investments are outlined below.



TRANSIT OPERATIONS AND MAINTENANCE

Transit service is vitally important to achieving the Vision of providing strong neighborhood, local, and countywide multimodal connections. Expanding Marin Transit and supporting Golden Gate Transit services is integral to all of the strategies identified in Chapter 4, and support the Economic, Equity and Environmental Strategies of Marin County's vision for transportation.

- **Regional transit services** support a strong economy by improving essential job access networks and expanding mobility for residents, visitors and workforce. Providing regional transit connections can encourage higher-occupancy use of our highways for Marin's workers. SMART, regional bus services, and ferry services are likely to capture "choice" transit riders. Providing transit service that connects and enhances these investments are key to the success of transit in the future. Higher-frequency regional ferry services out of Larkspur and capital investments on Highway 101, such as finishing the HOV lane between Marin and Sonoma, are likely to ease congestion on Highway 101 and provide reliable transit services for Marin workers and residents.
- **Local transit services** throughout the County also contribute to the strategies outlined in the Vision. Higher service frequency on major roadway corridors can further attract riders who currently may not view transit as

an option for many trips. Supporting higher-frequency services on the major roadway corridors and near employment centers would be complemented with attracting choice riders and enhancing existing local community transit services, which are a lifeline for the transit-dependent. Services to low-density areas of the county can be costly, and innovative models to reduce costs, such as shared mobility pilots like TAM's Lyft Partnership program, will continue to be considerations for the future. Innovations such as Electric Buses and Autonomous Vehicles or shared mobility services will be monitored closely to further understand their impacts on the transportation system such as reduced fuel and driver costs, respectively.

- **Rural transit services** have been successfully implemented in Marin County. Maintaining these successes are important as a lifeline service in the county, and to support the local economy with access to jobs, goods, and services. Recreational trip management to Muir Woods will require additional management and mobility options to mitigate traffic impacts and sustain the economic benefits from Marin's recreation areas.
- **School bus transportation services** are provided at different levels throughout the county, with yellow school bus services in place in San Rafael, Ross Valley, Mill Valley, the Tiburon Peninsula, and West Marin. Local supplemental school trips on transit services may support high schools. However, elementary and middle schools throughout the County have identified yellow school bus as a local important need to address school safety and congestion levels at schools. The impacts of these services are likely to vary significantly based on site-specific considerations and travel markets, though these locally identified services are an important congestion relief option for many communities in Marin and on the Highway 101 corridor.
- **Senior mobility services** in Marin are increasingly in demand. Marin's senior mobility needs will increase significantly in the short term, as the County's share of population over the age of 62 is expected to reach 39% by 2030, from about 23% in 2015²⁹. Marin Access Paratransit saw a 26% increase in ridership between 2008 and 2014, underscoring this trend. Marin Transit's Volunteer Driver and Catch-a-Ride programs, which deliver paratransit service to older adults through nonprofit and private taxi operators, have seen similar ridership growth. These services will need to expand and diversify to provide mobility options that are accessible to a growing sector of our population, especially those who are transit-dependent.
- **Ferry Feeder Services and SMART Feeder Services** allow for intermodal transfers in Marin County, encouraging transit trips and access to regional job centers. Providing additional transit connections will allow Marin residents and employees to access regional job centers while minimizing traffic and parking concerns at these locations. Feeder services are an opportunity to innovatively address access challenges, and microtransit and shared mobility services may provide a low-cost alternative to vehicle ownership.



The Bettini Transit Center in Downtown San Rafael

29 State of California Department of Finance Population Projections, <http://www.dof.ca.gov/Forecasting/Demographics/Projections/>

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TRANSIT CAPITAL

In addition to transit operations and maintenance, new transit capital facilities are integrated in every strategy supporting Marin's Vision. These facilitate a range of small improvements including improving ADA access at bus stops, providing real time travel information for transit riders, as well as larger capital improvements like relocating the Bettini Transit Center and bus-on-shoulder facilities on Highway 101. Transit capital improvements in the Vision include:

- Expanding transit operations services in the county by creating a local operations and maintenance facility and additional parking for yellow school bus service. Currently many transit and yellow school bus service yards are located in the East Bay and in further locations in the North Bay, limiting contractors and driving higher costs of services. Locating these facilities in Marin will increase the productivity and reduce the costs of these services resulting in the ability for further expansion.
- Fleet replacement is an ongoing cost associated with transit services, and a major capital expense for many transit agencies. Currently, TAM has been providing funding to Marin Transit to test electric buses to reduce long-term fueling costs. As technology like electric buses and automated buses progresses, managing the costs of fleet replacement will remain an important consideration. Fleet replacement will continue to include the shift of local transit vehicles to hybrid and electric-only propulsion.
- Increasing access to bus stops, through safe walking and biking paths to transit stops on Highway 101 and SMART stations will support current transit riders and encourage more people to take transit. Additionally, improving the transit stops themselves with new shelters and passenger amenities that enhance the passenger experience are key ways of attracting and retaining transit ridership, including meeting the needs of people with disabilities. Transit technology like real-time bus arrival information can attract "choice riders" who might otherwise choose to drive alone.
- Transit capital projects that provide a travel time savings can also attracting "choice riders" that would otherwise choose to drive alone. These improvements can include bus-on-shoulder facilities in northern Marin, and other improvements throughout the county.
- Relocating the Bettini Transit Center, which serves 9,000 daily riders, is a high-priority need to accommodate the SMART extension to Larkspur. This facility is the largest transit center in Marin County, and serves all transit operators in the county.
- Enhancing Marin's park-and-ride facilities along Marin's highways can increase transit ridership. In northern Marin, increasing use of these sites, including capital improvements to serve these locations with transit more efficiently is included in the Vision. Potentially encouraging their use for technology providers like micro-transit and carpool services will also support higher occupancy use of our highways. Protecting facilities from sea level rise is a current challenge in some locations, such as the Manzanita Park-and-Ride, and is likely to continue into the future.



HIGHWAYS

Throughout Marin, Highway 101 serves as the primary north-south interregional roadway and as the primary arterial link between many Marin communities. Improvements to Marin's highways provide significant benefits to travelers in Marin due to the high volumes and its use for local trips. Improvements specifically on Highway 101 will benefit from a holistic approach, with the understanding that no single project or program will resolve the travel challenges for all users of the facility. Rather, each program works together with every other program with support from transit and employer/employee support programs to manage demand on the system. Identified in the Vision include:

- Finish the Marin Sonoma Narrows, by providing an HOV lane on Highway 101 between Novato and Petaluma. This HOV lane addition project represents a long-standing commitment to completing the HOV lane through Marin County, and supports transit riders and higher-occupancy vehicles on our roadways. The HOV lane addition project also includes bike and pedestrian facilities along the entire corridor, completing a key gap in the regional bike system.
- Because major repairs cost five to 10 times more than routine maintenance, maintaining our roadways at a good state of repair reduces Marin's long-term costs associated

with rebuilding roadways. There is currently a backlog of needed maintenance in a number of Marin jurisdictions, resulting in necessary investment in our local roadways.

- Consider widening Highway 37 to a full 4-lane facility, and protect Highway 37 from sea level rise with improvements that raise the roadway and encourage environmental restoration of the North Bay.
- Improve access to the Richmond-San Rafael Bridge, via Sir Francis Drake Boulevard improvements and improvements to the flow of vehicles getting off Highway 101 and then on Interstate-580 at Bellam Boulevard in San Rafael. These access improvements serve as shorter-term opportunities; while ultimately a Highway 101/Interstate-580 Direct Connector will be required.
- Provide ramp metering across the county. Ramp metering can improve traffic flow on our highways and reduce travel times by reducing bunching of vehicles loading on to the highway. Advance detection to avoid backup on to local roads is included as part of this project.
- Interchange modernization, can serve as multimodal improvements that enhance our communities and connect users of all modes. Highway 101 bisects many of our communities and limits Bike and pedestrian connections across communities and to Regional bus stops located on highway 101. Improvements to these facilities may include, among others, Tiburon Boulevard / East Blithedale Avenue, Tamalpais Drive, improvements at Merrydale Avenue, Freitas Parkway, the 2nd Street on-



Marin Sonoma Narrows

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ramp in San Rafael, and Lucas Valley Road.

- Bus-on-shoulder facilities, as discussed in the transit capital section above, are a major highway capital improvement that can help manage demand on our highways and provide travel time reductions for commuters on the highway. This project can take advantage of existing regional bus stops on the highway, providing additional travel time benefits that attract additional riders.



ROADWAYS

Roadway projects are of paramount importance to achieving the Vision because Marin's roadways comprise the County's most essential transportation connections that affect nearly all travel modes. A well-maintained roadway network is an essential component of an effective, efficient transportation system that offers mobility options to all types of road users.

- Maintaining and repairing our local roads is a critical component of the long-range vision for Marin. Roads in good repair, including multimodal facilities, benefit all users of the system and make it easier for people to get to work and other places they want to be. In addition to our current challenges of maintaining our roadways, flooding and sea level rise is a growing risk for many communities, especially critical in areas of limited access and egress like Marin City. Projects that improve drainage or protect from

bay incursion will maintain access across key segments of Marin County's road network and reduce risks from flooding and erosion, especially on roads located on steep slopes.

- Improving our major road corridors in the county that serve local communities can enhance local communities and travel of all users in Marin. These projects can improve safety and access for all Marin residents, especially those who travel without a private vehicle and rely extensively on pedestrian and bicycle facilities.
- Modernizing and improving intersections can provide a key benefit to current challenges of travel time, safety, and mobility. This effort can prepare Marin for future challenges associated with autonomous vehicles and the need for vehicle communication with infrastructure. These improvements may include adaptive signal technology to optimize traffic flow on major corridors, new Wi-Fi-enabled controller equipment to speed up transit travel times with transit signal priority systems, and changes to roadway geometry to increase safety of all road users. These investments can benefit a wide range of corridors, including 2nd and 3rd Streets in Downtown San Rafael near SMART tracks to help vehicle flows "recover" after SMART trains pass.



School Bus Service on the Tiburon Peninsula



ACTIVE TRANSPORTATION

Active transportation projects – including bike, pedestrian, and Safe Routes to Schools (SRTS) improvements – are essential to the *Strategic Vision Plan's* core objective to make multimodal trips easy and safe. Investments in pedestrian, bike, and SRTS improvements provides Marin residents with mobility options other than driving and makes it easier to choose bicycling or walking over a vehicle for a variety of trip purposes. SRTS projects and programs are intended to reduce school trip-related congestion by increasing the share of school trips made with non-driving modes. Advancing our regional bike networks by completing gap closures can help attract regional, federal, and state funding sources that would not otherwise be available to Marin County. The vision for this mode includes:

- Expand bike and pedestrian connections to improve access to transit by providing safe and accessible facilities for users of all skill levels and capabilities, and bike parking for transit riders. Good access to regional and local transit stops located along Highway 101, SMART stations, and transit facilities throughout the county can promote a reduction in vehicle trips and support access to those without private vehicles.
- Create a local, low stress network where bike paths connect residents to commercial areas, schools, and downtown businesses

to improve mobility choices for Marin residents and support local economies.

- Improve regional bike path improvements to connect our communities along the SMART bike/pedestrian trail and the Bay Trail system to invite people to bike longer distances on safe facilities separated from vehicle traffic. These regional facilities include access through downtown San Rafael, and portions of the Bay Trail in southern Marin. These gap closures provide safe access and connectivity for all users.
- Increase the share of green trips to schools through education and outreach, and safety improvements like safe pathways and crossing guards by continuing to invest in the SRTS program.



A student participating in TAM's Safe Routes to Schools Program

GETTING AROUND MARIN



INNOVATION PROGRAMS

Knowing that the transportation world is quickly shifting, TAM has embarked on a pilot program with Lyft to test shared mobility solutions to support transit ridership on SMART. TAM is also looking into the future to try to understand how future technologies will support all travelers, including seniors and people with disabilities. The Vision has developed these innovation concepts into transit, roadway, and employer/employee-oriented strategies; however, a dedicated innovation program should be considered in this Vision to explore how Marin County can advance and attract technological solutions to our challenges. Many of the opportunities that could be explored are determined by the opportunities under which the private sector would be a viable partner. These opportunities may include new signal technologies that coordinate with autonomous vehicles to allow communication even in low-visibility settings, “connected” corridors to improve traffic flow, and shared mobility services and autonomous vehicle testing. Marin County has the second-highest electric vehicle adoption rate in California, and these technologies can support further advancement of electric vehicle adoption.



EMPLOYER/EMPLOYEE SUPPORT

Providing additional travel supply through additional capital and service investments is a critical part of the Vision. However, managing demand is of equal importance in the development of the Vision. Employer/employee support programs are designed to encourage a shift from single-occupancy vehicle trips to other modes, reducing trips that contribute significantly to traffic congestion. Employer/employee support programs thereby support the Vision objective to make it easy, safe, and convenient to travel in Marin. By addressing countywide vehicle trip reduction, employer/employee support programs improve job access, expand mobility choices, and reduce transportation related pollution.

- Support transit through programs that address first- and last-mile connections to fixed-route transit to make it easier for people to choose transit over driving alone, even when buses and trains do not provide door-to-door service. These employer/employee support services can provide new mobility options through technology applications and shared mobility services. Additionally, employer/employee support programs such as transit incentives and marketing programs can encourage transit use.

- TAM currently provides an Emergency Ride Home program, providing “insurance” for commuters who do not drive alone to work. This transit support program is effective at providing peace of mind to many commuters in Marin.
- Many employer/employee support programs focus on employer-sponsored commute programs and peak hour trip reduction. These programs can support transit, vanpool, carpool, and rideshare mode choices for individual employees, and mitigate peak hour traffic for those who continue to drive alone.
- Encourage parking management strategies. Parking management is a crucial component of employer/employee support and most of Marin’s parking supply is managed by private owners and granted by local approvals. Therefore, facilitating partnerships or incentives with major employers or retail districts to implement parking management strategies is key to reducing demand for parking and increasing ridesharing, transit ridership, walking, and biking.



TAM funded electric vehicle charging station at Marin Civic Center

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Conclusion

Implementing the projects and programs that contribute to Marin's Vision will take a holistic and strategic approach to addressing our needs. One project in isolation will not resolve the myriad of challenges we face in traveling around the County, but incremental changes will contribute towards achieving our Vision. Marin's existing and future challenges will require a comprehensive multimodal strategy that expands transportation choices for all residents, commuters and visitors. Innovation is likely to help shape our future transportation network, and TAM is working towards addressing Marin's needs while keeping transportation planning and our local transportation funding working on long-range goals that contribute to Marin's quality of life.

The Vision laid out in this report expands upon TAM's three core principles of economy, equity, and environmental health and safety to advance an effective transportation system that provides efficient travel overall between key destinations, by addressing congestion, while also ensuring an equitable allocation of travel options to provide efficient access regardless of one's mode of travel.

Fiscal support will be required to make this Vision a reality and the *Strategic Vision Plan's* projects and programs depend upon ongoing funding commitments from a variety of local, regional, state, and federal sources. While Marin County's Transportation sales tax provides the bulk of our local support to an effective and efficient system, additional revenues will be needed to support a resilient, world-class transportation system that supports our residents, workforce and visitors.

The transportation system Marin County envisions is one that makes it convenient, easy, and safe to travel in Marin, regardless of one's mode of travel. Defining targeted investments in mobility improvements to adapt to our increasing and ongoing challenges offers an opportunity for TAM and partner agencies to implement innovative, 21st-Century infrastructure improvements. TAM will continue to work towards this future and is committed to improving Marin's Transportation System.

TAM SVP
for a Multi-modal Transportation System

Sample 3-5 Year Goals

1. Complete critical highway connections for Hwy 101 and Hwy 580. (Capacity Increasing).

2. Address Climate Change and Sea Level Rise in Transportation Planning:

Tactics

- Coordinate infrastructure planning for Transportation projects and Sea Level Rise Adaptation Projects: Hwys 37, 101, 580; Major arterials; North-South Greenway.
- Electrify transportation system; encourage alternative fuels as bridging strategy.

3. Move more people on transit and shared rides to reduce congestion, VMT/GHGs. (Demand Management)

Tactics

- TAM, MTD and TAM member jurisdictions to partner
- Identify markets and develop strategies to increase users in each market; set targets; measure results annually, re-evaluate strategies.
- Employ Safe Routes to School multifaceted & multi-year 5E's approach to changing behavior to move people toward transit/shared rides over time: Education, Encouragement, Enforcement, Engineering, Evaluation.
- Complete first-last mile connections.

4. Complete critical connections in Marin's bicycle network and increase bicycle mode share over time. (Demand Management)

Tactics

- TAM, TAM member jurisdictions, TAM BPAC and MCBC to partner
- Implement Complete Streets policies for capital improvement projects on arterials
- Identify target markets and develop strategies to increase users in each market; set targets; measure results annually, re-evaluate strategies.
- Employ Safe Routes to School multifaceted & multi-year 5E's approach to changing behavior to move people toward transit/shared rides over time: Education, Encouragement, Enforcement, Engineering, Evaluation.

5. Improve Operational Efficiencies of Marin's transportation systems to reduce local back-ups on Marin's major arterials and major highway connections. (Operational Efficiency)

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DATE: November 13, 2017

TO: Transportation Authority of Marin Board of Commissioners

FROM: Dianne Steinhauser, Executive Director
Derek McGill, Planning Manager

SUBJECT: Accept 2016 System Monitoring Report and the 2017 Congestion Management Program Report (Action), Agenda Item No. 11

RECOMMENDATION

Accept the 2016 System Monitoring Report and the Draft 2017 Congestion Management Program (CMP) Report for Marin County.

A presentation on the 2016 System Monitoring report was made on October 9th, 2017 to the TAM Programming and Projects Executive Committee who recommended the Board accept the System Monitoring Report.

The CMP report concludes that no follow up actions are required on any of the evaluated roadway segments, due to these meeting the established goal or road segments being grandfathered in as part of the original network adoption. Nonetheless, TAM and our local jurisdictions are working towards improvements on many of these road segments.

BACKGROUND

As part of TAM's responsibilities as a Congestion Management Agency, it must update its Congestion Management Program (CMP) every two years for the County to remain eligible for federal and state funds. The next CMP update is due to Metropolitan Transportation Commission (MTC) in December 2017.

Consistent with Requirements from State Law, TAM and its consultants, TJKM Associates, have prepared the 2016 System Monitoring Report and 2017 Congestion Management Program Report. As with previous CMP updates, TAM has collected transportation data to measure system performance in even-numbered years, in this case 2016. That data is utilized for the CMP prepared in odd number years, in this case 2017. Data gathered through this CMP process was expanded in 2016, at the request of our member cities and towns, and this broader collection of information was brought forth to the Programming and Projects Committee in October 2017, where the report was recommended for Board acceptance.

CMP's measure congestion on key highway and arterial segments that were adopted by the CMA, evaluate this congestion against pre-established performance standards, enumerate deficiencies requiring remedial action, address Transportation Demand Management and traffic relief strategies and compile a capital improvement program to improve multi-modal system performance. Transportation system monitoring data collection is necessary to develop the CMP. Note that TAM's predecessor, the Marin County Congestion Management Agency, adopted a CMP designated network in 1991 following the passage of CMP legislation. This same network has been in effect as our CMP reference set of critical roadways ever since.

MTC published updates to its CMP Guidance on July 5, 2013. Our current 2017 CMP Update must be consistent with the latest adopted RTP (Plan Bay Area, adopted July 2017) and with the current MTC travel model. Changes to MTC’s CMP Guidance include references to regional goals and policies established in Plan Bay Area.

The requirements for the CMP were enacted with the passage of Assembly Bill 471 (1989) and became effective upon voter approval of the Prop 111 Blueprint Legislation passed in June 1990. The CMP sets the stage for local land use changes to not adversely impact current transportation service below Level of Service D, without committed transportation mitigation measures. The goal of the original legislation was to tie together land use decisions with transportation investments. Proposition 111 provided for a nine-cent increase in the state gas tax over a five-year period. Note that since 1990, there has been significant additional legislation linking transportation and land use, specifically AB 32 and SB 375.

The CMP legislation makes the following requirements of a conformance determination for local jurisdictions:

- Maintain highway Level of Service (LOS) standards outlined in the CMP (LOS E for highways and LOS D for local arterials), with the exclusion of grandfathered segments;
- Participate in a program to analyze the impact of land-use decisions;
- Participate in the adoption and implementation of a deficiency plan when LOS standards are not maintained, with the exclusion of grandfathered segments.

Cities and counties have a vested interest in complying with the CMP requirements because their receipt of Proposition 111 gas tax subventions, along with other state and federal transportation funds, is conditioned on the development of and compliance with a CMP.

California Government Code Section 65089 requires that every county that includes an urbanized area adopt a CMP. The CMP shall include every city and the county. California Government Code Section 65088.1 defines urbanized areas as being over 50,000 in population. Marin County meets this definition.

DISCUSSION/ANALYSIS

Data gathered through this CMP process typically includes:

- Peak hour travel counts on our Arterials and Highways,
- Peak hour travel counts and occupancy information on key portions of our HOV system (where appropriate).
- Weekend hourly travel counts on portions of State Route 1 and Sir Francis Drake
- Travel Times along arterial and highways using Inrix data (where available)
- Bike and Pedestrian Counts at approximately 23 locations over a 14 hour period on weekdays and 2 hour weekend counts.

The CMP network of monitored roadways was adopted in 1994 by the CMA in response to state statutory requirements associated with the Congestion Management Program legislation of 1990. The locations of the CMP roadways are identified in the table below:

Street	From	To	Roadway Type
SR 1	US 101	Tennessee Valley Rd	Arterial
SR 1	Northern Ave	Almonte Blvd	Arterial
SR 1	Sir Francis Drake Blvd	Pt. Reyes Station	Arterial

SR 37	US 101	Atherton Ave	Freeway
US 101	Golden Gate Bridge	Spencer Ave	Freeway
US 101 (SOV and HOV)	SR 131 (Tiburon Blvd)	Tamalpais Dr	Freeway
US 101 (SOV and HOV)	Sir Francis Drake Blvd	I-580	Freeway
US 101 (SOV and HOV)	I-580	Mission Ave	Freeway
US 101 (SOV and HOV)	Mission Ave	N. San Pedro Rd	Freeway
US 101 (SOV and HOV)	Freitas Pkwy	Lucas Valley Rd	Freeway
US 101	North of Atherton	Sonoma Co. Line	Freeway
SR 131 (Tiburon Blvd)	Redwood Hwy Front.Rd	E. Strawberry Dr	Arterial
I-580	Sir Francis Drake Blvd	Marin Co. Line	Freeway
I-580	Bellam Blvd	Sir Francis Drake Blvd	Freeway
Novato Blvd	San Marin Dr	Eucalyptus Ave	Arterial
Novato Blvd	Wilson Ave	Diablo Ave	Arterial
S. Novato Blvd	Sunset Pkwy	US 101	Arterial
Bel Marin Keys	US 101	Commercial Blvd	Arterial
Sir Francis Drake Blvd	Butterfield Rd	Willow Rd	Arterial
Sir Francis Drake Blvd	San Anselmo Ave	Red Hill Ave	Arterial
Sir Francis Drake Blvd	College Ave	Toussin Ave	Arterial
Sir Francis Drake Blvd	College Ave	Wolfe Grade	Arterial
Sir Francis Drake Blvd	US 101	Larkspur Landing Circle	Arterial
Red Hill Ave	Sir Francis Drake Blvd	Second St	Arterial
Second St	US 101	Marquard St	Arterial
Third St	US 101	Marquard St	Arterial
Bridgeway	Gate 5 Rd	Gate 6 Rd	Arterial

In 2016, in response to local jurisdictional needs for better data and TAM’s countywide constituents requesting same, the TAM Board authorized an expansion of the data collection process to collect additional travel data beyond previous congestion management program efforts. This data collection effort has been shaped by our member agencies, specifically Public Works staff and City/ Town Manager input into the effort, with increased funding from a temporary expansion of city/county fees to TAM. The TAM Board authorized an expanded set of data collection effort to include:

- Expanding the hours of the data collection to gather average daily traffic (ADT) and determine peak hour counts.
- Expanding the weekend data collection process to better compare weekend ADT to weekday ADT.
- Expanding data collection outside the CMP roadway network including the following locations:

Street	From	To	Roadway Type
Alexander Avenue	US 101	South Street	Arterial
Almonte Blvd	SR 1	Miller Avenue	Arterial
Camino Alto	Blithedale	Tamalpais	Arterial
Paradise Drive	San Clemente	Westward Drive	Arterial
Tamalpais Drive	Madera Blvd	Sausalito Street	Arterial
College Ave	Magnolia	SFD	Arterial

Bon Air Road	Magnolia	SFD	Arterial
Wolfe Grade	SFD	D Street	Arterial
SFD	Butterfield	Red Hill	Arterial
Lincoln Ave	Mission	US 101	Arterial
Manual T Freitas	Las Gallinas	Northgate	Arterial
Las Gallinas	Manual T Freitas	Lucas Valley	Arterial
Main Gate Road	Nave Drive	C Street	Arterial
Ignacio Boulevard	Alameda Del Prado	Entrada Drive	Arterial

- Expanding Bike and Pedestrian counts to include 5 new locations. The bike and pedestrian count locations now include:

ID	Count Location
1	LOS RANCHITOS RD AND PUERTO SUELLO SUMMIT
2	CAL PARK HILL PATHWAY AND ANDERSON
3	MILL VALLEY-SAUSALITO PATH AND BLITHEDALE AVENUE
4	MILL VALLEY-SAUSALITO PATH AND TENNESSEE VALLEY PATH
5	BRIDGEWAY BLVD AND PRINCESS ST
6	TIBURON BIKE PATH AND TIBURON BIKE PATH
7	MAIN ST AND TIBURON BLVD/PARADISE DR
8	S KNOLL RD AND TIBURON BLVD
9	TOWER DR AND E BLITHEDALE AVE
10	SIR FRANCIS DRAKE FLYOVER
11A	SAN ANSELMO AVE AND TURNSTEAD AVE
11B	SAN ANSELMO AVE AND TURNSTEAD AVE
12	BOLINAS RD AND BROADWAY BLVD
13	MAGNOLIA AVE & WARD ST
14	LARKSPUR-CORTE MADERA PATH
15	CORTE MADERA CREEK PATH
16	CAMINO ALTO & E BLITHEDALE AVE
17	ALAMEDA DEL PRADO AND PACHECO HILL PATH
18	LARKSPUR PLAZA DR / ROSE LN AND DOHERTY DR
19	ROSE LN AND DOHERTY DR
20	S NOVATO BLVD AND ROWLAND BLVD
21	ANDERSEN DR AND BELLAM BLVD
22	NICASIO VALLEY RD & DRIVEWAY
23	ENFRENTE BIKE PATH AND NOVATO BLVD
24	ALMONTE BLVD / SHORELINE HWY AND SHORELINE HWY
25	E. FRANCISCO BLVD AND BAY ST
26	ANDERSEN DR AND DU BOIS ST
27	MERRYDALE DR & NONE-SCREENLINE
28	US 101 NB OFF RAMP AND BIKE PATH AT SFD BLVD

The resultant 2016 System Monitoring Report provides system performance information on a wide range of quantitative travel information from roadway speeds and volumes, transit performance, and bike and pedestrian volumes. In October through December 2016 tube counts were conducted at the identified roadway locations and video technology was used at the identified bike and pedestrian count locations. Data was collected on a seven day period to capture Tuesdays through Thursdays when schools were in session, and days with any holidays, special events or weather conditions were avoided.

Local Roadway Volumes

Roadway volumes collected during this process are included in **Attachment A**, and summarized on a 3-day (Tuesday-Thursday) average, with approximated peak hours of 6-10 AM and 3-7 PM. East Sir Francis Drake west of US 101 reflected the highest volume local road in the county, with 2nd and 3rd Streets in San Rafael in 2nd and 3rd place respectively.

Also included in **Attachment A** are time of day charts comparing Saturday and Sunday travel information with average weekday traffic for each of our local roadway segments.

Local Roadway Service Level

In the 2016 Monitoring Cycle, four of the 17 CMP roadways segments received the minimal established LOS goal or fell below that goal for the AM peak. Three of the four segments are arterial segments on Sir Francis Drake, and one on South Novato Boulevard west of US 101. These charts are shown as table 6 in the report on page 13.

In the PM 4 segments four received the minimal established LOS goal or fell below that goal, two on Sir Francis Drake, one on 2nd Street in San Rafael, and one on SR 1 west of US 101. These charts are shown as table 7 in the report on page 14.

No follow up actions are required on any of these segments, due to these meeting the established goal or roadways segments being grandfathered in as part of the original network adoption. Nonetheless, TAM and our local jurisdictions are working towards improvements on many of these road segments.

Highway Service Level

In the 2016 monitoring cycle, 3 highway segments met the minimal established LOS goal of “E” for mixed flow conditions in the AM period, and all other segments performed above this goal. All of these segments are southbound or westbound facilities, as shown on table 9 on page 20. All northbound facilities received a LOS standard of an “A” with the exception of US 101 north of the Golden Gate Bridge which has a LOS “C”.

In the PM period, 4 highway segments fell below established LOS goals for mixed flow conditions with LOS “F”. All of these segments are northbound/eastbound directions, as shown in table 10 on page 22 of the report. These roadways are grandfathered segments or currently under improvement so no action is required. All southbound facilities received an LOS standard of a “C” or higher with the exception of US 101 north of the Golden Gate Bridge which has LOS “E”.

Note TAM and its member jurisdictions are working towards improvements in the Highway 101 Corridor.

HOV Lane Service Levels

In the 2016 monitoring cycle, two segments of HOV lanes met or fell below established LOS goals for HOV lane performance, one in the AM on southbound US 101 from Lucas Valley Road to Freitas Parkway at LOS

“E” and at SR 131 to Tamalpais in the PM, a grandfathered segment that has historically not met established LOS standards at LOS “F”. The full performance of HOV lanes are shown in Table 12 and 13 on page 27 of the report. Again, while no follow up actions are required on any of these segments per CMP statutes, TAM and its member agencies are working on efforts to improve operations in these segments including ramp metering and bus-on-shoulder options.

Countywide Travel time comparisons

Based on the data collected as part of this effort average travel times were gathered for US 101 to compare free-flowing conditions to the peak travel periods. The average free-flow US 101 travel time (from county line to county line) is 26 minutes, with an average travel time of 36 minutes at the AM peak and 39 minutes in the PM peak.

Pedestrians and Bicycles

TAM conducts bicycle and pedestrian counts at 28 locations most of which have been counted previously by TAM for Marin County as part of the Nonmotorized Transportation Pilot Program. Bridgeway at Princess Street in Sausalito remains the highest volume on weekdays of both bike and pedestrian counts with 4,865 pedestrians and 1,929 bicyclists counted over a 14-hour period. Other high volume locations include San Anselmo Avenue at Tunstead Avenue in San Anselmo with 2,666 Bike and Pedestrian counts and Broadway at Bolinas road in Fairfax with 2,469 bike and pedestrian counts. The Central Marin Ferry Connector Bridge opened in 2016 has 530 bike and pedestrian users over a 14-hour period.

Travel Demand Modeling and Land Use Analysis

The CMP is required to identify consistency with MTC’s Regional Travel Demand Model Methodology and databases used in the Regional Travel Demand Model. MTC published updates to its CMP Guidance on July 5, 2013. As done in previous CMP cycles, the 2017 CMP Update must be consistent with the adopted RTP (Plan Bay Area, adopted July 2017) and with the current MTC travel model. There have been no changes to the regional guidance since TAM’s adoption of the 2013 CMP. MTC and County staff around the region staff are in discussions about future CMP guidance and modeling requirements.

The intent of the Land Use Analysis Program is to improve the linkage between local land use decisions and regional transportation facility decisions; to better assess the impacts of development in one community on another; and to promote information sharing between local governments when the decisions made by one jurisdiction have an impact on another. TAM acts as a resource to local governments in performing transportation analyses of land use changes on the CMP designated transportation network.

Capital Improvement Program

TAM’s CMP Capital Improvement Program is the basis for determining which projects are included in the Regional Transportation Improvement Program, RTIP. The CMP Capital Improvement Program must also show consistency with regional air quality attainment plans.

Both Measure A’s transportation sales tax and Measure B’s vehicle registration fee provide projects and programs addressing long range needs identified through the Regional Transportation Plan are included in this chapter.

Monitoring, Conformance and Deficiency Planning

Local jurisdictions must meet the CMP conformance requirements to receive funding in several state programs. The process of conformity has not substantively changed in the 2017 CMP. LOS monitoring did not report any new deficiencies and local jurisdictions that conform to the land use analysis program requirements are expected to remain in conformance.

Recommendation

Move to accept the Draft 2017 Congestion Management Program (CMP) with its supporting documentation- the 2016 Transportation Systems Monitoring Report.

FISCAL CONSIDERATION

There are no fiscal considerations.

NEXT STEPS

The CMP is a required document and must be submitted to MTC by December 2017 for review and acceptance.

TAM staff will post the information shared in this report on the Data & Statistics page of the TAM website here: <https://www.tam.ca.gov/resources-news/data-statistics/>

Ramp volumes that are being gathered on highway ramps in Marin County are being delayed due to the North Bay Fires; however these will be presented to the TAM Board in early 2018. They are not required in the CMP submittal to MTC.

ATTACHMENTS

Exhibit A – Travel Data Summaries

Exhibit B – Draft 2016 Transportation System Monitoring Report

Exhibit C – Draft 2017 CMP Report

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Average Daily Traffic Information (Tuesday – Thursday ADT)

		Average Daily Traffic (T-TH)		AM Peak (6-10)		PM Peak (3-7)		Notes:
		EB	WB	EB	WB	EB	WB	
<i>CMP Segments</i>								
1A	SR1 West of 101	14,985	15,135	4,503	2,783	3,780	5,107	
1B	SR1 Between Northern & Almonte	5,123	2,759	1,682	580	1,201	744	
1C	SR 1 Between Sir Francis Drake & Pt. Reyes Station	1,195	1,178	202	201	381	148	NB/SB
4A	SR131 Between Redwood & Strawberry	15,373	16,583	3,629	4,282	4,201	4,482	
6A	Novato Blvd Between San Marin & Eucalyptus	3,405	3,707	883	825	1,006	1,294	
6b	Novato Blvd Between Wilson & Diablo	9,633	9,235	2,688	1,500	2,569	3,321	
6C	Novato Blvd Between Sunset & US 101	5,108	3,828	1,895	688	1,250	1,393	
7A	Bel Marin Keys Between US 101 & Commercial	10,443	10,215	3,550	1,556	2,087	3,808	
8A	SFD Blvd Between Butterfield & Willow	10,382	11,511	3,132	1,850	2,570	3,801	
8B	SFD Blvd Between San Anselmo & Red Hill	14,896	15,587	4,344	2,613	3,858	5,077	
8C	SFD Blvd Between College & Toussin	10,616	11,815	2,996	1,945	2,794	3,925	
8D	SFD Blvd Between College & Wolfe	14,369	15,035	3,254	3,305	3,902	4,442	
8E	SFD West of Larkspur Landing	22,320	23,551	6,410	5,666	5,114	6,535	
9A	Red Hill Ave Between SFD & Second	19,793	18,611	5,130	5,080	3,599	5,521	
9B	Second St Between US 101 & Marquard St	22,285		5,358		5,845		
9C	Third St Between US 101 & Marquard St		20,630		3,935		5,915	
10A	Bridgeway Between Gate 5 & Gate 6	12,927	13,324	2,108	3,675	4,152	3,328	
<i>New Locations</i>								
1	Alexander Ave Between US101 & South	3,195	4,006	463	1,161	931	1,147	NB/SB
2	Almonte Between SR1 & Miller	8,872	8,627	1,682	1,991	3,333	2,690	NB/SB
3	Camino Alto Between Blithedale & Tamalpais	3,225	1,636	414	386	1,855	534	NB/SB
4	Blithedale Ave East of Camino Alto	16,926	14,867	3,697	3,714	4,753	3,914	
5	Paradise Dr Between San Clemente & Westward	7,154	12,888	1,718	3,406	2,218	4,230	
6	Tamalpais Dr Between Madera & Sausalito	9,613	9,125	2,393	1,870	2,903	2,892	
7	College Ave Between Magnolia & SFD	7,478	7,162	1,205	1,988	2,290	2,049	
8	Bon Air Rd Between Magnolia & SFD	7,460	6,817	1,304	1,813	2,559	1,649	
9	Wolfe Grade Between SFD & D St	6,684	4,872	903	1,507	3,060	1,376	NB/SB
10	SFD Blvd Between Butterfield Rd & Red Hill Ave	13,733	17,798	4,070	2,930	3,185	5,853	
11	3rd St Between US 101 & Point San Pedro Rd		13,754		2,250		3,946	
12	2nd St Between US 101 & Point San Pedro Rd	21,747		4,002		6,851		
13	Lincoln Ave Between Mission Ave & US 101	5,280	6,988	994	1,914	2,057	2,183	NB/SB
14	Manual T Frietas Between Las Gallinas & Northgate	10,636	11,538	2,844	2,495	3,072	3,528	
15	Las Gallinas Between Manual T Frietas & Lucas Valley	3,580	3,556	694	1,533	1,300	861	NB/SB
16	Main Gate Rd Between Nave Dr & C St	3,684	3,330	973	811	1,140	1,097	
17	Ignacio Blvd Between Alameda Del Prado & Entrada D	8,803	7,257	3,364	1,192	1,914	2,459	
18	SR131/Tiburon Blvd Between Strawberry & Trestle	14,058	14,021	3,163	3,525	4,141	3,900	
19	Miller Ave Between Reed St & Camino Alto	10,296	10,343	1,866	2,409	3,482	3,088	

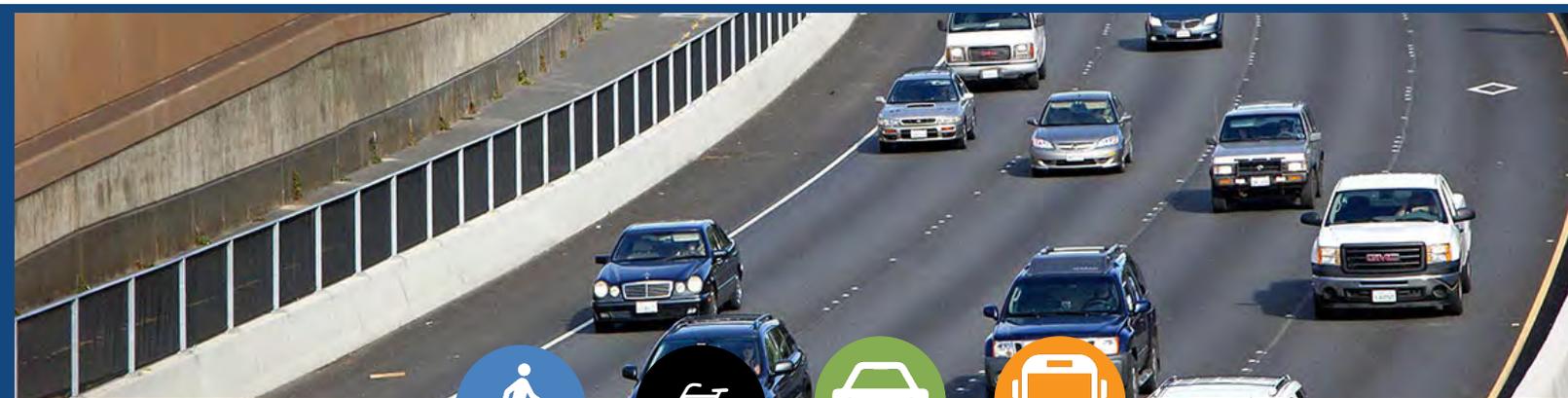
Average Daily Traffic to Weekend Comparison

		Average Daily Traffic (T-TH)		Saturday Volumes			Sunday Volumes			Notes:
		EB	WB	EB	WB	% of ADT	EB	WB	% of ADT	
<i>CMP Segments</i>										
1A	SR1 West of 101	14,985	15,135	11,888	15,600	-10%	11,154	14,129	-19%	
1B	SR1 Between Northern & Almonte	5,123	2,759	6,315	4,181	25%	5,271	3,658	12%	
1C	SR 1 Between Sir Francis Drake & Pt. Reyes Station	1,195	1,178	2,051	2,308	46%	1,311	1,422	13%	NB/SB
4A	SR131 Between Redwood & Strawberry	15,373	16,583	14,117	14,750	-11%	13,649	15,691	-9%	
6A	Novato Blvd Between San Marin & Eucalyptus	3,405	3,707	3,222	3,361	-8%	3,065	3,483	-9%	
6b	Novato Blvd Between Wilson & Diablo	9,633	9,235	8,408	7,998	-15%	7,432	6,869	-32%	
6C	Novato Blvd Between Sunset & US 101	5,108	3,828	3,767	3,247	-27%	4,336	3,582	-13%	
7A	Bel Marin Keys Between US 101 & Commercial	10,443	10,215	5,057	5,076	-104%	4,075	3,994	-156%	
8A	SFD Blvd Between Butterfield & Willow	10,382	11,511	10,569	11,825	2%	9,672	9,770	-13%	
8B	SFD Blvd Between San Anselmo & Red Hill	14,896	15,587	15,565	14,956	0%	12,799	13,203	-17%	
8C	SFD Blvd Between College & Toussin	10,616	11,815	8,877	10,463	-16%	7,534	5,611	-71%	
8D	SFD Blvd Between College & Wolfe	14,369	15,035	10,786	11,292	-33%	9,133	9,628	-57%	
8E	SFD West of Larkspur Landing	22,320	23,551	17,639	18,698	-26%	14,895	15,579	-51%	
9A	Red Hill Ave Between SFD & Second	19,793	18,611	17,996	16,617	-11%	15,266	14,443	-29%	
9B	Second St Between US 101 & Marquard St	22,285		19,111		-17%	21,661		-3%	
9C	Third St Between US 101 & Marquard St		20,630		17,959	-15%		17,721	-16%	
10A	Bridgeway Between Gate 5 & Gate 6	12,927	13,324	13,697	13,053	2%	9,923	9,870	-33%	
<i>New Locations</i>										
1	Alexander Ave Between US101 & South	3,195	4,006	4,014	4,977	20%	3,386	3,756	-1%	NB/SB
2	Almonte Between SR1 & Miller	8,872	8,627	7,139	8,135	-15%	5,896	6,120	-46%	NB/SB
3	Camino Alto Between Blithedale & Tamalpais	3,225	1,636	2,228	1,726	-23%	1,458	1,180	-84%	NB/SB
4	Blithedale Ave East of Camino Alto	16,926	14,867	14,011	11,649	-24%	11,645	9,828	-48%	
5	Paradise Dr Between San Clemente & Westward	7,154	12,888	5,482	8,645	-42%	4,581	6,388	-83%	
6	Tamalpais Dr Between Madera & Sausalito	9,613	9,125	7,053	6,799	-35%	6,018	5,857	-58%	
7	College Ave Between Magnolia & SFD	7,478	7,162	4,734	4,896	-52%	4,039	4,500	-71%	
8	Bon Air Rd Between Magnolia & SFD	7,460	6,817	4,579	4,090	-65%	3,623	3,344	-105%	
9	Wolfe Grade Between SFD & D St	6,684	4,872	3,564	3,052	-75%	2,913	2,275	-123%	NB/SB
10	SFD Blvd Between Butterfield Rd & Red Hill Ave	13,733	17,798	12,072	15,160	-16%	11,415	13,776	-25%	
11	3rd St Between US 101 & Point San Pedro Rd		13,754		16,913	19%		17,774	23%	
12	2nd St Between US 101 & Point San Pedro Rd	21,747		17,996		-21%	15,594		-39%	
13	Lincoln Ave Between Mission Ave & US 101	5,280	6,988	3,485	5,515	-36%	3,173	4,385	-62%	NB/SB
14	Manual T Frietas Between Las Gallinas & Northgate	10,636	11,538	8,631	8,791	-27%	7,403	7,820	-46%	
15	Las Gallinas Between Manual T Frietas & Lucas Valley	3,580	3,556	2,603	2,818	-32%	2,272	1,884	-72%	NB/SB
16	Main Gate Rd Between Nave Dr & C St	3,684	3,330	2,332	2,158	-56%	2,090	1,868	-77%	
17	Ignacio Blvd Between Alameda Del Prado & Entrada Dr	8,803	7,257	6,653	5,925	-28%	5,064	5,135	-57%	
18	SR131/Tiburon Blvd Between Strawberry & Trestle	14,058	14,021	12,590	12,959	-10%	11,097	11,391	-25%	
19	Miller Ave Between Reed St & Camino Alto	10,296	10,343	9,376	9,615	-9%	7,469	7,338	-39%	



2016 Transportation System Monitoring Report

Final Report
August 2017



VISION THAT MOVES YOUR COMMUNITY

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EXECUTIVE SUMMARY

The County of Marin maintains a Congestion Management Plan (CMP) through the Transportation Authority of Marin (TAM), the designated Congestion Management Agency (CMA), as required by the California Government Code 65089. TAM is also required to monitor the implementation of all elements of the CMP and prepare a monitoring report every other year. This report fulfils the biennial monitoring task as required by the State. This 2016 Transportation System Monitoring Report provides an insight into the performance of various arterial and freeway segments, throughout the County, and assists with key decisions on future investment of transportation dollars.

Included in this report is extensive bicycle and pedestrian monitoring data. Though not required for the CMP process, TAM chooses to include this data to understand the multi-modal aspects on the CMP network due to the unique nature of Marin County.

