



Transportation Authority of Marin

900 Fifth Avenue  
Suite 100  
San Rafael  
California 94901

Phone: 415/226-0815  
Fax: 415/226-0816

www.tam.ca.gov

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James Campbell

**Corte Madera**

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**County of Marin**

Damon Connolly  
Katie Rice  
Kathrin Sears  
Dennis Rodoni  
Judy Arnold

## AGENDA

### CITIZENS' OVERSIGHT COMMITTEE

July 20, 2020

5:00 p.m.

### Virtual Meeting

**Zoom Link:**

<https://us02web.zoom.us/j/83596550131?pwd=MIRxZ3Z4RVU2WGRsdGR6VzlwNVcvdz09>

**Webinar ID: 835 9655 0131**

**Password: 882603**

**How to watch the meeting:**

<https://us02web.zoom.us/j/83596550131?pwd=MIRxZ3Z4RVU2WGRsdGR6VzlwNVcvdz09>

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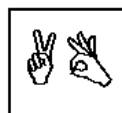
**Teleconference:** Members of the public wishing to participate via teleconference, can do so by dialing in to the following number at 5:00 PM on the day of the meeting: +1 669 900 6833; Access Code: 835 9655 0131; Password: 882603.

**How to provide comment on agenda items:**

- Before the meeting: email your comments to [dmerleno@tam.ca.gov](mailto:dmerleno@tam.ca.gov). Please email your comments no later than 1:00 P.M. Monday, July 20, 2020 to facilitate timely distribution to Committee members. Please include the agenda item number you are addressing and your name and address. Your comments will be forwarded to the TAM COC members and will be placed into the public record.

- During the meeting (only): Your meeting-related comments may be sent to [info@tam.ca.gov](mailto:info@tam.ca.gov). During the meeting your comments will be read (3-minute limit per comment) when the specific agenda item is considered by the Committee. Your comment will also become part of the public record. In order to ensure staff receives your comment during the meeting, it is recommended that you send your comment using [info@tam.ca.gov](mailto:info@tam.ca.gov) early in the meeting.

- During the meeting (only): If watching this meeting online, click on the "raise hand" feature in the webinar controls. This will notify TAM staff that you would like to comment. If participating by phone, "raise hand" on Zoom by pressing \*9 and wait to be called upon by the Chair or the Clerk to speak. Ensure that you are in a quiet environment with no background noise. You will be notified that your device has been unmuted when it is your turn to speak. You may be notified prior to your allotted time being over. Your comments will also become part of the public record.



Late agenda material can be inspected in TAM's office between the hours of 8:00 a.m. and 5:00 p.m.  
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**no later than 5 days** before the meeting date.

**Making the Most of Marin County Transportation Dollars**



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### CITIZENS' OVERSIGHT COMMITTEE

July 20, 2020

5:00 p.m.

### Virtual Meeting

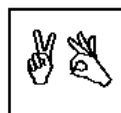
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1. Introductions and Welcome (2 minutes)
2. Open time for public expression, up to three minutes per speaker, on items not on the agenda (public is welcome to address the COC, but according to the Brown Act, the COC may not deliberate or take action on items not on the agenda)
3. [Review and Approval of June 15, 2020 Meeting Minutes](#) (Action) (5 minutes)
4. TAM Staff Report (Information) (20 minutes)
5. [TAM and Marin Transit "Connect2Transit" Program in Uber App](#) (Information) (20 minutes)
6. [Status Update on NB US101 to EB I-580 Direct Connector Project](#) (Information) (20 Minutes)
7. [Highway 101 Interchange Studies Project Report](#) (Information) (20 minutes)
8. Committee Member Hot Items Report (Discussion) (10 minutes)
9. Discussion of Next Meeting Date and Recommended Items for the Agenda (5 minutes)



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**no later than 5 days** before the meeting date.

**Making the Most of Marin County Transportation Dollars**



MEETING OF THE  
TRANSPORTATION AUTHORITY OF MARIN  
CITIZENS' OVERSIGHT COMMITTEE

June 15, 2020

5:00 p.m.