CMP Network

The County established the CMP Network in 1991 that included all state highways and principal arterials in the County. In total, the 123-mile CMP network contains 91 miles of state highways and 32 miles of principal arterials. *The CMP adopted Level of Service (LOS) standard for Arterials is LOS D, and for Freeways, it is LOS E. In order for the arterial segments to meet this standard, they should be performing at a speed of 10 mph or more, and for freeway segments, it is 30 mph or more.* Additional details on the network and their recent performance are discussed in Chapter 3 of this 2016 Transportation Monitoring Report.

Data Collection and Congestion Analysis

The biennial monitoring task requires extensive data collection for all established arterials and freeway segments included in the network. With changing needs and technological advancements, the data collection methodology has evolved over the last two decades since the first CMP was adopted.

In order to collect accurate and useful data that is consistent with prior monitoring efforts, certain data collection methods were followed. The data was collected only on normal commute travel days (i.e. Tuesdays, Wednesday, and Thursdays), and non-school days and days with any special events or incidents were eliminated. Available commercial speed data and floating car surveys were utilized for the analysis. The data was analyzed separately for commercial speed data and floating car surveys to obtain average speeds for each segment and convert to LOS using Highway Capacity Manual (HCM) methodologies. Further discussion on data collection efforts is included in Chapter 2.

CMP Network



Monitoring Results

The 1991 CMP established LOS standards for major arterials and freeway segments using travel time and average speed. For arterials, the established standard is LOS D, while for the freeways it is LOS E. Many sections with a LOS designation worse than the adopted standards in 1991 are grandfathered into the first adopted CMP. CMP legislation exempts congested CMP roadway segments that did not meet the minimum LOS standards when the CMP network was formed (in 1991 and 1992) from deficiency identification and preparing a deficiency plan. These segments are referred as Grandfathered Segments.

A total of 17 arterial segments and 10 freeway segments were monitored in this report during the AM and PM peak periods. A summary of these monitoring results are provided in **Table 1**.

Table 1: 2014 CMP Network Monitoring Results

Roadway Type	# of CMP Segments	AM Peak Hour		PM Peak Hour		LOS Standard
		LOS Standard Met	LOS Standard Not Met*	LOS Standard Met	LOS Standard Not Met*	
Arterials	17	16	1	16	1	D
Freeways	10	10	0	6	4	E
TOTAL	27	26	1	22	5	

Notes: *Includes Grandfathered segments.

In the 2016 Monitoring Cycle, six of the 27 segments did not meet the established LOS standards. Two of the seven segments are arterials, and since all of these segments have been grandfathered, no follow up actions are required. The remaining four are freeway segments, of which three have been grandfathered and of which the 4th segment has a mainline improvement scheduled for construction completion in Fall 2017¹. On-going work along the eastbound shoulder on the Richmond-San Rafael Bridge has also likely had an upstream impact on travel times, as recorded in this monitoring report for Segments 5A and 5B. These freeway segments do not require any follow up actions or corrective measures at this time. Additional details for all arterial and freeway segments are provided in Chapter 3.

¹ The Bay Area Toll Authority (BATA) is spearheading the Richmond-San Rafael Bridge Access Improvements to improve mobility along the Interstate 580 corridor between Richmond and San Rafael. This project will convert the right shoulder to a third freeway lane from the Sir Francis Drake Boulevard on-ramp in Marin County to the Marine Street (Richmond Parkway/Point Richmond) exit in Contra Costa County.

1.0 BACKGROUND

1.1 Purpose of the CMP and Biennial Monitoring

The legislative changes of 1990 required all urbanized counties within the State to establish a CMA, and develop and maintain a CMP. As required by the State regulations, TAM, the County-designated CMA, established the CMP roadway network in 1991 that included all state highways and principal arterial roadways within the County. California Government Code Section 65089(b)(1)(A) states that once a highway or roadway has been designated as part of the CMP system, it cannot be removed. Furthermore, Section 60589(b)(4) requires that the regional transportation system is part of the required land use program defined by State statute.

Biennial monitoring provides an opportunity to monitor established LOS standards for the arterial and freeway segments, and identify appropriate strategies to employ when a segment fails to meet the established LOS standards. While the CMP is very critical to Marin County's transportation vision, it also supports the broader transportation goals of the Regional Transportation Plan (RTP) developed by the Metropolitan Transportation Commission (MTC), the San Francisco Bay Area's regional transportation planning agency. The Marin CMP roadway system is consistent with the RTP, as well as the CMPs of adjoining Contra Costa, San Francisco, and Sonoma counties.

1.2 CMP Designated Network

The following State Highways and arterials are included in the Marin County CMP roadway network:

1. State Route 1 (SR 1) – from Sonoma County Line to United States Highway 101 (US 101)
2. State Route 37 (SR 37) – from US 101 to Sonoma County Line
3. US 101 – from Sonoma County Line to San Francisco County Line
4. State Route 131 (SR 131) – from US 101 to Main Street in Tiburon
5. Interstate 580 (I-580) – from US 101 to Contra Costa County Line
6. Novato Boulevard / South Novato Boulevard in Novato – from Sutro Avenue / San Marin Drive to US 101
7. Bel Marin Keys Boulevard – from US 101 Southbound Ramps to Commercial Boulevard
8. Sir Francis Drake Boulevard in unincorporated Marin County, Fairfax, San Anselmo, Ross, Kentfield, Larkspur – from SR 1 to I-580
9. Red Hill Avenue / 2nd Street / 3rd Street in San Anselmo and San Rafael – from Sir Francis Drake Boulevard to US 101
10. Bridgeway / 2nd Street / Alexander Avenue in Sausalito – from US 101 to US 101

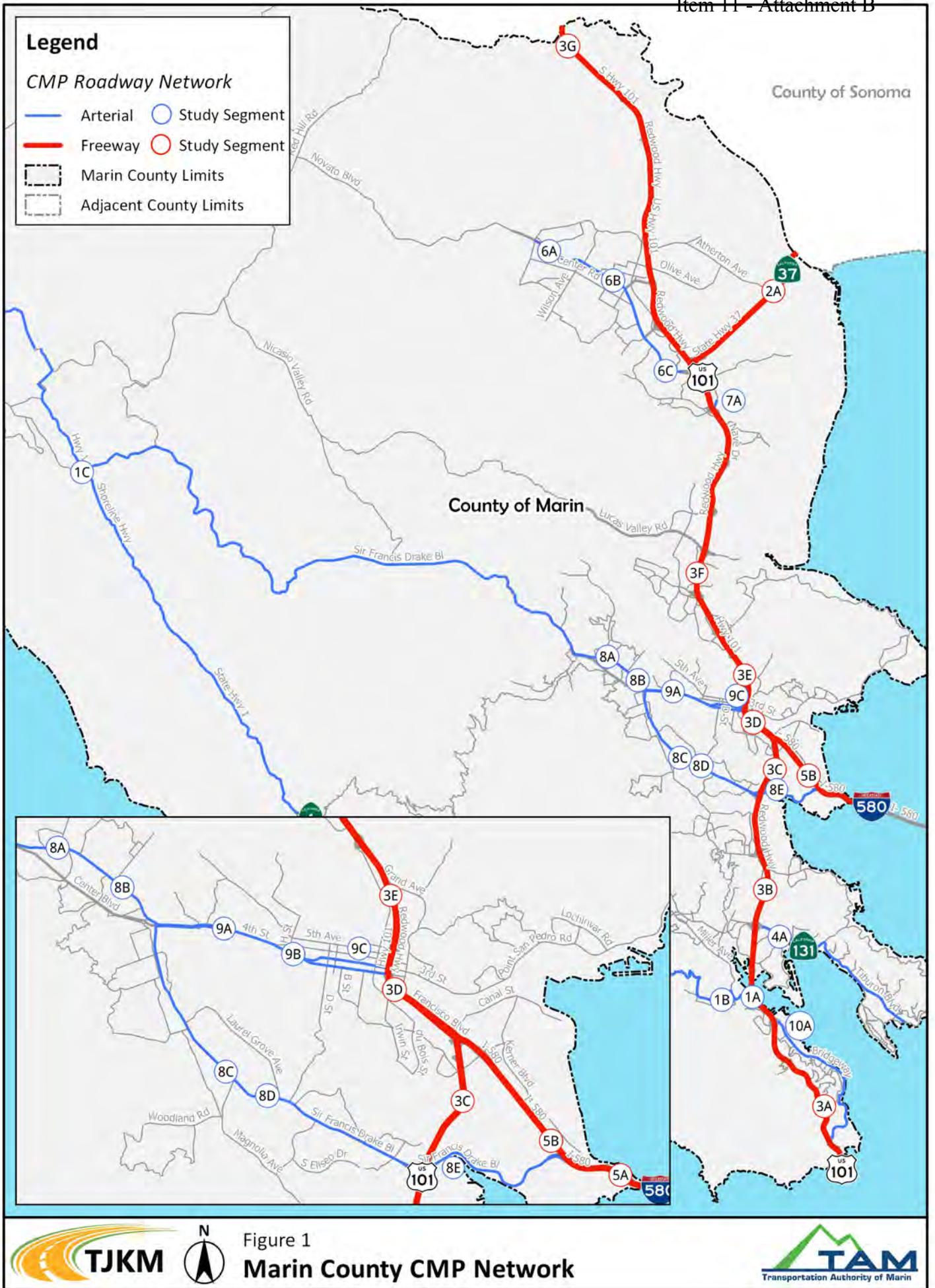
Table 2 provides details of the Marin CMP Roadway Network segments. In total, the 123-mile CMP designated roadway network contains 91 miles of state highways and 32 miles of principal arterial roadways. The CMP Network is illustrated in **Figure 1**.

The HOV lanes in the Marin CMP network are illustrated in **Figure 2**.

Table 2: Arterial and Freeway Segments in CMP Network

ID #	Street	From	To	CMP Facility Type	Grand-fathered Status
1A	SR 1	US 101	Tennessee Valley Rd	Arterial	No
1B	SR 1	Northern Ave	Almonte Blvd	Arterial	Yes
1C	SR 1	Sir Francis Drake Blvd	Pt. Reyes Station	Arterial	No
2A	SR 37	US 101	Atherton Ave	Freeway	No
3A	US 101 (MF and HOV)	Golden Gate Bridge	Spencer Ave	Freeway	No
3B	US 101 (MF and HOV)	SR 131 (Tiburon Blvd)	Tamalpais Dr	Freeway	Yes
3C	US 101 (MF and HOV)	Sir Francis Drake Blvd	I-580	Freeway	Yes
3D	US 101 (MF and HOV)	I-580	Mission Ave	Freeway	Yes
3E	US 101 (MF and HOV)	Mission Ave	N. San Pedro Rd	Freeway	Yes
3F	US 101 (MF and HOV)	Freitas Pkwy	Lucas Valley Rd	Freeway	Yes
3G	US 101	North of Atherton	Sonoma Co. Line	Freeway	Yes
4A	SR 131 (Tiburon Blvd)	Redwood Hwy Frontage Rd	E. Strawberry Dr	Arterial	No
5A	I-580	Sir Francis Drake Blvd	Marin Co. Line	Freeway	No
5B	I-580	Bellam Blvd	Sir Francis Drake Blvd	Freeway	Yes
6A	Novato Blvd	San Marin Dr	Eucalyptus Ave	Arterial	No
6B	Novato Blvd	Wilson Ave	Diablo Ave	Arterial	No
6C	S. Novato Blvd	Sunset Pkwy	US 101	Arterial	No
7A	Bel Marin Keys	US 101	Commercial Blvd	Arterial	Yes
8A	Sir Francis Drake Blvd	Butterfield Rd	Willow Rd	Arterial	Yes
8B	Sir Francis Drake Blvd	San Anselmo Ave	Red Hill Ave	Arterial	Yes
8C	Sir Francis Drake Blvd	College Ave	Toussin Ave	Arterial	Yes
8D	Sir Francis Drake Blvd	College Ave	Wolfe Grade	Arterial	Yes
8E	Sir Francis Drake Blvd	US 101	Larkspur Landing Cir	Arterial	Yes
9A	Red Hill Ave	Sir Francis Drake Blvd	Second St	Arterial	No
9B	Second St	US 101	Marquard St	Arterial	No
9C	Third St	US 101	Marquard St	Arterial	No
10A	Bridgeway	Gate 5 Rd	Gate 6 Rd	Arterial	No

Notes: MF = Mixed Flow lanes; HOV = High Occupancy Vehicle



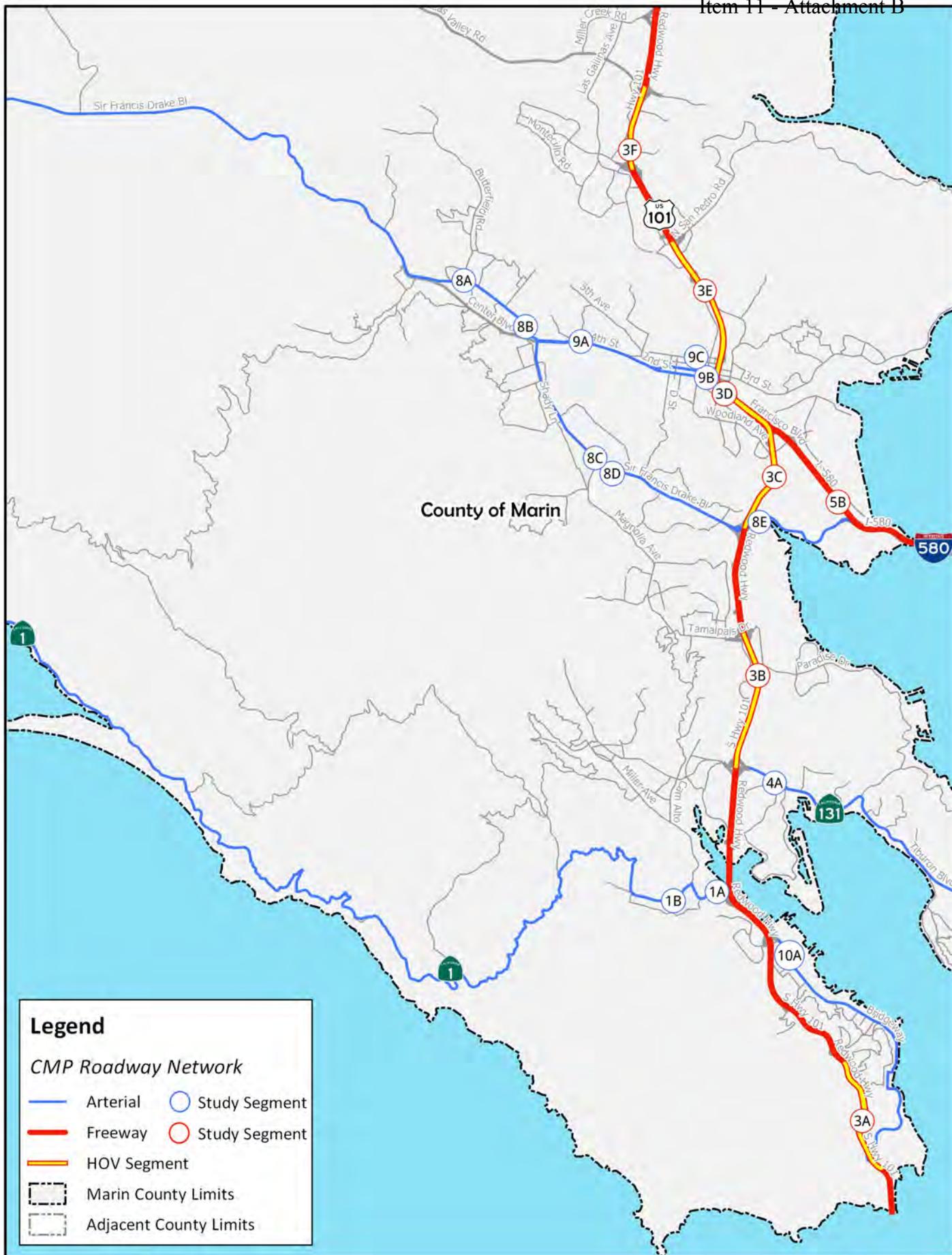


Figure 2
HOV Lanes in CMP Network



1.3 Roadway System Level of Service

The 1991 CMP established the LOS standards for the arterials and freeway segments using travel times and average speeds. For the arterial segments, LOS D is the established standard while for the freeway segments, LOS E is the accepted standard. Certain segments were operating at lower levels of service when these standards were established. These segments have been “grandfathered” in, allowing them to operate at levels lower than the established standards without requiring corrective measures.

Local jurisdictions often measure LOS based on delay at intersections. However, TAM as a CMA is concerned with system performance as a whole, not the performance of individual intersections. Therefore, LOS for the CMP is based on travel speeds, and not delay at intersections.

The following **Table 3** shows frequency of monitoring based upon the results of the most recent data collection and analysis efforts:

Table 3: Frequency of CMP Monitoring

Roadway Type	LOS in Most Recent Monitoring Report	Frequency of Monitoring
Arterial Segments	LOS C or better (> 13 MPH)	4 years
	LOS D or worse (< 13 MPH)	2 years
Freeway Segments	LOS C or better (> 54 MPH)	4 years
	LOS D or worse (< 54 MPH)	2 years
Grandfathered Segments	N/A	2 years

Source: 2012 Transportation Monitoring Report

The 2016 monitoring included all arterial and freeway segments within the network, irrespective of their 2014 LOS designation. These efforts are in conformance with the established monitoring requirements.

2.0 METHODOLOGY

This section discusses the methodology utilized for measuring LOS on major arterials and freeways. The process begins with screening days within the monitoring period to ensure that only those expected to result in normal commuter traffic conditions are retained. Days that could produce lighter or heavier than usual traffic conditions, such as public holidays or special event days, were identified for later removal.

Using a combination of commercial speed data and floating car surveys, travel time data was collected for 27 segments within Marin County, including 17 arterial segments and 10 freeway segments, six with HOV lanes. The raw commercial speed data and floating car survey data were subsequently post-processed in order to calculate average speeds along study segments and analyzed. Consistent with prior Marin County CMP monitoring, average speed was then used to assign LOS using HCM methodologies.

2.1 Screening for Data Collection Periods

To ensure that data collection efforts appropriately reflect normal traffic conditions, the data collection schedule was carefully reviewed in an effort to eliminate collection of abnormal travel conditions associated with national holidays, school holidays across the county, construction events, and any other events associated with abnormal traffic conditions, such as seasonal shopping events. These factors have potential to affect the data quality for the current monitoring and removing them ensures the LOS results are representative of normal traffic conditions experienced by a daily commuter.

Travel time data was collected using a combination of commercial speed data and in-field floating car surveys, and therefore appropriate monitoring days for both sources were reviewed and identified. Additionally, commercial speed data was also obtained for some arterial segments that were also selected for in-field floating car surveys, with the intention of providing an additional level of data validation between sources.

Notwithstanding the preliminary screening process, the data collected in the field was processed and reviewed to identify any significant inconsistencies relative to prior year analyses, adjacent segment travel times and travel patterns, commercial speed data, and TJKM's understanding of area circulation patterns. A second round of floating car surveys were performed on segments where irregularities were found in this secondary screening process, in order to increase the number of data points used in the average speed calculations, further improving our confidence in the data validity.

2.1.1 Base Monitoring Times

In-field floating car surveys for LOS monitoring were conducted in October, November, and December 2016, when schools were in session. A second round of in-field floating car surveys were conducted in March and April 2017, when schools were in session, after secondary data screening revealed some segments would benefit from additional data points to ensure data confidence. Commercial speed data was obtained in September 2016.

Weekday data was collected on Tuesdays, Wednesdays, and Thursdays for the nominated morning and evening peak periods. The morning peak period was from 7:00 AM to 9:00 AM and the evening peak period was from 4:30 PM to 6:30 PM.

2.1.2 Public Holidays, Special Events, and Weather Conditions

During the data collection days and times, no public holidays, special events or weather conditions were observed that could have impacted the usefulness of the collected data. The data was collected on days and hours representative of normal traffic conditions.

2.1.3 Construction/Maintenance and Traffic Incidents

Significant construction impacts were not present during the monitoring period, resulting in no data being disqualified from the process. However, some on-going construction, maintenance, and rehabilitation work on the eastbound Richmond-San Rafael Bridge shoulders may have caused increased congestion upstream on I-580 eastbound analysis segments. This work was on-going during a significant portion of 2016 and will continue until Fall 2017. The reason for this work is in part to prepare for addition of a third eastbound lane, in response to existing PM peak hour eastbound congestion. Therefore, despite potentially affecting travel times, this work was not considered disqualifying for the purposes of this study, since poor travel times were reported previously in 2014. The next monitoring in 2018 should reveal the benefit of this project for eastbound travel times on these analysis segments.

Major incidents have potential to impact normal daily traffic conditions so data for incidents was reviewed. Using Freeway Performance Monitoring System (PeMS) operated by Caltrans, incident data during the monitoring period was collected. Upon review, no data was excluded from the monitoring period due to incidents on the CMP segments.

2.2 Data Collection

Travel time, traffic volumes, bicycle, and pedestrian volumes were collected during the monitoring period on Tuesdays, Wednesdays, and Thursdays. This section describes the types of data and their collection methods.

2.2.1 Travel Time Data

Both commercial speed data and in-field floating car surveys were obtained to measure average speed, and quantify LOS, in the Monitoring Report. In some cases, commercial speed data and in-field floating car surveys were obtained for overlapping study locations, on different dates, in order to gauge consistency between methods and as a secondary screening for unusual travel conditions.

Commercial Speed Data (INRIX)

MTC has contracted with INRIX to obtain region-wide commercial speed data, and has made the data available for planning and monitoring purposes. This LOS Monitoring Study used the commercial speed data from INRIX through MTC's contract. INRIX "aggregates traffic data from GPS-enabled vehicles and mobile devices, traditional road sensors and hundreds of other sources."

Traffic data is reported by INRIX using discrete roadway links termed as Traffic Message Channels (TMCs). Each TMC link is associated with a unique ID represented by a nine-digit code, where each individual number in the TMC code describes a portion of the geography including country, direction of travel, and roadway segment. INRIX data contains speeds aggregated at multiple time intervals for each TMC code in the network. For the current monitoring period, data at individual minute granularity was accessed for the selected monitoring times across all identified CMP segments in Marin County. Data from INRIX was then compared with floating car survey data to verify quality and help justify use.

Floating Car Surveys

Floating car surveys were conducted for the 17 arterial roadway segments identified for study, and the six high-occupancy vehicle (HOV) freeway segments. The surveys were completed using GPS technology to determine the travel time between the start and end of each CMP segment. A minimum of three surveys were completed for peak period and in each direction of travel on arterial and HOV freeway segments. Where INRIX data was deemed appropriate for use, floating car data was not used in travel time reporting or LOS calculations.

2.2.2 Bicycle and Pedestrian Counts

Bicycle and pedestrian counts were collected at 29 locations, six of which are new compared to 2014. At majority of the locations, the data was collected for 14 hours during the weekdays and two hours during the weekends. Additional details on this effort are included in Chapter 5.

2.2.3 Vehicle Screen Line Counts

Vehicle counts were collected for the 17 arterial monitoring locations over a period of seven days, during a typical week the AM and PM peak periods on typical weeks in October and November 2016 when schools were in session, during clear weather. For the 10 freeway segments, data was pulled from PeMS, as available, and where not available, from recently published traffic studies that included relevant and recent count information. Further discussion of this data is included in Chapter 6.

2.3 Data Analysis

The methodology for determining LOS from raw commercial speed and floating car survey data includes two steps. The first step requires converting the raw speed data into average peak period speeds on every CMP segment. The methodology differs between the two data sources for the conversion process. The second step consists of converting the average speeds to LOS using a specific method dependent on the type of roadway facility.

2.3.1 Average Speed – Commercial Speed Data (INRIX)

Once collected from the INRIX database, the commercial speed data points were associated with the appropriate CMP segment based on the date and time of the floating car surveys. Once reduced, the data was averaged on each segment to determine the average speed for all selected data points. *Three grades (10, 20, or 30) are associated with INRIX data, with a grade of 10 representing low quality, historical speed data, 30 representing high-quality probe data, and 20 representing a mixture of the two.* The collected datasets were graded and then compared with floating car survey data to verify quality and help justify use. Only grade 30 INRIX data was used in analysis over floating car survey data where manual collection results misrepresented normal traffic conditions.

2.3.2 Average Speed – Floating Car Survey Data

Once floating car survey data was collected using GPS units, it was processed to present average speed and travel time on each segment. It was then tabulated into spreadsheets to calculate the average speed using the travel time and length for each CMP segment.

2.3.3 Level of Service Standards

Determination of average speed allowed for LOS assignment on each CMP segment based on the methodology documented in Highway Capacity Manual 2010 (HCM 2010), published by Transportation Research Board. This study uses LOS speed standards as shown in **Tables 4** and **Table 5**.

Arterials

LOS for arterial facilities is dependent on the average speed of traffic on the segment. **Table 4** shows LOS designation assigned to various ranges of vehicle speeds on arterials. Based on the average speed of the freeway in the morning and evening peaks and using the HCM standards as shown in the table below, LOS was estimated for each CMP segment, in each travel direction, and during each weekday peak period.

Table 4: Arterial Level of Service Thresholds

Speed	Level of Service (LOS)
25 mph	A
20 mph	B
13 mph	C
10 mph	D
7 mph	E
< 7 mph	F

Source: Highway Capacity Manual, 2010 Edition

Freeways

The LOS assignments for freeway segments are different from arterials primarily due to higher capacity and higher speeds. **Table 5** shows LOS designations for freeway segments based on average vehicle travel speeds. Based on the average speed of the freeway in the morning and evening peaks and using the HCM standards as shown in the table below, LOS was estimated for each CMP segment, in each travel direction, and during each weekday peak period.

Table 5: Freeway Level of Service Thresholds

Speed	Level of Service (LOS)
60 mph	A
57 mph	B
54 mph	C
46 mph	D
30 mph	E
< 30 mph	F

Source: Highway Capacity Manual, 2010 Edition

3.0 LEVEL OF SERVICE RESULTS

This chapter discusses the 2016 monitoring LOS results for arterial and freeway segments on the CMP roadway network based on the data collected for the project during 2016/17. **Figures 3** and **4** illustrate the LOS results for each of the CMP Arterial and Freeway segments in Marin County for 2016.

3.1 Arterial Level of Service

There are 17 major arterial segments identified in the Marin County CMP network.

3.1.1 Existing Arterial Level of Service

In the AM peak period, all arterial segments except one are performing at LOS D or better. The Segment #8E, Sir Francis Drake Boulevard from Larkspur Landing Circle to US 101 in the westbound direction resulted in LOS E. This result is consistent with the results of the 2014 monitoring study. The LOS results for arterial segments in the AM peak period are shown in the **Table 6**.

In the PM peak period, all arterial segments except one are performing at LOS D or higher. The Segment #8E, Sir Francis Drake Boulevard from Larkspur Landing Circle to US 101 in the eastbound direction resulted in LOS F. This finding mirrors the AM peak hour result, which finds LOS E conditions in the opposite, westbound, direction, indicating the influence of commute traffic. This result shows a marked improvement over the 2014 monitoring study, which found an additional two segments operating at LOS E or worse. The LOS results for arterial segments in the PM peak period are shown in the **Table 7**.

Comparison charts of LOS results, for both directions of travel during the AM and PM peak periods, from 2014 and 2016 monitoring cycles are shown after the tables. **Figures 3** and **4** illustrate the LOS results for each of the CMP Arterial segments in Marin County for 2016.

3.1.2 CMP Arterial Level of Service Performance Standard

The LOS standard to meet CMP requirements is LOS D for major arterials in the PM peak period. There is no LOS standard for AM peak period.

As discussed in the section above, Segment #8E, Sir Francis Drake Boulevard from Larkspur Landing Circle to US 101 in the eastbound direction is performing at LOS F in the PM peak period. However, this segment is grandfathered, and therefore, no action is required.

3.1.3 Historical Arterial Level of Service

The **Table 8** and chart in the following pages show the historical LOS results from 2008–2016 for arterials in the Marin CMP network in the peak direction of travel during the PM peak period. Historical data for the peak direction of travel of both peak hours is presented in the charts for 2014 and 2016 Arterial LOS comparison.



Table 6: 2016 Arterial LOS Summary – AM Peak Period

ID	Roadway	Segment	Length (mi)	Northbound / Eastbound			Southbound / Westbound			LOS GOAL	ACTION
				Avg. Time (mm:ss)	Avg. Speed (mph)	LOS	Avg. Time (mm:ss)	Avg. Speed (mph)	LOS		
1A	SR 1	US 101 to Tennessee Valley Rd	0.40	01:05	25	B	02:19	16	C	D	None
1B	SR 1	Northern Ave to Almonte Blvd	0.80	03:31	15	C	01:49	27	A	D	None
1C	SR 1 ¹	Sir Francis Drake Blvd to Pt. Reyes Station	2.20	04:18	31	A	04:30	29	A	D	None
4A	SR 131 (Tiburon Blvd)	Redwood Hwy Frontage Rd to E. Strawberry Dr	0.50	00:49	35	A	01:09	26	A	D	None
6A	Novato Blvd	San Marin Dr to Eucalyptus Ave	0.42	00:53	28	A	01:23	21	B	D	None
6B	Novato Blvd	Wilson Ave to Diablo Ave	1.14	02:59	23	B	02:48	24	B	D	None
6C	S. Novato Blvd	Sunset Pkwy to US 101	1.07	06:23	12	D	02:11	27	A	D	None
7A	Bel Marin Keys	US 101 to Commercial Blvd	0.20	18:26	23	B	01:16	19	C	D	None
8A	Sir Francis Drake Blvd	Butterfield Rd to Willow Rd	0.26	01:14	12	D	00:51	17	C	D	None
8B	Sir Francis Drake Blvd	San Anselmo Ave to Red Hill Ave	1.12	06:32	13	D	02:44	24	B	D	None
8C	Sir Francis Drake Blvd	College Ave to Toussin Ave	0.28	01:08	15	C	00:36	26	A	D	None
8D	Sir Francis Drake Blvd	College Ave to Wolfe Grade	0.61	01:29	26	A	01:12	29	A	D	None
8E	Sir Francis Drake Blvd	US 101 to Larkspur Landing Cir	0.46	01:04	24	B	03:57	10	E	D	None ²
9A	Red Hill Ave	Sir Francis Drake Blvd to Second St	1.13	02:41	26	A	03:56	19	C	D	None
9B	Second St	US 101 to Marquard St	1.13	02:52	23	B	One Way Only			D	None
9C	Third St	US 101 to Marquard St	1.11	One Way Only			03:29	19	C	D	None
10A	Bridgeway ¹	Gate 5 Rd to Gate 6 Rd	0.17	00:28	22	B	00:29	21	B	D	None

- Notes: 1. Data obtained from commercial sources.
2. Grandfathered Segment (No actions required).

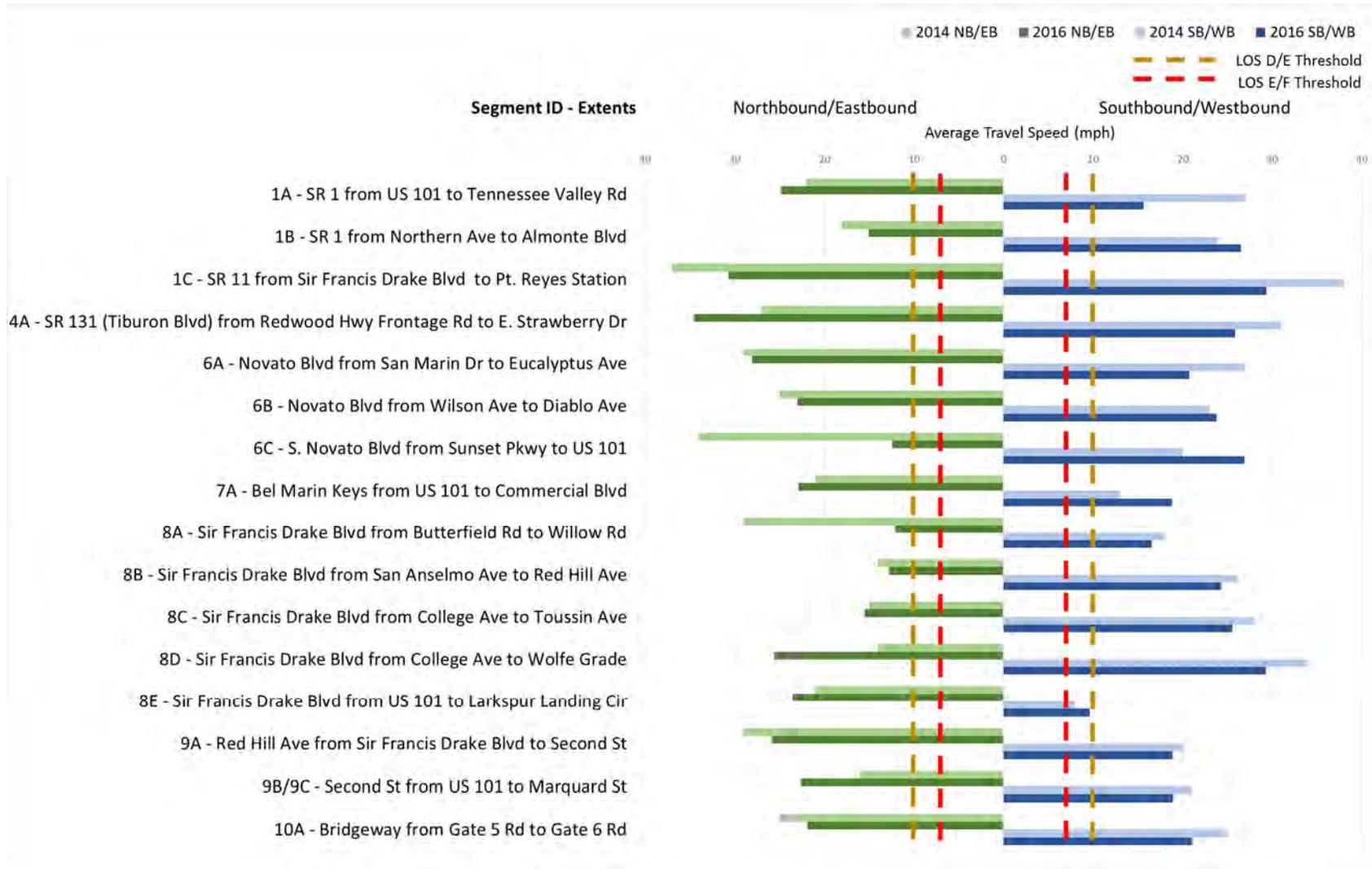


Table 7: 2016 Arterial LOS Summary – PM Peak Period

ID	Roadway	Segment	Length (mi)	Northbound / Eastbound			Southbound / Westbound			LOS Goal	Action
				Avg. Time (mm:ss)	Avg. Speed (mph)	LOS	Avg. Time (mm:ss)	Avg. Speed (mph)	LOS		
1A	SR 1	US 101 to Tennessee Valley Rd	0.40	01:16	21	B	03:03	11	D	D	None
1B	SR 1	Northern Ave to Almonte Blvd	0.80	02:04	24	B	01:39	29	A	D	None
1C	SR 1 ¹	Sir Francis Drake Blvd to Pt. Reyes Station	2.20	04:35	29	A	04:19	31	A	D	None
4A	SR 131 (Tiburon Blvd)	Redwood Hwy Frontage Rd to E. Strawberry Dr	0.50	01:16	25	B	01:02	28	A	D	None
6A	Novato Blvd	San Marin Dr to Eucalyptus Ave	0.42	00:49	30	A	00:53	28	A	D	None
6B	Novato Blvd	Wilson Ave to Diablo Ave	1.14	03:58	17	C	03:41	18	C	D	None
6C	S. Novato Blvd	Sunset Pkwy to US 101	1.07	02:05	27	A	08:25	21	B	D	None
7A	Bel Marin Keys	US 101 to Commercial Blvd	0.20	00:50	19	C	01:38	15	C	D	None
8A	Sir Francis Drake Blvd	Butterfield Rd to Willow Rd	0.26	00:46	19	C	01:08	12	D	D	None
8B	Sir Francis Drake Blvd	San Anselmo Ave to Red Hill Ave	1.12	05:32	14	C	03:17	21	B	D	None
8C	Sir Francis Drake Blvd	College Ave to Toussin Ave	0.28	01:13	14	C	01:05	15	C	D	None
8D	Sir Francis Drake Blvd	College Ave to Wolfe Grade	0.61	01:35	23	B	01:40	24	B	D	None
8E	Sir Francis Drake Blvd	US 101 to Larkspur Landing Cir	0.46	10:28	3	F	01:26	19	C	D	None ²
9A	Red Hill Ave	Sir Francis Drake Blvd to Second St	1.13	02:55	24	B	04:12	17	C	D	None
9B	Second St	US 101 to Marquard St	1.13	02:52	11	D	One Way Only			D	None
9C	Third St	US 101 to Marquard St	1.11	One Way Only			03:29	17	C	D	None
10A	Bridgeway ¹	Gate 5 Rd to Gate 6 Rd	0.17	00:28	20	B	00:29	21	B	D	None

- Notes:
1. Data obtained from commercial sources.
 2. Grandfathered Segment (No actions required).

AM Peak Period – 2014 and 2016 LOS Results Comparison



PM Peak Period – 2014 and 2016 LOS Results Comparison

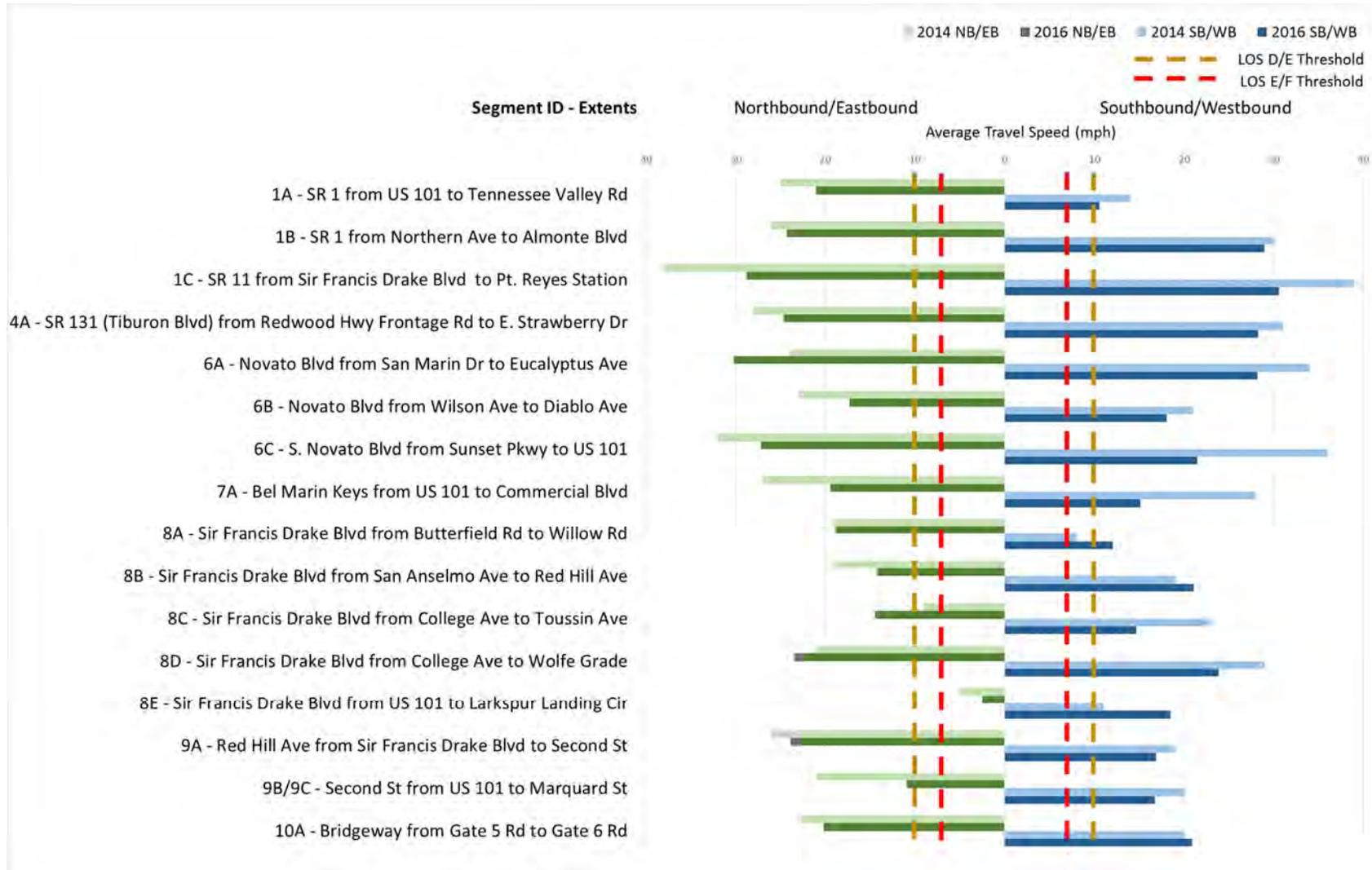
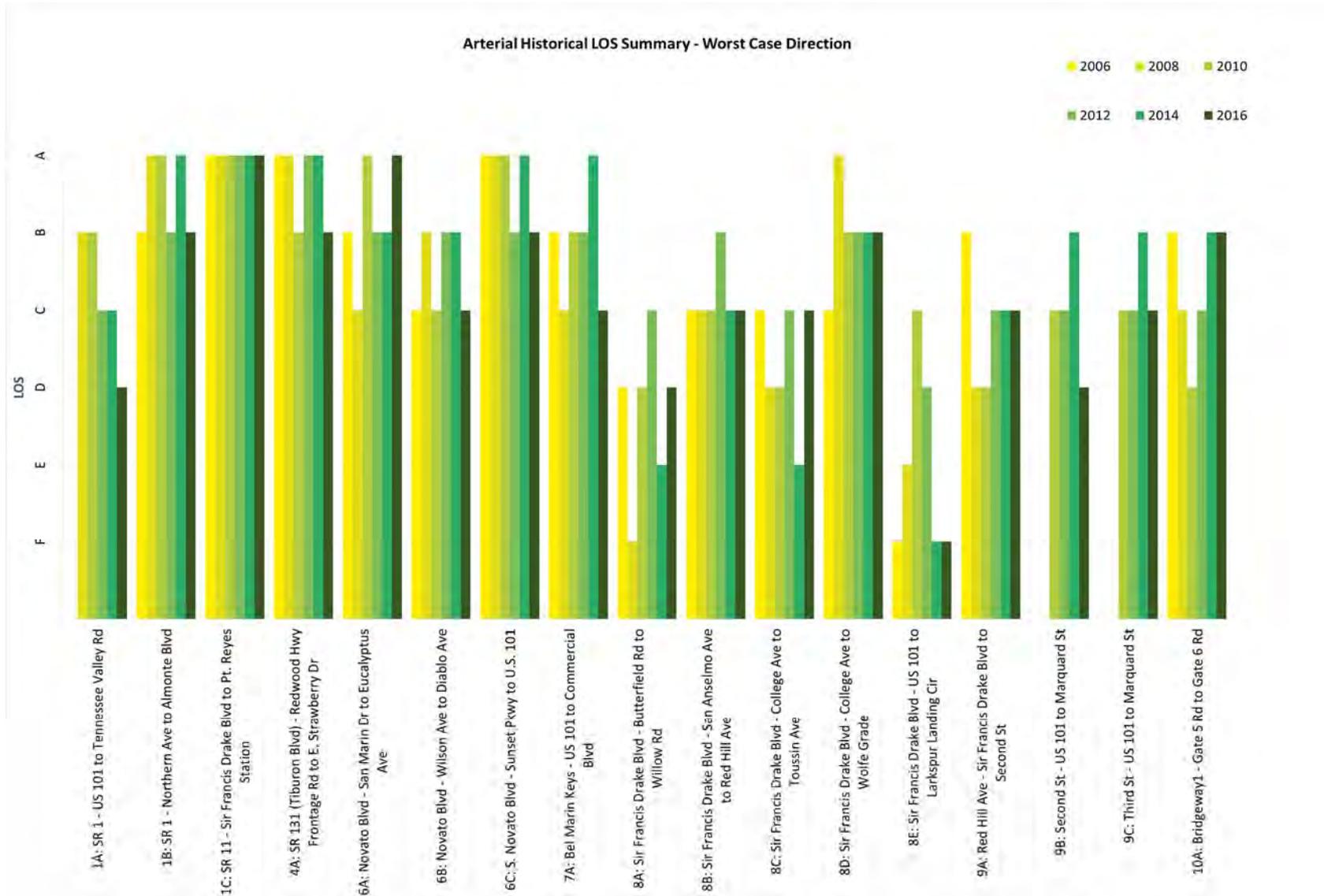




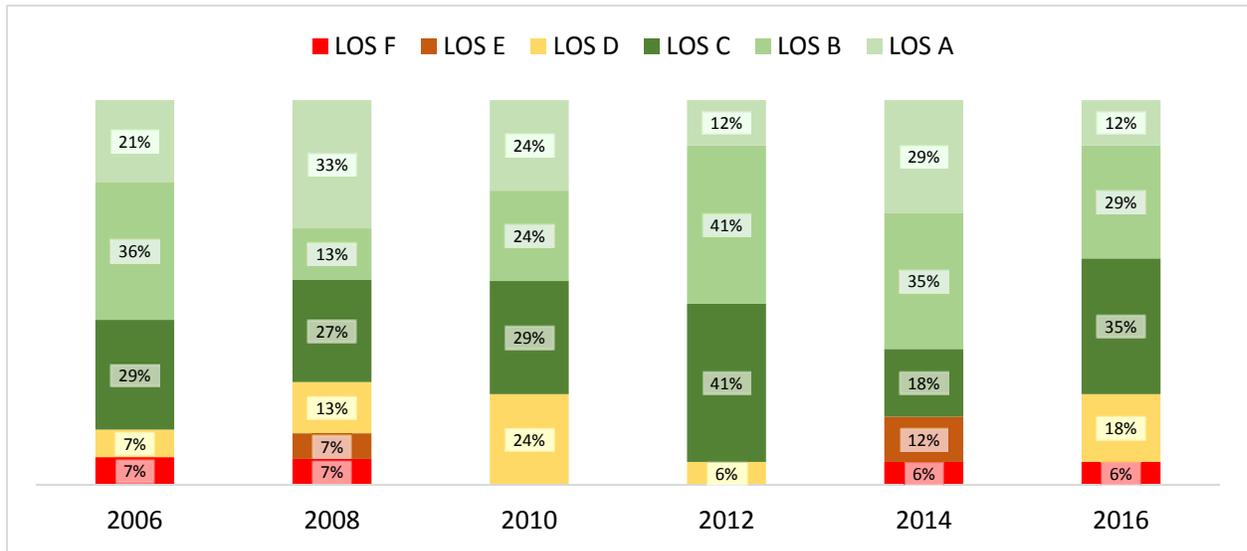
Table 8: Arterial Historical LOS Summary – PM Peak Period (Worst Case Direction)

ID	LOS Goal	Roadway	Segment	2006	2008	2010	2012	2014	2016
1A	D	SR 1	US 101 to Tennessee Valley Rd	-	B	B	C	C	D
1B	D	SR 1	Northern Ave to Almonte Blvd	B	A	A	B	A	B
1C	D	SR 1 ¹	Sir Francis Drake Blvd to Pt. Reyes Station	A	A	A	A	A	A
4A	D	SR 131 (Tiburon Blvd)	Redwood Hwy Frontage Rd to E. Strawberry Dr	A	A	B	A	A	B
6A	D	Novato Blvd	San Marin Dr to Eucalyptus Ave	B	C	A	B	B	A
6B	D	Novato Blvd	Wilson Ave to Diablo Ave	C	B	C	B	B	C
6C	D	S. Novato Blvd	Sunset Pkwy to US 101	A	A	A	B	A	B
7A	D	Bel Marin Keys	US 101 to Commercial Blvd	B	C	B	B	A	C
8A	D	Sir Francis Drake Blvd	Butterfield Rd to Willow Rd	D	F	D	C	E	D
8B	D	Sir Francis Drake Blvd	San Anselmo Ave to Red Hill Ave	C	C	C	B	C	C
8C	D	Sir Francis Drake Blvd	College Ave to Toussin Ave	C	D	D	C	E	C
8D	D	Sir Francis Drake Blvd	College Ave to Wolfe Grade	C	A	B	B	B	B
8E	D	Sir Francis Drake Blvd	US 101 to Larkspur Landing Cir	F	E	C	D	F	F
9A	D	Red Hill Ave	Sir Francis Drake Blvd to Second St	B	D	D	C	C	C
9B	D	Second St	US 101 to Marquard St	-	-	C	C	B	D
9C	D	Third St	US 101 to Marquard St	-	-	C	C	B	C
10A	D	Bridgeway	Gate 5 Rd to Gate 6 Rd	B	C	D	C	B	B

Arterial Historical LOS Summary for PM Peak Period - Worst Case Direction



PM Peak Period - Historical Comparison of System Wide Arterial Performance



3.2 Freeway Level of Service

There are 10 freeway segments identified in the Marin County CMP network. Mixed flow lanes and HOV lanes are monitored separately.

3.2.1 Existing Freeway Level of Service (Mixed Flow)

In the AM peak period, all mixed flow freeway segments are performing at LOS E or better. The LOS results for the AM peak are shown in **Table 9**.

In the PM peak period, all mixed flow freeway segments except four are performing at LOS E or higher. Two US 101 NB segments and two I-580 EB segments are operating at LOS F. These are segments 3B, 3G, 5A, and 5B respectively. By comparison, only one I-580 EB segment performed at LOS F during the PM peak hour in 2014. On-going shoulder closures on the Richmond-San Rafael Bridge may have impacted the travel times recorded on Segments 5A and 5B. The LOS results for the PM peak are shown in **Table 10**.

Figures 3 and 4 illustrate the LOS results for each of the CMP Freeway segments in Marin County for 2016.

The comparison of LOS results, in the AM and PM peak hour in the peak direction, from 2012 and 2014 monitoring cycles is shown below.

3.2.2 CMP Freeway (Mixed Flow) Level of Service Performance Standard

The LOS standard to meet the CMP requirements is LOS E for Freeways and Expressways in the PM peak period. There is no LOS standard for AM peak period.

Segments 3B, 3G, and 5B are grandfathered, and therefore, no action is required. Segment 5A is not grandfathered. However, a mainline improvement to add a third eastbound lane is scheduled for completion in Fall 2017², which is anticipated to significantly ease eastbound congestion during the PM peak hour. Therefore, no action is currently required.

² The Bay Area Toll Authority (BATA) is spearheading the Richmond-San Rafael Bridge Access Improvements to improve mobility along the Interstate 580 corridor between Richmond and San Rafael. This project will convert the right shoulder to a third freeway lane from the Sir Francis Drake Boulevard on-ramp in Marin County to the Marine Street (Richmond Parkway/Point Richmond) exit in Contra Costa County.



Table 9: Freeway Mixed-Flow Lanes LOS Summary – AM Peak Period

ID	Roadway	Segment	Length (mi)	Northbound / Eastbound			Southbound / Westbound			LOS Goal	Action
				Avg. Time (mm:ss)	Avg. Speed (mph)	LOS	Avg. Time (mm:ss)	Avg. Speed (mph)	LOS		
2A	SR 37	US 101 to Atherton Ave	2.60	02:29	63	A	03:24	46	E	E	None
3A	US 101	Golden Gate Bridge to Spencer Ave	1.50	01:40	54	C	01:39	54	C	E	None
3B	US 101	SR 131 (Tiburon Blvd) to Tamalpais Dr	1.70	01:38	62	A	01:37	63	A	E	None
3C	US 101	Sir Francis Drake Blvd to I-580	1.32	01:17	62	A	01:28	54	D	E	None
3D	US 101	I-580 to Mission Ave	1.22	01:11	61	A	01:18	56	C	E	None
3E	US 101	Mission Ave to N. San Pedro Rd	1.59	01:30	63	A	02:00	48	D	E	None
3F	US 101	Freitas Pkwy to Lucas Valley Rd	1.01	00:55	67	A	01:42	35	E	E	None
3G	US 101	North of Atherton to Sonoma Co. Line	5.96	05:35	64	A	07:32	47	D	E	None
5A	I-580	Sir Francis Drake Blvd to Marin Co. Line	0.70	00:41	61	A	00:57	44	E	E	None
5B	I-580	Bellam Blvd to Sir Francis Drake Blvd	1.23	01:12	61	A	01:18	57	C	E	None

AM Peak Period – 2014 and 2016 LOS Results Comparison





Table 10: Freeway Mixed-Flow Lanes LOS Summary – PM Peak Period

ID	Roadway	Segment	Length (mi)	Northbound / Eastbound			Southbound / Westbound			LOS Goal	Action
				Avg. Time (mm:ss)	Avg. Speed (mph)	LOS	Avg. Time (mm:ss)	Avg. Speed (mph)	LOS		
2A	SR 37	US 101 to Atherton Ave	2.60	02:20	67	A	02:27	64	A	E	None
3A	US 101	Golden Gate Bridge to Spencer Ave	1.50	01:39	54	C	02:11	41	E	E	None
3B	US 101	SR 131 (Tiburon Blvd) to Tamalpais Dr	1.70	03:59	26	F	01:36	64	A	E	None ¹
3C	US 101	Sir Francis Drake Blvd to I-580	1.32	01:51	43	E	01:20	60	B	E	None
3D	US 101	I-580 to Mission Ave	1.22	01:33	47	D	01:16	58	B	E	None
3E	US 101	Mission Ave to N. San Pedro Rd	1.59	01:44	55	C	01:41	57	C	E	None
3F	US 101	Freitas Pkwy to Lucas Valley Rd	1.01	01:02	59	B	00:59	61	A	E	None
3G	US 101	North of Atherton to Sonoma Co. Line	5.96	12:31	29	F	05:39	63	A	E	None ¹
5A	I-580	Sir Francis Drake Blvd to Marin Co. Line	0.70	01:52	22	F	00:43	59	B	E	None ²
5B	I-580	Bellam Blvd to Sir Francis Drake Blvd	1.23	04:20	17	F	01:13	61	A	E	None ¹

Notes: 1. Grandfathered Segment (No actions required).

2. Improvements to this segment are currently scheduled for construction in Fall 2017 (No action required, pending verification of performance after improvement construction).

PM Peak Period – 2014 and 2016 LOS Comparison



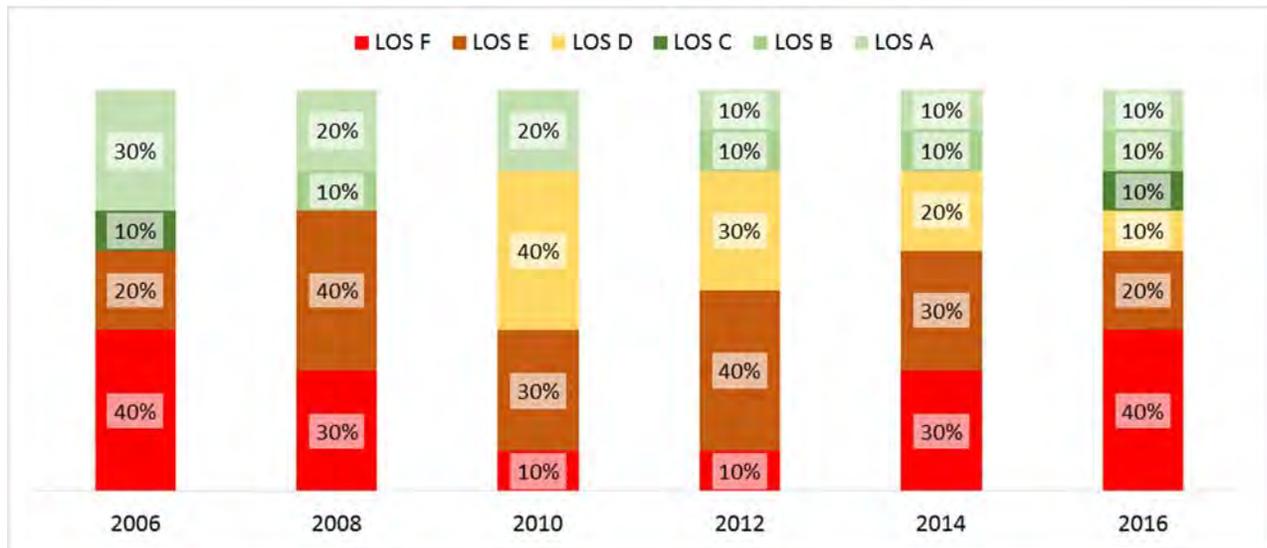
3.2.3 Historical Level of Service – Freeways Mixed-Flow

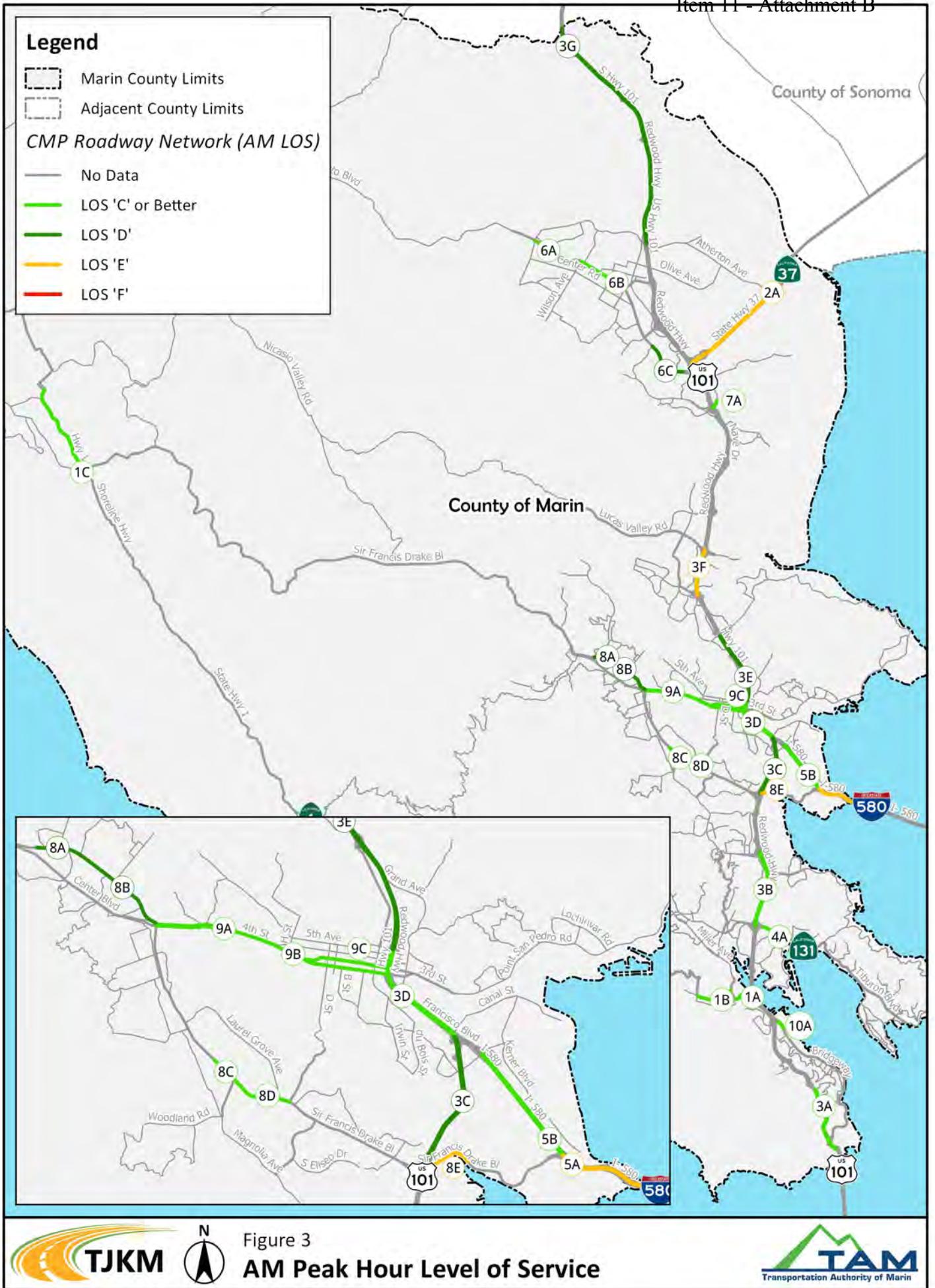
The chart and **Table 11** below present the historical LOS results for the PM peak period for mixed-flow lanes on freeways. Historical data is not presented for the AM peak period for this time-period, but is instead presented in the above charts for 2014. Across the years, many segments experience fluctuations in level of service. The fluctuations in the trends can be attributed to several factors, such as changes in traffic patterns, traffic volumes, unemployment, economy, etc.

Table 11: Freeway Historical LOS Summary – PM Peak Period

ID	LOS Goal	Roadway	Segment	2006	2008	2010	2012	2014	2016
2A	E	SR 37	US 101 to Atherton Ave	A	B	A	A	A	A
3A	E	US 101	Golden Gate Bridge to Spencer Ave	A	A	D	E	D	E
3B	E	US 101	SR 131 (Tiburon Blvd) to Tamalpais Dr	F	F	F	F	F	F
3C	E	US 101	Sir Francis Drake Blvd to I-580	F	E	D	D	D	E
3D	E	US 101	I-580 to Mission Ave	F	E	E	D	E	D
3E	E	US 101	Mission Ave to N. San Pedro Rd	C	F	E	D	B	C
3F	E	US 101	Freitas Pkwy to Lucas Valley Rd	A	A	D	B	E	B
3G	E	US 101	North of Atherton to Sonoma Co. Line	E	F	E	E	F	F
5A	E	I-580	Sir Francis Drake Blvd to Marin Co. Line	F	E	A	E	E	F
5B	E	I-580	Bellam Blvd to Sir Francis Drake Blvd	E	E	D	E	F	F

PM Peak Period - Historical Comparison of System Wide Freeway Performance





3.2.4 Freeway HOV Lane Level of Service

Six freeway segments in the CMP network have HOV lanes and all are located on US 101. The LOS standard to meet the CMP requirements is LOS E for Freeways and Expressways in the PM peak hour. There is no LOS standard for AM peak period.

The LOS results for the Freeway HOV segments are within the CMP LOS standards, except for Segment #3B. This segment is grandfathered, and does not need any action.

The LOS results for the AM and PM peaks are shown in **Table 12** and **Table 13** respectively. All but one segment performed at LOS D or better in the AM and PM peak periods. The US 101 HOV lane enforcement in the northbound direction is between the hours of 4:30-7:00 PM, Monday through Friday; and in the southbound direction is between the hours of 6:30-8:30 AM, Monday through Friday. **Figures 5** and **6** illustrate the LOS results for each of the CMP Freeway HOV segments in Marin County for 2016.

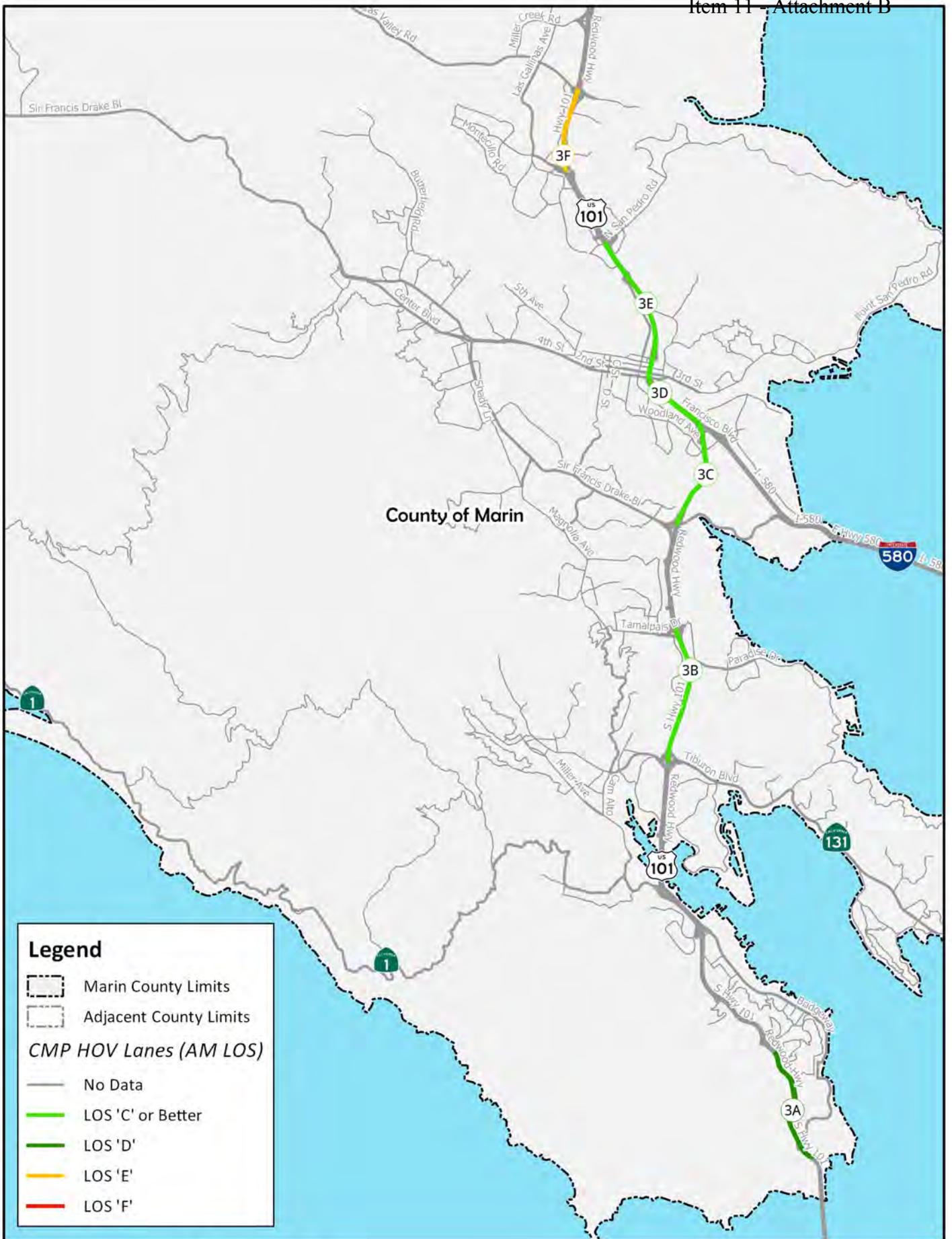
Table 12: US 101 Freeway HOV Lanes LOS Summary – AM Peak Period (SB Peak Direction)

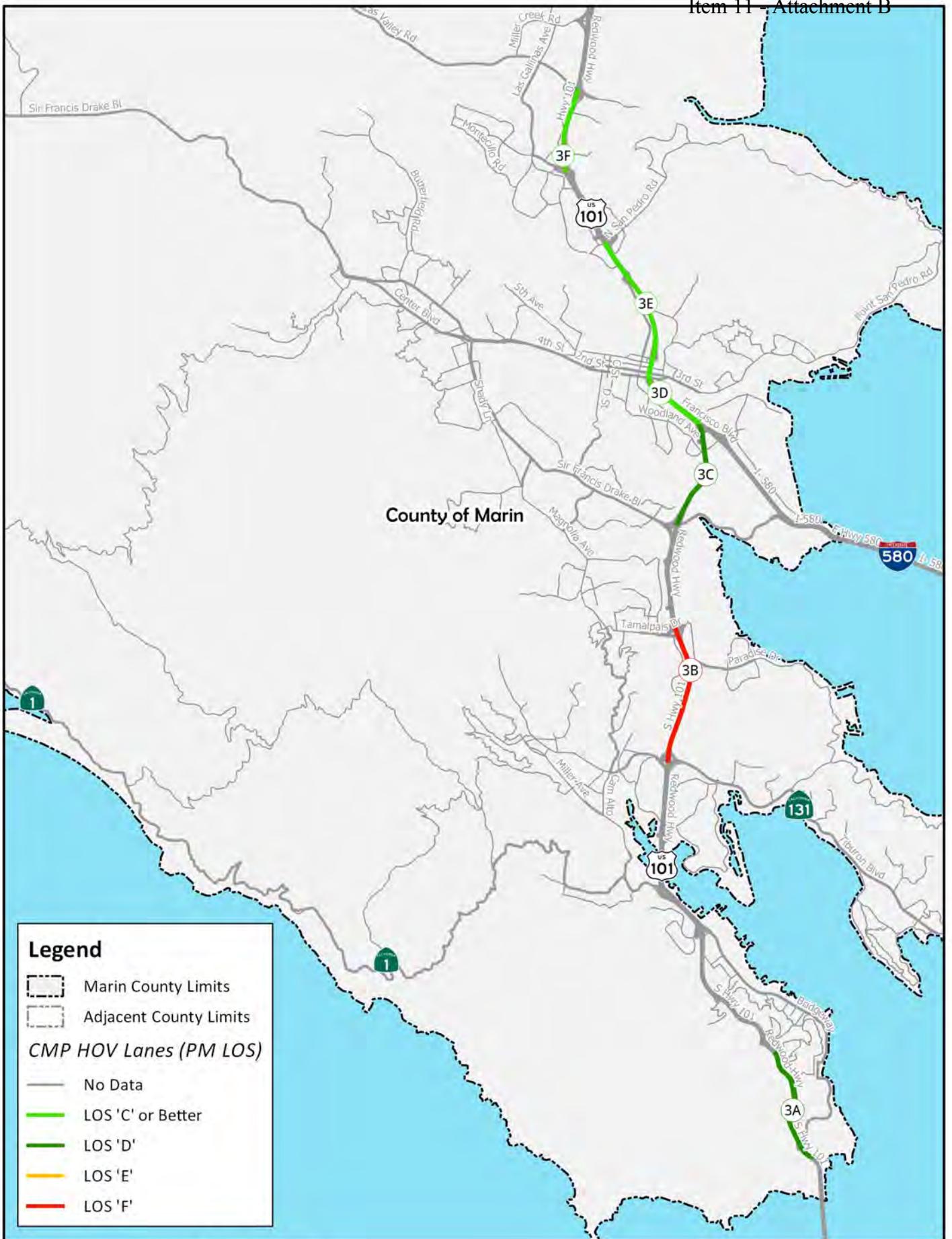
ID	Segment	Length (mi)	Northbound / Eastbound			Southbound / Westbound			LOS Goals	Action
			Avg. Time (mm:ss)	Avg. Speed (mph)	LOS	Avg. Time (mm:ss)	Avg. Speed (mph)	LOS		
3A HOV	Golden Gate Bridge to Spencer Ave	1.50	02:03	58	B	02:16	53	D	E	None
3B HOV	SR 131 (Tiburon Blvd) to Tamalpais	1.70	01:24	69	A	01:29	65	A	E	None
3C HOV	Sir Francis Drake Blvd to I-580	1.32	01:06	68	A	01:18	58	B	E	None
3D HOV	I-580 to Mission Ave	1.22	01:01	67	A	01:09	59	B	E	None
3E HOV	Mission Ave to N. San Pedro Rd	1.59	01:22	68	A	01:40	56	C	E	None
3F HOV	Freitas Pkwy to Lucas Valley Rd	1.01	00:47	73	A	01:26	43	E	E	None

Table 13: US 101 Freeway HOV Lanes LOS Summary – PM Peak Period (NB Peak Direction)

ID	Segment	Length (mi)	Northbound / Eastbound			Southbound / Westbound			LOS Goals	Action
			Avg. Time (mm:ss)	Avg. Speed (mph)	LOS	Avg. Time (mm:ss)	Avg. Speed (mph)	LOS		
3A HOV	Golden Gate Bridge to Spencer Ave	1.50	02:17	52	D	02:45	46	D	E	None
3B HOV	SR 131 (Tiburon Blvd) to Tamalpais	1.70	03:52	28	F	01:29	65	A	E	None ¹
3C HOV	Sir Francis Drake Blvd to I-580	1.32	01:35	48	D	01:15	61	A	E	None
3D HOV	I-580 to Mission Ave	1.22	01:16	54	C	01:04	64	A	E	None
3E HOV	Mission Ave to N. San Pedro Rd	1.59	01:37	57	B	01:27	64	A	E	None
3F HOV	Freitas Pkwy to Lucas Valley Rd	1.01	00:57	61	A	00:55	64	A	E	None

Notes: 1. Grandfathered Segment (No actions required)





Legend

- Marin County Limits
- Adjacent County Limits
- CMP HOV Lanes (PM LOS)**
- No Data
- LOS 'C' or Better
- LOS 'D'
- LOS 'E'
- LOS 'F'



Figure 6
HOV Lanes PM Peak Hour Level of Service



3.3 Travel Time Reliability

Travel time reliability is the consistency or dependability in travel times, as measured from day-to-day and/or across different times of the day. Travel time reliability is significant to many transportation users. Driver's value reliability as it allows them to make better use of their time. Many transportation planners and decision makers have started to consider travel time reliability as a performance measure throughout the United States. A more extensive discussion of these measures can be found in the Federal Highway Administration publication *Travel Time Reliability*, including guidance on the calculation methodology and application of travel time reliability measures.

Travel time reliability measures are relatively new, but a few have proven effective. Most measures compare high-delay days to those with an average delay. The most effective methods of measuring travel time reliability are 90th or 95th percentile travel times, buffer index, and planning time index, explained in the following sections. Related measurements include average travel time and free flow travel time.

3.3.1 90th or 95th Percentile Travel Times

This method, the *90th or 95th percentile travel times*, is perhaps the simplest method to measure travel time reliability. It estimates how bad delay will be on specific routes during the heaviest traffic days. The one or two bad days each month mark the 95th or 90th percentile, respectively. Users familiar with a route (such as commuters) can see how bad traffic is during those few bad days and plan their trips accordingly. This measure is reported in minutes.

3.3.2 Buffer Index

The *buffer index* represents the extra time (or time cushion) that travelers must add to their average travel time when planning trips to ensure on-time arrival.

For example, a buffer index of 40 percent means that for a trip that usually takes 20 minutes a traveler should budget an additional eight minutes to ensure on-time arrival. The additional eight minutes is called the buffer time. Therefore, the traveler should allow 28 minutes for the trip in order to ensure on-time arrival 95 percent of the time.

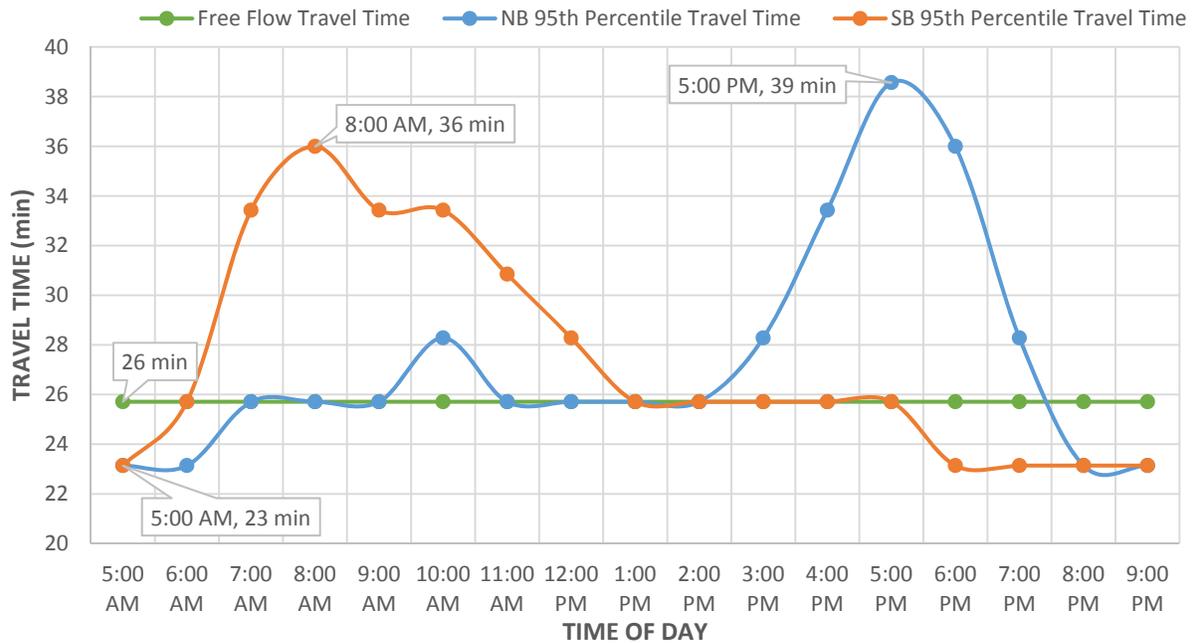
3.3.3 Planning Time Index

The *planning time index* represents how much total time a traveler should allow to ensure on-time arrival. While the buffer index shows the *additional* travel time that is necessary, the planning time index shows the *total* travel time that is necessary. The Planning Time Index is the ratio of the 95th percentile travel time to the free-flow travel time. For example, a planning time index of 1.60 means that for a trip that takes 15 minutes in light traffic a traveler should budget a total of 24 minutes to ensure on-time arrival 95 percent of the time.

The graph below compares the travel time along US 101 in Marin County under free flow conditions to the northbound and southbound 95th percentile travel times between 5:00 AM and 9:00 PM. Planning time index data was collected by TJKM from the Caltrans Performance Measurement System (PeMS) for midweek days during October 2016, excluding holidays and any days with adverse weather. Caltrans assumes a free flow speed of 60 miles per hour (mph) for calculating free flow travel time. Travel times were calculated using the total corridor length of 25.7 miles.

As this speed is below the posted speed limit of 65 mph, speeds increase during off peak times and result in actual 95th percentile travel times below the calculated free flow travel time.

US 101 – Marin County Travel Time Comparison



As this graph shows, 95th percentile travel times vary over the course of a day from approximately 23 minutes to 39 minutes in the northbound direction and from 23 minutes to 36 minutes in the southbound direction.

The free flow travel time along the same corridor is approximately 26 minutes, assuming a speed of 60 mph. Northbound traffic experienced more delays during the afternoon commute period, with a maximum planning time index of 1.5 at 5:00 PM. Southbound traffic experienced more delays during the morning commute period, with a maximum planning time index of 1.4 at 8:00 AM. It should be noted that the free flow speed of 60 mph is lower than the posted speed limit of 65 mph. In the evening and very early morning, 95th percentile travel times dropped below free flow travel times, indicating that traffic tended to speed up and approach the speed limit.

In addition to the above, TAM can also include factors such as seasonal variation, weather, and incidents to calculate the travel time along US 101 and I-580 within Marin County. Based on studies conducted within the United States, weather generally increases travel time by approximately 10 percent.

4.0 CURRENT TRANSIT OPERATIONS IN MARIN COUNTY

The transit network within Marin County is comprised of a variety of services. These include:

- ▶ General public transit bus service for both inter- and intra-county trips
- ▶ General public ferry service, serving trips between Marin County and San Francisco
- ▶ Specialized transit services aimed at serving the needs of the senior and disabled population in the County, including dial-a-ride, paratransit, and wheelchair accessible taxis
- ▶ Privately operated services, providing targeting service between specific locations, such as the service between Marin County and San Francisco International Airport

The Sonoma-Marín Area Rail Transit (SMART) service will likely be added next year as a CMP transit service. As of March 2017, construction of the first initial segment has been completed and testing is underway on the tracks for a projected opening in late Spring/early Fall of 2017.

The following sections provide a brief description of the transit services provided for inter- and intra-county transit travel. In addition, bus route information, headways, and overall transit ridership are summarized in each section.

4.1 Marin Transit

Marin Transit is the agency responsible for local transit service within Marin County. Marin Transit has responsibility for local transit services and contracts with other operators for three types of fixed route services within the county: large bus fixed route, shuttle, and rural service. Contracted providers include Golden Gate Transit, MV Transportation, and Marin Airporter. Marin Transit also contracts with Whistlestop Wheels to provide paratransit and dial-a-ride services within Marin County. Marin Transit added 19 percent service increases in Summer 2016.

Table 14 summarizes the regularly scheduled Marin Transit services. Marin Transit also operates the Marin Access Mobility Management Center, which is a one-call, transportation information and referral service, focused on meeting the mobility needs of Marin’s older adults, disabled persons, and low-income residents. **Tables 15** and **16** summarize the CMP arterial and freeway segments utilized by the Marin Transit Bus Routes.

Transit service provided within Marin County by Marin Transit via contractors includes:

- ▶ *Local Service.* Nine routes operate entirely within Marin County on weekdays, with limited weekend service, contracted through Golden Gate Transit. Additional 10 routes operate as school-focused service on school days only, as detailed below. Since the 2015 CMP, Marin Transit has ceased operations on Route 45.
- ▶ *School Service.* Ten routes provide limited service on school days in Marin County, as well as select trips on Routes 17 and 23. All routes have operated continuously since the 2015 CMP, with the addition of Route 122 serving the College of Marin. Marin transit also provides contract support for yellow school bus service in the Mill Valley, Ross Valley and the Tiburon Peninsula.
- ▶ *Recreational Services.* A seasonal shuttle service, Route 66, operates between Muir Woods and Mill Valley. A supplemental route (66F) provides intermediate service via Marin City. Shuttle schedules are adapted to weekend and seasonal recreational travel demands. Marin Transit contracts with Golden Gate Transit to operate Route 66 in partnership with the National Park Service between May and October.

- ▶ **West Marin Stagecoach.** Marin Transit contracts with MV Transportation to operate the West Marin Stagecoach with one service route (Route 68) in West Marin. The Stagecoach provides weekday and weekend service to area residents. Route 65 has been removed.
- ▶ **Community Shuttle Service.** Marin Transit contracts with Marin Airporter to operate six shuttle bus routes providing limited service: Strawberry / Tiburon (Route 219); San Rafael / Fairfax (Route 228); Santa Venetia / San Rafael (Route 233); San Rafael / Contempo (Route 245); Hamilton Theater / San Marin Drive in Novato (Route 251); Indian Valley Campus / San Rafael (Route 257). Since the previous CMP update, Route 259 (San Rafael / Novato) ceased operation. Marin Airporter also provides airport shuttle service between Marin County and San Francisco Airport as its primary business, separate from Marin Transit operations.
- ▶ **Marin Access.** Marin Access provides transit services and information for the community's older adults, persons with disabilities, and low-income residents. This Marin Transit program contracts with Whistlestop Wheels to provide the following services: Paratransit, Catch-A-Ride, and Volunteer Driver.
- ▶ **Novato Dial-a-Ride.** Marin Transit contracts with Whistlestop Wheels to provide a dial-a-ride shuttle bus service that provides curb-to-curb pick-up and drop-off service available to all residents in the Novato service area.

Table 14: Marin Transit Routes - Peak Headways for Fixed-Route Service

As of March 2017			As of March 2015		
Route #	Route Type: Description	Approx. Headways (minutes)	Route #	Route Type: Description	Approx. Headways (minutes)
17	Local: San Rafael to Sausalito	30-60	17	Local: San Rafael to Sausalito	30-60
22	Local: San Rafael to Marin City	30-60	22	Local: San Rafael to Marin City	20-60
23	Local: Shoreline Pkwy to White Hill Middle School (Fairfax)	60	23	Local: San Rafael to White Hill MS	60
29	Local: San Rafael to Manor (Fairfax)	60	29	Local: San Rafael to Manor (Fairfax)	30-60
35	Local: San Rafael to Canal Area	30	35	Local: San Rafael to Canal Area	4-30
36	Local: San Rafael to Marin City	30	36	Local: San Rafael to Marin City	26-30
-	-	-	45	Local: San Rafael Kaiser Hospital North Gate	28-60
49	Local: San Rafael to Novato (Redwood Blvd & Olive Ave)	30-60	49	Local: San Rafael to Novato (Redwood Blvd & Olive Ave)	60
61	West Marin Stagecoach: Donahue & Terners (Marin City) to Bolinas Downtown	170	61	West Marin Stagecoach: Donahue & Terners (Marin City) to Bolinas Downtown	170
-	-	-	65	West Marin Stagecoach: Dillon Beach to Eastside Transit Center	WED 2 runs EB 1 run WB
66	Muir Woods Shuttle: Pohono Street Park & Ride Lot (Mill Valley) to Muir Woods	20-30 (Weekends)	66	Muir Woods Shuttle: Pohono Street Park & Ride Lot (Mill Valley) to Muir Woods	20-30 (Weekends)
68	West Marin Stagecoach: Inverness to San Rafael	60-120	68	West Marin Stagecoach: Inverness to San Rafael	60-120
71x	Local: Novato to Sausalito Ferry	30	71	Local: Novato to Marin City	30
113	School: Paradise Cay to Redwood HS	1 run (AM) 1 run (PM)	113	School: Paradise Cay to Redwood HS	1 run (AM) 2 runs (PM)

As of March 2017			As of March 2015		
Route #	Route Type: Description	Approx. Headways (minutes)	Route #	Route Type: Description	Approx. Headways (minutes)
115	School: Sausalito Ferry to St. Hilary School	2 runs (AM) 2 runs (PM)	115	School: Sausalito Ferry to St. Hilary School	2 runs (AM) 2 runs (PM)
117	School: East Corte Madera to Hall MS	2 runs (AM) 4 runs (PM)	117	School: East Corte Madera to Hall MS	2 runs (AM) 4 runs (PM)
119	School: Tiburon to Redwood HS	2 runs (AM) 1 run (PM)	119	School: Tiburon to Redwood HS	2 runs (AM) 2 runs (PM)
122	School: College of Marin to San Rafael Transit Center	10 runs (AM) 10 runs (PM)	-	-	-
125	School: San Rafael to Lagunitas	2 run (AM) 2 runs (PM)	125	School: San Rafael to Lagunitas	2 run (AM) 2 runs (PM)
139	School: Terra Linda HS to Lucas Valley	1 run (AM) 1 run (PM)	139	School: Terra Linda HS to Lucas Valley	1 run (AM) 1-2 runs (PM)
145	School: Terra Linda HS to San Rafael	1 run (AM) 1-2 runs (PM)	145	School: Terra Linda HS to San Rafael	1-2 runs (PM)
151	School: Hamilton (Novato) to San Marin HS	2 runs (AM) 2 runs (PM)	151	School: Hamilton (Novato) to San Marin HS	2 runs (AM) 2-3 runs (PM)
154	School: Olive Ave & Olive Ct to San Marin HS / Sinaloa MS	2 runs (AM) 2 runs (PM)	154	School: Olive Ave & Olive Ct to San Marin HS / Sinaloa MS	1 run (AM) 2 runs (PM)
219	Shuttle: Strawberry to Tiburon	30	219	Shuttle: Strawberry to Tiburon	30
228	Shuttle: San Rafael to Manor (Fairfax)	60	228	Shuttle: San Rafael to Manor (Fairfax)	60
233	Shuttle: San Rafael to Santa Venetia	60	233	Local: San Rafael to Santa Venetia	60
245	Shuttle: San Rafael to Contempo	60	-	-	-
251	Shuttle: Hamilton Theater to San Carlos & San Marin (Novato)	60	251	Shuttle: Hamilton Theater to San Carlos & San Marin (Novato)	60
257	Shuttle: Indian Valley Campus to San Rafael	60	257	Shuttle: Indian Valley Campus to San Rafael	60

Sources: Marin Transit website (2017); Marin CMP Update (2015).

Table 15: CMP Arterial Segments Utilized by Marin Transit Services

Arterial Segments			Transit Routes	PM Peak LOS
ID	Roadway	Segment		
1A	SR 1	US 101 to Tennessee Valley Rd	66, 66F	D
1B	SR 1	Northern Ave to Almonte Blvd	66, 66F	B
1C	SR 1 ¹	Sir Francis Drake Blvd to Pt. Reyes Station	-	A
4A	SR 131 (Tiburon Blvd)	Redwood Hwy Frontage Rd to E. Strawberry Dr	219	B
6A	Novato Blvd	San Marin Dr to Eucalyptus Ave	251	A
6B	Novato Blvd	Wilson Ave to Diablo Ave	251	C
6C	S. Novato Blvd	Sunset Pkwy to US 101	-	B
7A	Bel Marin Keys	US 101 to Commercial Blvd	257	C
8A	Sir Francis Drake Blvd	Butterfield Rd to Willow Rd	23, 122, 68, 228	D
8B	Sir Francis Drake Blvd	San Anselmo Ave to Red Hill Ave	23, 68, 228	C
8C	Sir Francis Drake Blvd	College Ave to Toussin Ave	122, 68, 228	C
8D	Sir Francis Drake Blvd	College Ave to Wolfe Grade	68, 228	B
8E	Sir Francis Drake Blvd	US 101 to Larkspur Landing Cir	17, 68, 228	F
9A	Red Hill Ave	Sir Francis Drake Blvd to Second St	23	C
9B	Second St	US 101 to Marquard St	23	D
9C	Third St	US 101 to Marquard St	-	C
10A	Bridgeway ¹	Gate 5 Rd to Gate 6 Rd	66F	B

Table 16: CMP Freeway Segments Utilized by Marin Transit Services

Freeway Segments			Transit Routes	PM Peak LOS
ID	Roadway	Segment		
2A	SR 37	US 101 to Atherton Ave	-	A
3A	US 101	Golden Gate Bridge to Spencer Ave	-	E
3B	US 101	SR 131 (Tiburon Blvd) to Tamalpais Dr	17	F
3C	US 101	Sir Francis Drake Blvd to I-580	17, 228	E
3D	US 101	I-580 to Mission Ave	17	D
3E	US 101	Mission Ave to N. San Pedro Rd	245	C
3F	US 101	Freitas Pkwy to Lucas Valley Rd	-	B
3G	US 101	North of Atherton to Sonoma Co. Line	-	F
5A	I-580	Sir Francis Drake Blvd to Marin Co. Line	-	F
5B	I-580	Bellam Blvd to Sir Francis Drake Blvd	-	F

4.2 Golden Gate Transit

Golden Gate Transit operates transit services between Marin County and the Sonoma, San Francisco, and Contra Costa Counties. Golden Gate Transit is one of three operating divisions of the Golden Gate Bridge, Highway and Transportation District. **Table 17** lists the service routes with a comparison to the most recent CMP update in March 2015.

Additional bus service provided directly by Golden Gate Transit connects Marin County to other parts of the region. Inter-county bus routes that operate partly inside Marin County include the following services:

- ▶ *Transbay Basic Service.* Basic service routes operate all day, seven days a week, providing wheelchair accessible trunk-line service between the Transbay Terminal and Civic Center in San Francisco or Richmond BART, and various suburban centers within Marin and Sonoma Counties. They provide the “backbone” service within Marin County and between Marin and neighboring counties. The routes are 40/40x, 70/71, and 101/101X. Since the previous CMP update, Route 10 ceased operation.
- ▶ *Transbay Commute Service.* This service provides 17 routes that operate on non-holiday weekdays. Most services connect residential neighborhoods within Marin County to the San Francisco Financial District and Civic Center employment centers during the AM and PM commute periods. Other service connects Sonoma County with Marin County and San Francisco. Commute service is generally operated in the peak direction during commute hours only, and is not run at all during the midday and off-peak periods.