Virtual Meeting

**Zoom link:**

<https://us02web.zoom.us/j/83927874660?pwd=cTBtSTk3NVlQMitlVElEK2lkVWhVUT09>

**Webinar ID: 839 2787 4660**

**Password: 115829**

**MEETING MINUTES**

**Members Present:**

Peter Pelham, Major Marin Employers (Chairperson)  
Bob Burton, Southern Marin Planning Area (Vice-Chairperson)  
Joy Dahlgren, Central Marin Planning Area  
Charley Vogt, Northern Marin Planning Area  
Paul Royce, Ross Valley Planning Area  
Kate Powers, Environmental Organizations  
Kevin Hagerty, League of Women Voters  
Allan Bortel, Marin County Paratransit Coordinating Council  
Paul Premo, Taxpayer Group  
Zack Macdonald, School Districts

**Alternates Present:**

Kay Noguchi, League of Women Voters  
Kingston Cole, Taxpayer Groups

**Staff Members Present:**

Anne Richman, Executive Director  
Li Zhang, Chief Financial Officer/Deputy Executive Director  
Dan Cherrier, Principal Project Delivery Manager  
Derek McGill, Planning Manager  
David Chan, Manager of Programing and Legislation  
Helga Cotter, Senior Accountant  
Denise Merleno, Administrative Services Associate

**Public Present:**

Amy Van Doren, Director of Policy & Legislative Programs of Marin Transit

Chairperson Peter Pelham called the Citizens' Oversight Committee (COC) meeting to order at 5:04 p.m.

**1. Introductions and Welcome**

Chairperson Pelham asked TAM Senior Accountant Helga Cotter to conduct the roll call. Ms. Cotter did so and confirmed that a quorum was present.

**2. Open Time for Public Expression**

Ms. Cotter confirmed that no public comments had been received.

### **3. Review and Approval of May 18, 2020 Meeting Minutes (Action)**

Member Kevin Hagerty moved to approve the May 18, 2020 Meeting Minutes. Member Charley Vogt seconded the vote and the Minutes were approved with Vice-Chairperson Bob Burton abstaining.

### **4. TAM Staff Report (Information)**

Executive Director (ED) Anne Richman presented the staff report. ED Richman confirmed that staff continues to work most remotely with occasional essential trips to the office. She stated that preparations are being made to ensure the agency will comply with the County Health Department's requirements when the office reopens.

ED Richman reported on her participation in the Marin Recovers Industry Advisors Task Force. She stated that recommendations should be published soon relating to precautions for the transportation industry. ED Richman recommended that members review the Marin Recovers website, which includes detailed information on reopening segments of the economy and resources for best practices.

ED Richman discussed the agency's capital projects, including a major road rehabilitation and upgrade project schedule with work started today, on Sir Francis Drake Boulevard between US-101 and the Town of Ross, with \$14.5 million contributed from the Measure A Expenditure Plan. ED Richman stated that Caltrans has advertised the North-South Greenway project and bids are expected in late July. ED Richman reported that the construction of a 2-way protected bike path from westbound I-580 along Sir Francis Drake Boulevard to Andersen Drive is underway and expected to be completed in late summer of this year. She stated the project is a partnership between the Bay Area Toll Authority (BATA), Caltrans, the City of San Rafael and TAM and TAM has allocated \$1.3 million for this project. ED Richman reported on the Measure AA funded US-101 Interchange Study, which has started collecting existing data and will consider improvements to eleven interchanges stipulated in the Expenditure Plan and consideration of a twelfth interchange.

ED Richman reported on the US-101- I-580 Direct Connector Stakeholder Working Group, which she said is scheduled to hold via Zoom on Monday, June 29, 2020 and Tuesday, July 21, 2020 with the aim of providing an overview to stakeholders and gain feedback on the alternatives that are under consideration.

ED Richman confirmed that MTC and Caltrans will jointly submit an application in July for the Marin Sonoma Narrows (MSN) B7 Segment as a regional priority for \$40 million in Senate Bill (SB) 1 Solutions for Congested Corridors Program (SCCP) funding. ED Richman also confirmed that the Safe Routes to School (SR2S) program offers online activities for teachers and students with planning underway for the new school year, which includes a remote learning option should it be necessary.