Table 17: Regional Golden Gate Bus Transit Routes and Peak Headways

As of March 2017			As of March 2015		
Route #	Route Type: Description	Approx. Headways (minutes)	Route #	Route Type: Description	Approx. Headways (minutes)
2	Commute: SF to Marin Headlands	30	2	Commute: SF to Marin Headlands	30
4	Commute: Mill Valley to SF	5-15	4	Commute: Mill Valley to SF	5-15
8	Commute: Tiburon to SF	2 runs (AM) 1 run (PM)	8	Commute: Tiburon to SF	2 runs (AM) 1 run (PM)
-	-	-	10	Basic: Strawberry to SF	30-60
18	Commute: College of Marin to SF	22-30	18	Commute: College of Marin to SF	22-30
24	Commute: Manor (Fairfax) to SF	8-30	24	Commute: Manor (Fairfax) to SF	8-30
25	Shuttle: Larkspur Ferry to Manor (Fairfax)	30	25	Shuttle: Larkspur Ferry to Manor (Fairfax)	30
27	Commute: San Anselmo to SF	15-60	27	Commute: San Anselmo to SF	15-60
30	Commute: San Rafael to SF	2 runs (AM) 1 run (PM)	-	-	-
37*	Shuttle-Larkspur Ferry to Smith Ranch Road	30	37*	Shuttle-Larkspur Ferry to Smith Ranch Road	30
38	Commute: Terra Linda to SF	2 runs (AM) 1 run (PM)	38	Commute: Terra Linda to SF	30
40/40x	Basic: San Rafael to Del Norte BART	30-60	40/42	Basic: San Rafael to Del Norte BART weekday	30-60
44	Commute: Marinwood to SF	2 runs (AM) 2 runs (PM)	44	Commute: Marinwood to SF	2 runs (AM) 2 runs (PM)
54	Commute: San Marin to SF	9-30	54	Commute: San Marin to SF	9-30
56	Commute: Novato to SF	30	56	Commute: Novato to SF	30
58	Commute: SF to Novato	30	58	Commute: SF to Novato	30
70/70x	Basic: Novato to SF	4-30	70/71	Basic: Novato to SF	4-30
72/72x	Commute: Santa Rosa to SF	10-30	72	Commute: Santa Rosa to SF	10-30
74	Commute: Santa Rosa to SF	30	74	Commute: Santa Rosa to SF	30
76	Commute: East Petaluma to SF	25-30	76	Commute: East Petaluma to SF	25-30
92	Commute: Marin City to SF	30-60	92	Commute: Marin City to SF	30-60
93	Commute: GG Toll Plaza to SF Civic Center	10-30	93	Commute: GG Toll Plaza to SF Civic Center	10-30
97	Commute: Larkspur Ferry to SF	1 run (AM)	97	Commute: Larkspur Ferry to SF	1 run (AM)
101/101x	Basic: Santa Rosa to SF	60	101/101x	Basic: Santa Rosa to SF	60

Sources: Golden Gate Transit Website (2017); Marin CMP Update (2015).

4.3 Ferry Services

Three organizations provide Ferry service in Marin County:

- ▶ *Golden Gate Ferry Service.* The Golden Gate Bridge, Highway and Transportation District operates ferry services from Larkspur and Sausalito to San Francisco via conventional and high-speed ferries. The Larkspur Ferry provides more service to San Francisco, with headways between 30 and 55 minutes during the weekday commute periods. The Sausalito Ferry provides less frequent service to San Francisco and longer headways between 50 and 90 minutes during the weekday commute periods. Both ferries transport people to the San Francisco Ferry Building. The San Francisco Giants Game Ferry (National League Baseball) is an additional ferry service that operates on game days. This ferry runs until 30 minutes after the final out of the ballgame and runs about 60 minutes from Larkspur to AT&T Park.
- ▶ *Blue and Gold Fleet.* The Blue and Gold Fleet operates both commuter and recreational ferry service from Sausalito to Fisherman’s Wharf in San Francisco. Blue and Gold also provides recreational service between Angel Island and San Francisco, Oakland, and Vallejo.
- ▶ *Angel Island Tiburon Ferry.* The Angel Island Tiburon Ferry operates recreational service between Angel Island and Downtown Tiburon. Service varies throughout the year; headways are one-two hours on weekdays and one-three hours on weekends; on weekends from April through October, headways are one hour and from November through March, are one-two hours. No weekday service is offered from November through February except by reservation, and Wednesday-Friday service is offered in the month of March.

4.4 Summary of Fixed Route Services and Boardings

The transit routes managed by Marin Transit are routinely monitored for performance. The recent dedication of additional resources has led to an expansion of local transit service, which in turn has increased local boardings. These trends are illustrated in **Table 18** and Transit Ridership Trends Chart, which show ridership trends for Marin Transit Fixed Route Service, Golden Gate Transit Bus, and Ferry Operations.

- ▶ As the table shows, demand for the Golden Gate Transit basic and commuter bus services to and from San Francisco have decreased slightly in the last year by approximately 2 percent.
- ▶ Golden Gate Ferry Service has experienced decreased in ridership during the last two fiscal years, approximately 5 percent increase from 2013-2014 to 2015-2016.
- ▶ Marin Transit Fixed Route Service showed a decrease of 5 percent in ridership from 2013-2014 to 2015-2016 with an increase of 3 percent in revenue hours.
- ▶ Marin Access Services have a slight increase in ridership of approximately 2 percent with a 1 percent reduction in revenue hours in fiscal year 2015-2016. There was much larger bump in both ridership and revenue hours in the fiscal year previous 2014-2015.

Tables 15 and **16** provided in Section 4.1. Marin Transit summarize the CMP segments utilized by the Marin Transit Bus Services and the LOS for each segment during the PM peak hour showing the impact on transit services using them.

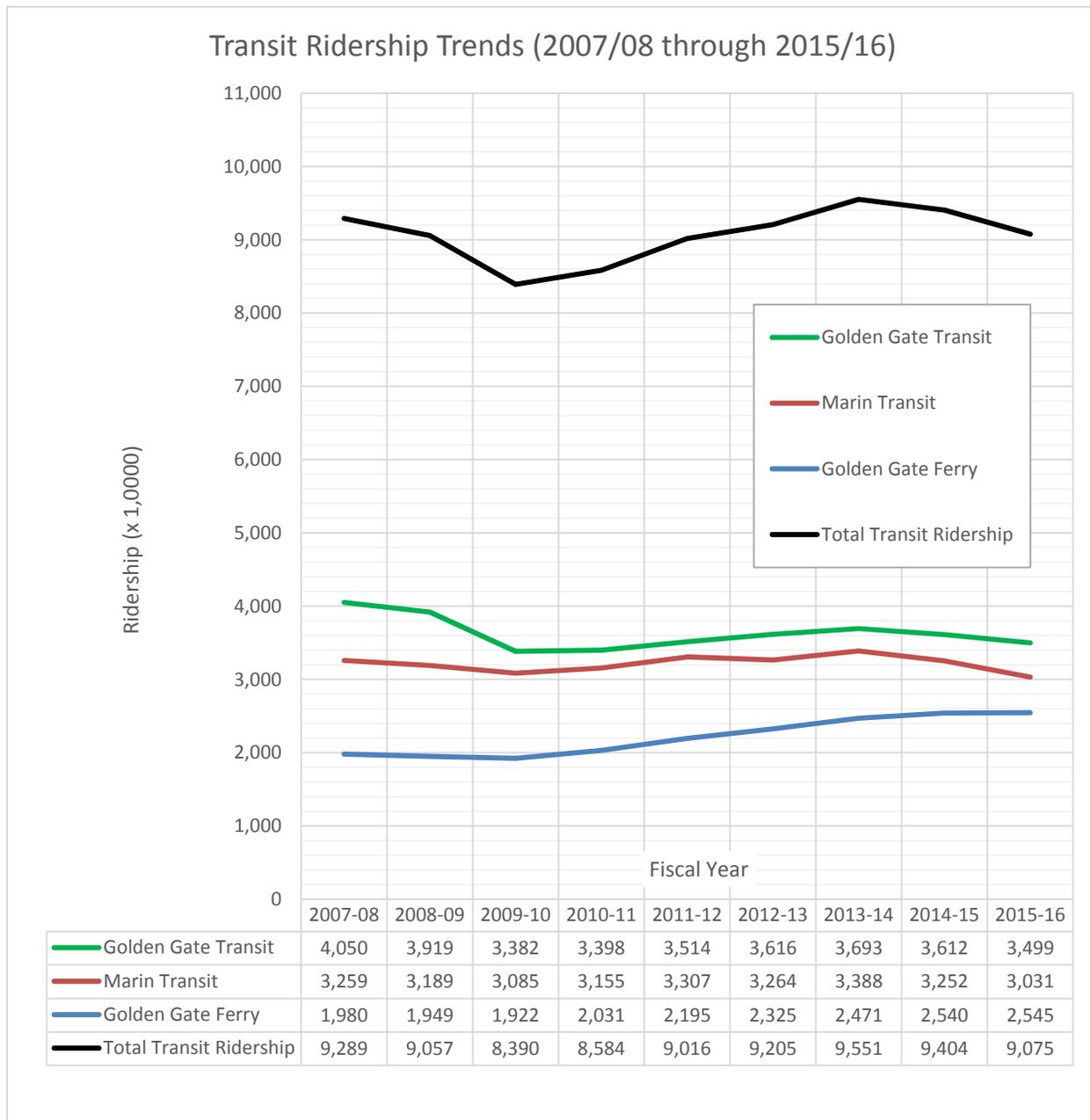
Table 18: Transit Ridership Trends in Marin County

Fiscal Year	Annual Revenue Hours	Annual Boardings
Golden Gate Basic and Commuter Service¹:		
2010-2011	333,000	3,398,098
2011-2012	325,000	3,513,639
2012-2013	341,000	3,615,851
2013-2014	321,000	3,692,851
2014-2015	337,000	3,612,000
2015-2016	N/A	3,499,000
Golden Gate Ferry Service¹:		
2010-2011	14,000	2,031,219
2011-2012	13,000	2,195,414
2012-2013	13,000	2,324,874
2013-2014	14,000	2,470,583
2014-2015	14,000	2,540,000
2015-2016	14,000	2,545,000
Marin Transit Fixed Route Service²:		
2010-2011	117,011	3,154,571
2011-2012	136,951	3,307,179
2012-2013	136,227	3,263,903
2013-2014	147,111	3,387,925
2014-2015	152,801	3,252,116
2015-2016	156,803	3,031,450

Sources: 1. Comprehensive Annual Financial Report FY 2015-2016. Golden Gate Bridge Highway and Transportation District. (http://goldengate.org/organization/annual_reports.php)

2. System Performance Summary for FY 2010-2011, FY 2011-2012, FY 2012-2013, FY 2013-2014, 2014-2015, 2015-2016, Marin Transit. (<http://www.marintransit.org/monitoringreports.html>)

Transit Ridership Trends (2007 / 2008 through 2015 / 2016)

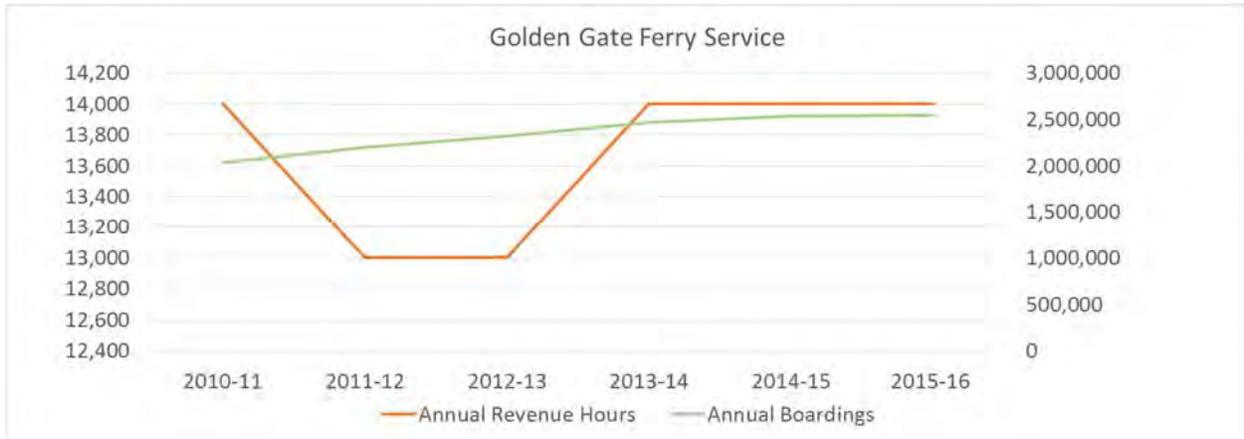


The trends for annual revenue hours and boardings for each of the Golden Gate Transit Basic and Commuter Services, Golden Gate Ferry Service, and Marin Transit Fixed Route Service between 2010-2011 and 2015-2016 were compared and illustrated in the Annual Revenue Hours and Boardings Trends Charts provided below.

Annual Revenue Hours and Boardings Trends for Golden Gate Transit Basic and Commuter Services (2010 / 2011 through 2015 / 2016)



Annual Revenue Hours and Boardings Trends for Golden Gate Ferry Service (2010 / 2011 through 2015 / 2016)



Annual Revenue Hours and Boardings Trends for Marin Transit Fixed Route Service (2010 / 2011 through 2015 / 2016)



4.5 Specialized Transit Services

- ▶ **Marin Access.** Marin Transit contracts with Whistlestop Wheels to provide local paratransit services that are available during the same hours and days of the week as comparable local and inter-county fixed-route, non-commute bus services. The service is a door-to-door ridesharing program that has approximately 40 lift-equipped vehicles available for use. Approximately 162,511 annual passenger trips are provided on Marin Access Paratransit service.

Inter-county paratransit service is provided seven days a week, under an agreement between Golden Gate Transit and Marin Transit. The inter-county service area includes Sonoma, San Francisco, and Contra Costa County in addition to Marin County. Statistics for this service are included in **Table 19**. The demand for paratransit service has grown in recent years as more Marin County residents have become eligible for the service and medical providers and residents become more aware of paratransit service.

Table 19: Marin Access Performance Statistics, FY 2011 to FY 2016

Fiscal Year	Annual Revenue Hours	Annual Passenger Trips
2010-2011	53,127	116,970
2011-2012 ¹	49,012	119,666
2012-2013 ²	59,589	143,417
2013-2014	57,389	158,187
2014-2015	60,417	172,512
2015-2016	58,756	162,511

Notes: 1 Volunteer Driver Program added in FY 2011-2012.

2 Catch-A-Ride Program added in FY 2012-2013.

Source: System Performance Summary for FY 2010-2011, FY 2011-2012, FY 2012-2013, FY 2013-2014, 2014-2015, 2015-2016, Marin Transit. (<http://www.marintransit.org/monitoringreports.html>)

- ▶ **Volunteer Driver.** Marin Transit manages two Volunteer Driver programs for seniors who have difficulty using fixed route or paratransit services: 1) the Safe Transport and Reimbursement (STAR) Program operated by Whistlestop Wheels in Eastern Marin, and 2) the TripTrans West Marin Volunteer Driver Program operated by West Marin Senior Services in Western Marin. Both programs provide drivers with mileage reimbursements for their services. During the 2015-2016 fiscal year, the volunteer driver program served 16,570 unlinked passengers during weekday service.
- ▶ **Catch-a-Ride.** Marin Transit manages the Catch-A-Ride program, which allows eligible Marin County residents to receive a discounted ride in taxis and other licensed vehicles throughout Marin County. To be considered eligible for the program, participants must be a resident of Marin County and at least 80 years of age, at least 60 years of age and unable to drive, or be eligible for paratransit under the Americans with Disabilities Act. The program pays a discounted rate of the fare based on the mileage of the trip, rather than the meter rate. Fiscal year 2015-2016, the program had 16,520 trips. Marin Catch-A-Ride is funded by Marin's voter approved vehicle registration fee, Measure B.
- ▶ **School Transportation.** Marin Transit provides school transportation services including supplemental school bus service and contracted yellow school bus service.

5.0 BICYCLE AND PEDESTRIAN ACTIVITY

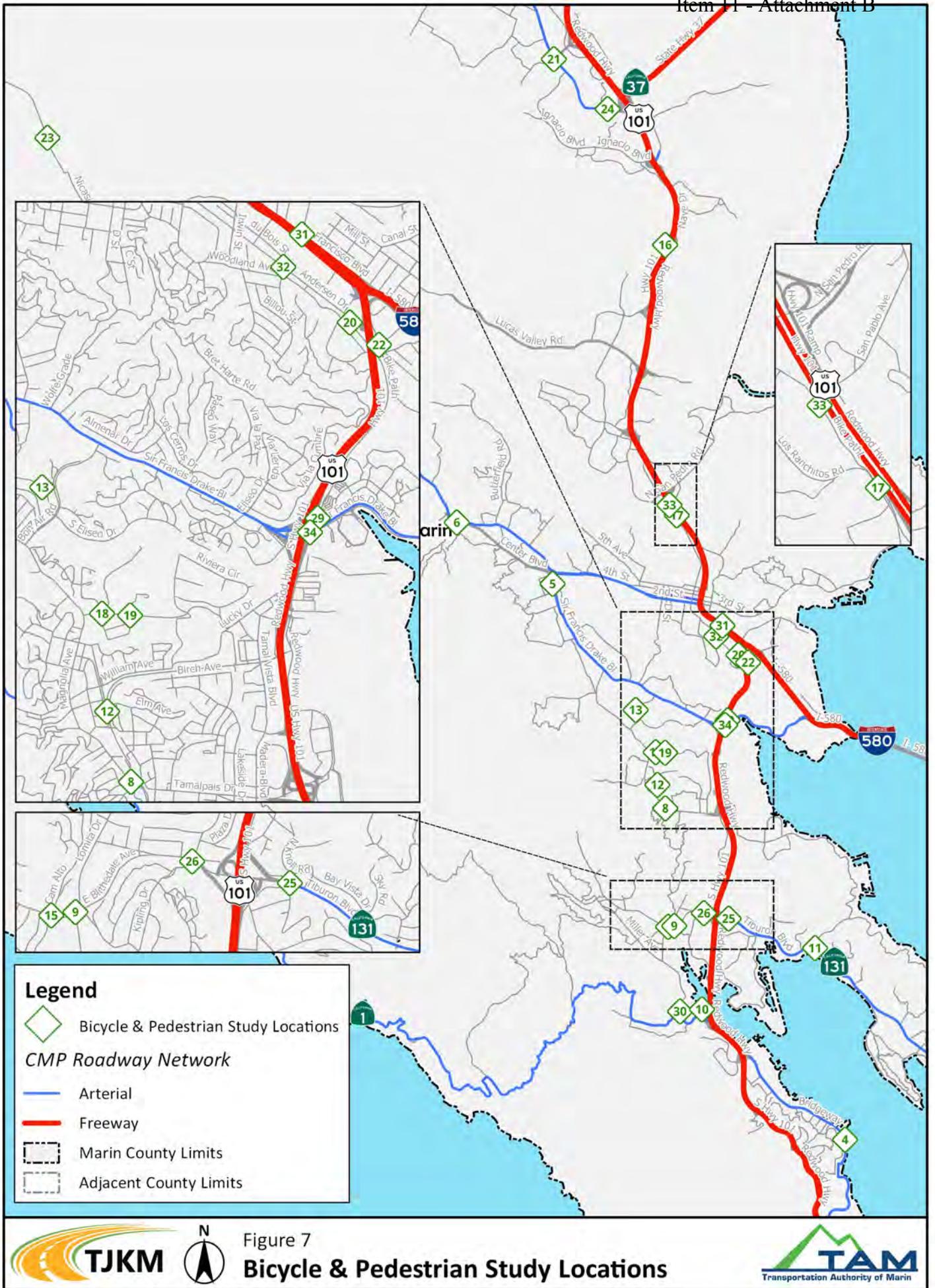
Bicycle and pedestrian activity was monitored at various locations in Marin County that were previously studied in the 2014 Transportation System Monitoring Report. **Table 20** lists the bicycle and pedestrian count locations, consistent with the 2014 study. **Figure 7** presents a map of the bicycle and pedestrian count locations. The bicycle and pedestrian monitoring report is not required for the CMP and is therefore presented for informational purposes only. Bicycle and pedestrian volumes were collected at 28 locations. This includes seven new locations, noted in **Table 18**, relative to the 2014 report. Locations 27 and 28 from the 2014 report, pedestrian paths at the US 101 northbound and southbound ramps in Tiburon, were not included in 2016.

Bicycle and pedestrian counts we collected on weekdays for a 14-hour period from 6:00 AM to 8:00 PM and for a four-hour weekend midday period between 10:00 AM and 2:00 PM. The surveys also included adult and youth demographic attributes. The total bicycle and pedestrian volumes were then compared to the historical data from previous years.

Table 20: Bicycle and Pedestrian Count Locations

ID1	Count Location Description and City
1	Tiburon Boulevard @ Main Street, Tiburon
4	Bridgeway @ Princess Street, Sausalito
5	San Anselmo Avenue @ Tunstead Avenue (Southern Intersection), San Anselmo
6	Broadway @ Bolinas Road, Fairfax
8	Magnolia Avenue @ Ward Street, Larkspur
9	Mill Valley-Sausalito Path @ E. Blithedale Avenue, Mill Valley
10	Mill Valley-Sausalito Path @ Tennessee Valley Path Junction, Tam Junction
11	Tiburon Bike Path @ Blackie's Pasture/McKegney Green, Tiburon
12	Larkspur-Corte Madera Path @ Baltimore Avenue, Larkspur
13	Corte Madera Creek Path @ Bon Air Road, Greenbrae
15	Camino Alto @ E. Blithedale Avenue, Mill Valley
16	Pacheco Hill Path @ Alameda del Prado, Novato
17	Los Ranchitos Road @ Lincoln Hill Multi-Use Pathway, San Rafael
18	Doherty Drive @ Larkspur Plaza Drive/Rose Lane West, Larkspur
19 ²	Doherty Drive @ Rose Lane East, Larkspur
20	Andersen Drive @ Cal Park Tunnel Path, San Rafael
21	S. Novato Boulevard @ Rowland Way, Novato
22	Bellam Boulevard @ Andersen Drive, San Rafael
23	Nicasio Valley Road @ Nicasio School, Nicasio
24	Enfrente Bike Path @ S. Novato Boulevard, Novato
25	Tiburon Boulevard @ S. Knoll Road, Mill Valley
26	E. Blithedale Avenue @ Tower Drive, Mill Valley
29 ²	Central Marin Ferry Connector Bridge @ Sir Francis Drake Boulevard, Larkspur
30 ²	Almonte Boulevard @ Shoreline Highway, Mill Valley
31 ²	Francisco Boulevard E. @ Bay Street, San Rafael
32 ²	Andersen Drive @ Du Bois Street, San Rafael
33 ²	Merrydale Road @ Lincoln Hill Multi-Use Pathway, San Rafael
34 ²	US 101 NB Off-Ramp @ Marin County Bike Route 20 / Sir Francis Drake Boulevard, Larkspur

Notes: 1. ID Numbers are non-sequential to retain consistency with 2014 Monitoring Report and previous reports.
2. New count location for 2016



5.1 Bicycle and Pedestrian Volumes

Raw bicycle and pedestrian counts were processed into two-hour peak periods, shown in **Table 21**. Volumes are reported for the two-hour periods specified in the 2014 Monitoring Report (weekday 7:00-9:00 AM, weekday 4:00-6:00 PM, and weekend 12:00-2:00 PM) to retain consistency between monitoring years. As was the case in 2014, it should be noted that conducting 14-hour counts showed an offset in the peak periods for bicycle and pedestrian users relative to vehicular traffic peaks. This shift in peak activity by mode is discussed later in this section. It should also be noted that comparisons between years for single day data collection efforts are less reliable for pedestrian and bicycle volumes, as opposed to vehicular volumes, as slight to moderate changes in weather patterns are much more likely to cause shifts in travel behavior in these modes than for motorists.

During the weekday monitoring, overall pedestrian activity was highest during the two-hour PM peak period, while overall bicycle activity was similar in both peak periods, but slightly higher during the two-hour AM peak period. This system-wide observation varied considerably from location to location, however. During the weekend two-hour midday peak period, overall bicycle and pedestrian activity nearly doubled from what was observed during the weekdays, most notably for bicycles.

The Bridgeway and Princess Street location in Sausalito, CA (ID# 4) experienced the highest volumes of pedestrians and bicyclists of all 28 locations monitored. This location experienced 270 bicyclists in the AM peak period (up from 181 in 2014) and 349 bicyclists in the PM peak period (up from 234 in 2014). During the weekend midday peak period, this location recorded 1,577 bicyclists.

During the AM peak period, 134 pedestrians were observed at the Bridgeway and Princess Street location, up from 101 in 2014. During the PM peak period, 866 pedestrian were observed, up from 586 in 2014. During the weekend midday peak period, 2,883 pedestrians were observed, an increase from 2,513 in 2014.

For bicycles, the South Novato Boulevard and Roland Way (ID# 21) and Bellam Boulevard and Andersen Drive (ID# 22) locations had the lowest observations in the AM peak period with only 8 bicyclists each. During the PM peak period, the Enfrente Bike Path at South Novato Boulevard (ID# 24) had the lowest bicycle observations, with a count of 12. During the weekend peak hour, Bellam Boulevard and Andersen Drive had the lowest observation with 13 bicyclists.

For pedestrians, the lowest observed activity occurred at Nicasio Valley Road at Nicasio School (ID# 23) with no recorded pedestrian counts at any weekday or weekend data collection periods on this rural facility.

Table 21: 2-Hour Bicycle and Pedestrian Count Volumes for Weekdays and Weekends

ID	Count Location Description	Weekday AM Peak (7-9 AM)			Weekday PM Peak (4-6 PM)			Weekend Midday Peak (12-2 PM)			Weekday 14-Hour Total (6 AM–8 PM)		
		Peds	Bikes	Total	Peds	Bikes	Total	Peds	Bikes	Total	Peds	Bikes	Total
1	Tiburon Blvd @ Main St	258	47	305	293	87	380	315	253	568	1,377	373	1,750
4	Bridgeway @ Princess St	134	270	404	866	349	1,215	2,883	1,577	4,460	4,865	1,929	6,794
5	San Anselmo Ave @ Tunstead Ave	154	77	231	440	114	554	154	263	417	2,151	515	2,666
6	Broadway @ Bolinas Rd	237	75	312	381	135	516	550	293	843	1,892	577	2,469
8	Magnolia Ave @ Ward St	120	50	170	306	55	361	391	163	554	1,530	326	1,856
9	Mill Valley-Sausalito Path @ E. Blithedale Ave	83	192	275	59	89	148	55	411	466	287	600	887
10	Mill Valley-Sausalito Path @ Tennessee Valley Path Junction	105	278	383	135	209	344	64	756	820	654	1,276	1,930
11	Tiburon Bike Path @ Blackie's Pasture / McKegney Green	7	23	30	16	16	32	16	35	51	76	87	163
12	Larkspur-Corte Madera Path @ Baltimore Ave	112	116	228	127	78	205	84	141	225	601	429	1,030
13	Corte Madera Creek Path @ Bon Air Rd	118	71	189	74	96	170	61	67	128	473	368	841
15	Camino Alto @ E. Blithedale Ave	30	64	94	31	36	67	43	208	251	148	291	439
16	Pacheco Hill Path @ Alameda del Prado	3	24	27	1	24	25	3	28	31	23	126	149
17	Los Ranchitos Rd @ Lincoln Hill Multi-Use Pathway	4	33	37	10	35	45	3	53	56	52	184	236
18	Doherty Dr @ Larkspur Plaza Dr / Rose Ln West	128	141	269	0	69	69	225	61	286	413	422	835
19	Doherty Dr @ Rose Ln East	92	108	200	57	54	111	386	56	442	926	329	1,255
20	Andersen Dr @ Cal Park Tunnel Path	18	80	98	20	96	116	31	89	120	124	414	538
21	S. Novato Blvd @ Rowland Wy	53	8	61	39	29	68	30	25	55	379	128	507
22	Bellam Blvd @ Andersen Dr	45	8	53	38	28	66	31	13	44	208	58	266
23	Nicasio Valley Rd @ Nicasio School	0	10	10	0	22	22	0	165	165	0	96	96

ID	Count Location Description	Weekday AM Peak (7-9 AM)			Weekday PM Peak (4-6 PM)			Weekend Midday Peak (12-2 PM)			Weekday 14-Hour Total (6 AM–8 PM)		
		Peds	Bikes	Total	Peds	Bikes	Total	Peds	Bikes	Total	Peds	Bikes	Total
24	Enfrente Bike Path @ S. Novato Blvd	6	17	23	10	12	22	3	27	30	54	84	138
25	Tiburon Blvd @ S. Knoll Rd	5	36	41	8	31	39	3	111	114	62	176	238
26	E. Blithedale Ave @ Tower Dr	27	46	73	20	44	64	14	115	129	158	231	389
29	Central Marin Ferry Connector Bridge @ Sir Francis Drake Blvd	12	70	82	23	91	114	11	95	106	158	372	530
30	Almonte Blvd @ Shoreline Hwy	45	100	145	72	36	108	48	134	182	269	279	548
31	Francisco Blvd E. @ Bay St	109	37	146	76	80	156	31	36	67	614	260	874
32	Andersen Dr @ Du Bois St	29	81	110	27	85	112	25	90	115	174	356	530
33	Merrydale Rd @ Lincoln Hill Multi-Use Pathway	4	12	16	7	14	21	3	25	28	46	93	139
34	US 101 NB Off-Ramp @ Marin County Bike Route 20 / Sir Francis Drake Blvd	14	44	58	10	67	77	12	61	73	91	280	371
TOTAL		1,952	2,118	4,070	3,146	2,081	5,227	5,475	5,351	10,826	17,805	10,659	28,464

Bicycle and pedestrian volumes are presented in the above table for the AM and PM peak periods generally associated with vehicle commuter traffic. *Peak periods for non-auto modes do not necessarily mirror those for vehicles due to the increased travel time associated with the slower progression.* For this monitoring cycle, 14-hour counts were conducted and the data shows that bicycle and pedestrian peak periods tend to be outside the standard 7:00-9:00 AM and 4:00-6:00 PM weekday peak periods.

Table 22 summarizes the highest volume observed two-hour peak periods at each location for weekdays and **Table 23** summarizes the highest volume observed two-hour peak period for weekends (between 10:00 AM and 2:00 PM). The following charts display the differences between bicycle and pedestrian volumes during standard vehicular peaks and observed peak periods.

Table 22: Maximum Observed Peak Period Bicycle and Pedestrian Count Volumes for Weekdays

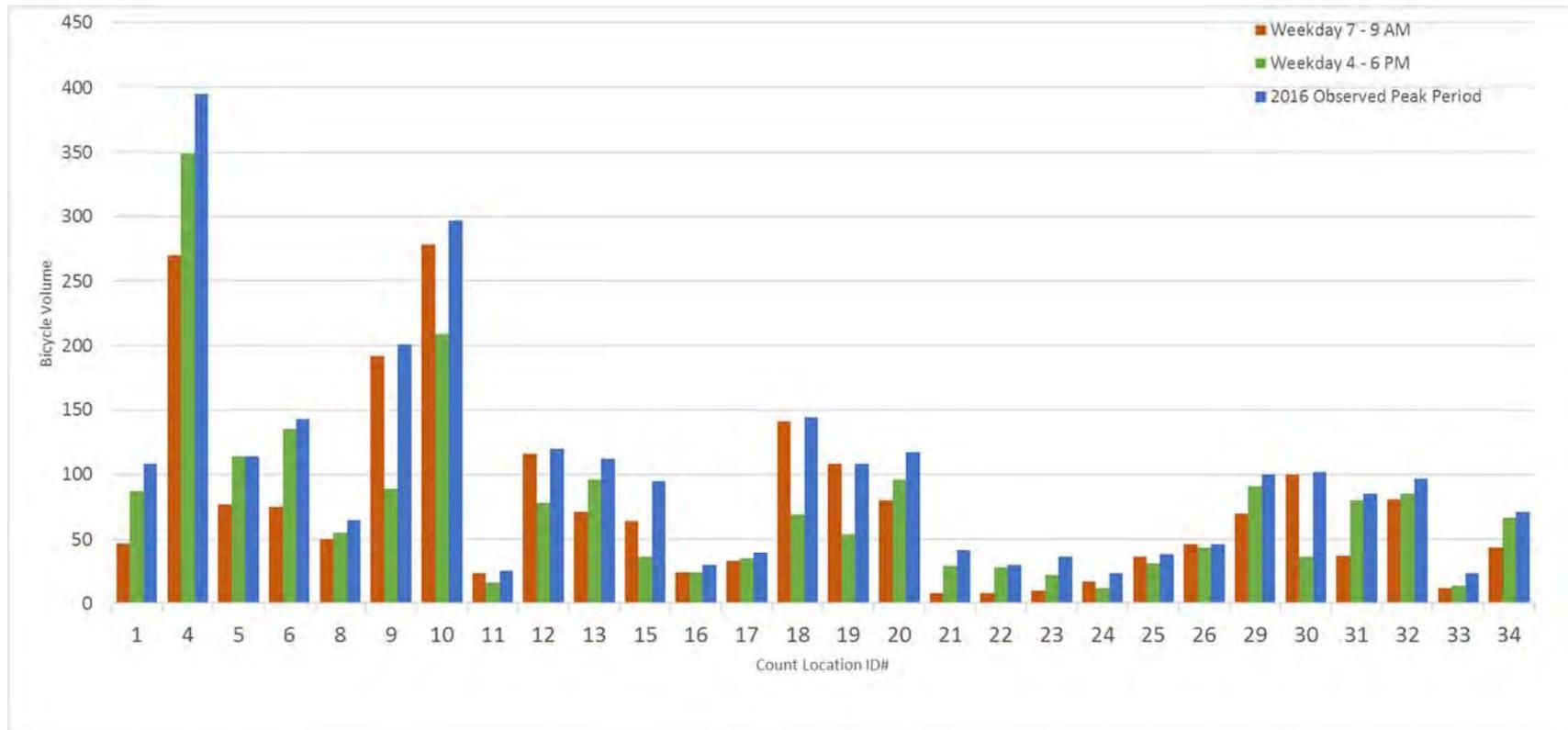
ID	Count Location Description	Pedestrian		Bicycle	
		Peak Period	Count	Peak Period	Count
1	Tiburon Blvd @ Main St	4:45 PM - 6:45 PM	396	2:45 PM - 4:45 PM	108
4	Bridgeway @ Princess St	12:30 PM - 2:30 PM	1,453	12:15 PM - 2:15 PM	395
5	San Anselmo Ave @ Tunstead Ave	12:30 PM - 2:30 PM	471	4:00 PM - 6:00 PM	114
6	Broadway @ Bolinas Rd	5:00 PM - 7:00 PM	438	3:15 PM - 5:15 PM	143
8	Magnolia Ave @ Ward St	5:00 PM - 7:00 PM	357	12:30 PM - 2:30 PM	65
9	Mill Valley-Sausalito Path @ E. Blithedale Ave	7:45 AM - 9:45 AM	96	7:15 AM - 9:15 AM	201
10	Mill Valley-Sausalito Path @ Tennessee Valley Path Junction	4:15 PM - 6:15 PM	153	6:30 AM - 8:30 AM	297
11	Tiburon Bike Path @ Blackie's Pasture / McKegney Green	8:30 AM - 10:30 AM	23	2:45 PM - 4:45 PM	25
12	Larkspur-Corte Madera Path @ Baltimore Ave	8:00 AM - 10:00 AM	137	7:30 AM - 9:30 AM	120
13	Corte Madera Creek Path @ Bon Air Rd	7:00 AM - 9:00 AM	118	3:30 PM - 5:30 PM	112
15	Camino Alto @ E. Blithedale Ave	7:30 AM - 9:30 AM	36	6:45 AM - 8:45 AM	95
16	Pacheco Hill Path @ Alameda del Prado	6:00 AM - 8:00 AM	10	4:30 PM - 6:30 PM	30
17	Los Ranchitos Rd @ Lincoln Hill Multi-Use Pathway	9:00 AM - 11:00 AM	12	4:45 PM - 6:45 PM	39
18	Doherty Dr @ Larkspur Plaza Dr / Rose Ln West	11:15 AM - 1:15 PM	207	7:30 AM - 9:30 AM	144
19	Doherty Dr @ Rose Ln East	11:45 AM - 1:45 PM	385	7:00 AM - 9:00 AM	108
20	Andersen Dr @ Cal Park Tunnel Path	11:30 AM - 1:30 PM	25	4:30 PM - 6:30 PM	117
21	S. Novato Blvd @ Rowland Wy	2:00 PM - 4:00 PM	150	3:00 PM - 5:00 PM	42
22	Bellam Blvd @ Andersen Dr	6:45 AM - 8:45 AM	54	3:45 PM - 5:45 PM	30
23	Nicasio Valley Rd @ Nicasio School	6:00 AM - 8:00 AM	0	10:00 AM - 12:00 PM	36
24	Enfrente Bike Path @ S. Novato Blvd	10:00 AM - 12:00 PM	15	11:15 AM - 1:15 PM	23
25	Tiburon Blvd @ S. Knoll Rd	1:15 PM - 3:15 PM	21	6:45 AM - 8:45 AM	38
26	E. Blithedale Ave @ Tower Dr	10:30 AM - 12:30 PM	43	6:45 AM - 8:45 AM	46
29	Central Marin Ferry Connector Bridge @ Sir Francis Drake Blvd	5:00 PM - 7:00 PM	41	4:45 PM - 6:45 PM	100
30	Almonte Blvd @ Shoreline Hwy	4:45 PM - 6:45 PM	98	7:30 AM - 9:30 AM	102
31	Francisco Blvd E. @ Bay St	5:00 PM - 7:00 PM	185	3:45 PM - 5:45 PM	85
32	Andersen Dr @ Du Bois St	12:45 PM - 2:45 PM	53	4:30 PM - 6:30 PM	97
33	Merrydale Rd @ Lincoln Hill Multi-Use Pathway	4:45 PM - 6:45 PM	14	2:30 PM - 4:30 PM	23
34	US 101 NB Off-Ramp @ Marin County Bike Route 20 / Sir Francis Drake Blvd	5:00 PM - 7:00 PM	28	4:45 PM - 6:45 PM	71

Table 23: Maximum Observed Peak Period Bicycle and Pedestrian Count Volumes for Weekends

ID	Count Location Description	Pedestrian		Bicycle	
		Peak Period	Count	Peak Period	Count
1	Tiburon Blvd @ Main St	10:00 AM - 12:00 PM	383	10:30 AM - 12:30 PM	306
4	Bridgeway @ Princess St	12:00 PM - 2:00 PM	2,883	12:00 PM - 2:00 PM	1,577
5	San Anselmo Ave @ Tunstead Ave	10:00 AM - 12:00 PM	239	10:30 AM - 12:30 PM	311
6	Broadway @ Bolinas Rd	11:15 AM - 1:15 PM	562	11:15 AM - 1:15 PM	359
8	Magnolia Ave @ Ward St	12:00 PM - 2:00 PM	391	10:30 AM - 12:30 PM	200
9	Mill Valley-Sausalito Path @ E. Blithedale Ave	10:30 AM - 12:30 PM	77	10:15 AM - 12:15 PM	486
10	Mill Valley-Sausalito Path @ Tennessee Valley Path Junction	10:00 AM - 12:00 PM	184	11:45 AM - 1:45 PM	758
11	Tiburon Bike Path @ Blackie's Pasture / McKegney Green	10:00 AM - 12:00 PM	36	10:45 AM - 12:45 PM	46
12	Larkspur-Corte Madera Path @ Baltimore Ave	10:00 AM - 12:00 PM	191	10:45 AM - 12:45 PM	145
13	Corte Madera Creek Path @ Bon Air Rd	10:00 AM - 12:00 PM	128	10:45 AM - 12:45 PM	67
15	Camino Alto @ E. Blithedale Ave	10:15 AM - 12:15 PM	53	10:30 AM - 12:30 PM	225
16	Pacheco Hill Path @ Alameda del Prado	11:15 AM - 1:15 PM	3	10:15 AM - 12:15 PM	49
17	Los Ranchitos Rd @ Lincoln Hill Multi-Use Pathway	10:00 AM - 12:00 PM	13	10:45 AM - 12:45 PM	58
18	Doherty Dr @ Larkspur Plaza Dr / Rose Ln West	12:00 PM - 2:00 PM	225	11:00 AM - 1:00 PM	65
19	Doherty Dr @ Rose Ln East	12:00 PM - 2:00 PM	386	10:15 AM - 12:15 PM	65
20	Andersen Dr @ Cal Park Tunnel Path	10:45 AM - 12:45 PM	38	10:30 AM - 12:30 PM	98
21	S. Novato Blvd @ Rowland Wy	11:00 AM - 1:00 PM	39	10:00 AM - 12:00 PM	33
22	Bellam Blvd @ Andersen Dr	10:15 AM - 12:15 PM	38	10:00 AM - 12:00 PM	14
23	Nicasio Valley Rd @ Nicasio School	6:00 AM - 8:00 AM	0	10:00 AM - 12:00 PM	231
24	Enfrente Bike Path @ S. Novato Blvd	10:00 AM - 12:00 PM	8	10:00 AM - 12:00 PM	34
25	Tiburon Blvd @ S. Knoll Rd	10:30 AM - 12:30 PM	11	10:00 AM - 12:00 PM	164
26	E. Blithedale Ave @ Tower Dr	12:00 PM - 2:00 PM	14	10:15 AM - 12:15 PM	185
29	Central Marin Ferry Connector Bridge @ Sir Francis Drake Blvd	10:00 AM - 12:00 PM	19	11:00 AM - 1:00 PM	110
30	Almonte Blvd @ Shoreline Hwy	10:00 AM - 12:00 PM	59	10:00 AM - 12:00 PM	176
31	Francisco Blvd E. @ Bay St	10:00 AM - 12:00 PM	61	12:00 PM - 2:00 PM	36
32	Andersen Dr @ Du Bois St	11:30 AM - 1:30 PM	40	11:00 AM - 1:00 PM	96
33	Merrydale Rd @ Lincoln Hill Multi-Use Pathway	9:30 AM - 11:30 AM	8	11:00 AM - 1:00 PM	33
34	US 101 NB Off-Ramp @ Marin County Bike Route 20 / Sir Francis Drake Blvd	10:00 AM - 12:00 PM	24	10:00 AM - 12:00 PM	77



Weekday Bicycle Volume Comparison



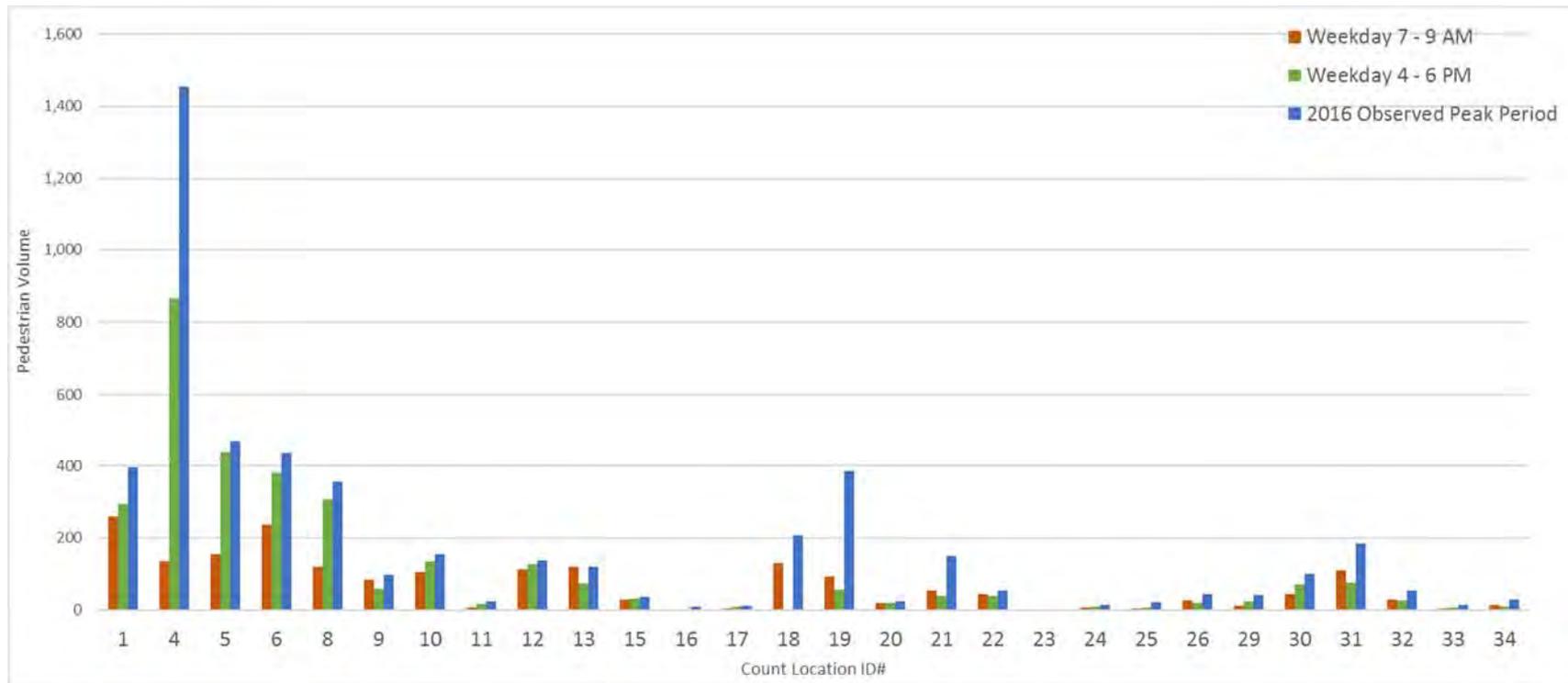
¹Locations 2 and 3 not counted in 2014 or 2016

²Locations 27 and 28 not counted in 2016

³Locations 29 through 34 are new for 2016



Weekday Pedestrian Volume Comparison



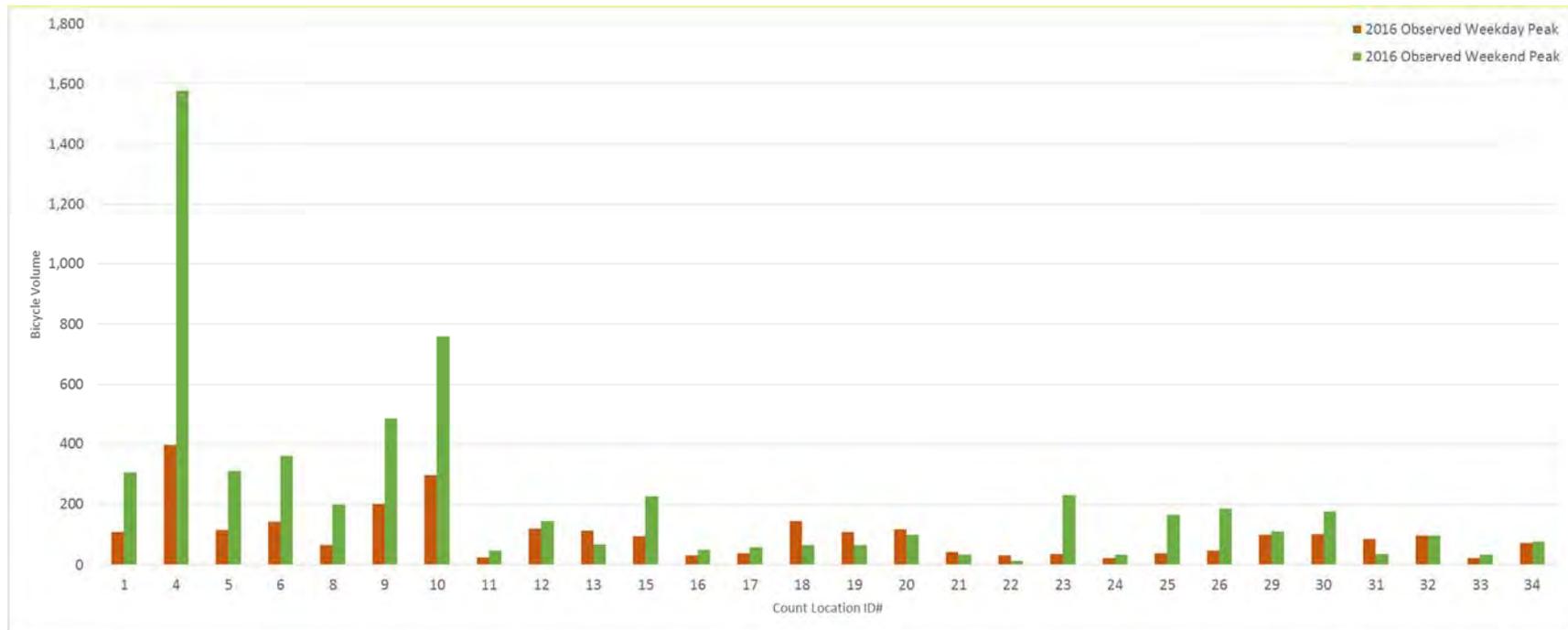
¹Locations 2 and 3 not counted in 2014 or 2016

²Locations 27 and 28 not counted in 2016

³Locations 29 through 34 are new for 2016



Weekday vs Weekend Peak Bicycle Volume Comparison



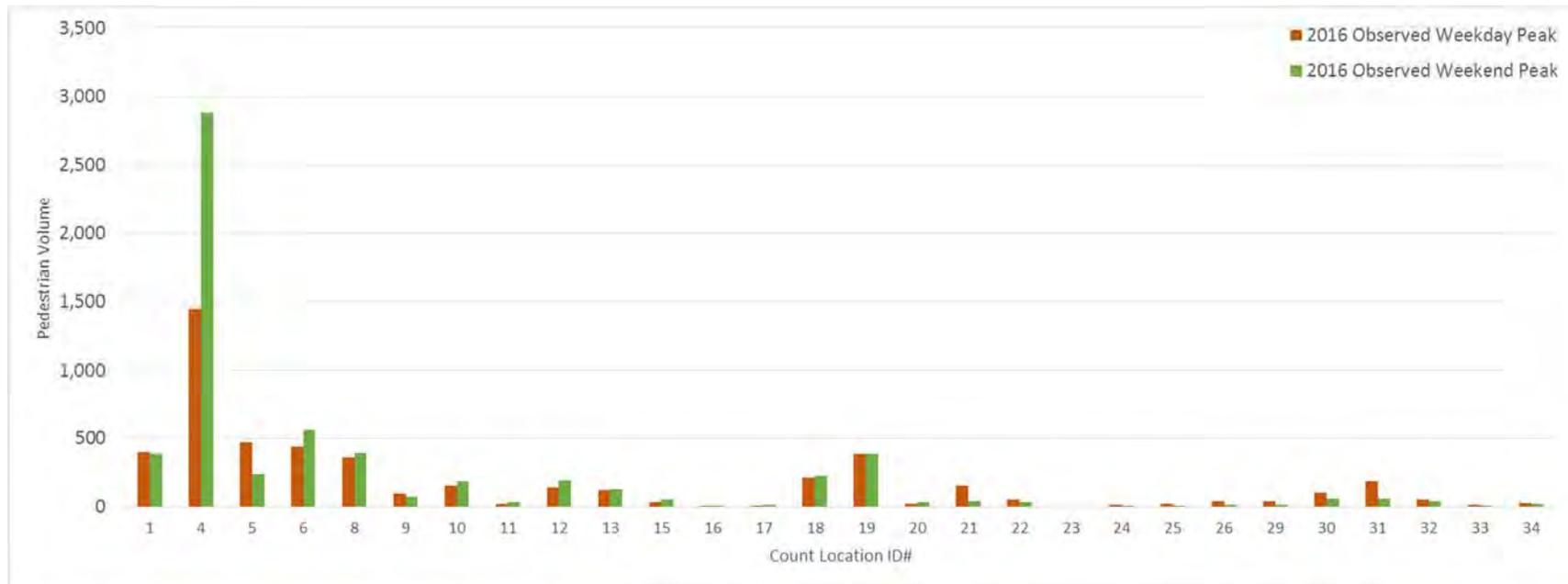
¹Locations 2 and 3 not counted in 2014 or 2016

²Locations 27 and 28 not counted in 2016

³Locations 29 through 34 are new for 2016



Weekday vs Weekend Peak Pedestrian Volume Comparison



¹Locations 2 and 3 not counted in 2014 or 2016

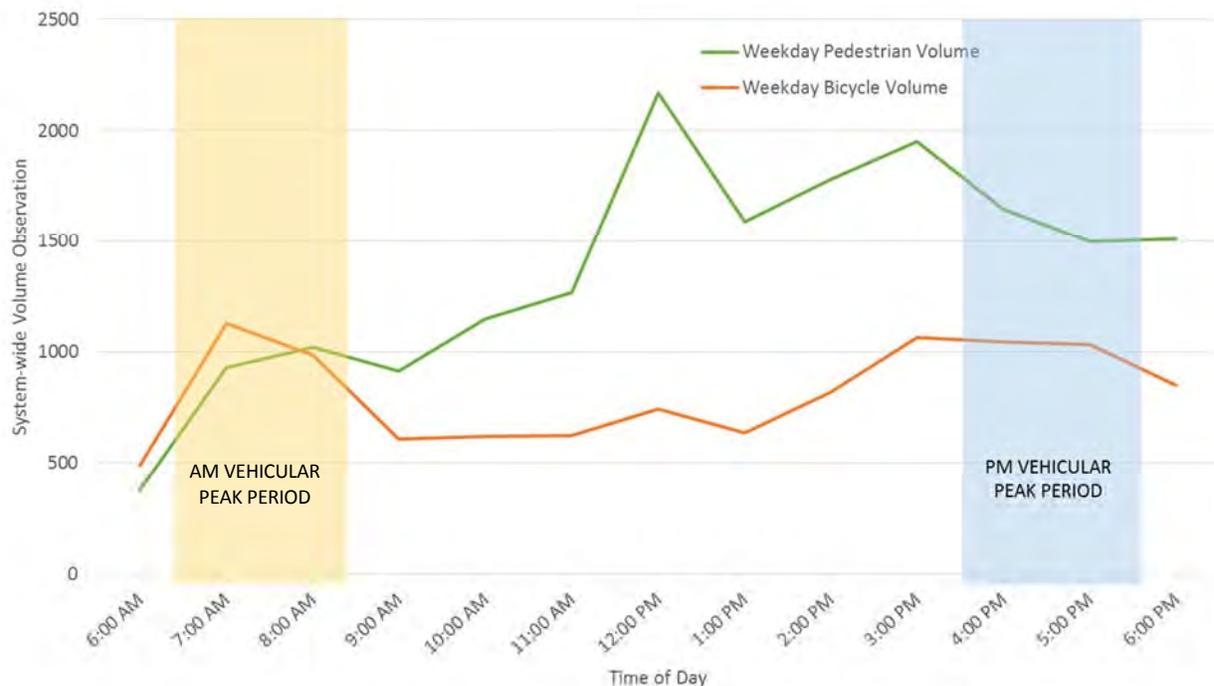
²Locations 27 and 28 not counted in 2016

³Locations 29 through 34 are new for 2016

As shown in the first two comparison charts above, peak observation periods for bicycle and pedestrian activity do generally follow the patterns of traditional AM and PM peak periods for vehicular volumes, notwithstanding a handful of exceptions, where peak activity falls outside those vehicular peaks. However, system-wide, there are not strong patterns that emerge when looking for an overall peak period.

The second set of comparison charts display differences between the maximum observed two-hour peak periods on weekdays versus weekends for bicycles and pedestrians. Weekend counts generally show much higher volumes than those found during weekdays. This trend shows that many users on the weekend are recreational users and do not necessarily commute during the weekdays via bicycling or walking.

The following chart shows the total sum of all system-wide bicycle and pedestrian observations, respectively, over the course of the 14-hour monitoring period.



Additional bicycle and pedestrian volume attribute trends at each count location are displayed in **Table 24**. The adult to youth ratio for bicyclists and pedestrians was 7:93 for both modes, system-wide at all locations combined. Locations closer to schools show much higher youth to adult ratios, in some cases showing youth volumes exceeding adult volumes.

Overall, in terms of system-wide comparisons, these data show a relatively significant shift from the 2014 data, which showed overall 15:85 and 20:80 splits between youths and adults for cyclists and pedestrians respectively.

As noted in the beginning of this chapter, comparisons between years based on a single data collection data should be made cautiously, since shifts in non-essential travel behavior, and shifts to other travel modes, are far more sensitive to slight shifts in weather, temperature, and other field conditions for non-motorized modes than for motorists. Conclusions based on these data should also, therefore, be made cautiously, and based on field observations over several days.

Table 24: Peak Period Bicycle and Pedestrian Volumes and Attributes: Youth vs Adult

ID	Count Location Description	Pedestrians				Bicyclists			
		Youth	Adult	Total	Ratio	Youth	Adult	Total	Ratio
1	Tiburon Blvd @ Main St	27	843	870	3 : 97	0	387	387	0 : 100
4	Bridgeway @ Princess St	108	3,827	3,935	3 : 97	8	2,190	2,198	0 : 100
5	San Anselmo Ave @ Tunstead Ave	62	677	739	8 : 92	3	454	457	1 : 99
6	Broadway @ Bolinas Rd	22	1,143	1,165	2 : 98	1	501	502	0 : 100
8	Magnolia Ave @ Ward St	69	777	846	8 : 92	8	257	265	3 : 97
9	Mill Valley-Sausalito Path @ E. Blithedale Ave	8	190	198	4 : 96	1	691	692	0 : 100
10	Mill Valley-Sausalito Path @ Tennessee Valley Path Junction	7	299	306	2 : 98	8	1,240	1,248	1 : 99
11	Tiburon Bike Path @ Blackie's Pasture / McKegney Green	3	36	39	8 : 92	2	74	76	3 : 97
12	Larkspur-Corte Madera Path @ Baltimore Ave	26	298	324	8 : 92	120	230	350	34 : 66
13	Corte Madera Creek Path @ Bon Air Rd	26	231	257	10 : 90	42	194	236	18 : 82
15	Camino Alto @ E. Blithedale Ave	19	84	103	18 : 82	4	306	310	1 : 99
16	Pacheco Hill Path @ Alameda del Prado	0	6	6	0 : 100	0	76	76	0 : 100
17	Los Ranchitos Rd @ Lincoln Hill Multi-Use Pathway	0	17	17	0 : 100	0	121	121	0 : 100
18	Doherty Dr @ Larkspur Plaza Drive / Rose Ln West	104	82	186	56 : 44	150	118	268	56 : 44
19	Doherty Dr @ Rose Ln East	106	72	178	60 : 40	120	87	207	58 : 42
20	Andersen Dr @ Cal Park Tunnel Path	8	64	72	11 : 89	10	262	272	4 : 96
21	S. Novato Blvd @ Rowland Wy	25	90	115	22 : 78	1	60	61	2 : 98
22	Bellam Blvd @ Andersen Dr	27	88	115	23 : 77	19	30	49	39 : 61
23	Nicasio Valley Rd @ Nicasio School	0	0	0	-	0	197	197	0 : 100
24	Enfrente Bike Path @ S. Novato Blvd	0	19	19	0 : 100	1	56	57	2 : 98
25	Tiburon Blvd @ S. Knoll Rd	2	16	18	11 : 89	1	176	177	1 : 99
26	E. Blithedale Ave @ Tower Dr	4	58	62	6 : 94	0	205	205	0 : 100
29	Central Marin Ferry Connector Bridge @ Sir Francis Drake Blvd	4	44	48	8 : 92	11	256	267	4 : 96
30	Almonte Blvd @ Shoreline Hwy	77	103	180	43 : 57	91	178	269	34 : 66
31	Francisco Blvd E. @ Bay St	15	200	215	7 : 93	11	148	159	7 : 93
32	Andersen Dr @ Du Bois St	1	79	80	1 : 99	0	256	256	0 : 100
33	Merrydale Rd @ Lincoln Hill Multi-Use Pathway	3	8	11	27 : 73	10	37	47	21 : 79
34	US 101 NB Off-Ramp @ Marin County Bike Route 20 / Sir Francis Drake Blvd	3	36	39	8 : 92	2	172	174	1 : 99
TOTAL		756	9,387	10,143	7 : 93	624	8,959	9,583	7 : 93

5.2 Historical Trends

5.2.1 Historical Bicycle Volume Trends

The bicycle data collected for this monitoring period was compared with the previous cycles' data to determine historical trends. It should be noted that these counts are for the peak hour, the one hour experiencing the highest volume of bicyclists throughout the day, and not the two-hour peak period. As shown in the **Table 25**, the average weekday bicycle volume is 76 bicyclists per location in 2016, an 85% increase over the 41 in 2014, and 31% increase over the five-year average (2007 to 2014) of 58. More modest increases relative to 2015 and the five-year average were recorded for weekend bicycle travel. Decreases in observed bicycle volumes were recorded at several locations, most significantly at the Tiburon Bike Path at Blackie's Pasture (ID# 11) during both weekday and weekend periods.

5.2.2 Historical Pedestrian Volume Trends

Weekday and weekend pedestrian peak hour count data is shown in **Table 26**. The pedestrian data collected for this monitoring period was compared with the previous cycles' data to determine historical trends. It should be noted that these counts are for the peak hour, the one hour experiencing the highest volume of pedestrians throughout the day, and not the two-hour peak period. In 2016, the average weekday pedestrian volume is 136 per location, a twofold increase over the 64 in 2014, and 40 percent increase over the five-year average (2007 to 2014) of 97. A less pronounced increase in pedestrian volume was noted on weekends. The increases, decreases, and shifts in pedestrian volume, when examined at the count location level, however, show far more variance than the bicycle counts. This reinforces the notion that pedestrian travel may involve more non-essential and recreational trips than bicyclists and motorists.

5.2.3 Caution Concerning Use of Historical Trend Information

In 2014, the data showed a noticeable downward trends in bicycle and pedestrian activity. This pattern appears to have reversed, showing an overall increase in bicycle ridership in 2016 relative to the five-year average, and a moderate increase in overall pedestrian activity. While it is encouraging to see an overall shift towards increased non-motorized travel, it is improbable that the changes in cycling and pedestrian activity are entirely attributable to overall commute and modal shifts changes over just two years.

As previously mentioned, shifts to other modes of travel are particularly sensitive to moderate changes in weather, temperature, and other field conditions for cyclists and pedestrians. Perhaps more importantly, shifts in weather, temperature, and other field conditions play a significant role in reducing pedestrian and cycling activity for non-essential trips and recreational use. These factors limit the utility of historical comparisons and year-to-year comparisons between these travel modes when only using a single data collection point. Conclusions drawn from this analysis should therefore be made cautiously.



Table 25: Weekday and Weekend Peak Hour Historical Bicycle Counts, 2007-2016

ID ¹	Bicycle Counts - Weekday Peak Hour											Bicycle Counts - Weekend Peak Hour										
	07	08	09	10	11	12	13	14	2007 - 2014 Average	2016	% Change	07	08	09	10	11	12	13	14	2007 - 2014 Average	2016	% Change
1	64	54	84	40	76	53	67	45	60	61	2%	154	147	64	213	185	127	103	150	143	161	13%
4	129	184	121	127	40	207	314	132	157	218	39%	91	467	502	460	476	283	573	746	450	812	80%
5	41	40	69	62	100	46	60	36	57	66	16%	102	34	128	119	166	233	124	134	130	171	32%
6	61	67	80	58	303	55	61	50	92	80	-13%	167	82	239	128	238	302	164	233	194	196	1%
8	25	33	45	25	26	16	31	28	29	42	45%	76	102	104	113	125	188	239	87	129	111	-14%
9	84	98	93	81	99	122	64	69	89	113	27%	111	302	300	243	279	355	241	252	260	262	1%
10	101	156	116	166	114	153	112	93	126	178	41%	266	339	397	344	386	308	367	360	346	397	15%
11	77	58	93	93	86	36	41	58	68	19	-72%	80	139	153	251	255	114	106	190	161	27	-83%
12	28	44	41	36	68	31	43	35	41	102	149%	57	57	69	66	77	47	79	69	65	85	31%
13	27	38	35	61	N/A	24	32	35	36	63	75%	35	26	49	66	N/A	40	45	35	42	37	-12%
15	36	33	18	93	20	12	8	14	29	69	138%	38	131	42	20	21	82	43	50	53	115	117%
16	6	11	4	28	27	3	17	21	15	18	20%	5	13	30	22	32	32	24	22	23	27	17%
17	22	11	15	65	101	29	17	23	35	20	-43%	67	4	11	11	38	59	17	47	32	40	25%
18	28	26	40	78	86	N/A	115	15	55	128	133%	19	31	12	9	37	N/A	21	18	21	39	86%
20	37	39	35	30	76	33	40	20	39	57	46%	23	23	14	95	77	47	57	29	46	60	30%
21	18	N/A	12	76	12	5	15	10	21	22	5%	13	N/A	10	11	15	20	16	21	15	18	20%
22	21	N/A	25	26	29	66	24	17	30	24	-20%	8	N/A	16	22	49	30	10	11	21	10	-52%
Average	47	59	54	67	79	56	62	41	58	76	31%	77	126	126	129	154	142	131	144	129	152	18%

Note: Locations where data was absent in 2014 report are not included in comparison table



Table 26: Weekday and Weekend Peak Hour Pedestrian Historical Counts, 2007-2016

ID ¹	Pedestrian Counts - Weekday Peak Hour											Pedestrian Counts - Weekend Peak Hour										
	07	08	09	10	11	12	13	14	2007 - 2014 Average	2016	% Change	07	08	09	10	11	12	13	14	2007 - 2014 Average	2016	% Change
1	269	134	226	226	82	234	228	130	191	193	1%	564	187	238	200	394	332	159	427	313	249	-20%
4	348	514	394	394	506	696	638	376	483	732	52%	303	1388	1782	1676	1055	890	1316	1381	1224	1,699	39%
5	122	66	140	140	181	228	186	107	146	260	78%	222	60	194	258	394	307	202	234	234	127	-46%
6	74	178	121	121	252	187	131	69	142	259	82%	125	276	124	121	205	204	209	197	183	321	75%
8	84	105	123	123	125	97	159	81	112	174	55%	102	114	133	48	195	170	128	165	132	199	51%
9	38	41	26	26	86	78	44	35	47	64	36%	19	39	28	29	33	31	63	34	35	42	20%
10	20	54	40	40	33	106	46	44	48	73	52%	48	40	55	52	53	75	65	43	54	109	102%
11	84	164	78	78	117	92	72	79	96	17	-82%	75	97	145	166	267	148	212	153	158	24	-85%
12	64	42	51	51	51	31	56	55	50	77	54%	33	44	59	33	52	29	41	64	44	104	136%
13	35	48	35	35	N/A	44	37	36	39	73	87%	26	37	47	25	N/A	42	23	28	33	71	115%
15	35	13	15	15	112	10	20	11	29	22	-24%	15	12	6	9	8	22	10	15	12	34	183%
16	7	15	7	7	29	22	2	18	13	9	-31%	11	8	11	14	12	16	7	5	11	3	-73%
17	14	1	4	4	78	8	6	9	16	8	-50%	20	1	4	5	11	0	13	6	8	9	13%
18	38	46	161	161	387	N/A	118	15	132	193	46%	30	26	13	8	30	N/A	22	21	21	199	848%
20	11	19	31	31	23	0	10	1	16	15	-6%	21	24	10	71	32	3	5	2	21	24	14%
21	39	N/A	9	9	29	16	41	16	23	104	352%	13	N/A	6	7	8	25	9	11	11	22	100%
22	39	N/A	9	9	30	154	11	11	38	36	-5%	20	N/A	34	31	31	30	5	11	23	24	4%
Average	78	96	86	86	133	125	106	64	97	136	40%	97	157	170	162	174	145	146	165	152	192	26%

Note: Locations where data was absent in 2014 report are not included in comparison table

6.0 ADDITIONAL ROADWAY CHARACTERISTICS

The following chapter discusses the distributions of ridership on CMP roadways and Marin County transit providers. As mentioned earlier, vehicle occupancy counts were conducted at the following seven locations within the CMP network:

1. Segment #1A – SR 1 from US 101 to Tennessee Valley Road
2. Segment #1B – SR 1 from Northern Avenue to Almonte Boulevard
3. Segment #3A – US 101 from Golden Gate Bridge to Spencer Avenue
4. Segment #3B – US 101 from SR 131 (Tiburon Boulevard) to Tamalpais Drive
5. Segment #3F – US 101 from Freitas Parkway to Lucas Valley Road
6. Segment #3G – US 101 from Atherton Avenue to Sonoma County Line
7. Segment #5A – I-580 from Sir Francis Drake Boulevard to Marin County Line

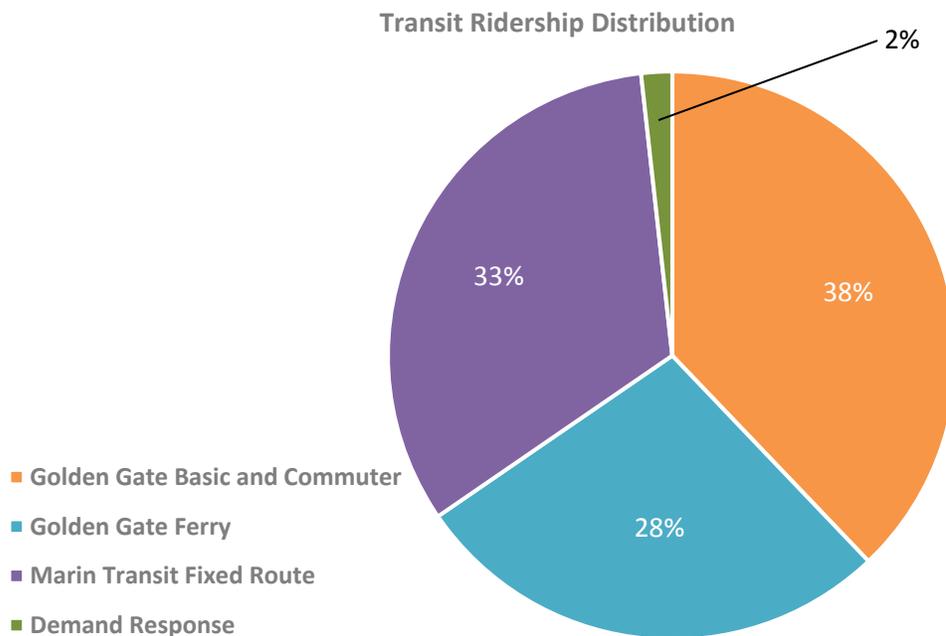
6.1 Passenger Vehicle Rider Distribution

During the summer of 2017, multiple vehicle occupancy counts were collected by MTC, TAM, and Caltrans along the CMP arterial and freeway segments within Marin County. The vehicle occupancy study will be made available separately once the collected data is compiled and analyzed.

6.2 Transit Rider Distribution

This section discusses the ridership distribution amongst all transit operations within Marin County and the following chart displays the use percentage of each transit mode. The following lists the services included in the analysis for Fiscal Year 2015-2016:

1. Golden Gate Basic and Commuter Service
2. Golden Gate Ferry Service
3. Marin Transit Sponsored Local Service
4. Marin Transit Shuttles and West Marin Routes (including Novato Dial-a-Ride)
5. Marin Access Paratransit Service



The above chart shows that there is a large (68 percent total) ridership using Golden Gate Transit Services. Of this, 38 percent use the Basic and Commuter Services and the remaining 25 percent take the Ferry. This distribution helps display that when looking at improving transit services within Marin County, Golden Gate Transit Services would benefit most. The distribution also illustrates that 33 percent of transit users are on the Marin Transit Fixed Route Services. This knowledge allows TAM to determine where to allocate their limited funding for transit improvements in the near future.

The remaining two percent of ridership is comprised of the Marin Access Services. Though these services do not provide a majority of rides within the system, they provide essential movement of Marin residents and should not be ignored when considering improvements.

7.0 NEXT STEPS

7.1 2014 CMP Conformance

As discussed earlier, two arterial segments and four freeway segments were found to be in non-compliance of the adopted LOS standards. Since the arterial segments, and three of the freeway segments have been grandfathered in, no actions or corrective measures are required. Additionally, as previously mentioned in this report, the fourth freeway segment that did not meet the adopted LOS standard has a scheduled improvement slated for construction completion by Fall 2017 that will add a third travel lane in the direction of travel that experienced PM peak hour congestion. Therefore, no actions or corrective measures are required beyond monitoring the performance of that segment after construction of the improvement has been completed.

7.2 Travel Time Reliability

The FAST Act, the successor federal transportation bill to MAP 21, continued to place increased emphasis on travel time reliability. Since travel time reliability is extremely important to the users, and since it plays a key role in a user's mode choice, TJKM recommends that TAM continue including travel time reliability data for future CMP monitoring efforts.

7.3 CMP Update

The next step in the CMP process is to complete the 2017 CMP Update. TJKM will work with TAM staff on a work plan and schedule to complete the 2017 Update as per CMP guidelines.



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2017 CMP Update



Final Report
November 2017



VISION THAT MOVES YOUR COMMUNITY

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COMMON ACRONYMS AND ABBREVIATIONS

AB	Assembly Bill	PeMS	Performance Measurement System
ABAG	Association of Bay Area Governments	RTIP	Regional Transportation Improvement Program
ADA	Americans with Disabilities Act	RTP	Regional Transportation Plan
ADT	Average Daily Traffic	SB	Southbound
BAAQMD	Bay Area Air Quality Management District	SCS	Sustainable Communities Strategy
Caltrans	California Department of Transportation	SCTA	Sonoma County Transportation Authority
CEQA	California Environmental Quality Act	SHOPP	State Highway Operations and Protection Program
CIP	Capital Improvement Program	SMART	Sonoma-Marín Area Rapid Transit
CMA	Congestion Management Agency	SOV	Single Occupancy Vehicle
CMIA	Corridor Mobility Improvement Account	SR	State Route
CMP	Congestion Management Program	SR2S	Safe Routes to School
CTC	California Transportation Commission	STAR	Safe Transport and Reimbursement
EB	Eastbound	STIP	State Transportation Improvement Program
FY	Fiscal Year	TAM	Transportation Authority of Marin
GHG	Greenhouse Gasses	TAZ	Traffic Analysis Zones
HCM	Highway Capacity Manual	TCIF	Trade Corridors Improvement Fund
HOT	High Occupancy Toll	TCM	Transportation Control Measures
HOV	High Occupancy Vehicle	TDM	Transportation Demand Management
IOS	Initial Operating Segment	TFCA	Transportation Fund for Clean Air
LOS	Level of Service	TIP	Transportation Improvement Program
MSN	Marin-Sonoma Narrows	V/C	Volume to Capacity
MTC	Metropolitan Transportation Commission	VMT	Vehicle Miles Travelled
MTM	Marin Travel Model	VRF	Vehicle Registration Fee
MUTCD	Manual of Uniform Traffic Control Devices	WB	Westbound
NB	Northbound		
NTPP	Nonmotorized Transportation Pilot Program		

EXECUTIVE SUMMARY

The 2017 Congestion Management Program (CMP) Update is a document of the Transportation Authority of Marin (TAM), the designated Congestion Management Agency (CMA) for Marin County. The 2016 biennial update is required by State statute. Following are highlights of this document.

Chapter 1: Designated Roadway System

The designated CMP roadway system in Marin County has not changed, as required by law. The CMP network numbering system is defined in corridor segments, allowing readers to easily reference roadway performance tables.

Chapter 2: Roadway System Level of Service

The monitoring results of roadway segments have varied little since the 2015 CMP Update, although some segments show improved levels of service (LOS). Five monitored CMP roadway segments (all grandfathered with the exception of one) out of 27 fell below LOS standards based on the 2016 Monitoring results.

Grandfathered roadway segments are those that operated at a lower (deficient) LOS than the standard established in 1991. Such segments are allowed to continue operating at a lower LOS without requiring remedial action. The segment that is not grandfathered has scheduled construction for improvements in Fall 2017 and will not require a follow-up action until verification of performance after construction. Given that no segments require action, no jurisdiction is considered out of conformance at this time.

Chapter 3: System Performance

The transit system in Marin County continues to serve many residents and commuters. The recent dedication of additional resources has led to an expansion of local transit service. Overall demand for Golden Gate Ferry has increased slightly during Fiscal Year (FY) 2015/16 from FY 2014/15. However, Golden Gate Transit and Marin Transit services have shown a slight decrease in ridership in FY 2015/16 from FY 2014/15.

Bicycle and pedestrian system performance is important to the County and is detailed in Chapter 3. The data collected to measure bicycle and pedestrian activity indicated that during the weekday monitoring, overall pedestrian activity was highest during the two-hour PM peak period, while overall bicycle activity was similar in both peak periods, but slightly higher during the two-hour AM peak period. This system-wide observation varied considerably from location to location. During the weekend two-hour midday peak period, overall bicycle and pedestrian activity nearly doubled from what was observed during the weekdays, most notably for bicycles. This trend shows that many users on the weekend are recreational users and do not necessarily commute during the weekdays via bicycling or walking.

The average weekday bicycle volume per location in 2016 shows an 85% increase over 2014, and 31% increase over a five-year average (2007 to 2014). In 2016, the average weekday pedestrian volume per location shows a twofold increase over 2014, and 40% increase over a five-year average (2007 to 2014).

The performance measures presented in this chapter show that multimodal demand is not showing significant change in the last two years. The current economy is good and though many efforts on different fronts are proceeding well, the challenges of increased travel demand remain significant. Overall traffic flow on eight arterial segments and two US 101 segments was better in 2016 than it was in 2014.

Travel times along US 101 in the northbound (NB) and southbound (SB) directions between the County lines vary between 23 - 39 minutes and 23 - 36 minutes respectively depending on the time of day. Planning travel time, the total time a traveler should allow to ensure on-time arrival, in the NB direction during the PM peak hour can be as high as approximately 39 minutes, and approximately 36 minutes in the SB direction during the AM peak hour. Transit ridership shows approximately 66% using Golden Gate Transit Services, 33% using Marin Transit Fixed Route Services, and the remainder using Marin Access Services.

Chapter 4: Transportation Demand Management

Transportation Demand Management (TDM) strategies are utilized to improve efficiency of the existing transportation systems without significant expansion of the infrastructure. These strategies focus on ways to reduce solo driving and/or to eliminate need for driving all together. Some of the commonly used strategies that aim at cutting down solo driving include carpool, vanpool, bicycles, transit, and park & ride lots. Strategies to reduce vehicle miles traveled (VMT) include alternatives such as telecommuting, flexible work schedules, and parking cash-out programs. Improving a balance between available jobs and housing also help encourage non-auto modes of transportation. Use of TDM strategies help cities and counties in their attempt to balance the growing need for transportation and availability of limited transportation dollars.

Chapter 5: Land Use Analysis

The CMP presents two important elements of the Land Use Analysis Program: Part A for major development projects and general plan updates, and Part B for biennial development tracking, both of which require local government participation and cooperation. The first program was adopted in 1991. As of August 2015, 20 major development proposals in the near-term horizon are to be considered in Part A. Compliance to CMP requirements allows jurisdictions to retain gas tax funding and have projects programmed in the Regional Transportation Improvement Program (RTIP).

Chapter 6: Travel Demand Model

CMP requirements include maintaining and utilizing a travel demand model that is consistent with the regional model and available for use in corridor and development studies. The Marin Travel Model (MTM) was updated in 2013 with 2040 land use projections to be consistent with Plan Bay Area forecasts.

Chapter 7: Capital Improvements Program

A majority of Measure A, the County's 1/2-cent transportation sales tax, funding is allocated to operating existing programs. Also, many Marin County projects have received major funding from other sources in the past several years, so that there are not many improvements that can be identified. The most significant investment to Marin's roadway system, the Marin-Sonoma Narrows (MSN) Project, is detailed

in this chapter. Several MSN Phase 1 projects have been completed and are underway. This report also describes other projects whose funding is provided and tracked by regional and state agencies.

This CMP identifies programs and funding relative to County Measure B, the \$10 vehicle registration fee (VRF) approved by Marin County voters in 2010. Measure B includes three elements: maintain local streets and pathways; improve transit for seniors and persons with disabilities; and, reduce congestion and pollution with programs relating to school safety and congestion, commute alternatives, and alternative fuels.

Chapter 8: Deficiency Plan Procedures

Local jurisdictions must meet the CMP conformance requirements to receive funding from several State programs. The conformity process has not substantially changed in the 2015 CMP. LOS monitoring in this CMP found one new deficiency. The segment, I-580 from Sir Francis Drake Boulevard to Marin County Line, that is not grandfathered has scheduled construction for improvements in Fall 2017 and will not require a follow-up action until verification of performance after construction. Given that no segments require action, no jurisdiction is considered out of conformance at this time and local jurisdictions that conform to the land use analysis program requirements are expected to remain in conformance.

1. DESIGNATED ROADWAY SYSTEM

1.1 Purpose and Intent of Legislation

The CMP roadway system is a network that allows performance monitoring in terms of established LOS standards. The network must be created at a level such that impacts can be identified, and a connection can be made between proposed projects and their specific impacts on the network. The network can neither be too small, as impacts would be unidentifiable, nor too large, as there would be logistical issues in monitoring network performance. The CMP was established as part of the legislated Transportation Blueprint of 1990 and became a requirement for CMAs across California to fulfill.

The Marin County CMA established the CMP roadway network in 1991. The designated CMP roadway system includes all state highways and principal arterial roadways in Marin County. California Government Code Section 65089(b)(1)(A) states that once a highway or roadway has been designated as part of the CMP system, it cannot be removed. Furthermore, Section 60589(b)(4) requires that the regional transportation system is part of the required land use program defined by State statute.

1.2 Relationship to Regional Plans

The CMP is a short-range document containing elements that are required for consistency with long term regional transportation plans. The CMP is required to be consistent with long range regional transportation plans in the following areas:

- Goals and objectives established in the RTP;
- Consistency of the system definition with adjoining counties;
- Consistency with federal and state air quality plans;
- Consistency with the MTC travel demand modeling database and methodologies; and
- RTP financial assumptions.

Plan Bay Area 2040 is the Regional Transportation Plan (RTP) developed by the Metropolitan Transportation Commission (MTC), the San Francisco Bay Area's regional transportation planning agency. The Marin CMP roadway system is consistent with the RTP, which was adopted in July 2017.

1.3 Designated CMP System

Prior Marin County CMPs have defined State Highways and other principal arterial roadways for the County CMP roadway network. MTC has provided a framework that allows for flexibility in defining the principal arterial system. The following criteria were used to establish the designated CMP roadway network:

- *State Highways*: All State Highways must be included in the CMP roadway network according to the CMP legislation. If a route is to be removed from the State Highway System, it is to be evaluated according to principal arterial criteria to determine whether it should remain in the CMP network.
- *Principal Arterial Roadways*: Marin's first CMP, created in 1991, designated principal arterial roadways as part of the CMP roadway network. Non-State CMP roadways were included based upon the following criteria:

- Purpose and function of the roadway
- Land use adjacent to the roadway and proximity to activity centers
- Average Daily Traffic (ADT) volume (generally greater than 25,000 daily vehicles)
- Connectivity to other facilities

1.4 County CMP Designated Network

Figure 1 illustrates all designated CMP roadway facilities within Marin County. The following roadways are designated as the State Highway corridors of the Marin CMP roadway network:

1. State Route (SR) 1 – from Sonoma County Line to US 101
2. SR 37 – from US 101 to Sonoma County line
3. US 101 – from Sonoma County Line to San Francisco County Line
4. SR 131 – from US 101 to Main St in Tiburon
5. Interstate I-580 – from US 101 to Contra Costa County Line

As noted above, additional roadways were designated in Marin’s CMP in 1991. The following routes (also shown in **Figure 1**) are the Principal Arterials of the Marin CMP roadway network:

1. Novato Boulevard/South Novato Boulevard in Novato – from Sutro Avenue/San Marin Drive to US 101
2. Bel Marin Keys Boulevard – from US 101 SB Ramps to Commercial Boulevard
3. Sir Francis Drake Boulevard in unincorporated Marin County, Fairfax, San Anselmo, Ross, Kentfield, Larkspur – from SR 1 to I-580
4. Red Hill Avenue/2nd Street/3rd Street in San Anselmo and San Rafael – from Sir Francis Drake Boulevard to US 101
5. Bridgeway/2nd Street/Alexander Avenue in Sausalito – from US 101 to US 101

Table 1 provides details of the Marin CMP roadway network. In total, the 123-mile CMP designated roadway network contains 91 miles of state highways and 32 miles of principal arterial roadways.

Table 1: Arterial and Freeway Segments in CMP Network

<i>ID</i>	<i>Street</i>	<i>From</i>	<i>To</i>	<i>Roadway Type</i>	<i>Grand-fathered Status</i>
1A	SR 1	US 101	Tennessee Valley Rd	Arterial	No
1B	SR 1	Northern Ave.	Almonte Blvd	Arterial	Yes
1C	SR 1	Sir Francis Drake Blvd.	Pt. Reyes Station	Arterial	No
2A	SR 37	US 101	Atherton Ave.	Freeway	No
3A	US 101	Golden Gate Bridge	Spencer Ave.	Freeway	No
3B	US 101 (SOV & HOV)	SR 131 (Tiburon Blvd.)	Tamalpais Dr.	Freeway	Yes
3C	US 101 (SOV & HOV)	Sir Francis Drake Blvd.	I-580	Freeway	Yes
3D	US 101 (SOV & HOV)	I-580	Mission Ave.	Freeway	Yes
3E	US 101 (SOV & HOV)	Mission Ave.	N. San Pedro Rd.	Freeway	Yes
3F	US 101 (SOV & HOV)	Freitas Pkwy.	Lucas Valley Rd.	Freeway	Yes
3G	US 101	North of Atherton	Sonoma Co. Line	Freeway	Yes
4A	SR 131 (Tiburon Blvd.)	Redwood Hwy Frontage Rd.	E. Strawberry Dr.	Arterial	No
5A	I-580	Sir Francis Drake Blvd.	Marin Co. Line	Freeway	No
5B	I-580	Bellam Blvd.	Sir Francis Drake Blvd.	Freeway	Yes
6A	Novato Blvd.	San Marin Dr.	Eucalyptus Ave.	Arterial	No
6B	Novato Blvd.	Wilson Ave.	Diablo Ave.	Arterial	No
6C	S. Novato Blvd.	Sunset Pkwy.	US 101	Arterial	No
7A	Bel Marin Keys	US 101	Commercial Blvd.	Arterial	Yes
8A	Sir Francis Drake Blvd.	Butterfield Rd.	Willow Rd.	Arterial	Yes
8B	Sir Francis Drake Blvd.	San Anselmo Ave.	Red Hill Ave.	Arterial	Yes
8C	Sir Francis Drake Blvd.	College Ave.	Toussin Ave.	Arterial	Yes
8D	Sir Francis Drake Blvd.	College Ave.	Wolfe Grade	Arterial	Yes
8E	Sir Francis Drake Blvd.	US 101	Larkspur Landing Cir.	Arterial	Yes
9A	Red Hill Ave.	Sir Francis Drake Blvd.	Second St.	Arterial	No
9B	Second St.	US 101	Marquard St.	Arterial	No
9C	Third St.	US 101	Marquard St.	Arterial	No
10A	Bridgeway	Gate 5 Rd.	Gate 6 Rd.	Arterial	No

Notes: SOV = Single Occupancy Vehicle; HOV = High Occupancy Vehicle

2. ROADWAY SYSTEM LEVEL OF SERVICE

2.1 Purpose and Intent of Legislation

California Government Code 65089(b)(1)(A) requires that LOS standards be established as part of a CMP using the Transportation Research Board’s Highway Capacity Manual (HCM) or an accepted alternative.

Traffic LOS definitions describe roadway operational conditions in terms of speed and travel time, volume, capacity, ease of maneuverability, traffic interruptions, comfort, convenience, and safety. **Tables 2 and 3** show the LOS criteria used in monitoring the Marin County CMP roadway network for arterial and freeway segments. There are six gradations of LOS from A to F. LOS A reflects free-flow conditions, with vehicles traveling at free-flow speed. LOS F reflects forced-flow, or “stop-and-go” congested conditions.

Table 2: Arterial Level of Service Thresholds

<i>Speed</i>	<i>Level of Service (LOS)</i>
25 mph	A
20 mph	B
13 mph	C
10 mph	D
7 mph	E
< 7 mph	F

Source: Highway Capacity Manual

Table 3: Freeway Level of Service Thresholds

<i>Speed</i>	<i>Level of Service (LOS)</i>
60 mph	A
57 mph	B
54 mph	C
46 mph	D
30 mph	E
< 30 mph	F

Source: Highway Capacity Manual

The LOS designation as related to facility speeds and volume-to-capacity ratios provides a quantitative tool that can be used to analyze the impacts of land use changes on the CMP network. Traffic LOS is also used as a measure of system performance (e.g., congestion). Every two years, TAM (as Marin’s CMA) is required to determine whether local governments have been conforming to the CMP, including attainment of LOS standards. This is achieved through a self-certification process in which TAM monitors and reports LOS conditions. The CMA can also consider local jurisdiction monitoring reports to aid in determining whether the local city is in conformance with the CMP. Additional detail on monitoring requirements is included in Chapter 8.

Local cities and towns must consider the impacts that land use decisions have on LOS within the designated CMP network. TAM works with local government entities to determine whether a change in

land use affects LOS negatively, and how to mitigate any anticipated deficiencies. A systems approach may have to be examined when considering LOS of the entire system. Cities and counties may be responsible for improvements and funding of programs that affect the system as a whole.

It should be noted that prior to the 2007 CMP, the methodology for monitoring LOS was conducted by using the volume to capacity (V/C) ratio. Since then, the methodology has shifted from using traffic volumes to measuring the amount of time traveled through a segment, reflecting newer LOS calculation methods now recommended and performed by the Highway Capacity Manual printed in 2003. The 2016 Monitoring Cycle uses historical data no earlier than 2008 so all LOS methodologies are the same.

2.2 Highway Level of Service Standards

Goals and Objectives

The LOS methodology should allow for measurement of traffic growth trends through changes in volumes, capacity, and delay. CMP legislative guidance identifies several issues that affect the determination of LOS and the application of a standard. The Marin County CMP has developed an approach that is consistent, easy to use, non-duplicative, and compatible with local government data and travel demand models. **Table 4** below summarizes the approach used to address each issue identified in the guidance.