ED Richman provided background information on the GET2SMART program, which has been rebranded in partnership with TAM, Marin Transit and Uber. She stated that the new program integrates TAM's GET2SMART program and Marin Transit's Connect On-Demand services within the Uber App, which includes TAM's incentive for shared rides and the ability to see real time public transit information. ED Richman stated that the program should be launched in July with rebranding occurring beforehand.

ED Richman reported on State Route (SR) 37 work by Caltrans to update traffic monitoring and analysis systems and will include lane shifts. She also reported on the City of San Rafael's request for input for a proposal to add two Priority Development Areas (PDAs), one in the Northgate Mall area and the other in the Canal neighborhood. ED Richman noted that the proposal will be heard at the City Council meeting on June 16, 2020.

In response to Member Hagerty, ED Richman stated that discussions were still ongoing related to a new TAM office lease.

ED Richman clarified Uber's role in providing transportation, in response to Member Kate Powers. She confirmed that the \$5 discount still applies to rides to SMART stations, transit hubs and the ferry terminal, and that Uber will provide the platform for GET2SMART and Marin Transit's Connect Service.

In response to Vice-Chairperson Burton, ED Richman stated that bike usage on the Richmond-San Rafael Bridge has increased during the Shelter in Place period, with increased use at weekends, and that data collected by BATA is available, which will be discussed with the COC in the future. ED Richman stated that the improvements to Sir Francis Drake Boulevard include restriping, crosswalk, signal improvements and an additional eastbound right turn lane near the Bon Air Shopping Center.

## **5. Review of the Revenue and Expenditure Component for the Measure AA Strategic Plan (Discussion)**

ED Richman stated that David Chan, TAM's Manager of Programing and Legislation, would lead the discussions, which would include revenue scenarios that consider the uncertainty of the present economic climate and use of reserve funds.

Mr. Chan presented the staff report on the Strategic Plan, which he stated identifies revenue, prioritizes projects for project implementation based on readiness. He noted that the full Strategic Plan is updated every other year and that the Board adopted the current plan in June 2019. However, Mr. Chan stated that the revenue and expenditure component is updated annually because it includes financial information, such as revenue forecasts, cash flow and reimbursement schedules.

Mr. Chan stated that three different revenue scenarios have been explored due to the uncertainties caused by the COVID-19 pandemic and Shelter in Place order: Best Case, Moderate Case and Worse Case. Mr. Chan explained that the Best Case scenario assumes smooth reopening of the economy with recovery on course for the end of this year; Moderate Case scenario assumes the economy will reopen with some major setbacks and recovery will take in 2 – 3 years; Worse Case scenario assumes there will be a second wave of COVID-19 cases and the full recovery will take up to 5 years. He discussed the adopted Strategic Plan in relation to the 3 scenarios, noting that projected revenues under the scenarios for FY20-2021 vary from no growth to a 15% decrease, and he discussed the effects of the 5-year projections under the 3 scenarios on revenue projections over a 30-year period.

Mr. Chan discussed the reserve funds in relation to revenue decline, noting that there is a total \$5.4 million of reserve funds collected under Measure A/Measure AA, which will be used to offset the decline in revenue to maintain the \$27.5 million commitment next year and reduce negative impacts for future years. Mr. Chan stated that staff is not recommending collecting the 5% reserve during years of zero or negative growth and he discussed the effects of using the reserved funds to offset revenue decline under the 3 scenarios, noting that cuts in projects and programs will be necessary under the Worse Case scenario.

Mr. Chan suggested two ways of distributing the reserve funds, the first being to distribute the funds in proportion to the share stipulated in the Expenditure Plan. The second would be to release funds only to the strategies/categories that have needs with the recipients committing to a reasonable repayment schedule. He stated that the TAM Administration, Projects and Planning (APP) Executive Committee reviewed this item and voted to recommend the second option to the TAM Board.

Mr. Chan discussed interest funds, which he stated could be used to address a decline in revenue, noting that \$1.73 million should remain uncommitted at the end of this fiscal year. He explained that these funds have been used in the past for projects that have no other financial resources. He stated that the TAM Board has the discretion to use these funds to offset the decline in revenue in extreme situations but that staff recommends

holding the remaining interest funds for funding needs of critical projects as approved by the TAM Board last year.