Table 4: Approaches to Marin CMP Issues

<i>Issue</i>	<i>Approach</i>
Inter-County Trips	In accordance with California statutory requirements, trips with no end in Marin County (through trips) are not to be included for deficiency plan determination. These trips are included for performance reporting.
LOS Standards	D for Urban and Suburban Arterial Roadways. E for Freeways and Rural Expressways (US 101, I-580, and SR 37).
Method of Analysis: Freeway and Rural Expressway Segments	The analysis technique for freeway segments, based on segment weekday PM peak-hour volume to capacity ratios is from chapter 23 and 24 of the Highway Capacity Manual. (The PM peak hour is the highest consecutive 60 minutes of traffic in the afternoon, typically between 5 PM and 6 PM).
Method of Analysis: Urban and Suburban Arterial Segments	Volume-to-Capacity ratios are the analysis technique for arterial sequences, utilizing capacities provided in Chapter 15 and 16 of the <i>Highway Capacity Manual</i> , and based on weekday PM peak-hour traffic volumes. (The PM peak hour is the highest consecutive 60 minutes of traffic in the afternoon, typically between 5 PM and 6 PM).
Method of Analysis: Rural Arterial Roadways	Chapter 20 of the <i>Highway Capacity Manual</i> is the analysis technique to be applied for rural roadways, based on weekday PM peak hour traffic volumes. (The PM peak hour is the highest consecutive 60 minutes of traffic in the afternoon, typically between 5 PM and 6 PM).
Monitoring	The local agency (e.g., city and county) or TAM performs the LOS monitoring. Monitoring frequency is to be biennial (with certain exceptions outlined in Chapter 8 of the Highway Capacity Manual), recognizing that more frequent counting could be done as part of development impact study requirements.
Deficiency Analysis	More refined analyses may be required when determining if a roadway segment is deficient. If appropriate, the operational analysis methodology described in the <i>Highway Capacity Manual</i> may be used to determine LOS.

The CMP legislation allows trips not originating in a county, trips passing through a county, or trips generated by low- and very low-income housing to be excluded from the determination of conformance with LOS standards following consultation with MTC, Caltrans, and the Bay Area Air Quality Management District. TAM, however, decided to include these trips when determining conformance with LOS standards for local planning purposes, as exclusion of these trips would present a misleading picture of the traffic conditions in the county and could artificially skew the inclusion and/or ranking of projects in the seven-year Capital Improvement Program (CIP).

Facility Classifications

The HCM provides methods for determining LOS on several types of facilities. These facilities are grouped into interrupted- and uninterrupted-flow facilities. Interrupted-flow facilities include city streets and non-grade separated highways (like SR 1) that are part of the State Highway System. For purposes of LOS analysis, the CMP network is classified into two functional types of facilities:

- *Basic Freeway and Rural Expressway Segments:* These are designed as uninterrupted-flow facilities with multiple lanes available in each direction and traffic only stopping when traffic is heavy enough to create slow speeds or when breakdowns occur.
- *Suburban and Rural Arterial Roadways:* Suburban arterial roadways consist of more than one lane in each direction, with traffic signals less than two miles apart on average. Rural arterial roadways are typically a single lane in each direction but designed at lower speeds than rural expressways and have occasional interrupted flow from traffic signals, stop signs or turning vehicles.

Definition of Roadway Segments

Chapter 1 lists the segments of the Marin County CMP network analyzed as part of this CMP (see **Figure 1** and **Table 1**). Each segment is assigned a “responsible jurisdiction” where the jurisdiction named is the one with the greatest segment mileage. This jurisdiction is responsible for preparing any required deficiency plans, as well as complying with all other CMP legislative requirements related to that segment. Other jurisdictions through which a CMP segment travels are expected to work in a cooperative fashion with the responsible jurisdiction, and bear a pro rata share of the cost of any improvement to the facility based on the approximate cost of improvements in their jurisdiction. In the event that funding is needed for a program, each jurisdiction would contribute its fair share of the cost based on segment mileage within the jurisdiction.

Identification of “Grandfathered” Roadway Segments

“Grandfathered” roadway segments are those that operated at a lower (deficient) LOS than the standard established in 1991. Freeway segments that operated at LOS F or arterial segments that operated at LOS E or F in the 1991 CMP qualify as “grandfathered” segments and do not require action if they operated at these levels during the 2016 Monitoring. The monitoring locations for each CMP facility in Marin County and their grandfathered status are summarized in **Table 1**.

At the time when the Marin County CMP was created, there was an agreement that some segments would operate at deficient LOS and should be excluded from local government requirements to maintain the adopted level of service standard as part of any new development approval process. These segments were “grandfathered” and thus not required to meet the LOS standard.

In the future, TAM may wish to develop an improvement plan to address congestion as appropriate for these remaining grandfathered facilities. An improvement plan would consist of a description of the actions required to improve the LOS on the facility, either by increasing capacity or managing the demand for travel in a manner that effectively improves LOS.

2.3 2016 Monitoring Results

The monitoring for the 2017 CMP was conducted for TAM by TJKM. The 2016 Monitoring Cycle, documented in the *2016 Transportation System Monitoring Report*, provides detailed results summarized in **Tables 5** and **6**. **Table 5** documents average travel time, speed survey results, and LOS for the PM peak period on arterial segments. **Table 6** contains this information for freeways. The charts that follow are a historical comparison for arterial and freeway LOS during the PM peak period in the peak direction.

Table 5: 2016 Arterial LOS Summary – PM Peak Period

ID	Roadway	Segment	Length (mi)	Northbound / Eastbound			Southbound / Westbound			LOS Goal	Action
				Avg. Time (mm:ss)	Avg. Speed (mph)	LOS	Avg. Time (mm:ss)	Avg. Speed (mph)	LOS		
1A	SR 1	US 101 to Tennessee Valley Rd.	0.40	01:16	21	B	03:03	11	D	D	None
1B	SR 1	Northern Ave. to Almonte Blvd.	0.80	02:04	24	B	01:39	29	A	D	None
1C	SR 1 ¹	Sir Francis Drake Blvd. to Pt. Reyes Station	2.20	04:35	29	A	04:19	31	A	D	None
4A	SR 131 (Tiburon Blvd)	Redwood Hwy. Frontage Rd. to E. Strawberry Dr.	0.50	01:16	25	B	01:02	28	A	D	None
6A	Novato Blvd	San Marin Dr to Eucalyptus Ave	0.42	00:49	30	A	00:53	28	A	D	None
6B	Novato Blvd	Wilson Ave. to Diablo Ave.	1.14	03:58	17	C	03:41	18	C	D	None
6C	S. Novato Blvd	Sunset Pkwy. to US 101	1.07	02:05	27	A	08:25	21	B	D	None
7A	Bel Marin Keys	US 101 to Commercial Blvd.	0.20	00:50	19	C	01:38	15	C	D	None
8A	Sir Francis Drake Blvd	Butterfield Rd. to Willow Rd.	0.26	00:46	19	C	01:08	12	D	D	None
8B	Sir Francis Drake Blvd	San Anselmo Ave. to Red Hill Ave.	1.12	05:32	14	C	03:17	21	B	D	None
8C	Sir Francis Drake Blvd.	College Ave. to Toussin Ave.	0.28	01:13	14	C	01:05	15	C	D	None
8D	Sir Francis Drake Blvd.	College Ave. to Wolfe Grade	0.61	01:35	23	B	01:40	24	B	D	None
8E	Sir Francis Drake Blvd.	US 101 to Larkspur Landing Cir.	0.46	10:28	3	F	01:26	19	C	D	None ²
9A	Red Hill Ave.	Sir Francis Drake Blvd. to Second St.	1.13	02:55	24	B	04:12	17	C	D	None
9B	Second St.	US 101 to Marquard St.	1.13	02:52	11	D	One Way Only			D	None
9C	Third St.	US 101 to Marquard St.	1.11	One Way Only			03:29	17	C	D	None
10A	Bridgeway ¹	Gate 5 Rd. to Gate 6 Rd.	0.17	00:28	20	B	00:29	21	B	D	None

Notes: 1. Data obtained from commercial sources.
2. Grandfathered Segment (No actions required)

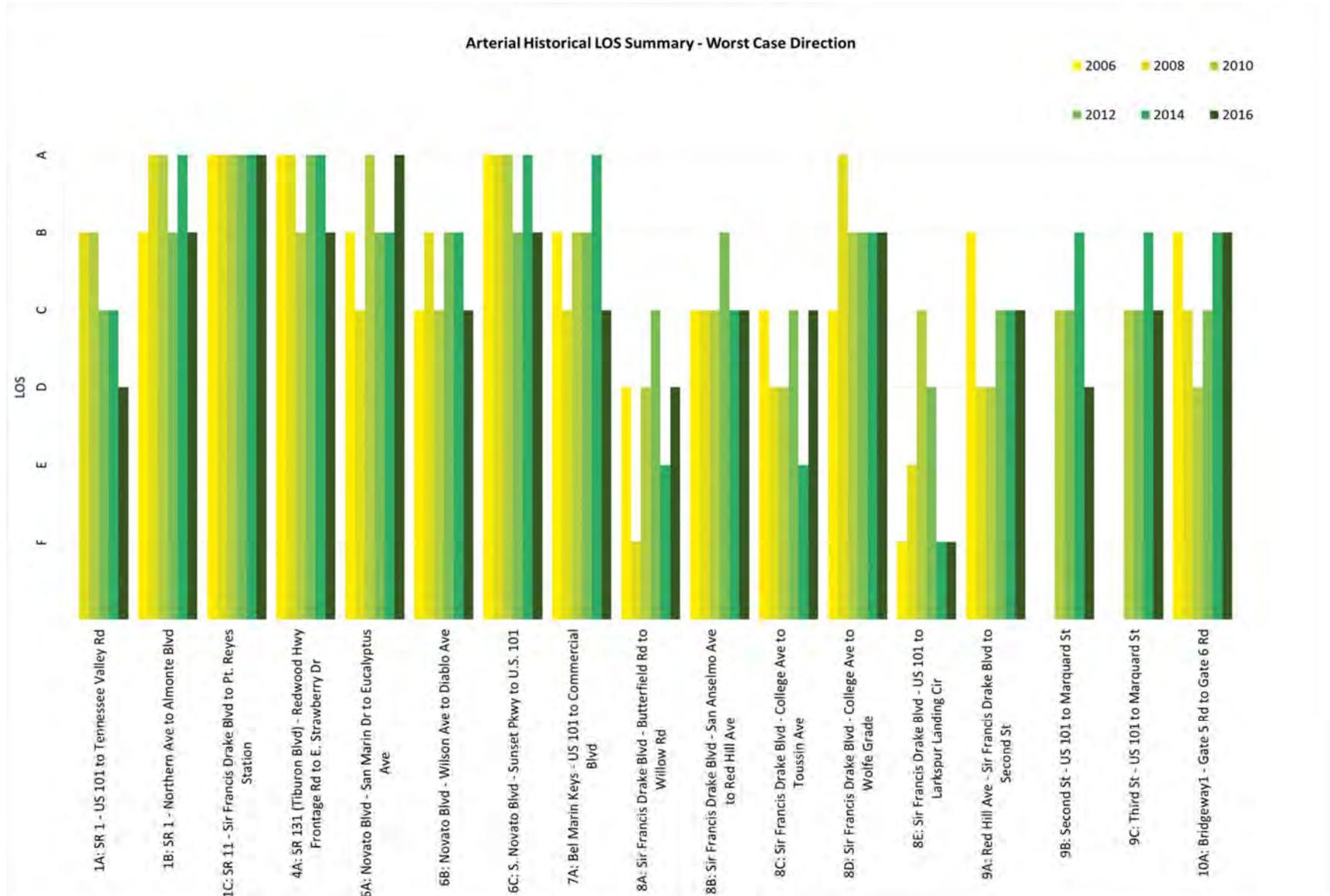
Table 6: Freeway Mixed-Flow Lanes LOS Summary – PM Peak Period

ID	Roadway	Segment	Length (mi)	Northbound / Eastbound			Southbound / Westbound			LOS Goal	Action
				Avg. Time (mm:ss)	Avg. Speed (mph)	LOS	Avg. Time (mm:ss)	Avg. Speed (mph)	LOS		
2A	SR 37	US 101 to Atherton Ave.	2.60	02:20	67	A	02:27	64	A	E	None
3A	US 101	Golden Gate Bridge to Spencer Ave.	1.50	01:39	54	C	02:11	41	E	E	None
3B	US 101	SR 131 (Tiburon Blvd.) to Tamalpais Dr.	1.70	03:59	26	F	01:36	64	A	E	None ¹
3C	US 101	Sir Francis Drake Blvd. to I-580	1.32	01:51	43	E	01:20	60	B	E	None
3D	US 101	I-580 to Mission Ave.	1.22	01:33	47	D	01:16	58	B	E	None
3E	US 101	Mission Ave. to N. San Pedro Rd.	1.59	01:44	55	C	01:41	57	C	E	None
3F	US 101	Freitas Pkwy. to Lucas Valley Rd.	1.01	01:02	59	B	00:59	61	A	E	None
3G	US 101	North of Atherton to Sonoma Co. Line	5.96	12:31	29	F	05:39	63	A	E	None ¹
5A	I-580	Sir Francis Drake Blvd. to Marin Co. Line	0.70	01:52	22	F	00:43	59	B	E	None ²
5B	I-580	Bellam Blvd. to Sir Francis Drake Blvd.	1.23	04:20	17	F	01:13	61	A	E	None ¹

- Notes:
1. Grandfathered Segment (No actions required).
 2. Improvements to this segment are currently scheduled for construction in Fall 2017 (No action required, pending verification of performance after improvement construction).

The results of the 2016 Monitoring Cycle show that no actions are required on any segment in the CMP network except for one segment, 5A – I-580 from Sir Francis Drake Boulevard to Marin County Line, which is not grandfathered experiences deterioration of LOS from E to F. However, improvements to this segment are currently scheduled for construction in Fall 2017. No action is required at this segment, pending verification of performance after improvement construction. Five of the 27 segments did not meet the established LOS standards: one arterials (one during the AM and PM peak hour) and four freeways (all during the PM peak hour). All of the segments with the exception of one are grandfathered. The grandfathered segments will require no follow-up actions. The segment that is not grandfathered has scheduled construction for improvements in Fall 2017 as aforementioned and will not require a follow-up action until verification of performance after construction. Given that no segments require action, no jurisdiction is considered out of conformance at this time.

Arterial Historical LOS Summary for PM Peak Period – Worst Case Direction



PM Peak Period – 2014 and 2016 LOS Comparison



3. SYSTEM PERFORMANCE

3.1 Purpose and Intent of Legislation

The California Government Code Section 65089(b)(2) requires each CMA to establish performance measures to evaluate current and future multimodal system performance (in addition to LOS presented in Chapter 2) for the movement of people and goods. Consistent with past CMPs, performance measures are included in this CMP and described in this chapter. The measures should not be confused with “standards,” as no level of performance is required. Rather, measures simply indicate the levels of performance at a given time.

The first part of this section highlights the current transit system in Marin County. The next section highlights bicycle and pedestrian programs. Lastly, one additional performance measure is provided:

- Travel Time Reliability

The above performance measures help determine whether the goals of the CMP are being met: supporting mobility, air quality, land-use, and economic objectives. These measures are also used in the development of any necessary CIP, deficiency plans, and the land-use analysis program. The *2016 Transportation System Monitoring Report* prepared by TJKM for TAM in August 2017 contains detailed information on the transportation system, and is a key source in describing these measures.

3.2 Current Transit Operations in Marin County

The transit network within Marin County comprises a variety of services. These include:

- General public transit bus service for both inter- and intra-county trips
- General public ferry service, serving trips between Marin County and San Francisco
- Specialized transit services aimed at serving the needs of the senior and disabled population in the County, including dial-a-ride, paratransit, and wheelchair accessible taxis
- Privately operated services, providing targeting service between specific locations, such as the service between Marin County and San Francisco International Airport

The Sonoma-Marín Area Rail Transit (SMART) service will likely be added as a CMP transit service. As of September 2017, revenue service of the SMART train is underway.

The following sections provide a brief description of the transit services provided for inter-county and intra-county transit travel. In addition, bus route information, headways, and overall transit ridership are summarized in each section.

Marin Transit

Marin Transit is the agency responsible for local transit service within Marin County. Marin Transit has responsibility for local transit services and contracts with other operators for three types of fixed route services within the county: large bus fixed route, shuttle, and rural service. Contracted providers include Golden Gate Transit, MV Transportation, and Marin Airporter. Marin Transit also contracts with Whistlestop to provide paratransit and dial-a-ride service within Marin County. Marin Transit added 19% service increases in Summer 2016.

Table 8 summarizes the regularly scheduled Marin Transit services. Marin Transit also operates the Marin Access Mobility Management Center, which is a one-call, transportation information and referral service, focused on meeting the mobility needs of Marin's older adults, disabled persons, and low-income residents.

Transit service provided within Marin County by Marin Transit via contractors includes:

- *Local Service:* Nine routes operate entirely within Marin County on weekdays, with limited weekend service, contracted through Golden Gate Transit. Additional 10 routes operate as school-focused service on school days only, as detailed below. Since the 2015 CMP, Marin Transit has ceased operations on Route 45.
- *School Service:* 10 routes provide limited service on school days in Marin County, as well as select trips on Routes 17 and 23. All routes have operated continuously since the 2015 CMP, with the addition of Route 122 serving the College of Marin. Marin transit also provides contract support for yellow school bus service in the Mill Valley, Ross Valley and the Tiburon Peninsula.
- *Recreational Services:* A seasonal shuttle service, Route 66, operates between Muir Woods and Mill Valley. A supplemental route (66F) provides intermediate service via Marin City. Shuttle schedules are adapted to weekend and seasonal recreational travel demands. Marin Transit contracts with Golden Gate Transit to operate Route 66 in partnership with the National Park Service between May and October.
- *West Marin Stagecoach:* Marin Transit contracts with MV Transportation to operate the West Marin Stagecoach with one service route (Route 68) in West Marin. The Stagecoach provides weekday and weekend service to area residents. Route 65 has been removed.
- *Community Shuttle Service:* Marin Transit contracts with Marin Airporter to operate six shuttle bus routes providing limited service: Strawberry / Tiburon (Route 219); San Rafael / Fairfax (Route 228); Santa Venetia / San Rafael (Route 233); San Rafael / Contempo (Route 245); Hamilton Theater / San Marin Drive in Novato (Route 251); Indian Valley Campus / San Rafael (Route 257). Since the previous CMP update, Route 259 (San Rafael / Novato) ceased operation. Marin Airporter also provides airport shuttle service between Marin County and San Francisco Airport as its primary business, separate from Marin Transit operations.
- *Marin Access:* Marin Access provides transit services and information for the community's older adults, persons with disabilities, and low-income residents. This Marin Transit program contracts with Whistlestop to provide the following services: Paratransit, Catch-A-Ride, and Volunteer Driver.
- *Novato Dial-A-Ride:* Marin Transit contracts with Whistlestop to provide a dial-a-ride shuttle bus service that provides curb-to-curb pick-up and drop-off service available to all residents in the Novato service area.

Golden Gate Transit

Golden Gate Transit operates transit services between Marin County and Sonoma, San Francisco, and Contra Costa Counties. Golden Gate Transit is one of three operating divisions of the Golden Gate Bridge, Highway and Transportation District.

Additional bus service provided directly by Golden Gate Transit connects Marin County to other parts of the region. Inter-county bus routes that operate partly inside Marin County include the following services:

- *Transbay Basic Service:* Basic service routes operate all day, seven days a week, providing wheelchair accessible trunk-line service between the Transbay Terminal and Civic Center in San Francisco or Richmond BART, and various suburban centers within Marin and Sonoma Counties. They provide the “backbone” service within Marin County and between Marin and neighboring counties. The routes are 40/40x, 70/71, and 101/101X. Since the previous CMP update, Route 10 ceased operation.
- *Transbay Commute Service:* This service provides 17 routes that operate on non-holiday weekdays. Most services connect residential neighborhoods within Marin County to the San Francisco Financial District and Civic Center employment centers during the AM and PM commute periods. Other service connects Sonoma County with Marin County and San Francisco. Commute service is generally operated in the peak direction during commute hours only, and is not run at all during the midday and off-peak periods.

Ferry Services

Three organizations provide ferry service in Marin County:

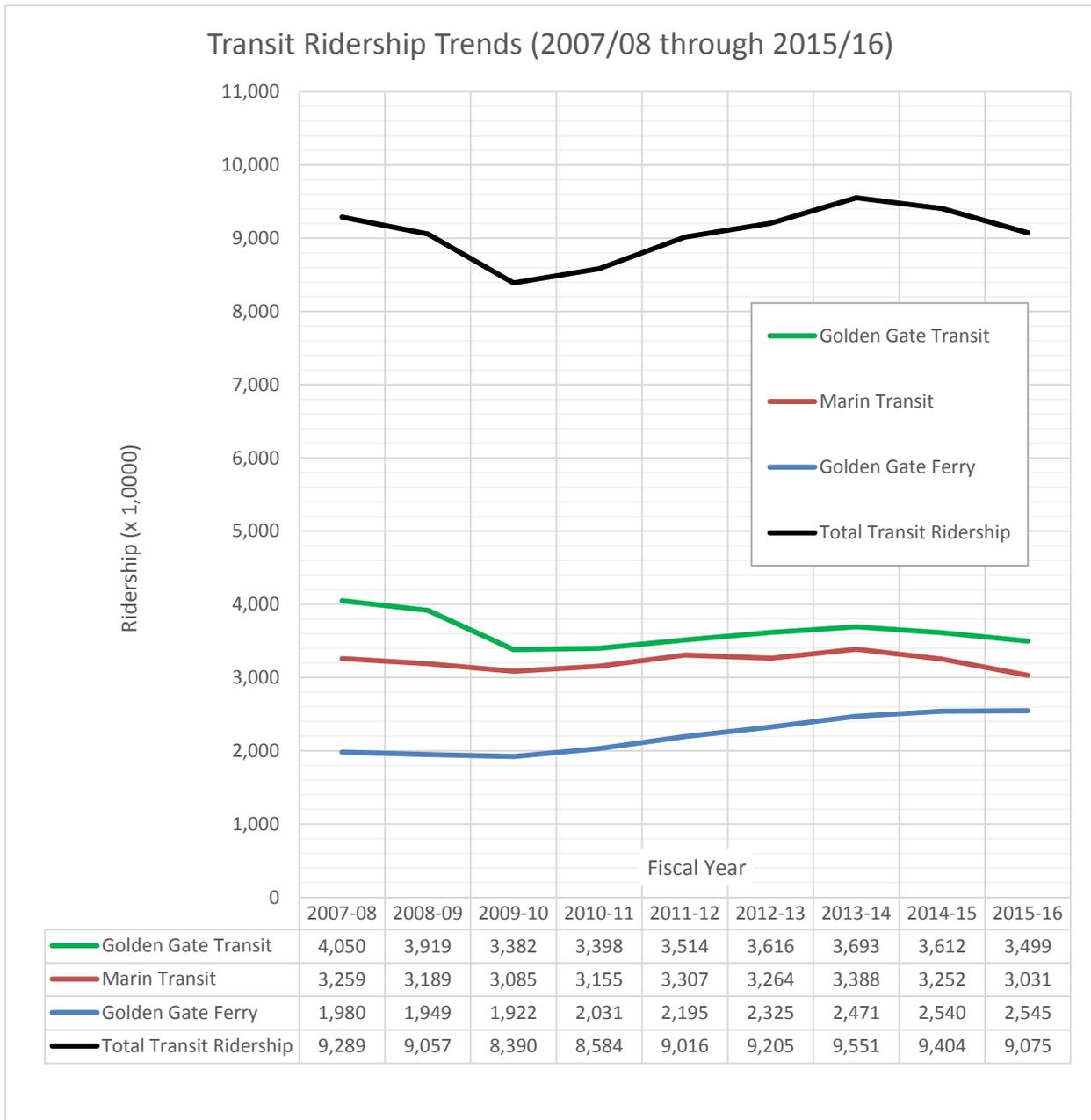
- *Golden Gate Ferry Service (Public Entity):* The Golden Gate Bridge, Highway, and Transportation District operates ferry services from Larkspur and Sausalito to San Francisco via conventional and high-speed ferries. The Larkspur Ferry provides more service to San Francisco, with headways between 30 and 55 minutes during the weekday commute periods. The Sausalito Ferry provides less frequent service to San Francisco and longer headways between 50 and 90 minutes during the weekday commute periods. Both ferries transport people to the San Francisco Ferry Building. The San Francisco Giants Game Ferry (National League Baseball) is an additional ferry service that operates on game days. This ferry runs until 30 minutes after the final out of the ballgame and runs about 60 minutes from Larkspur to AT&T Park. Golden Gate Ferry Service is now running Tiburon Ferry Service as well.
- *Blue and Gold Fleet (Private Entity):* The Blue and Gold Fleet operates both commuter and recreational ferry service from Sausalito to Fisherman’s Wharf in San Francisco. Blue and Gold also provides recreational service between Angel Island and San Francisco, Oakland, and Vallejo.
- *Angel Island Tiburon Ferry (Private Entity):* The Angel Island Tiburon Ferry operates recreational service between Angel Island and Downtown Tiburon. Service varies throughout the year; headways are one-two hours on weekdays and one-three hours on weekends; on weekends from April through October, headways are one hour and from November through March, are one-two hours. No weekday service is offered from November through February except by reservation, and Wednesday-Friday service is offered in the month of March.

Summary of Fixed Route Services and Boardings

The transit routes managed by Marin Transit are routinely monitored for performance. The recent dedication of additional resources has led to an expansion of local transit service, which in turn has increased local boardings. These trends are summarized in the chart below, which also shows ridership trends in Marin Transit Fixed Route Service, Golden Gate Transit Bus, and Ferry Operations. The following summarizes the changes in ridership in recent years:

- Demand for the Golden Gate Transit basic and commuter bus services to and from San Francisco have decreased slightly in the last year by approximately 2%.
- Golden Gate Ferry Service has experienced decreased in ridership during the last two fiscal years, approximately 5% increase from 2013-2014 to 2015-2016.
- Marin Transit Fixed Route Service showed a decrease of 5% in ridership from 2013-2014 to 2015-2016 with an increase of 3% in revenue hours.
- Marin Access Services have a slight increase in ridership of approximately 2% with a 1% reduction in revenue hours in FY 2015-2016. There was much larger bump in both ridership and revenue hours in the fiscal year previous 2014-2015.

Transit Ridership Trends (2007 / 2008 through 2015 / 2016)

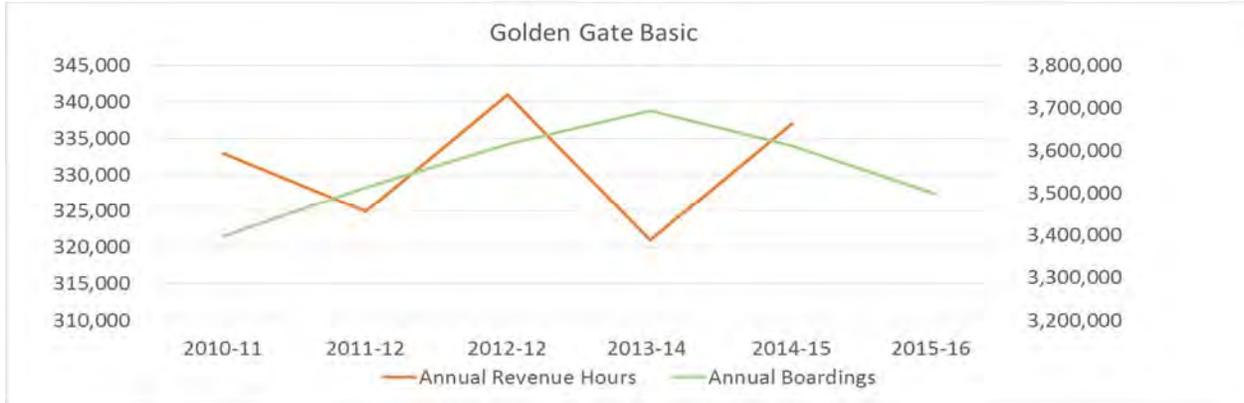


As the chart shows, the total ridership across Golden Gate Transit, Marin Transit, and Golden Gate Ferry has decreased slightly since 2013/14. Golden Gate Transit and Marin Transit have shown a steady decline in ridership from 2013/14 to 2015/16, however, Golden Gate Ferry has shown a steady albeit slight increase in ridership for the same duration.

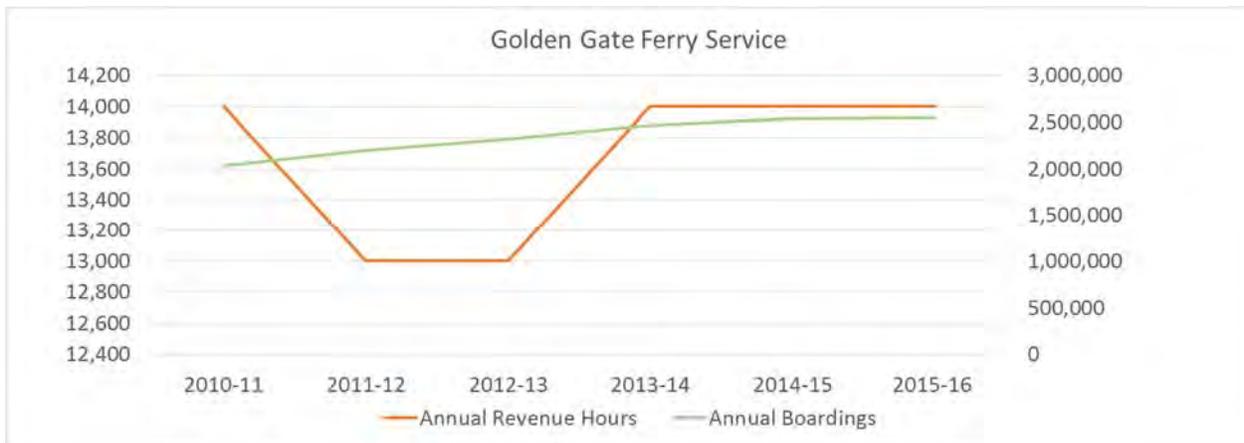
The trends for annual revenue hours and boardings for each of the Golden Gate Transit Basic and Commuter Services, Golden Gate Ferry Service, and Marin Transit Fixed Route Service between 2010-2011

and 2015-2016 were compared and illustrated in the Annual Revenue Hours and Boardings Trends Charts provided below.

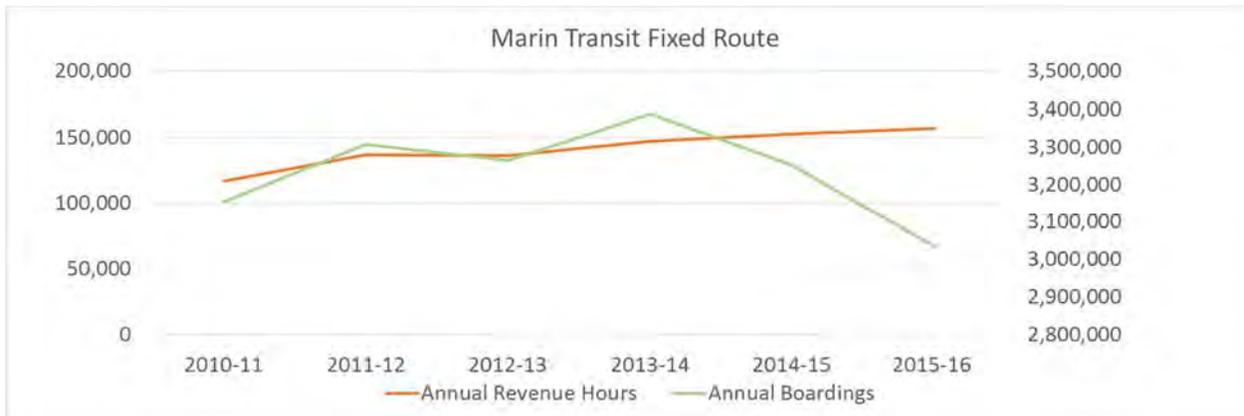
**Annual Revenue Hours and Boardings Trends for Golden Gate Transit Basic and Commuter Services
 (2010 / 2011 through 2015 / 2016)**



**Annual Revenue Hours and Boardings Trends for Golden Gate Ferry Service
 (2010 / 2011 through 2015 / 2016)**



**Annual Revenue Hours and Boardings Trends for Marin Transit Fixed Route Service
 (2010 / 2011 through 2015 / 2016)**

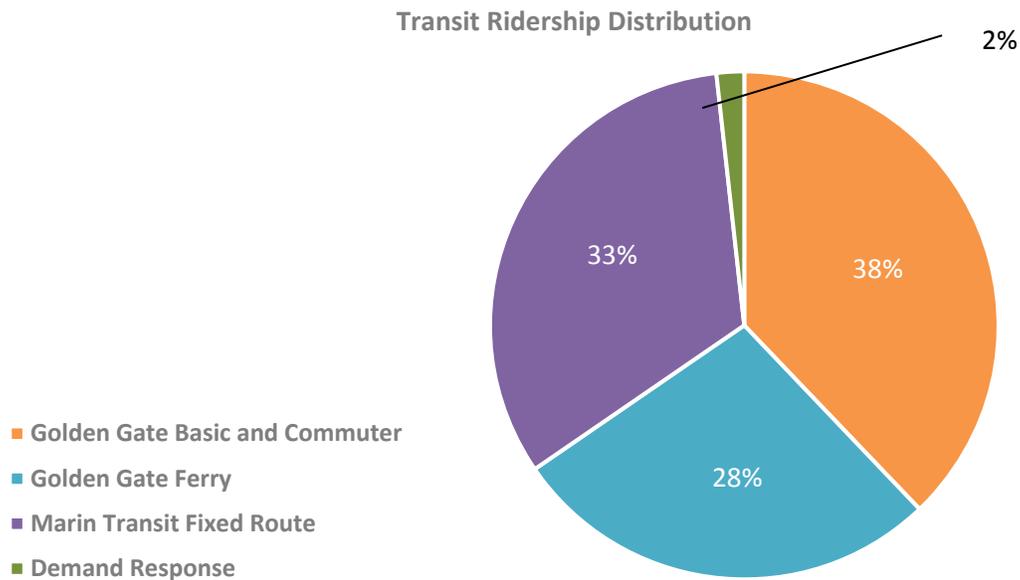


As the charts show, the annual boardings have decreased for Golden Gate Transit Commuter and Basic Services and Marin Transit Fixed Route Service even with the increase in annual revenue hours each year since 2012/13. There has been a steady increase in Golden Gate Ferry Service from 2010/11 through 2015/16 irrespective of the increase in annual revenue hours.

Transit Rider Distribution

This section discusses the ridership distribution amongst all transit operations within Marin County and the following chart displays the use percentage of each transit mode. The following lists the services included in the analysis for FY 2015-2016:

1. Golden Gate Basic and Commuter Service
2. Golden Gate Ferry Service
3. Marin Transit Sponsored Local Service
4. Marin Transit Shuttles and West Marin Routes (including Novato Dial-A-Ride)
5. Marin Access Paratransit Service



The above chart shows that there is a large (68% total) ridership using Golden Gate Transit Services. Of this, 38% use the Basic and Commuter Services and the remaining 25% take the Ferry. This distribution helps display that when looking at improving transit services within Marin County, Golden Gate Transit Services would benefit most. The distribution also illustrates that 33% of transit users are on the Marin Transit Fixed Route Services. This knowledge allows TAM to determine where to allocate their limited funding for transit improvements in the near future.

The remaining 2% of ridership is comprised of the Marin Access Services. Though these services do not provide a majority of rides within the system, they provide essential movement of Marin residents and should not be ignored when considering improvements.

Specialized Transit Services

Marin Access

Marin Transit contracts with Whistlestop to provide local paratransit services that are available during the same hours and days of the week as comparable local and inter-county fixed-route, non-commute bus services. The service is a door-to-door ridesharing program that has approximately 40 lift-equipped vehicles available for use. Approximately 162,511 annual passenger trips are provided on Marin Access Paratransit service.

Inter-county paratransit service is provided seven days a week, under an agreement between Golden Gate Transit and Marin Transit. The inter-county service area includes Sonoma, San Francisco, and Contra Costa County in addition to Marin County. Statistics for this service are included in **Table 7**. The demand for paratransit service has grown in recent years as more Marin County residents have become eligible for the service and medical providers and residents become more aware of paratransit service.

Table 7: Marin Access Performance Statistics FY 2011 to FY 2016

<i>Fiscal Year</i>	<i>Annual Revenue Hours</i>	<i>Annual Passenger Trips</i>
2010-2011	53,127	116,970
2011-2012 ¹	49,012	119,666
2012-2013 ²	59,589	143,417
2013-2014	57,389	158,187
2014-2015	60,417	172,512
2015-2016	58,756	162,511

Notes: ¹ Volunteer Driver Program added in FY 2011-2012.

² Catch-A-Ride Program added in FY 2012-2013.

Source: System Performance Summary for FY 2010-2011, FY 2011-2012, FY 2012-2013, FY 2013-2014, 2014-2015, 2015-2016, Marin Transit. (<http://www.marintransit.org/monitoringreports.html>)

Volunteer Driver

Marin Transit manages two Volunteer Driver programs for seniors who have difficulty using fixed route or paratransit services: 1) the Safe Transport and Reimbursement (STAR) Program operated by Whistlestop in Eastern Marin, and 2) the TripTrans West Marin Volunteer Driver Program operated by West Marin Senior Services in Western Marin. Both programs provide drivers with mileage reimbursements for their services. During the 2015-2016 fiscal year, the volunteer driver program served 16,570 unlinked passengers during weekday service.

Catch-a-Ride

Marin Transit manages the Catch-A-Ride program, which allows eligible Marin County residents to receive a discounted ride in taxis and other licensed vehicles throughout Marin County. To be considered eligible for the program, participants must be a resident of Marin County and at least 80 years of age, at least 60 years of age and unable to drive, or be eligible for paratransit under the Americans with Disabilities Act. The program pays a discounted rate of the fare based on the mileage of the trip, rather than the meter

rate. Fiscal year 2015-2016, the program had 16,520 trips. Marin Catch-A-Ride is funded by Marin's voter approved VRF, Measure B.

School Transportation

Marin Transit provides school transportation services including supplemental school bus service and contracted yellow school bus service.

3.3 Bicycle and Pedestrian Programs

TAM and other jurisdictions have a commitment to non-motorized transportation programs. This commitment extends to all levels of planning and funding, including a portion of TAM-administered Measure A funds. The Measure A – Transportation Sales Tax Strategic Plan is comprised of four strategies in order to establish exactly where Measure A expenditures are allocated:

- Strategy 1: Local Bus Transit
- Strategy 2: US 101 HOV Gap Closure
- Strategy 3: Local Streets and Roads
- Strategy 4: School Related Congestion and Safer Access to School

Strategies 2, 3, and 4 include bicycle and pedestrian improvements. Strategy 2 included the completion of two bicycle/pedestrian projects: Puerto Suello Hill and Lincoln Hill multi-use pathways. Strategy 3 is divided into two sub strategies: Major Roads and Related Infrastructure and Local Roads for all modes. Both sub strategies make bicycle and pedestrian eligible for funding. Per the Measure A Strategic Plan, Strategy 4 is identified as a significant component of traffic congestion in Marin, with over 21% of all trips in the morning peak period. Three sub-strategies – Safe Routes to Schools, Crossing Guards, and Safe Pathways to School Fund – complement each other to provide safer access to Marin schools.

Safe Routes to Schools Program

Strategy 4 of the Measure A Strategic Plan continues to make significant impact across the county. A brief overview of the three sub-strategies follows:

- *Safe Routes to School:* TAM's program is one of the most successful in the county, as well as a model for the nation. Since the program began, there has been an 8% mode shift countywide from single-student car trip to walking, bicycling, transit, and carpooling to/from school. The program will continue to strengthen and focus on long-term impacts.
- *Crossing Guards:* This program provides trained crossing guards at key intersections throughout Marin County. Use of the crossing guards can reduce the reluctance parents may have in allowing their children to walk to school.
- *Safe Pathways:* The capital improvement element of this strategy provides funding for the engineering, environmental clearance and construction of pathway, street crossing and sidewalk improvements for better and safer access to schools.

Additional funding of bicycle and pedestrian improvements in Marin County are provided through targeted funding sources, including

- Transportation Funds for Clean Air (TFCA)

- Transportation Development ACT (TDA) Article 3
- Regional Bicycle Program Funds
- Regional Measure 2 funds

Local Jurisdiction Bicycle and Pedestrian Plans

Countywide, TAM is coordinating the update of the County of Marin, and eight cities’ and town’s bicycle and pedestrian plans during 2014, 2015, and 2016. The plan updates completed by summer of 2016, are funded with TDA Article 3 funds and managed by each local agency for public outreach and local adoption. The schedule of the plan updates will take place over two years.

Local jurisdictions also maintain local funds and programs for bicycle and pedestrian projects as part of local jurisdiction capital improvement plans.

Bicycle and Pedestrian System Performance

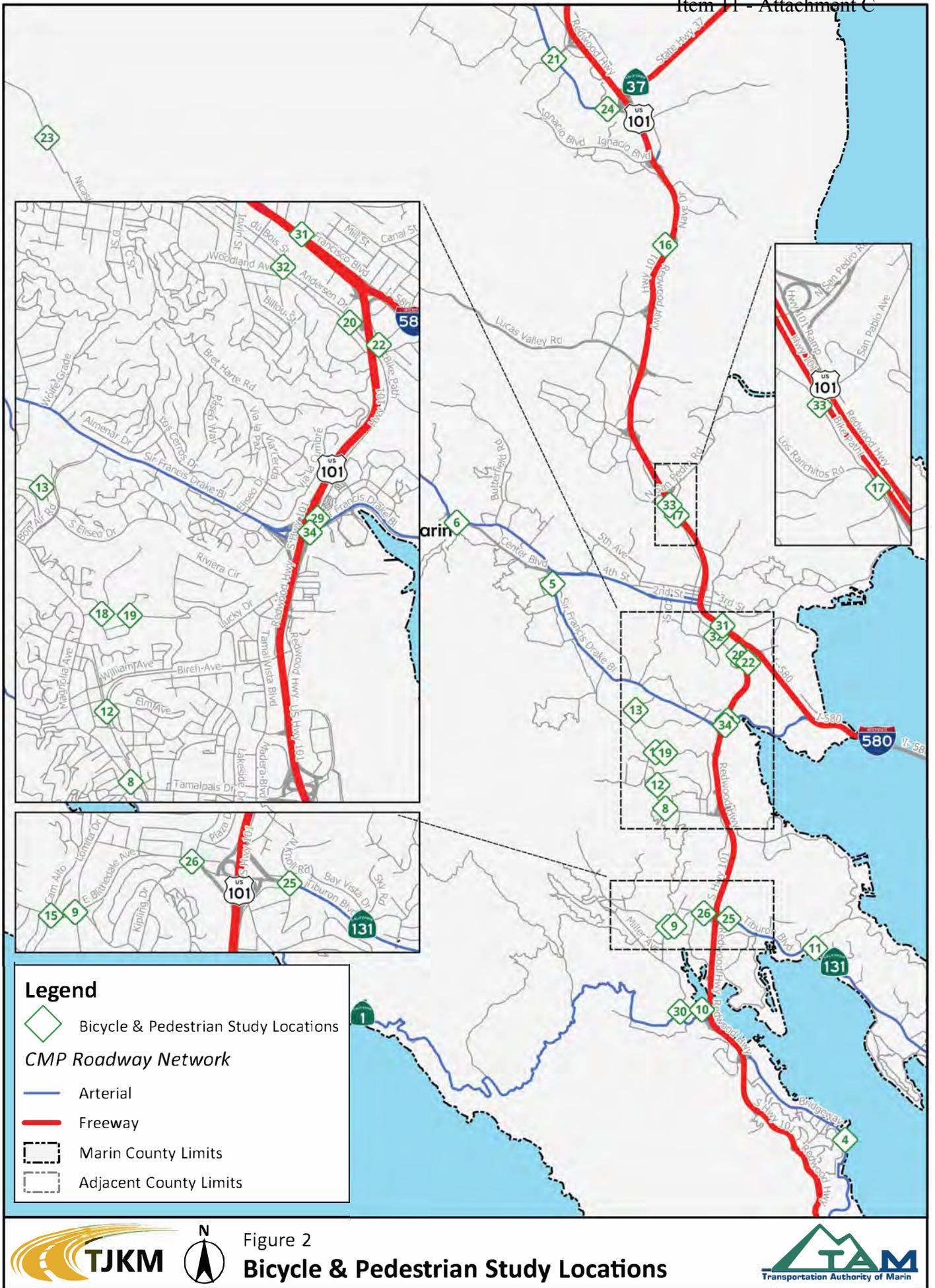
Bicycle and Pedestrian activity at various locations are routinely monitored for performance. Bicycle and pedestrian volumes were collected at 28 locations. **Table 8** lists the bicycle and pedestrian count locations. **Figure 2** illustrates the bicycle and pedestrian count locations. Bicycle and pedestrian counts were collected on weekdays for a 14-hour period from 6:00 AM to 8:00 PM and for a four-hour weekend midday period between 10:00 AM and 2:00 PM. The surveys also included adult and youth demographic attributes. The total bicycle and pedestrian volumes were then compared to the historical data from previous years. The data collected showed an offset in the peak periods for bicycle and pedestrian users relative to vehicular traffic peaks.