Mr. Chan discussed the potential impacts to the projects and programs under the three revenue scenarios. He stated that Marin Transit, which receives 55% of the revenue, could lose up to 16% of estimated funding in FY2020-21 and 21% in FY2021-22, compared to the adopted revenue level in the June 2019 Strategic Plan, depending on the revenue scenario and if no reserves are used. Mr. Chan also discussed the Local Streets and Roads category, which distributes money to cities and towns by formula for local infrastructure at the beginning of each year. He noted that the funds distributed this cycle are from funds accumulated by the end of June 30, 2020, so there will be no major difference between the amount budgeted and the actual amount in FY2020-21. However, the revenue drop in FY2021-22 is expected to be 8.5% and as high as 41% in FY2026-27 depending on the revenue scenario, which Mr. Chan stated could negatively affect the Pavement Condition Index (PCI) gain.

Mr. Chan stated that the agency will be entering into the final year of the current contract for SR2S professional services. He noted that the decrease in revenue is expected and that discussions with the Board will be needed about how to maintain or restructure the program before entering into a new contract. Mr. Chan stated that the Crossing Guard Program will also be affected, although sufficient funds remain to carry over and maintain the same number of guards for FY2020-21. He noted that discussions will be necessary the following year to manage the decline in funding.

Mr. Chan discussed other projects that will be impacted by revenue declines, including MSN, the US-101/ I-580 Director Connector, Local Interchange Enhancement Projects and Safe Pathway Programs. However, he noted that many of the projects could seek other sources of revenue and/or reduce work scope and that cashflow could be managed with no need of bonding as of now.

Mr. Chan discussed unspent Measure A funds from incomplete projects and interest funds and stated that there will be a proposal in 2021 to merge the Measure A and Measure AA Strategic Plans into a single Strategic Plan.

Mr. Chan stated that the next steps in the process would be for the TAM Board to review the three scenarios and reserve policies at its June 25, 2020 meeting. The Board will be requested not to collect the 5% reserve amount during years of negative or no growth revenue, while resuming collections during years of positive cash flow. He confirmed that the APP Executive Committee is recommending the Moderate Case scenario and Option 2 for the reserve fund policy, and that staff will report the comments from the COC to the Board. He noted that the long-term impacts on the agency's programs will need to be evaluated, most notably for the SR2S and Crossing Guard programs, and recommendations for changes will need to be taken to the Board along with regular updates on changes to the economic outlook.

In response to Member Hagerty, Ms. Zhang clarified the proposed reserve policies. She noted that 5% is collected annually off the top for 5 years and is set aside as a reserve and that staff is proposing to release the funds to agencies in strategies/categories that need additional funds, which is Option 2. Future tax revenues would be used to repay the funds so that the reserve is restored and could be distributed proportionally at the end of the Expenditure Plan. Ms. Zhang noted that a repayment schedule for each funding recipient requesting the reserve funds would need to be reviewed and approved by the TAM Board under Option 2. She explained that staff is suggesting Option 2 because there will be strategies/categories which will not need the reserve because they still have a fund balance, such as the Major Roads Category under Measure A. She confirmed the purpose of Option 2 is to help strategies/categories that need funding during the difficult economic times.

In response to Vice-Chairperson Burton, ED Richman stated that the crossing guards are not working while schools are closed, so there will be savings in the program. TAM will need to await a decision to open the schools before considering action.

Member Vogt asked Ms. Zhang to clarify the two TAM Executive Committees: Administration, Projects and Planning (APP) Executive Committee and Funding, Programs and Legislation (FPL) Executive Committee, and Ms. Denise Merleno, Executive Assistant, clarified the Board Members of each committee. Mr. Chan confirmed for Member Vogt that half the reserve would be used in FY2020-21 and the other half would be used in FY2021-22 under Option 1. However, staff is proposing Option 2, whereby funds would be released up to a certain amount to those categories that were in need of the funds. Member Vogt noted that TAM would need a reserve should the agency be considering future debt or bond financing for capital improvements to help with the agency's credit rating. In response, Ms. Zhang stated that debt financing is not foreseen in the next 5 years. She confirmed that the agency has capital projects that could benefit from federal funding, and ED Richman stated that recent federal relief funds have benefitted our partner agencies such as Marin Transit, which relieves pressure from TAM to fund shortfalls. Ms. Zhang confirmed the recommendation that the interest fund should be held and used only for emergency project funding needs.