Table 8: Bicycle and Pedestrian Count Locations

ID	Count Location Description and City
1	Tiburon Blvd. @ Main St., Tiburon
4	Bridgeway @ Princess St., Sausalito
5	San Anselmo Ave. @ Tunstead Ave. (Southern Intersection), San Anselmo
6	Broadway @ Bolinas Rd., Fairfax
8	Magnolia Ave. @ Ward St., Larkspur
9	Mill Valley-Sausalito Path @ E. Blithedale Ave., Mill Valley
10	Mill Valley-Sausalito Path @ Tennessee Valley Path Junction, Tam Junction
11	Tiburon Bike Path @ Blackie's Pasture/McKegney Green, Tiburon
12	Larkspur-Corte Madera Path @ Baltimore Ave., Larkspur
13	Corte Madera Creek Path @ Bon Air Rd., Greenbrae
15	Camino Alto @ E. Blithedale Ave., Mill Valley
16	Pacheco Hill Path @ Alameda del Prado, Novato
17	Los Ranchitos Rd. @ Lincoln Hill Multi-Use Pathway, San Rafael
18	Doherty Dr. @ Larkspur Plaza Dr./Rose Ln. West, Larkspur
19 ²	Doherty Dr. @ Rose Ln. East, Larkspur

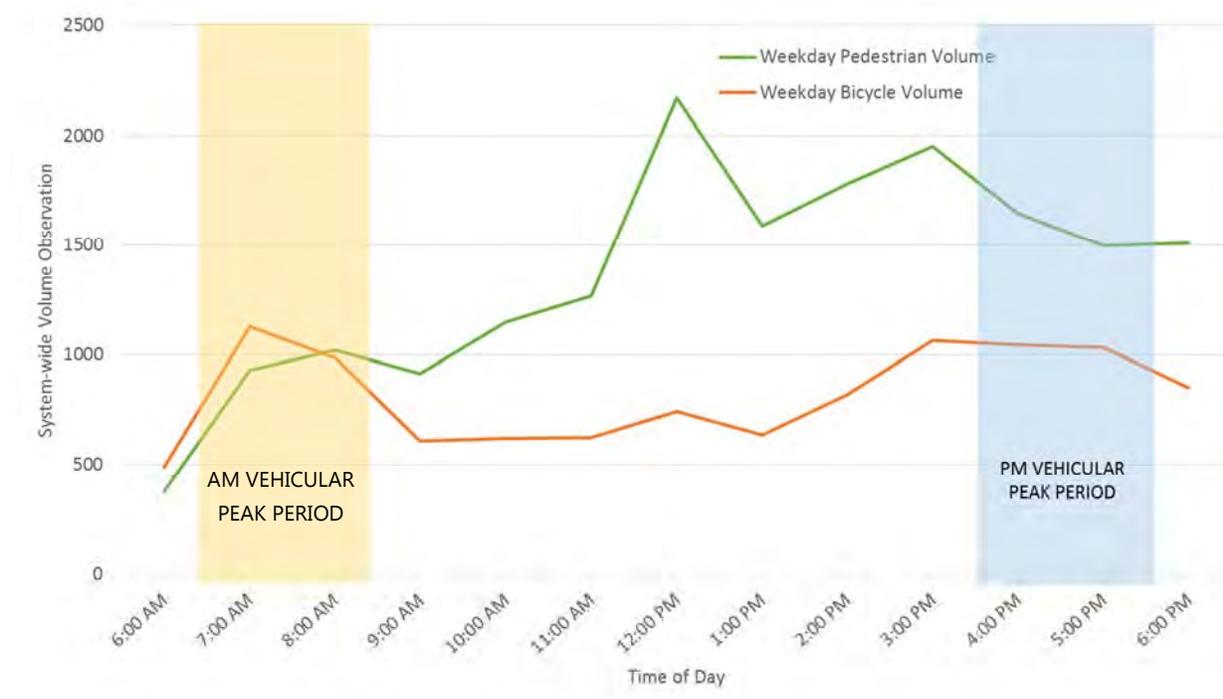
ID	Count Location Description and City
20	Andersen Dr. @ Cal Park Tunnel Path, San Rafael
21	S. Novato Blvd. @ Rowland Wy., Novato
22	Bellam Boulevard @ Andersen Dr., San Rafael
23	Nicasio Valley Rd. @ Nicasio School, Nicasio
24	Enfrente Bike Path @ S. Novato Blvd., Novato
25	Tiburon Blvd. @ S. Knoll Rd., Mill Valley
26	E. Blithedale Ave. @ Tower Drive, Mill Valley
29 ²	Central Marin Ferry Connector Bridge @ Sir Francis Drake Blvd., Larkspur
30 ²	Almonte Blvd. @ Shoreline Hwy., Mill Valley
31 ²	Francisco Blvd. E. @ Bay St., San Rafael
32 ²	Andersen Dr. @ Du Bois St., San Rafael
33 ²	Merrydale Rd. @ Lincoln Hill Multi-Use Pathway, San Rafael
34 ²	US 101 NB Off-Ramp @ Marin County Bike Route 20 / Sir Francis Drake Blvd., Larkspur

Notes: ¹ID Numbers are non-sequential to retain consistency with 2014 Monitoring Report and previous reports.
²New count location for 2016



During the weekday monitoring, overall pedestrian activity was highest during the two-hour PM peak period, while overall bicycle activity was similar in both peak periods, but slightly higher during the two-hour AM peak period. This system-wide observation varied considerably from location to location. During the weekend two-hour midday peak period, overall bicycle and pedestrian activity nearly doubled from what was observed during the weekdays, most notably for bicycles. This trend shows that many users on the weekend are recreational users and do not necessarily commute during the weekdays via bicycling or walking.

The following chart shows the total sum of all system-wide bicycle and pedestrian observations, respectively, over the course the 14-hour monitoring period.



Additionally, the adult to youth ratio for bicyclists and pedestrians was 7:93 for both modes, system-wide at all locations combined. Locations closer to schools show much higher youth to adult ratios, in some cases showing youth volumes exceeding adult volumes.

Overall, in terms of system-wide comparisons, the data showed a relatively significant shift from the 2014 data, which showed overall 15:85 and 20:80 splits between youths and adults for cyclists and pedestrians respectively.

The average weekday bicycle volume per location in 2016 shows an 85% increase over 2014, and 31% increase over a five-year average (2007 to 2014). In 2016, the average weekday pedestrian volume per location shows a twofold increase over 2014, and 40% increase over a five-year average (2007 to 2014).

3.4 Performance Measures

One additional performance measure, travel time reliability, described below allows TAM to further measure transportation system performance in Marin County.

Travel Time Reliability

Travel time reliability is the consistency or dependability in travel times, as measured from day-to-day and/or across different times of the day. Travel time reliability is significant to many transportation users. Drivers value reliability as it allows them to make better use of their time. Many transportation planners and decision makers have started to consider travel time reliability as a performance measure throughout the United States.

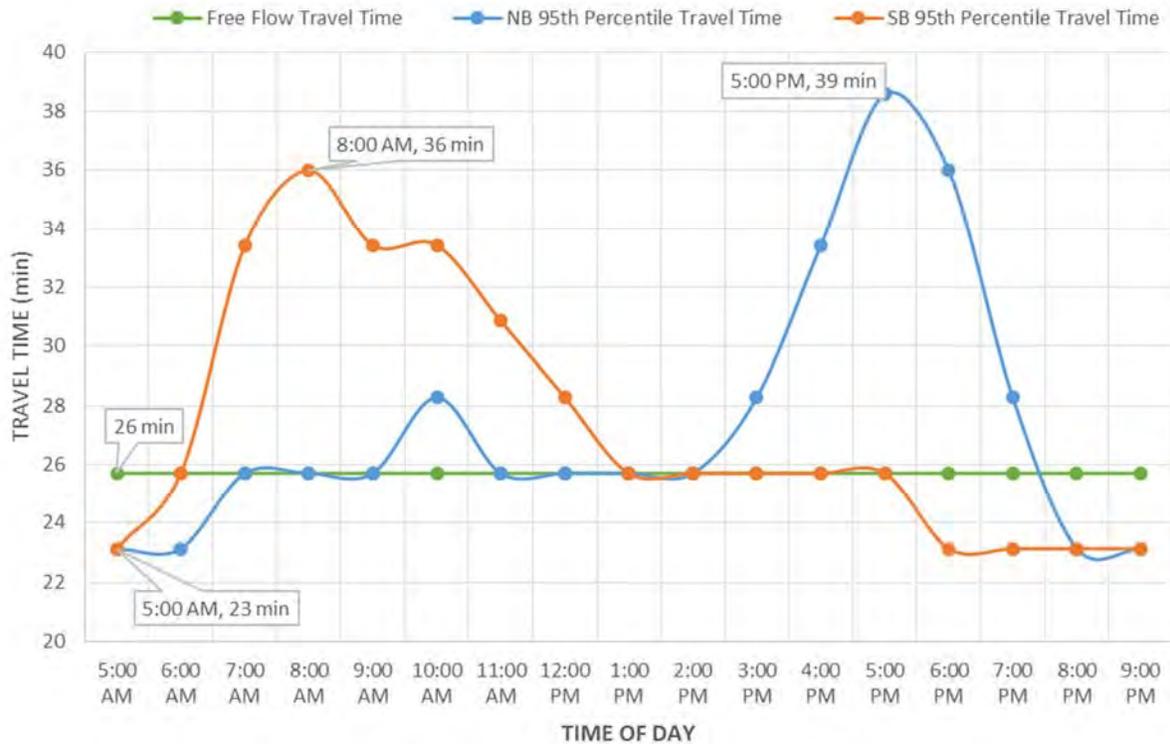
Travel time reliability measures are relatively new, but a few have proven effective. Most measures compare high-delay days to those with an average delay. The most effective methods of measuring travel time reliability are 90th or 95th percentile travel times, buffer index, and planning time index. The planning time index method has been used to compare travel times along US 101 in Marin County.

The planning time index represents how much total time a traveler should allow to ensure on-time arrival. While the buffer index shows the additional travel time that is necessary, the planning time index shows the total travel time that is necessary.

For example, a planning time index of 1.60 means that for a trip that takes 15 minutes in light traffic a traveler should budget a total of 24 minutes (15×1.6) to ensure on-time arrival 95% of the time.

The graph below compares the travel time along US 101 in Marin County under free flow conditions to the NB and SB 95th percentile travel times between 5:00 AM and 9:00 PM. Planning time index data was collected by TJKM from the Caltrans Performance Measurement System (PeMS) for midweek days during October 2016, excluding holidays and any days with adverse weather.

US 101 – Marin County Travel Time Comparison



As this graph shows, 95th percentile travel times vary over the course of a day from approximately 23 minutes to 39 minutes in the NB direction and from 23 minutes to 36 minutes in the SB direction.

The free flow travel time along the same corridor is approximately 26 minutes, assuming a speed of 60 mph. NB traffic experienced more delays during the afternoon commute period, with a maximum planning time index of 1.5 at 5:00 PM. SB traffic experienced more delays during the morning commute period, with a maximum planning time index of 1.4 at 8:00 AM. It should be noted that the free flow speed of 60 mph is lower than the posted speed limit of 65 mph. In the evening and very early morning, 95th percentile travel times dropped below free flow travel times, indicating that traffic tended to speed up and approach the speed limit.

In addition to the above, TAM can also include factors such as seasonal variation, weather, and incidents to calculate the travel time along US 101 and I-580 within Marin County. Based on studies conducted within the United States, weather generally increases travel time by approximately 10%.

4. TRANSPORTATION DEMAND MANAGEMENT

4.1 Purpose and Intent of Legislation

TDM strategies are utilized to improve efficiency of the existing transportation systems without significant expansion of the infrastructure. These strategies focus on ways to reduce solo driving and/or to eliminate need for driving all together. Some of the commonly used strategies that aim at cutting down solo driving include carpool, vanpool, bicycles, transit, and park & ride lots. Strategies to reduce VMTs include alternatives such as telecommuting, flexible work schedules and parking cash-out programs. Improving a balance between available jobs and housing also help encourage non-auto modes of transportation. Use of TDM strategies help cities and counties in their attempt to balance the growing need for transportation and availability of limited transportation dollars.

The CMP is required to include all elements identified in the California Government Code Section 65089(b). Subsection (3) requires that all CMPs include a TDM element that outlines projects and strategies that promote alternate modes of transportation and thereby help reduce traffic congestion and improve air quality. Effective January 1997, with the passage of Assembly Bill (AB) 2419, the "Trip Reduction" component is no longer required in the CMP. This places higher emphasis on various travel demand strategies that will help cut down VMTs on the regional freeways and major arterials and the GHG emissions in the Bay Area.

As local governments review new development proposals and make key decisions on planning and zoning matters, they have opportunity to ensure that TDM measures are adequately factored into this decision making process. As they develop and adopt their annual operating and capital budgets, they can allocate necessary funds so that the TDM strategies are adequately financed and implemented in a timely manner. Although not required, local governments may also choose to support (through resolution or other means) regional TDM measures, including carpool lanes and ridesharing facilities and programs, which could be implemented by other agencies, such as TAM or MTC.

4.2 Transportation Demand Management in Marin County

TAM recognizes that as a result of regional job and population growth patterns and increased travel demand, the peak-period travel speeds will continue to deteriorate on freeways and arterials within the County. Due to limited availability of funds and opportunities for system expansion, it is critical that various TDM strategies are utilized to address the growing transportation needs of the County residents and businesses. Along with improving roadway operations and improving local transit service in response to this forecasted growth in traffic, it is also important to implement TDM measures to improve the operating efficiency of the existing county transportation system. The TDM element of the CMP encourages an on-going process that promotes local and regional planning to reduce traffic congestion.

A broad range of TDM options is available to the County and its 11 cities for further consideration and implementation. These measures and classified into four categories:

1. **Traffic operational improvements:** Typically, this category includes improvements at intersections or along corridors that result in improved traffic flow and reduced congestion. These

improvements could also come through such diverse sources as increased ridesharing or minor modifications to the highway system.

2. Transit improvements: This category includes various strategies that encourage use of transit over auto. This includes better transit connections, real-time transit arrival information, bike-racks on transit, easier fare payment options, etc.
3. Traffic mitigation measures: These strategies involve addressing impacts of new developments, and mostly implemented by developers or employers.
4. Land-use planning and regulations: This category of actions focus on limiting demand for transportation or to mandate implementation of traffic mitigation techniques through the land-use planning or approval processes.

In general, implementation of various TDM strategies requires close coordination and collaboration among public and private sectors. Caltrans and City/County public works departments implement most traffic operational improvements, while Marin Transit and Golden Gate Transit implement transit improvements. Land use planning and zoning regulations are legislated and enforced by local governments with outreach to private sector entities to be impacted by such regulations.

TAM continues to expand its TDM and commute alternative efforts. A Vanpool Incentive Program, emergency ride home program, carpool, rideshare, and transit promotion has been authorized under Measure B, TAM's vehicle registration fund.

4.3 Air Quality Plan Consistency with RTP

MTC is responsible for developing a RTP that addresses transportation challenges for future years. This Plan identifies various Transportation Control Measures (TCMs) contained in the federal and state air quality plans to achieve and maintain standards for ozone and carbon monoxide. As required by the California statutes, the CIP of the Marin County's CMP conforms to the transportation-related vehicle emission air quality mitigation measures. The Marin CMP includes numerous project types and programs that are identified in the TCM plan, and promotes the region's adopted TCMs for the federal and state clean air plans.

In April 2017, the Bay Area Air Quality Management District (BAAQMD) adopted the latest Clean Air Plan. The TCMs identified in the current plan are refined from prior TCMs to better define the actions and have been expanded to include greenhouse gas emission mitigation actions. **Table 9** lists chapters of the Marin CMP that provide opportunities to address the TCMs applicable to the CMP. There are currently no unmet TCMs in the Bay Area's implementation plans for air quality.

Table 9: 2017 Bay Area Clean Air Plan Transportation Control Measures in Marin CMP

TCM	Description	CMP Reference
TR1 Clean Air Teleworking Initiative	Develop teleworking best practices for employers and develop additional strategies to promote telecommuting. Promote teleworking on Spare the Air Days.	Chapter 4, Transportation Demand Management
TR2 Trip Reduction Programs	Implement the regional Commuter Benefits Program (Rule 14-1) that requires employers with 50 or more Bay Area employees to provide commuter benefits. Encourage trip reduction policies and programs in local plans, e.g., general and specific plans while providing grants to support trip reduction efforts. Encourage local governments to require mitigation of vehicle travel as part of new development approval, to adopt transit benefits ordinances in order to reduce transit costs to employees, and to develop innovative ways to encourage rideshare, transit, cycling, and walking for work trips. Fund various employer-based trip reduction programs.	Chapter 4, Transportation Demand Management
TR3 Local and Regional Bus Service	Fund local and regional bus projects, including operations and maintenance.	Chapter 7, Capital Improvement Program
TR4 Local and Regional Rail Service	Fund local and regional rail service projects, including operations and maintenance.	Chapter 7, Capital Improvement Program
TR5 Transit Efficiency and Use	Improve transit efficiency and make transit more convenient for riders through continued operation of 511 Transit, full implementation of Clipper® fare payment system and the Transit Hub Signage Program.	Chapter 3, Performance Measures
TR6 Freeway and Arterial Operations	Improve the performance and efficiency of freeway and arterial systems through operational improvements, such as implementing the Freeway Performance Initiative, the Freeway Service Patrol and the Arterial Management Program.	Chapter 7, Capital Improvement Program
TR7 Safe Routes to Schools and Safe Routes to Transit	Provide funds for the regional Safe Routes to School and Safe Routes to Transit Programs.	Chapter 7, Capital Improvement Program
TR8 Ridesharing, Last-Mile Connection	Promote carpooling and vanpooling by providing funding to continue regional and local ridesharing programs, and support the expansion of carsharing programs. Provide incentive funding for pilot projects to evaluate the feasibility and cost-effectiveness of innovative ridesharing and other last-mile solution trip reduction strategies. Encourage employers to promote ridesharing and car sharing to their employees.	Chapter 4, Transportation Demand Management
TR9 Bicycle and Pedestrian Access and Facilities	Encourage planning for bicycle and pedestrian facilities in local plans, e.g., general and specific plans, fund bike lanes, routes, paths and bicycle parking facilities.	Chapter 7, Capital Improvement Program
TR10 Land Use Strategies	Support implementation of Plan Bay Area, maintain and disseminate information on current climate action plans and other local best practices, and collaborate with regional partners to identify innovative funding mechanisms to help local governments address air quality and climate change in their general plans.	Chapter 4, Transportation Demand Management
TR11 Value Pricing	Implement and/or consider various value pricing strategies.	Not applicable to Marin County
TR12 Smart Driving	Implement smart driving programs with businesses, public agencies and possibly schools and fund smart driving projects.	Chapter 3, Performance Measures
TR13 Parking Policies	Encourage parking policies and programs in local plans, e.g., reduce minimum parking requirements; limit the supply of off-street parking in transit-oriented areas; unbundle the price of parking spaces; support implementation of demand-based pricing (such as "SF Park") in high-traffic areas.	Chapter 4, Transportation Demand Management
TR15 Public Outreach and Education	Implement the Spare the Air Every Day Campaign including Spare the Air alerts, employer program, and community resource teams, a PEV Outreach campaign and the Spare the Air Youth Program.	Chapter 3, Performance Measures

Source: Bay Area Air Quality Management District (2017).

4.4 Transportation Demand Management – Completed and Current Actions

TAM continues to develop and implement projects and programs that improve traffic flow conditions, encourage use of transit, bicycling and walking; and promote alternatives to solo driving. Some of the recently completed and current projects include the following:

Commute Options

There are several options available to Marin residents and businesses that encourage transit, carpooling and vanpool. In June 2013, TAM conducted a survey and completed a report titled “The Marin Commuter” that outlines various green commute alternatives available to Marin commuters. TAM continues to support 511 Rideshare Options, Park & Ride lots, Golden Gate Ferry and Sonoma Marin Area Rail Transit (SMART) since 2017. In December 2016, the TAM Board of Commissioners authorized a partnership agreement with Lyft, Inc. a ridesharing mobile application, to provide a coupon code for up to \$5 off of Lyft services to and from any SMART train station in Marin. TAM also supports Vanpool Incentives Program and an Emergency Ride Home Program. Its “Go Time Marin” Commuter Toolkit provides useful information on developing and managing a successful employee commute program at employment sites.

Bicycle and Pedestrian Plan Updates

Bicycle and Pedestrian Master Plan updates for the County, Corte Madera, Fairfax, Larkspur, Mill Valley, Novato, San Anselmo, Sausalito, and Tiburon was completed in 2016. Updates to the Bicycle and Pedestrian Master Plan brings more local and regional funds to support bicycle and pedestrian infrastructure projects and thereby encourages more commuters to shift from auto to transit, bicycling and walking.

Ramp Metering

The Ramp Metering Program is part of the larger Freeway Performance Initiative, a partnership between The MTC, Caltrans and local congestion management agencies. The initiative works to apply technology to reduce the effects of congestion, including ramp metering, message signs, roving tow trucks to clear incidents, and 511 traveler information. The first phase of metering was recommended to occur on the US 101 NB ramps from Spencer Avenue to Sir Francis Drake Boulevard. Caltrans and MTC have suspended final design activities on the Phase-One Ramp Metering Project due to lack of funding for the project.

Marin-Sonoma Narrows Project

This project will expand the US 101 corridor to six lanes by adding carpool lanes from SR 37 to just north of Corona Road overcrossing in Petaluma and updating infrastructure connecting the freeway to local roads. The current construction for Phase 1 started in 2011 and is scheduled to be completed in 2016, with future phases to continue as funding becomes available.

- Phase 1 Projects currently under construction/expected completion:
 1. Petaluma Boulevard South Interchange (B2): Constructs a new interchange and supporting frontage roads to serve Petaluma Boulevard South and closes uncontrolled access points. Includes construction of the Petaluma River Bridge to accommodate future HOV lanes. Currently under construction.

2. San Antonio Bridge Replacement & Curve Improvement (B3): Realigns the highway westward in the vicinity of San Antonio Creek, establishes a new frontage road for improved access, and raises the grade of the bridge at the creek to address periodic flooding concerns. Expected completion date late 2018/early 2019.
3. Bike lanes: A continuous bike route is planned from Novato to Petaluma, using a combination of Class I and Class II bike lanes.
4. US 101 Planting and Orange Avenue Soundwall (L1A): Planted trees and other vegetation along the constructed corridor in Novato. Installed a soundwall on the NB lanes between DeLong Avenue and Atherton Avenue. Currently under construction.
- Phase 1 Projects completed:
 1. NB Route 116(E) (C3): Replaced separation bridge and widened SB separation bridge to accommodate HOV lanes on US101. Completed in 2015.
 2. Southerly Interchange (B1): Constructed a new interchange and frontage roads to serve San Antonio Road, and closed uncontrolled access points. Included Class I and Class II bike paths. Completed in 2014.
 3. NB HOV Lane (A3): Extended the NB HOV lane from Atherton to 1.4 miles south of the Redwood Landfill Interchange.
 4. SB HOV Lane (A2): Extended SB HOV lane to Franklin overhead.
 5. HOV Lanes in Novato (A1): Addressed congestion by adding HOV lanes through median widening, which included NB HOV lanes from Highway 37 to north of Atherton Boulevard and SB HOV lanes from Highway 37 to Rowland Boulevard.

Future Projects (Currently Unfunded)

1. B1 Phase II: Construct NB and SB HOV lanes between the Marin County/Sonoma County line and Atherton Avenue. Funding expected after 2018.
2. B2 Phase II: Construct NB and SB HOV lanes between Petaluma Boulevard South and the Marin/Sonoma County line and stripe for HOV lanes from Petaluma Boulevard South to Route 116. Funding expected by 2018.
3. C2 and B2 Phase II: Add NB and SB HOV Lanes on US101 in Petaluma (Sonoma County).
4. B1 Phase II: Add NB and SB HOV Lanes on Hwy 101 in northern Marin County.
5. A4 Phase II: Add a SB HOV lane through Novato.
6. B5 Phase II: Add NB and SB HOV lanes, frontage road improvements and a bike path between the Sonoma and Marin county line.

Central Marin Ferry Connection Multi-Use Pathway

The new bridge provides a separated bicycle/pedestrian connection from San Rafael through the Cal Park Hill Tunnel to the Larkspur Ferry Terminal and the Corte Madera Creek path, across Sir Francis Drake Boulevard. The project is funded through the MTC-sponsored Regional Measure 2 Program and Regional Bicycle Program, the County-sponsored Non-Motorized Transportation Pilot Program, 1/2 Cent Transportation Sales Tax Interest Revenue, and the Bay Area Air Quality District-sponsored Transportation Fund for Clean Air. Project Sponsors include: TAM, the County of Marin, the City of Larkspur, and SMART.



The first phase of the project has been completed. The second phase is expected to be constructed by 2017 and the third phase by 2019.

These are some of the projects and strategies being implemented by TAM and the Marin County cities. They exemplify the County's commitment to use of alternate modes of transportation to solo driving and reducing reliance on auto travel, lessening burden on the over-extended freeways and highways, and improving air quality.

5. LAND USE ANALYSIS

5.1 Purpose and Intent of Legislation

Section 65089(b)(4) of the California Government Code requires that a CMP include a program to analyze the impacts of land use decisions made by local jurisdictions on the regional transportation system (both highways and transit).

The Land Use Analysis Program must include an estimate of the costs to mitigate impacts of development on the highway and transit systems. The legislation allows the cost of mitigating interregional travel (trips that do not begin in Marin County or trips that travel entirely through Marin County) to be excluded from the mitigation cost estimate. Public and private (developer) contributions to regional transportation improvements may be credited.

The legislation does not modify the role of local jurisdictions in making land use decisions and in determining the responsibilities of project proponents to mitigate those impacts. However, TAM has the authority to withhold gas tax subventions to local governments provided by Proposition 111 if a local jurisdiction fails to meet the requirements outlined in the Monitoring and Conformance chapter of the CMP (Chapter 8). Further guidance on the Land Use Analysis Program is found in the Congestion Management Resource Handbook (Caltrans, November 1990, pages 35-37).

The Land-Use Analysis Program is particularly important because it affects, or is affected by:

- The CMP Designated Transportation System and Roadway Level of Service Standards (see Chapters 1 and 2);
- Performance Measures (see Chapter 3);
- The MTM, which can be used to analyze the impacts of land use changes on both highways and transit (see Chapter 6); and
- The Capital Improvement Program (see Chapter 7).

The intent of the Land Use Analysis Program is to improve the linkage between local land use decisions and regional transportation facility decisions; to better assess the impacts of development in one community on another; and to promote information sharing between local governments when the decisions made by one jurisdiction have an impact on another.

The Land Use Analysis Program for the Marin County CMP is a process designed to improve upon decisions about land use and the spending of funds on highway and transit improvements in the county. The process is intended to work in a positive, cooperative fashion that supports the needs of local, county, regional and state governments.

TAM acts as a resource to local governments in performing transportation analyses of land use changes on the CMP designated transportation network. The MTM is used to analyze the transportation effects of local general plan updates and amendments and other major development decisions. The California Environmental Quality Act (CEQA) provides a framework for such assessment. To avoid duplication, the Land Use Analysis Program is intended to make maximum use of the CEQA process.

Cities can develop and maintain their own transportation models for use in local forecasting or impact analysis. However, as discussed in Chapter 6, their models should be approved by TAM for consistency with countywide and regional transportation models. Currently, no cities in Marin County have their own multimodal model for local forecasting.

The Marin County CMP has established two separate information and analysis processes regarding determination of local land use impacts. Under Part A, local governments forward information on proposed major developments, major general plan updates or other amendments to TAM during the period when the local jurisdiction is reviewing the application. Part B requires participation in a biennial tracking update of projected land uses for use in modeling both traffic and transit impacts.

5.2 Land Use Analysis Program Part A

In Part A, local governments inform TAM about any general plan updates or amendments, or major developments concurrent with the local governments' approval process. By analyzing general plan updates or amendments or major development proposals rather than by each individual development permit, cities and TAM can proactively take into account regional transportation impacts and needs, and also determine ways to finance transportation costs in advance of development proposals. According to TAM staff, as of August 2015 there are 20 major development proposals in the near-term horizon as listed in **Table 10**.

Table 10: Major Development Proposals in Near-Term Horizon

Project	Jurisdiction
Corte Madera Inn Rebuild Project	Town of Corte Madera
Marin General Hospital Project	Marin County
Casa Bueno Townhomes	Town of Corte Madera
BioMarin Specific Plan Amendment Senior Housing Facility	San Rafael
Tiburon Martha Co. Development	County Of Marin
North Coast Land Holdings Community Plan Amendment/Master Plan Amendment on the Golden Gate Baptist Seminary Project	County Of Marin
Novato General Plan Update	Novato
Corte Madera Restoration Hardware Expansion	Corte Madera
The Oaks (Daphne O Krestine Trust) Master Plan Amendment / Precise Development Plan / Design Review (P1547)	County Of Marin
Marin City Community Services District Master Plan	County Of Marin
San Rafael General Plan	San Rafael
1203 Lincoln	San Rafael
Northgate Walk	San Rafael
815 B Street Mixed Use Project	San Rafael
Hamilton Square	Novato
Wood Hollow Hotel	Novato
Bahia Heights	Novato
Hamilton Cottages	Novato
Hanna Ranch Mixed Use Project	Novato
Residence Inn Novato	Novato

Threshold for Part A Analysis

If a general plan update or amendment, or major development proposal is projected to generate a net increase of 100 vehicle trips during the PM (afternoon) peak hour, information is to be forwarded to TAM for comment and is subject to a CMP analysis. Local jurisdictions are responsible for determining which projects meet these criteria. The PM peak hour is most appropriate for this determination given that for most roadway segments, traffic levels of service are worse during the PM peak hour than during the AM peak hour. Examples of projects that typically meet the 100-trip threshold include 100 single-family homes, 150 apartment units, 5,000 square feet of retail space, or 40,000 square feet of office space.

Procedures for Part A Analysis

The local jurisdiction reviewing the proposed land use development or proposing a change to their general plan should notify TAM of the impending action and prepare a traffic impact study (either a stand-alone study or part of an Environmental Impact Report) through a Notice of Preparation or similar process. In addition to the proposed land use change, the sponsor should submit information on potential highway network and transit system changes in their jurisdiction that could result from implementation through project or ordinance approvals, or changes to the circulation element policies or maps in their general plan.

Once TAM receives a project notice, TAM staff will prepare a response directing the applicant on what analysis is appropriate to fulfill CMP requirements. The TAM staff response should include a recommended approach to apply the travel model for use in the study. TAM usually recommends applying the county travel model under these specific situations:

1. General plan updates and amendments are normally processed well before any construction takes place. This provides more time for transportation impacts to be analyzed and mitigation measures developed than would occur if the analysis took place closer to actual project construction.
2. Existing general plans have already been incorporated into the Year 2035 land uses for the countywide model, as well as for the MTC regional travel model. The TAM model is currently being updated to Year 2040 land uses consistent with Plan Bay Area projections. Thus, any land development project that conforms to the general plan should not materially alter the forecast results generated by computer analysis already completed or being completed for the CMP. Only changes in (or amendments to) existing general plans could cause significant change in the Year 2035 / 2040 model forecasts.
3. A city or the county may consider general plan updates or amendments no more than four times during any year according to state law. This reduces the possible model runs that would be required.
4. Most (but not all) general plan updates or amendments are for developments of significant size.

Future levels of service are based on the land use assumptions and corresponding travel demand forecasts based on current general plans. The information on noticing that should be forwarded to TAM includes:

- Precise location of the project(s) with map, including street access location;

- Proposed project land use(s) and number of dwelling units or square footage of development;
- Any available traffic studies, including trip generation rates assumed in determining whether the general plan update or amendment met the 100-trip threshold; and
- Expected occupancy of each land use in Year 2040, with completion date and phasing.

The MTM is available to be used as part of the local development review process where appropriate. The local jurisdiction is responsible for determining future baseline traffic volumes, but may use the MTM for background or cumulative conditions analyses. The local jurisdiction remains responsible for identifying mitigations and funding any costs associated with a Negative Declaration or Environmental Impact Report for any project. It should be noted that the MTM is managed directly by TAM; therefore TAM must coordinate and manage any use of the model.

It may be appropriate for TAM to participate in a Part A land use analysis, especially if it involves using the MTM. If TAM participates in a Part A analysis, TAM would make modifications to its land use database contained in the model. A model run would include all highway and transit improvements (not just those on CMP designated facilities) for which funds seem reasonably secure, and also any improvements the applicant is willing to pay for as a condition of development approval. TAM would forward this information to the local agency, which would consider any level of service reduction in making their decision to approve or not to approve the development project / general plan amendment. In developing conditions for project approval, the local jurisdiction would then have the option of:

- Requiring additional mitigations from the developer, such as TDM measures (e.g., transit service, flex time, etc.), roadway improvements that would improve the LOS to the adopted standard, or other system improvements that would improve air quality as allowed by the CMP legislation;
- Delaying the project until a certain highway or transit project is constructed;
- Working closely with the TAM staff on development of a Deficiency Plan if it appears that a CMP system segment does not meet the adopted LOS standard; or
- Choosing not to implement any of the above measures and risk having the LOS not meet the adopted standard on certain roadway segments in a future year. In this case, the local government would risk losing the increment of gasoline taxes provided by Proposition 111.

Once a study of the transportation impacts is completed, the local jurisdiction should send a draft copy to TAM for referral and comment. If the draft is prepared as part of an Environmental Impact Report, TAM concerns should be addressed in a final certification.

Once any remaining concerns expressed by TAM have been addressed and final documentation is completed, the local jurisdiction sends final project information and documentation to TAM as part of the Part A compliance.

5.3 Land Use Analysis Program Part B

TAM Monitors proposed project development projects in Marin County for CMP analysis. Many projects in Marin County are generally too small to effectively analyze using the county model on an individual basis. As mentioned earlier in Part A, large projects requiring a city or county general plan update or

amendment should be analyzed using the model. Participation in development tracking is simple and useful for three principal reasons:

- Local jurisdictions already are responsible for reporting information for all land use development;
- Compliance with Part B of the Land Use Analysis Program is easily attained by biennially submitting a complete account of all residential and commercial projects approved in the preceding submittal and reviewing the PROPDEV inventory for that jurisdiction; and
- Adjacent jurisdictions are able to account for nearby cumulative development more easily.

Once TAM has received updates on land use changes from the planning departments of each local government in Marin County, it performs updates to the MTM with updated land use information as appropriate addition to land use changes, local governments are also responsible for advising TAM of planned changes to the roadway network and transit system based on their knowledge of developer mitigations, ordinance approvals, or changes to the circulation element of their general plan.

5.4 Additional Periodic Compliance

In addition to the Part A and Part B program elements that demonstrate biennial compliance, local governments should report when periodic changes occur in two other special instances:

- Each jurisdiction should report changes to local traffic LOS standards, and confirm that they are consistent with or more restrictive than the LOS standards in the CMP.
- Each jurisdiction should inform TAM when any other changes to the transportation network have occurred or changed, or are programmed to occur or change within their local capital improvements program or budget, or in any administrative directives.

5.5 Relationship of Land Use Analysis Program to CEQA

Local governments continue to have lead agency responsibility under CEQA for performing Environmental Impact Reports and Negative Declarations and conducting transportation analyses supporting these documents. Local government should continue to propose and analyze mitigation strategies. TAM may comment through the CEQA process, keeping local governments informed as to the adequacy of the analysis and approving any transportation models used as part of the analysis. TAM may also provide local governments with information on cumulative impacts.

5.6 Impacts of Non-Compliance

In the future, if any Marin County jurisdiction does not comply with each of these CMP requirements, (when TAM makes any necessary non-conformance determination for each jurisdiction), that jurisdiction is found in non-conformance and may risk:

- Losing an increment in its gasoline tax subvention funds; and/or
- Not having projects programmed in the RTIP.

6. TRAVEL DEMAND MODEL

6.1 Purpose and Intent of Legislation

California Government Code Section 65089(c) requires that every CMA, in consultation with the regional transportation planning agency (MTC in the Bay Area), cities, and the county, develop a uniform database on traffic impacts for use in a countywide travel demand model. The State statute also requires the countywide model to be the basis for transportation models used for county sub-areas and cities, and that all models are consistent with the modeling methodology and databases used by the regional transportation planning agency. The CMA also approves sub-county area transportation models and models used by local jurisdictions for land-use impact analysis, if local jurisdictions decide to develop them. In Marin County, the MTM is routinely updated as part of the consistency determination process with MTC.

The purpose of the travel demand model requirement is to guide the CMA decision-making process in identifying the most effective balance of transportation programs and projects that maintain LOS standards, which includes:

1. Consideration of the benefits of transit service and TDM programs, and
2. The need for projects that improve congestion on the CMP designated network.

The modeling requirement is also intended to assist local agencies in assessing the impact of new development on the transportation system. TAM needs to consider the nature of the analysis, functions of specific analytical tools, and its available resources when deciding how to fulfill this requirement of the statute.

6.2 Local Agency Requirements

At this time, there are no specific requirements of local agencies, other than supplying the base year land use information that is noted in Chapter 5. TAM expects to continue operating and refining its own countywide model, although cities may also create and use their own model subject to the above legislative requirements.

6.3 Travel Demand Forecast Overview

A distinct and measurable relationship between travel demand, land use patterns, and transportation systems is the basis for modern transportation planning practice. Transportation models have been developed as the best tools available to quantify this relationship; however, it is complex. Research on more effective transportation modeling continues to evolve.

CMP legislation requires consistency with the regional travel model. This chapter summarizes the MTM performance and its consistency with the MTC Travel Demand Model guidelines for CMPs. The last conformity evaluation of the MTM was completed in 2015 and remains current as of this CMP update. MTC is currently developing guidance for the next conformity evaluation.

6.4 Existing and Past Programs

Bay Area travel demand modeling has been characterized by extensive travel behavior studies and model development by MTC, the recognized Metropolitan Planning Organization and regional transportation planning agency for the Bay Area, in cooperation with the Association of Bay Area Governments (ABAG). Since the early 1970's, MTC has had the responsibility and also funding at the Federal level to develop models of travel behavior. Marin County, in developing its own travel demand model (MTM), has built on information and logic from the MTC model.

MTC is required to review any sub-regional model for consistency with the MTC model. TAM staff assists with any model revisions. The remainder of this chapter contains the MTC checklist and responses for model consistency.

Land use forecasts for Marin County jurisdictions are currently consistent with ABAG's Projections 2013. The MTM currently includes the Plan Bay Area land use projections for Year 2040. Plan Bay Area is the combined RTP and Sustainable Communities Strategy for the Bay Area. In measures including households, population, jobs, and employed residents, the changes in the model update will be within the MTC criteria for sub-regional model consistency. Thus, Marin County will continue to fall within the model consistency checklist.

6.5 MTC Modeling Consistency

MTC's has established regionally consistent model "sets" for application by MTC and the CMAs. In the winter of 2010/2011, MTC replaced the modeling tool used by TAM to develop the MTM – named *BAYCAST-90* – that had been in place, with relatively minor modifications, for the past two decades with a more sophisticated, activity-based model – named *Travel Model One*. The approach remains the same: a checklist is used to adjudge consistency across model components.

Checklist

MTC requires local CMAs to submit a checklist for model consistency. This checklist guides CMAs through their model development and consistency review process by providing an inventory of specific products to be developed and submitted to MTC, and by describing standard practices and assumptions to be followed. The checklist items are highlighted in this section.

Because of the complexity of the topic, the checklist may need additional detailed information to explain differences in methodologies or data. Significant differences will be resolved between MTC and the CMA, taking advantage of the Regional Model Working Group. Standard formats for model comparisons will be developed by MTC for use in future guidelines. With regard to the MTM, no difference in data occurs that requires resolution.

Update Process

TAM model forecasts must be updated as necessary every two years to four to be consistent with MTC's forecasts. Alternative approaches to fully re-running the entire model are available, including incremental approaches that apply factors to demographic inputs or to trip tables. Similarly, the horizon year must be the same as the TIP horizon year. However, interpolation and extrapolation approaches are acceptable,

with appropriate attention to network changes. These alternative approaches should be reviewed with MTC. The MTM is routinely updated to reflect new development and transportation projects within Marin County.

Marin Travel Model Conformity to MTC Model Data

The MTM conforms to MTC consistency guidelines. The conformity between the MTM and MTC forecasting was established in October 2013 and confirmed in 2015. The next model conformity check is to be determined by future MTC guidance. Below is a list of MTC checklist requirements and the products required for each.

A. General Approach

PRODUCT 1: The TAM Countywide Model was developed in 1989 with a standard, four-step trips based model procedure and is a direct implementation of the MTC FCAST 1980/81 model. The auto ownership, trip generation, trip distribution, mode choice and trip assignment steps all use MTC procedures consistent with the FCAST model sets. The TAM Countywide Model is a focused version of the MTC FCAST model in that there is considerably more zonal and network detail within Marin County, similar detail in San Francisco and Sonoma County to MTC, and a more coarse skeletal system in the remaining counties. The model has a traditional trip purpose definition of home-based work, home-based shop/other, home-based social/recreation, non-home based, home-based college and home-based school similar to the MTC FCAST model. The model develops trip generation using a Fortran program with calibrated trip production and attraction equations and rates consistent with MTC FCAST. The model distributes trips based on travel time friction factors using a gravity model with two-dimensional matrix balancing and utilizes k-factors for home-based work trips to improve the estimates compared to the MTC regional model. Transit routes are coded in the model for Muni, ferries, and Golden Gate Transit from Marin to San Francisco. Mode choice is conducted using a standard multinomial logit formulation for home-based work to predict auto trips for drive-alone, shared ride two and shared ride three, and transit trips. A simple binomial model is used for the other purposes to predict auto and transit trips. At this stage the model does not forecast non-motorized trips (pedestrian and bicycle). Trip assignment is conducted for the AM and PM peak one-hour periods and for daily trips using a standard BPR style speed-flow relationship. The capacities and speeds on the road network incorporate the five area types (Core, Central Business District, Other Central Business District, Residential Areas and Rural Areas) and six facility types (Freeway, Expressway, Undivided Arterial, Collector Street, Centroid Connector and Divided Arterial) consistent with the MTC FCAST system.

B. Demographic/Economic/Land Use Forecasts

PRODUCT 2: The 2040 socio-demographic data in the TAM Countywide Model is based on the latest Plan Bay Area data and disaggregated (reallocated) within Marin and Sonoma counties, and aggregated outside. The resulting deviation is no greater than $\pm 1\%$ from the county level totals

provided by ABAG for households, household population, jobs and employed residents for the subject counties, and match ABAG estimates exactly outside the subject counties.

PRODUCT 3: At this time, the TAM Countywide Model does not include a 2010 base year. It is anticipated the next update to the TAM model (October 2015) will update the base year to 2010.

PRODUCT 4: Land uses were allocated within Marin County directly consistent with the MTC RTAZ totals and disaggregated to the finer TAZs within Marin County. Data at the MTC TAZ level in Marin County was allocated to the smaller Marin model TAZs using local land use development patterns, but MTC zone level control totals were preserved in the allocation process.

C. Pricing Assumptions

PRODUCT 5: The TAM model was originally calibrated using pricing assumptions consistent with the 1980 calibration assumptions therefore all prices are expressed in \$1980. These assumptions were updated with each subsequent model validation. However, since this round did not update the validation, the pricing was unchanged. TAM has provided MTC with a table showing comparisons between \$1980, \$1990, \$2000 and \$2010 levels that is relatively consistent with the latest MTC pricing assumptions for automobile costs.

D. Network Assumptions

PRODUCT 6: The TAM Countywide Model uses MTC regional highway and transit assumptions for the other bay area counties with a more detailed network definition within Marin and Sonoma County. The 2040 horizon year is consistent with the latest MTC RTP plan.

E. Automobile Ownership

PRODUCT 7: The TAM Countywide Model uses average auto ownership assumptions based on zonal average auto ownership values taken directly from the MTC FCAST regional model for Marin, Sonoma and San Francisco counties. Auto ownership assumptions are not utilized for the other bay area counties. As comparison for the latest Conformity, average values were computed for the MTC Model One auto ownership for each county and compared to similar values for the TAM Countywide Model. Because the auto ownership parameters are based on the documented calibration for year 1990 conditions using the MTC FCAST process, the auto ownership model has not been adjusted to better match the MTC results at this stage. When the TAM Countywide Model is next updated, the auto ownership results will be directly compared to 2010 Census data as well as the corresponding results from MTC Travel Model One. Adjustments will be made to the calculation of auto and transit accessibility as well as calibration coefficients to ensure better consistency of auto ownership results.

F. Tour/Trip Generation

PRODUCT 8: The TAM Countywide Model implements the MTC FCAST trip generation process using a FORTRAN program. The Travel Model One does not calculate trips from each land use, but instead develops a set of tours based on activities which are then turned into trips.

The total daily trips in the TAM Countywide Model are 6% lower than the daily trips generated from tours in Travel Model One. This is likely because the tours can consider several types of short trips on the way to and from primary activities that may be consolidated in the FCAST trips based model system.

G. Activity/Trip Location

The TAM Countywide Model uses the MTC FCAST model trip distribution process and basic factors to estimate activity/trip locations. Additional adjustment factors (“K factors”) were applied to more closely match the MTC FCAST model estimates of county-to-county trip patterns for the 2000 calibration year. These calibrated adjustment factors are used for all forecast years.