Mr. Chan clarified project sponsors in response to Member Powers. Member Powers asked staff if other agencies had commented on the proposed recommendations and Mr. Chan stated that he would be making a presentation to the Marin Public Works Association (MPWA) on Thursday, June 28, 2020. ED Richman stated that the agency has worked closely with Marin Transit and that she provided the documents to Marin Transit's General Manager. ED Richman confirmed she had reviewed the proposal with some of the city managers who expressed satisfaction that TAM can provide funding for the projects and programs scheduled in the forthcoming year.

In response to Member Powers, Ms. Zhang confirmed that staff is recommending the 5% reserve to be collected when there is a positive growth rate. Ms. Zhang stated that there will still be sales tax revenue collected under Measure A due to sales tax collection reconciliation and corrections for period prior to April 1, 2019.

Member Allan Bortel asked staff if sales tax data was available showing revenue from March and April 2020 to compare with revenue during the same time period in 2019. Ms. Zhang stated that final numbers are not available but that the agency's tax consultants are predicting a drop of 10% for Marin County.

Member Paul Premo stated that he believed the recommendation is reasonable and he asked staff to confirm that the Strategic Plan will be updated in 2021 and the budget could be amended if necessary. Ms. Zhang confirmed the process and noted that impacts should be lessened with the agency's reserve; that Marin Transit is getting state and federal stimulus funds, and that TAM's aim is to stabilize funding curve to help local agencies. She discussed the difficulty of projecting revenue and confirmed that staff will bring any necessary adjustment to the current budget and recommendation timely.

Ms. Cotter confirmed that no public comments had been received.

In response to Member Paul Royce, ED Richman confirmed that a barrier is being installed to separate the bike lane from the freeway on the overpass from the Richmond-San Rafael Bridge to Andersen Drive. In addition to the barrier, Mr. Cherrier stated that the original estimate for construction work on Sir Francis Drake Boulevard East was \$6 million, which Member Royce referred to.

## **6. Review and Acceptance of 2020 Measure A/AA 1/2-Cent Transportation Sales Tax Compliance Auditee Selection List (Action)**

Ms. Zhang presented the staff report, which asked the Committee to review the 2020 Measure A/AA 1/2-Cent Transportation Sales Tax Compliance Auditee Selection List and refer it to the TAM Board for approval. She recalled that the Measure A Sales Tax Compliance Audit Policy was amended at the March meeting to include both Measure A and Measure AA, which the Board approved. Ms. Zhang noted that Member Hagerty asked if

the COC could be given the authority to both review and approve the auditee selection list and she confirmed staff would be happy to bring this item to the COC each year.

Ms. Zhang discussed the 6 funding recipients who were selected for the 2020 cycle of the sales tax compliance audit based on the updated Compliance Audit Policy. She noted that Marin Transit is audited annually because it receives 55% of sales tax revenue and that some of the programs under Measure A are still ongoing. Ms. Zhang stated that Novato Boulevard has been selected in the Major Roads Category under Measure A and noted that \$2.35 million from Measure AA is set aside annually for 14 years to complete projects in the Major Roads Category under Measure AA. She pointed out that the Major Roads Category is audited by project phase. Ms. Zhang stated that the County of Marin has been selected for its use of Measure A/AA funds under Local Streets and Roads, noting that the funds are provided via formula. She stated that they are audited to ensure the funds are spent in accordance with the Expenditure Plan and Funding Agreement. Ms. Zhang noted that there is no audit for the SR2S program this cycle since it was audited last year. Ms. Zhang noted that the Crossing Guard Program and Safe Pathways to School Project have also been selected for this cycle based on the frequency specified in the Compliance Audit Policy. Ms. Zhang noted that the COC is requested to review and recommend the list to the TAM Board for approval. Once the list is approved, the project sponsors will be notified, a workshop will be conducted in late August/early September and the audit process should be completed in November or December 2020. The final report will then be presented to the COC for review and acceptance before the TAM Board reviews and accepts the audit based on the COC and APP Executive Committee review and commendations.