PRODUCT 9: Average trip lengths in miles are compared for the 2040 horizon year. The MTC Travel Model One results are reported for tour types while the TAM Countywide Model results are reported for trip purposes. For home-based work trips, the average trip distance between the TAM Countywide Model and MTC Model One is -1.43 miles or -14%. For all purposes, the average trip distance between the TAM Countywide Model and MTC Model One is 0.17 miles or 3%.

PRODUCT 10: The county-to-county trip patterns were compared for 2040 journey-to-work patterns. The 2040 journey-to-work patterns for the TAM Countywide Model were estimated by dividing home-based work trips by a factor of 1.5. This factor was estimated based on prior comparisons of 2000 Census Journey to Work data and 2000 Home-Based Work trip estimates from various travel models. Overall, the TAM Countywide Model is within 1% of the MTC’s Travel Model One for the number of bay area travelers. The TAM Countywide Model is within 7% of the MTC’s Travel Model One for the number of travelers with both home and workplace within Marin County.

H. Travel Mode Choice

The mode choice in the TAM Countywide Model is based on the multinomial logit formulation of the MTC FCAST model. Comparisons between the TAM Countywide Model and the MTC’s Travel Model One focus on the more aggregate results (“higher level nests”) where direct comparisons are possible. The TAM Countywide Model does not currently predict non-motorized modes.

PRODUCT 11: Trips by mode for the 2040 horizon year are compared between the tour types in MTC’s Travel Model One and the closest corresponding trip purpose in the TAM Countywide Model.

Overall, the TAM Countywide Model is 13% higher than the MTC’s Travel Model One for automobile mode share and 0.6% higher for transit mode share. The TAM Countywide Model is 15% higher than the MTC’s Travel Model One for Home Based work automobile mode share and 6% lower for transit mode share.

I. Traffic Assignment

Traffic assignment results are compared to the MTC’s Travel Model One in terms of region-level, time-period-specific comparison of VMT and vehicle hours traveled (VHT) by facility type, and

region-level, time-period-specific comparison of estimated average speed on freeways and all other facilities. The TAM Countywide Model only predicts traffic for the AM and PM peak hour periods and for daily conditions.

PRODUCT 12: Vehicle miles and hours of travel are compared with the MTC's Travel Model One for the 2040 horizon year. The only time periods that can be directly compared with the TAM Countywide Model are the AM and PM peak hour periods and the daily conditions. The TAM Countywide Model does not include traffic assignments for the early AM, AM and PM peak four-hour, midday or evening periods.

The TAM Countywide Model estimates 2040 12% lower daily VMT and 29% lower daily VHT than the MTC's Travel Model One.

PRODUCT 13: Estimated average speeds for freeways and non-freeways are compared with the MTC Model One for the 2040 horizon year. The only time periods that can be directly compared with the TAM Countywide Model are the AM and PM peak hour periods and daily. Overall, the TAM Countywide Model daily speeds are within -2% for freeways, -14% for other facilities and 25% for all facilities combined when compared to the MTC Travel Model One speeds.

6.6 Relationship to Marin County Capital Improvement Program

The current MTM includes all relevant projects listed in the State Transportation Improvement Program (STIP) for the 2040 horizon year.

The MTM is used for assessing the impacts of capital improvements. CMP statutes stipulate three criteria for projects selected for the CIP:

- Projects must maintain or improve the traffic level-of-service and transit performance standards,
- Project land use impacts must be mitigated, and
- Projects must conform to vehicle emissions and air quality mitigation measures

Toward that end, MTM results are typically used in evaluating relevant projects in the CIP chapter (Chapter 7), in preparing a project list for RTIP consideration by MTC and also for developing and programming any supplementary revenue sources.

7. CAPITAL IMPROVEMENT PROGRAM

7.1 Purpose and Intent of Legislation

CMPs are required by California Government Code Section 65089(b)(5) to include a seven-year CIP to maintain or improve the performance of the multimodal system for the movement of people and goods and to mitigate regional transportation impacts identified through the Land Use Analysis Program. Capital improvement projects must conform to transportation-related vehicle emissions and air quality mitigation measures. In the Bay Area, such TCMs are contained in the Bay Area 2017 Clean Air Plan.

7.2 Relationship to Regional Transportation Plan

MTC adopted the current RTP, Plan Bay Area, in July 2017. The action elements and projects for the CMP's CIP are consistent with the assumptions, goals, policies, actions and projects identified in the RTP. MTC made a significant effort to adopt policies that complement and support programs of Federal, State, and regional agencies. The RTP is updated every four years, with Plan Bay Area 2040 document updated in March 2017.

7.3 Relationship to Regional Transportation Improvement Program

TAM's CIP is the basis for determining which projects are included in the RTIP. Inclusion of a project in the RTIP is the first step in obtaining a funding commitment from the State. Projects that MTC includes in the RTIP are then recommended to the California Transportation Commission (CTC) for inclusion in the State Transportation Improvement Program (STIP). If the CTC includes a project in the STIP, it has approved the project for the necessary environmental studies and project design, which ultimately leads to a final decision on whether a project is implemented.

Projects that are to be included in the RTIP must be first included in TAM's CIP. However, it should be noted that MTC is responsible for assembling the RTIP, and also, the RTIP is a funding-constrained document. This CIP is developed with information from the current RTIP, which MTC adopted in September 2014. The dynamic nature of funding requires minor amendments to the plan several times a year.

7.4 Relationship to Air Quality Attainment Plans

The TAM CIP project list must show consistency to air quality attainment plans. The Bay Area 2017 Clean Air Plan, prepared by the Bay Area Air Quality Management District, is the current adopted plan. Various TCMs have been adopted as a part of this plan. MTC gives priority to those proposed projects that support or help implement any of the TCMs (see Chapter 4 for a listing and discussion of TCMs). Examples of such projects include HOV lanes and ramp meter bypass lanes for HOVs.

7.5 Project Funding Identified in TAM Measure A Strategic Plan

Marin County voters passed Measure A, the County's 1/2-cent transportation sales tax, in 2004. A Strategic Plan for this measure was developed that outlines how collected funds will be spent. This plan is routinely updated to reflect current agency strategies. As many projects are also funded partially through Measure A revenues, the relationship of the CIP to this Strategic Plan is important.

The most recent update, the Measure A Strategic Plan Update 2016, discusses strategies in four areas. Each strategy and key capital improvements are described as follows:

- Strategy 1: Develop a seamless local bus transit system that improves mobility and serves community needs including special transit for seniors and the disabled (paratransit services). This strategy includes transit capital investments.
- Strategy 2: Fully fund and ensure the accelerated completion of the Highway 101 Carpool Lane Gap Closure Project through San Rafael. This strategy is a capital improvement project that is effectively completed.
- Strategy 3: Maintain, improve and manage Marin County’s local transportation infrastructure, including roads, bikeways, sidewalks, and pathways. This category includes capital improvements for local and regional streets, roads and paths.
- Strategy 4: Reduce school-related congestion and provide safer access to schools. This category includes capital projects related to safe routes and safe pathways to schools.

The Strategic Plan includes proposed allocations for each strategy through FY 2024/25. The Sales Tax Programming/Expenditure Summary for key capital projects between 2016 and 2025 have been identified and are summarized in **Table 11**.

Table 11: Marin County Measure A Strategic Plan Capital Projects

Strategy	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25
Strategy 1 – Local Bus Transit									
Sub-strategy 1: Local Bus Transit System	\$13,995,922	\$9,180,948	\$9,384,713	\$9,592,552	\$9,804,549	\$10,020,785	\$10,241,347	\$10,466,319	\$10,898,429
Sub-strategy 2: Rural Bus Transit System	\$1,450,213	\$744,401	\$760,923	\$777,775	\$794,963	\$812,496	\$830,379	\$848,620	\$883,656
Sub-strategy 3: Special Needs Transit Service	\$2,572,019	\$2,233,204	\$2,282,768	\$2,333,324	\$2,384,890	\$2,437,488	\$2,491,138	\$2,545,861	\$2,650,969
Sub-strategy 4: Bus Transit Facilities	\$4,948,140	\$1,488,802	\$1,521,845	\$1,555,549	\$1,589,927	\$1,624,992	\$1,660,759	\$1,697,241	\$1,767,313
Strategy 2 – 101 Gap Closure									
Strategy 2: 101 Gap Closure	\$1,175,804	-	\$2,825,529	-	-	-	-	-	-
Strategy 3 – Local Infrastructure									
Sub-strategy 1: Major Roads	\$1,840,000	\$1,800,000	\$13,485,000	\$14,800,000	\$5,000,000	-	-	-	-
Sub-strategy 2: Local Roads	\$3,240,324	\$3,311,863	\$3,384,833	\$3,459,262	\$3,535,179	\$3,612,615	\$3,691,600	\$3,772,165	\$3,926,907

Strategy	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25
Strategy 4 – School Access									
Sub-strategy 1: Safe Routes to Schools	\$810,000	\$655,000	\$655,000	\$660,000	\$650,000	\$730,000	\$730,000	\$775,000	\$807,018
Sub-strategy 2: Crossing Guards	\$946,000	\$1,076,000	\$1,015,000	\$970,000	\$1,010,000	\$1,175,000	\$1,020,000	\$1,035,000	\$1,110,000
Sub-strategy 3: Safe Pathways	\$100,000	\$100,000	\$437,858	\$834,222	\$854,276	\$874,730	\$895,594	\$916,875	\$957,751

Source: Transportation Authority of Marin, Measure A – Transportation Sales Tax Strategic Plan Update, 2016

7.6 Marin-Sonoma Narrows Project and Funding

The Marin-Sonoma Narrows (MSN) section of US 101 is a nationally and regionally significant highway linking the San Francisco Bay Area and Oregon. It is also the only continuous north/south route through Marin County. The State designated the Narrows as an Inter-Regional Route of Significance, and US 101 is listed as a Focus Route in California’s 1998 Interregional Transportation Strategic Plan. As a result of these various designations, the MSN Project has received State discretionary funding on four separate occasions.

The existing segment (monitored Segment 3G) of US 101 through the Narrows has two lanes in each direction, sections that do not meet current freeway standards (including expressway sections with at-grade intersections), and consistently maintains a poor LOS in many sections. The MSN Project consists of widening approximately 17 miles of US 101 from four to six lanes by adding one HOV lane in each direction; creating a controlled access freeway section through the historic “Narrows,” and upgrading the highway to current freeway standards from SR 37 in Novato to Old Redwood Highway in Petaluma.

Project funding was awarded in prior years. In May 2008, the CTC awarded \$66.04 million in ITIP funding to the project. In 2012, the CTC increased the Proposition 1B Corridor Mobility Improvement Account (CMIA) funds from \$82.4 million to \$172.5 million in addition to previously committed federal, state and regional funding. This increases available funding to nearly \$398 million out of an estimated \$745 million total project cost.

TAM, the Sonoma County Transportation Authority (SCTA), and Caltrans have developed individual projects divided into three segments. A discussion of the projects by segment is listed in **Table 12**. A continuous bike route is also planned through all projects by utilizing a combination of Class I and II bike lanes.

Table 12: Marin-Sonoma Narrows Project

Segment A City of Novato from South of State Route 37 to north of Atherton Ave.	Segment B The City of Novato and end in the City of Petaluma, beginning north of Atherton Ave. and continuing to State Route 116	Segment C The City of Petaluma from State Route 116 to the Corona Rd. overcrossing
A1-HOV Lanes in Novato – HOV lanes have been added through median widening. This includes NB HOV lanes from SR 37 to north of Atherton Blvd. and SB HOV lanes from SR 37 to Rowland Blvd. Both lanes were constructed and opened to traffic in August 2012.	B1-Southerly Interchange – a new interchange, adding on to the existing Redwood Landfill overcrossing, and supporting frontage roads will be built to serve San Antonio Rd., enabling the closure of uncontrolled access points. Construction started in April 2013 and completed in October 2014.	C3-Replace the NB Route 116 E Separation Bridge and widen SB separation bridge to accommodate HOV Lanes on US 101 – Construction started in April 2013
A2-Extend SB HOV Lane – to Franklin overhead. Construction started in June 2013 and completed in November 2013	B2-Petaluma Blvd. South Interchange - constructs a new interchange and supporting frontage roads to serve Petaluma Blvd. South and closes uncontrolled access points. This project also includes construction of the Petaluma River Bridge to accommodate future HOV lanes. Construction started in April 2013 and is expected to be completed in Summer 2016.	–
A3-Extended NB HOV Lane – from Atherton to 1.4 miles south of the Redwood Landfill Interchange. Construction started in April 2013 and completed in October 2014.	B3-San Antonio Curve Correction – the mainline highway curve across the Marin/Sonoma county line at San Antonio Creek will be reconstructed to lower the existing highway grade just north of the creek in order to improve sight distances. A new US101 bridge over San Antonio Creek is included. The highway will be raised upward to prevent future freeway closures due to periodic flooding. Construction will begin in Spring 2016.	–

7.7 Recent Project Funding Identified in CTC Programs

The CTC manages several funding programs, including the State Transportation Improvement Program (STIP), funds from Propositions 1B and 116, and the State Highway Operations and Protection Program (SHOPP).

The STIP lists include allocations for each of California’s counties. The share for Marin County includes both general program and specific project amounts. The most recently adopted CTC allocations for Marin County projects are shown in **Table 13**. The most recent STIP (adopted in August 2017) has allocations from FY 2016/17 until FY 2020/21.

Table 13: State Transportation Improvement Program Projects in Marin County

Project	Agency	Program Amount	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21
Planning, Programming and Monitoring	TAM	206	206	-	-	-	-
Planning, Programming and Monitoring	MTC	24	24	-	-	-	-
Marin-Sonoma Narrows: San Antonio Rd	Caltrans	(21)	(21)				
Planning, Programming and Monitoring	TAM	206	-	206	-	-	-
Planning, Programming and Monitoring	MTC	51	-	25	26	-	-
Parkade Area Circulation Improvements	Fairfax	255	-	255	-	-	-

Note: Funds are in \$1,000's

Source: California Transportation Commission, 2017 Report of STIP Balances County and Interregional Shares, August 2017

Marin County originally received funds through the adoption of Proposition 1B in 2006. This proposition created the CMIA. In the original 2007 adopted program, CMIA funds were key funding sources to help complete three major projects in Marin County:

- The widening of westbound I-580 westbound to NB US 101 connector in San Rafael (completed in 2010). The completion eased congestion for traffic traveling to and from the East Bay via the Richmond-San Rafael Bridge.
- The construction of HOV lanes within Novato (part of the MSN project).
- The construction of interchanges and partial HOV lanes between Novato and Petaluma (part of the MSN project) was scheduled to receive CMIA funding in 2012

The SHOPP lists 16 projects in Marin County as part of the most recent project list developed in 2016. The project list is shown in **Table 14**. The projects primarily consist of roadway safety improvements and projects addressing storm damage, including culvert replacement, drainage system upgrades, embankment and slope reconstruction, retaining wall construction, and bridge railing replacement.

Table 14: State Highway Operations and Protection Program (SHOPP) Projects

Route	Location	Description	Amount	Project Year
SR 1	Near Mill Valley, at Tennessee Valley Rd.	Repair roadway slip-out	\$2,536	2017/18
SR 1	Near Mill Valley, at 0.2 mile north of Loring Ave.	Provide drainage system and install rock slope protection	\$2,894	2016/17
SR 1	Near Olema, 1.8 miles south of Olema	Replace culvert with a bridge	\$6,340	2017/18
SR 1	Near Muir Beach, 0.3 mile north of Seacape Dr.	Construct tie-back wall	\$4,219	2016/17
SR 1	Near Muir Beach, 0.2 mile north of Cold Stream Fire Rd.	Construct tie-back wall	\$3,309	2016/17
SR 1	Near Muir Beach, at Cold Stream Rd.	Construct retaining wall	\$2,139	2016/17
US 101	In San Rafael, at the Route 101/580 interchange	Repair sinking pavement and drainage systems	\$3,912	2016/17
SR 1	In Marin County, near Tamalpais-Homestead Valley, from 0.2 mile west of Erica Rd. to Valley Ford Rd.; also in Napa County, on Route 29, from PM 48.0 to PM 48.6	Install centerline rumble strips	\$8,416	2016/17
US 101	Near Mill Valley, from Redwood Hwy. Frontage Rd. to Route 131 (Tiburon Blvd.)	Install concrete barrier	\$9,409	2017/18
SR 1	In Almonte, near Route 101 off-ramp to Route 1; also from Coyote Creek to Flamingo Rd.	Upgrade pedestrian facilities	\$4,576	2017/18
US 101	In Sausalito, Corte Madera, Larkspur, and Tiburon, on Routes 101 and 131 at various locations	Upgrade curb ramps, driveways and sidewalks	\$3,239	2016/17
SR 1	Near Point Reyes Station, at Lagunitas Creek Bridge No. 27-0023	Replace bridge	\$7,076	2018/19
SR 1	Near Point Reyes Station, at Millerton Gulch Bridge No. 27-0114	Repair damaged embankment and construct retaining wall	\$8,180	2017/18
US 101	In San Rafael, from Route 101 NB off-ramp to 2nd St. at San Rafael Harbor Bridge No. 27-0033	Replace bridge	\$10,264	2017/18
US 101	San Rafael on Route 101 at Miller Creek Bridge No. 27-0004	Scour mitigation	\$1,875	2016/17
SR 1	Near Point Reyes Station and Olema, from Olema Creek Bridge to north of Cypress Rd.; also, near Tomales, from south of Tomales-Petaluma Rd. to south of Valley Ford Rd. (PM 45.0/50.5)	Pavement rehabilitation	\$18,480	2019/20

Note: Funds are in \$1,000's

Source: Caltrans State Highway Operations and Protection Program (SHOPP), March 2016

7.8 Recent Project Funding Identified in RTIP

Additional transportation projects are also ongoing in Marin County. Many have been recognized in the RTIP, updated by MTC in December 2015. In addition to these identified funding programs, additional capital transportation investments are made from time to time. These often involve funding from local sources (such as development fees or development agreements) or from specialized funding made available, but not incorporated into multi-year funding documents. The current list of projects are listed in **Table 15**.

Table 15: Regional Transportation Improvement Program (RTIP) Projects

RTP ID	Project/Program	Total Project Cost	Committed Funds	Discretionary Funds
17030006	Implement Marin Sonoma Narrows HOV Lane and Corridor Improvements Phase 2	\$136	\$ -	\$136
17030002	Climate Program: TDM and Emission Reduction Technology	\$1	\$ -	\$1
17030013	San Rafael Transit Center (SRTC) Relocation Project	\$36	\$ -	\$36
17030015	SMART Downtown San Rafael to Larkspur Rail Extension	\$42	\$2	\$40
17030011	Widen Novato Boulevard between Diablo Ave. and Grant Ave.	\$17	\$ -	\$17
17030001	Bicycle and Pedestrian Program	\$30	\$ -	\$30
17030003	County Safety, Security and Other	\$4	\$ -	\$4
17030010	Highway Improvement Studies	\$5	\$ -	\$5
17030014	Larkspur Ferry Terminal Parking Garage – Planning Study	\$1	\$ -	\$1
17030005	Minor Transit Improvements	\$42	\$ -	\$42
17030016	Multimodal Streetscape	\$49	\$ -	\$49
17030004	Roadway Operations	\$20	\$ -	\$20
17030012	Sir Francis Drake Blvd. / Red Hill Ave. / Center Blvd. (known as "The Hub") – Project Development	\$6	\$ -	\$6
17030008	Tiburon East Blithedale Interchange – PAED	\$12	\$ -	\$12
17030007	US 101 / 580 Interchange Direct Connector – PAED	\$15	\$ -	\$15
17030009	Access Improvements to Richmond San Rafael Bridge	\$7	\$ -	\$7

Note: Amounts shown in millions of year-of-expenditure dollars.

Source: TAM & Plan Bay Area 2040, Metropolitan Transportation Commission RTIP, March 2017

7.9 Project Funding Identified in TAM Measure B Strategic Plan

The annual VRF was increased in November 2010 by \$10 to fund transportation improvements and collection began in May 2011. In July 2011, the TAM Board adopted the VRF Strategic Plan, as required by the VRF Expenditure Plan. The Strategic Plan serves as the programming document for the projects and programs that are contained in the three elements defined in the Expenditure Plan:

- **Element 1:** maintain local streets and Class I pathways, including, but not limited to, road maintenance, safety improvements, emergency pothole repair, crosswalk and accessibility enhancements, intersection control, drainage improvements, streetscape improvements, and Class I bicycle and pedestrian pathway maintenance and improvements. This element is divided

into two sub-elements: Element 1a for local streets and roads and Element 1b for Class I bicycle and pedestrian pathways.

- **Element 2:** improve mobility for seniors and people with disabilities by implementing a Mobility Management Program, supporting and enhancing Whistlestop and other local services, creating a “Paratransit Plus” program to serve older seniors who may not qualify for service under the Americans with Disabilities Act, and implementing other innovative programs to provide mobility to seniors as an alternative to driving.
- **Element 3:** implement three core strategies and programs, including: 1) School Safety and Congestion Reduction; 2) Commuter Alternatives to enhance or expand existing alternative programs to reduce single occupancy commuting; and 3) Electric Vehicle and other Alternative Fuel Programs to support alternative fuel education and implementation programs.

The Measure B VRF Strategic Plan includes proposed allocations for each element through FY 2020/21. These allocation amounts are summarized in **Table 16**.

Table 16: Marin County Measure B Strategic Plan Capital Projects

Element	FY 2014/15	FY 2015/16	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21
Element 1: Maintain Local Streets and Pathways							
Element 1a: Local Streets	-	-	\$2,230,550	-	-	\$2,192,400	-
Element 1b: Bike/Ped Pathways	\$104,400	\$104,400	\$104,400	\$104,400	\$104,400	\$104,400	\$104,400
Element 2: Improve Transit for Seniors and Persons with Disabilities							
Element 2: Transit for Senior and Disabled	\$730,800	\$730,800	\$730,800	\$730,800	\$730,800	\$730,800	\$730,800
Element 3: Reduce Congestion and Pollution							
Element 3.1: School Safety and Congestion - Crossing Guard	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000
Element 3.1: School Safety and Congestion - Street Smart	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000
Element 3.2: Commute Alternatives	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000
Element 3.3: Alternative Fuel Promotion	\$197,000	\$197,000	\$197,000	\$197,000	\$197,000	\$197,000	\$197,000

Source: 10-Year Measure B Vehicle registration Fee Revenue and Programming Summary, Transportation Authority of Marin 2011

7.10 Project Funding Identified in Local Jurisdictions’ Bicycle Plans

Marin County’s local jurisdictions have adopted Bicycle/Pedestrian Master Plans with planned related infrastructure improvements. By reference, the Marin County CMP recognizes those plans and planned facilities. Individual bicycle and pedestrian improvements will be implemented as scheduled by local agencies, and as funding becomes available. Funding sources will vary, and include TFCA funds, as well as Measure A, Safe Routes to Schools, and other local funds.

8. DEFICIENCY PLAN PROCEDURES

8.1 Purpose and Intent of Legislation

California Government Code Sections 65089.3, 65089.4, and 65089.5 govern the conformance process. These sections require that TAM determine every two years whether Marin County, including cities and towns within the county, conform to the requirements of the CMP based on information obtained through monitoring.

If TAM believes that a local government is not conforming to CMP requirements, it must then hold a noticed public hearing to determine areas of nonconformance. If after the public hearing TAM still believes that the local government is not conforming to CMP requirements, it must provide written notice to the local government citing the specific instances of nonconformance. The local government then has 90 days to remedy the instances of nonconformance. If after 90 days the local government has not remedied the nonconformance instances, TAM will make a finding of nonconformance and notify the State Controller to withhold certain gas tax subvention funds.

8.2 Local Government Conformance Requirements

CMP legislation has established the following requirements of a conformance determination for local jurisdictions:

- Maintain the highway LOS standards outlined in the CMP (Chapter 2).
- Participate in adoption and implementation of a deficiency plan when highway and roadway LOS standards are not maintained on portions of the designated system.
- Participate in a program to analyze the impact of land use decisions, including the estimate of the costs associated with mitigating these impacts. Specific requirements and recommendations are outlined in the Land Use Analysis Program element of the CMP (Chapter 5).

If either Marin County, or cities and towns within the county, do not meet each of these CMP requirements when TAM is scheduled to make its conformance determination for each jurisdiction ("Jurisdiction" referring to the local government that has the greatest segment distance within its boundaries per CMP definition), the jurisdiction is found in nonconformance. In this case, the jurisdiction may risk losing an increment in its gasoline tax subvention funds and not having projects programmed in the RTIP.

8.3 Local Government Monitoring Requirements

TAM must take active steps to ensure that Marin County and each city and town in Marin County at least biennially conform to each requirement of the CMP legislation. Monitoring must be done for several reasons:

- Congestion is projected to increase, which will waste valuable time and add to the transportation costs of goods and services.
- Congestion causes energy to be wasted and contributes to worsening of air quality.

- Coordinated growth management and transportation planning is essential to minimizing both travel time and costs.

The CMP legislation specifies that jurisdictions that do not demonstrate conformance to the requirements are to lose street and highway subvention money. Many jurisdictions use this money for maintenance of existing streets and roads so as not to neglect their transportation infrastructure.

Outlined below are the major actions that may be required by each jurisdiction to ensure CMP conformance. TAM currently performs all required LOS monitoring.

Maintaining Highway Level of Service Standards

TAM biennially monitors level of service on segments of CMP designated routes within Marin County and its jurisdictions. Where a segment falls within two or more jurisdictions, the jurisdiction responsible for the segment is the jurisdiction with the greatest segment mileage. The monitoring program occurs during the AM (7:00 AM to 9:00 AM) and PM (4:30 PM to 6:30 PM) peak periods. The traffic counts also should be taken in the spring (April or May), with counts at fall periods acceptable when needed (September or October). Consistent with this, the 2015 CMP update includes counts from October and November 2014. The LOS analysis based on these counts is consistent with the LOS methods outlined in the highway LOS standards (Chapter 2).

Transportation improvements or changed economic conditions may result in changes in LOS over consecutive monitoring cycles. If LOS is determined to be A, B, or C for any year that is monitored, the monitoring frequency could be reduced to every other CMP (four years), until such time as the segment is found to operate at LOS D or worse. Any segment determined to operate at LOS D should then be monitored for each CMP (two-year intervals). Grandfathered facilities that currently operate at LOS F do not have to be improved, but nevertheless their conditions should be monitored with each CMP.

Participation in Required Deficiency Plans

Where roadway facilities experience congestion worse than the roadway LOS standards established in Chapter 2, the congestion should be monitored annually until the congestion eases. If the LOS standard is exceeded for two CMP cycles, the roadway is then considered potentially deficient. A determination to see whether a Deficiency Plan is required once the exempted trips allowed in state legislation are assumed not to exist.

If TAM determines a segment that has not been grandfathered does not meet the adopted LOS standards (D for principal arterial roadways; E for freeways), then that jurisdiction must:

- Immediately propose and designate funds for measures that improve the LOS to meet or be better than the adopted LOS standard which TAM would then incorporate into the CIP, or
- Create a “deficiency plan” in accordance with CMP requirements. A deficiency plan requires the local government to:
 1. Analyze the cause of the deficiency and define improvements to the facility that maintain the LOS standard, or

2. Define improvements that have a measurable improvement on the transportation system's LOS or substantial air quality benefit and determine the cost of the improvements.

TAM has published guidelines governing specific issues related to Deficiency Plan preparation on its website. For all deficient facilities (including those that are grandfathered), TAM and its partnering agencies should develop an "operational plan" to minimize congestion on these facilities. Operational plans are envisioned as a description of capital projects, multimodal programs, and/or roadway management techniques that a local jurisdiction intends to advocate for implementation by that jurisdiction or others (such as Caltrans for State facilities).

All incorporated cities and towns in Marin County, along with unincorporated County areas, are in conformance at this time. Therefore, no deficiency plans will be required by this CMP.

Maintaining Program to Analyze Impacts from Land Use Decisions

Land use impact analysis monitoring requirements are detailed in the Land Use Analysis Program (Chapter 5). There are two general requirements:

1. For any general plan update or amendment or major development proposal that would result in a net increase of 100 or more PM peak hour vehicle trips, local governments are to forward information on the application to TAM and run the county model to obtain transportation impact information related to the amendment/development. The jurisdiction is responsible for conducting the model run if requested by TAM, which could be performed: (1) by the jurisdiction, (2) by a consultant hired by the jurisdiction, or (3) by TAM (only if staff is available to do the work). The jurisdiction requesting the model run reimburses the County for the cost of the model run. Model results are useful to cities and the County as part of their current review and approval processes, especially for purposes of defining the necessary mitigation measures.
2. Each jurisdiction is to be responsible for preparing and transmitting land use data to TAM for use in the MTM, as well as tracking land use buildout through issuance of planning and building permits. This requirement ties in with the existing property development ("PROPDEV") database that local governments are already using, as well as the County Community Development Agency's Countywide Land Use Database. TAM biennially runs the MTM in order to update future year LOS information in the CMP. Local governments can find this information useful when updating the land use and circulation elements of their general plans.

9. STUDY REFERENCES

- 2014 Transportation System Monitoring Report for Transportation Authority of Marin, TJKM (Final, June 2013).
- Congestion Management Program 2013 Update for Transportation Authority of Marin, TJKM, 2013.



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DATE: November 30, 2017

TO: Transportation Authority of Marin Board of Commissioners

FROM: Dianne Steinhauser, Executive Director
David Chan, Programming and Legislation Manager
Scott McDonald, Senior Transportation Planner

SUBJECT: Project Applications for Senate Bill 1 Local Partnership Program Funding (Action), Agenda Item No. 12

RECOMMENDATION

Authorize TAM staff to submit project applications for Senate Bill (SB) 1 Local Partnership Program (LPP) Formulaic Share and Competitive Share funding with applications due December 15, 2017 and January 30, 2018, respectively. TAM staff is recommending applications for the following projects:

LPP Formulaic Share - \$1,010,000 Estimated for TAM to receive in FY17/18 and FY18/19

- TAM's Marin Sonoma Narrows Project (\$500,000 for B1 Phase 2 and A4 Design Plans)
- City of San Rafael's Multi-Use Path from 2nd to Andersen (\$510,000 for Capital Improvements)

LPP Competitive Share - \$200 Million Estimated Annually for Statewide Competitive Applications (CTC will Program FY17/18 – FY19/20)

- TAM's Bellam Blvd Offramp (\$2 Million Application for Capital Improvements)
- County of Marin's Sir Francis Drake Blvd. (\$5 Million for Capital Improvements)
- TAM's Northern Segment North-South Greenway Project (\$2 Million for Capital Improvements)

Applications will be developed with assistance from local jurisdictions. These projects being recommended for the two shares of funding above were presented to the TAM Programming & Projects Executive Committee on November 13th as potential project candidates, with the exception of TAM's Northern Segment North-South Greenway Project which was added after further consideration.

BACKGROUND

The Road Repair and Accountability Act of 2017 (SB1) approved by Governor Brown in April 2017, is a \$5.24 billion annual transportation funding package aimed at fixing the state's local roads, freeways and bridges and investing more funding toward transit and safety projects. The revenue generated from taxes and a variety of other sources statewide (12 cent/gallon gas tax, 20 cent/gallon diesel tax, increased vehicle registration fees, fees for electric vehicles starting in 2020) will provide the first significant on-going increase in state transportation funding in more than two decades.

In some cases, SB1 funding will augment existing programs (including the Active Transportation Program (ATP), State Highway Operation and Protection Program (SHOPP), Transportation Asset Management

Program (TAMP), and State Transportation Improvement Program (STIP). Funding will also be provided through newly developed SB1 programs (including Local Streets and Roads (LS&R), Solutions for Congested Corridors, Trade Corridor Enhancement, and Local Partnership Program (LPP)). A more expansive list of SB1 programs and other grants are provided as part of Attachment A, of which guidelines for several SB 1 programs are still under development.

The funding for transportation through SB1 will be funneled through a wide range of programs largely administered by the California Transportation Commission (CTC). However, programs such as Regional ATP and the Trade Corridor Enhancement involve coordination from the Metropolitan Planning Organizations (MPOs). As the MPO for the Bay Area, the Metropolitan Transportation Commission (MTC) is responsible for programming regional ATP funds for selected projects and developing a regional submittal list for the Trade Corridor Enhancement Program.

In general, programs under SB1 can be divided into two basic categories – Competitive Programs whereby agencies statewide must submit grant applications to receive funding, and Formulaic Programs in which a specific amount of funding will be set aside by formula. For the competitive programs, either guidelines have been developed or will be developed soon which determine the agencies eligible to apply and for what project types. Within the Formulaic Program category, funding is either set aside by formula to regions, counties, or transit agencies depending on the guidelines for a given program. TAM staff will be closely tracking the competitive and formulaic program deadlines, both of which require eligible agencies to apply (through an allocation request in the case of formulaic programs and full applications for competitive programs).

DISCUSSION/ANALYSIS:

Shown in Attachment A is a summary list of the funds estimated from various SB1 programs along with a list of separate grant programs TAM staff is monitoring as potential resources to fund project needs from Marin. For the SB1 program funding listed, agencies responsible for submitting applications are identified. Based on the review of these fund sources, under Attachment B projects are listed that TAM staff has identified as suitable candidates for SB1 funding. Since the guidelines for some SB1 programs are still being developed, in the future this list will be updated accordingly.

Among the SB1 funding sources, are two distinct shares under the Local Partnership Program (Formulaic Share shown as 4a and Competitive Share shown as 4b of Attachment A). This program was developed specifically to reward agencies with approved taxes and fees dedicated to transportation including TAM (Measure A sales tax and Measure B vehicle registration fee) and SMART (Measure Q sales tax) from Marin. TAM will receive an estimated \$1,010,000 for FY17/18 and FY18/19 under the formula share. SMART will need to directly apply for its estimated \$390,000 for FY17/18 and FY18/19 under the formula program. Both TAM and SMART are also eligible to compete statewide under the competitive program, which provides \$200 Million annually and the first competitive program will cover three years (FY17/18-FY19/20).

The LPP Guidelines were just adopted in October 18, and can be found at http://www.catc.ca.gov/programs/SB_1/11617_Final_LPP_Guidelines.pdf. With fund estimates announced in November, TAM will need to develop project applications relatively quickly to meet the following deadlines:

- LPP Formulaic Share –December 15, 2017 deadline for allocation requests
- LPP Competitive Share –January 30, 2018 deadline for competitive applications

For the both the formulaic share and competitive share, a 1:1 Match is required (of either local, private, federal or state funds) and costs must be incurred after an allocation of the LPP funds, no sooner than January 31, 2018. The LPP Formulaic funds can be used for any component of a project (design included) whereas the Competitive Share funds are limited to construction of capital improvements. These factors were considered as TAM staff brought forward candidates to recommend submitting for the two LPP funding shares.

NEXT STEPS

This recommendation would authorize TAM staff to apply for LPP Formula funds to support TAM's Marin Sonoma Narrows Project and the City of San Rafael's Multi-use Path from 2nd to Andersen by the December 15, 2017 deadline. Additionally, TAM staff would be authorized to develop applications for TAM's Bellam Blvd Offramp project, TAM's Northern Segment North-South Greenway project as well as the County of Marin's Sir Francis Drake Blvd. Project, in conjunction with County staff, for the LPP Competitive funds by January 30, 2018.

In early 2018, TAM staff will present an updated list of projects proposed for other SB1 program funding to the TAM Board and to seek direction on future applications for funding.

ATTACHMENT

Attachment A – List of Upcoming Grants under SB1/Other Agencies

Attachment B – List of Projects Identified as Candidates Considered for SB1 Funding

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Funding Sources for Transportation/SB1								
No.	SB1 Funding Programs	Formula / Competitive	Statewide Annual Amount (Est.)	Increase in Marin Funding Levels Annually (Est.)	Guidelines Status	Applications Due Date	Eligible Applicants	Notes
1	Local Streets and Roads	Formula	\$1.5B	\$7.8M (est.)	Adopted	October 16, 2017	Local Jurisdictions	All Marin jurisdictions submitted their project lists by the deadline. CTC adopts project lists on December 6, 2017. Apportionments start mid-Jan 2018. Scope can change.
2a	Transit & Intercity Rail Program	Competitive Grants	\$330M	TBD	TBD	TBD	Transit Operators	Operators include: Marin Transit, Golden Gate Transit, SMART
2b	Intercity & Commuter Rail (now called State Rail Assistance by CalSTA)	Formula	\$38M	TBD	TBD	TBD	TBD	\$19M Estimated for State-Supported Intercity Rail (the state's three intercity rail corridors will receive a minimum of 25 percent of these funds, and \$19M Estimated for Commuter Rail (the state's five commuter rail corridors shall receive 20 percent of these funds through FY 2019–20). SMART will receive approx. \$2.5 million in FY 18, and approx. \$4 million in both FYs 19 and 20.
3a	State Transit Assistance (Revenue Based)	Formula	\$286M	See Notes	N/A	TBD	Transit Operators	Revenue comes automatically to transit operators by state statute. Operators include: Marin Transit, Golden Gate Transit, SMART. \$2.5M GGT/\$914k MT/\$686 SMART for operating; \$578K GGT/\$204k MT/\$153 SMART for capital.
3b	State Transit Assistance (Population Based)	Formula	\$286M	See Notes	MTC policy December/January 2017.	TBD	CMA's/ Transit Operators	MTC is considering a policy for FY18/19 to divide the program between a regional program (Managed by MTC) and for CMAs (Managed by TAM) to determine how best to invest the remaining funds in either paratransit, transit operating, and Lifeline program needs.
4a	Local Partnership Program (Formula)	Formula	\$200M	\$500,000 to \$600,000	Adopted	Dec 15, 2017	TAM and SMART	Revenue Estimate Determined by CTC. While formula based, funds only allowed to eligible recipients with 1:1 Match from local, private, federal or state funds. This is the next application due. TAM receives an estimated \$1,010,000 for FY17/18 and FY18/19 and SMART and estimated \$390,000 for FY17/18 and FY18/19, project will be approved January 30, 2018. Funds may be used for design or construction.
4b	Local Partnership Program (Competitive)	Competitive Grants	\$200M	TBD	Adopted	Jan 30, 2018	TAM and SMART	TAM submitted voter approval information and revenue on eligibility by Oct 27, 2017 (for Formula share and Grant eligibility). TAM should submit candidates that will compete well statewide. The first cycle will cover FY17/18-FY19/20 and projects will be adopted May 16, 2018. Requires 1:1 match and funds must be used for construction.
5	Active Transportation Program	Competitive Grants	\$192M increases program to total \$438M	TBD	May 2018 Adoption	30-May-18	TAM and local jurisdictions	Cycle 4 will include four years of funding FY 19/20 to FY 22/23. Match not required but encouraged. To date there has been interest by San Rafael for 2nd to Anderson MUP and Corte Madera for advancing Central Marin Gap Closure improvements initially funded through ATP for Design.

No.	SB1 Funding Programs	Formula / Competitive	Statewide Annual Amount (Est.)	Increase in Marin Funding Levels Annually (Est.)	Guidelines Status	Applications Due Date	Eligible Applicants	Notes
								Item 12 - Attachment A
6	Caltrans Local Planning Grants	Competitive Grants	\$25M for Sustainable Communities Grants and \$6.7 for Adaptation Planning Grants (\$20M over three years)	TBD	Aug-17	Oct 20, 2017 and Feb 2018	All agencies	Two rounds, one due in October, one due in February. TAM submitted application with Marin County for SR37 Sea Level Rise Planning Study. SMART also submitted an application for a rail study along SR37. Selected applications will be announced in Dec 2017.
7	SHOPP/Maintenance	Caltrans managed	\$1.9B Increases program to total \$4.4B	TBD	March 2018 Adoption	Caltrans submits proposed SHOPP	Caltrans	\$240 Million programmed August for accelerated project delivery (what Caltrans had in queue); opportunities for Marin regarding interchange mods, bike/ped crossings on state highways (via Caltrans Regional Bike Plan), and perhaps operational improvements such as auxiliary lanes and bus-on-shoulder
8	State Improvement Program (STIP)	Formula - MTC submits regional program (RTIP)	\$77M though RTIP, \$26M through ITIP	TBD	March 2018 Adoption	Oct-17	TAM and local jurisdictions	MTC submits Regional Program Due to CTC by December 15. Associated housing policies off the table this cycle of STIP but will continue to be considered at MTC. Since Marin has a negative fund balance/carryover there is no additional programming capacity for Marin in the 2018 STIP cycle (Funds were advanced for in past years and once the balance is positive additional projects can be programmed.
9	Bridges & Culverts	Caltrans managed	\$400M	TBD	TBD	TBD	Caltrans	Possibility that work in Marin Rte 37 at Novato Creek Bridge- to raise the bridge- would be eligible for this program in the future.
10	Congested Corridors	Competitive Grants	\$250M	TBD	Dec 2017 Adoption	16-Feb-18	Caltrans, TAM, MTC	MTC, Caltrans, SCTA and TAM coordinating on submitting the Marin Sonoma Narrows, named in legislation. CTC approves selected applications May 16, 2018. No local match funds required. MTC has a list of projects. While this is a competitive program (\$250 million per year statewide) the Legislature made it clear which projects/corridors it considers "congested" and therefore likely candidates to receive funds. One of which is in Marin County. From SB 1 Section 43: "Multimodal approaches for the Route 101 and SMART rail corridor between the Counties of Marin and Sonoma."
11	Trade Corridors	Competitive Grants	\$300M	TBD	Adopted	30-Jan-18	MTC	MTC Goods Movement Plan strong basis for candidates in this region. While I-580 and Hwy 101 in Marin and Sonoma included, heavy port and truck needs in East Bay and Solano likely to get early priorities. CTC approves selected applications May 16, 2018
12	Dept. of Parks & Recreation	State DPR managed	\$54M	TBD	TBD	TBD	TBD	
13	Freeway Service Patrol	CHP managed	\$25M	TBD	TBD	TBD	TBD	
14	Dept. of Food & Agriculture	State DFA managed	\$17M	TBD	TBD	TBD	TBD	
15	CSU & UC Research	Research Grants	\$7M	TBD	TBD	TBD	TBD	
16	Workforce Development Board	State WDB	\$5M	TBD	TBD	TBD	TBD	

DRAFT SB1 Preliminary Staff Review of Potential Project Candidates

No.	Projects Considered for funding programs	SB1 Programs Targeted	Funding Amounts Requested	Project Submittal Deadline	Notes and Considerations
1	Marin Sonoma Narrows (TAM Sponsored)	Local Partnership Program (LPP)Formulaic \$1,010,000 in FY17/18 and FY18/19 for TAM to receive 1st Priority for LPP Formulaic	\$500,000 (Design)	12/15/17	LPP Formulaic Required 1:1 Match for design or capital, for costs incurred after Jan 31, 2018. The \$500,000 match has been allocated by TAM (OBAG 2).
		Congested Corridors - \$250 Million Competitive	\$ 120 Million (Capital)	2/16/18	Strong Candidate, mentioned in Legislation for Congested Corridors. Must complete design, the program will fund capital only.
2	Bellam Blvd. Offramp (TAM Sponsored)	LPP-Competitive	\$2 Million (Capital)	1/31/18	Bellam Blvd. is a strong candidate (LPP-Competitive Funding for capital improvements for projects with a full funding plan). Required 1:1 match. Match allocated by TAM (Measure A ½ cent debt reserve).
3	2 nd to Andersen MUP (San Rafael Sponsored)	LPP-Formulaic \$1,010,000 in FY17/18 and FY18/19 for TAM to receive 2nd Priority for LPP Formulaic	\$510,000 (Capital)	12/15/17	The \$510,000 match has been identified and allocated by MTC to City (federal swap to Measure A sales tax).
		Active Transportation Program	\$3 Million	5/30/18	Strong Candidate, Cycle 4 Call for Projects in March with funds made available starting 2019/2020
4	Southern Segment North-South Greenway Project (TAM Sponsored)	Active Transportation Program	\$2 Million	5/30/18	Strong Candidate, Cycle 4 Call for Projects in March with funds in 19/20. Funds needed to complete funding plan.
5	Central Marin Regional Pathways Gap Closure Project (Corte Madera Sponsored)	Active Transportation Program	\$2.2 Million	5/30/18	Corte Madera received \$416k for Design from ATP Cycle 3.5, additional funds needed for advancing the project through Construction.
6	Major Roads – East Blithedale (Mill Valley Sponsored)	LPP-Formulaic (Potential Future Submittal for revenue after FY18/19)	\$150,000 (Design) Potential request for future cycles	12/15/17	Major Roads – East Blithedale \$150,000 match has been programmed by TAM as Measure A sales tax for \$300,000 Design work.
7	Major Roads -Sir Francis Drake Blvd. (County Sponsored)	LPP-Competitive	\$5 Million (Capital)	1/31/18	For capital improvements. The 5 Million required from \$13.5 programmed by TAM as Measure A Sales Tax. (funding plan in process).
8	Interchanges- Tiburon East Blithedale, Merrydale, Lucas Valley, 2 nd Street Onramp, Tamalpais, Manuel T. Freitas. (Caltrans/TAM sponsored)	Planning Grants (SHOPP request also)	\$500,000 per interchange	February 2018 (Sustainable Communities Component)	Planning Grants include two components -Sustainable Communities and Adaptation.
9	San Anselmo Hub (San Anselmo Sponsored)	Planning Grants	\$250,000 Estimated	February 2018 (Sustainable Communities Component)	Planning Grants include two components -Sustainable Communities and Adaptation. Received OBAG funds.
10	Northern Segment North-South Greenway Project (TAM Sponsored)	LPP-Competitive	\$2 Million	1/31/18	Needs an estimated \$2M to complete construction. 1:1 Match available.