Ms. Cotter confirmed that no public comments had been received.

Vice-Chairperson Burton moved to accept the proposed Sales Tax Compliance Auditee Selection List and recommend the TAM Board approve the list. Member Joy Dahlgren seconded the motion, which was approved unanimously.

## **7. Discussion on COVID-19 Effects on the Transportation System and Recovery Planning (Discussion)**

ED Richman stated that transportation has been deeply affected by the Shelter in Place Order, and this discussion item will focus on how the agency's programs and projects may be affected. ED Richman stated that staff is looking for feedback and that Planning Manager Derek McGill would present the report.

Mr. McGill stated that an opportunity exists for the agency to reconsider its projects and programs and understand how the agency's mobility goals could be met due to the impact of the pandemic. He discussed data sources showing significant drops in traffic and traffic patterns, noting a 90.7% drop in vehicle miles travelled (VMT) in March and April 2020 throughout the county on highways and local streets and roads. Mr. McGill noted that a positive change from the Shelter in Place order is an increase in electric bikes sales, but that there is a potential for traffic to increase to higher levels than previously. He discussed topics that TAM and other public agencies might want to consider, including those who are most impacted with the greatest needs that should be addressed and what changes the agency might want to consider to its projects and programs.

Mr. McGill noted that those who are most impacted by the Shelter in Place Order include low income, gig workers or those with contract-type jobs. He discussed the strengths of the County, noting excellent leadership in health and human services, strong community engagement and access to open space.

Mr. McGill discussed the constraints the agency will encounter, including limited funding, changes to housing needs and more demand in Marin, changes in employment, flexible office models, and commercial and retail space. He stated that a slow recovery for transit is expected and a faster recovery for single occupancy vehicles, with less willingness to share rides. With local tourism expected to increase, traffic levels are expected to rise.

Mr. McGill discussed the agency's operational change and changes to the agency's programs to ensure the needs of those more impacted are advanced. The changes under consideration include partnering with transit agencies to promote transit and advocate for funding for transportation agencies, partnering with jurisdictions on street design efforts, and promote safe travel for non-motorized transportation modes. Mr. McGill discussed potential new partnerships with employers through programs such as the Measure B Vehicle Registration Fee Commute Alternative Program.

Mr. McGill discussed the programs that are affected by the Shelter in Place Order, including Marin Commutes which encourages the public to use non-single occupancy vehicle trips, Crossing Guard and SR2S programs. He stated that the agency is considering partnering with local jurisdictions on Local Streets and Roads and active transportation improvements and considering how stimulus funds could be applied to construction projects as a way to economic improvement.

Mr. McGill concluded his presentation by asking the members for their opinion on whether the right topics have been considered, if there were other priorities that should be added and how TAM's programs can be adjusted to aid the recovery efforts.

Vice-Chairperson Burton commended staff on the presentations.

In response to Chairperson Pelham, Mr. McGill confirmed that staff is considering ways to support employees working from home, in addition to supporting those who must attend their place of work. Chairperson Pelham stated that he perceived there will be a big shift to working from home in those professions where it was thought not possible before Shelter in Place. He noted that a major portion of administrative staff at the Bank of Marin is working from home.

Member Dahlgren suggested that transit services from the Canal should be expanded during the periods where there is crowding. She discussed the importance of ensuring there is no major crowding during this period and suggested funding for services that are not popular could be funneled to services that are needed. Member Dahlgren suggested promoting bike riding, rather than transit riding, noting an increase in bike riding during the Shelter in Place period.

Member Powers stated that an opportunity exists to consider how the PCI could be improved during this period of low traffic. She discussed the need to identify and prioritize transit routes used by essential workers and offer them more flexibility.

Member Hagerty asked if consideration is being given to increase/improve transit connections for workers who cannot afford to live in the County to get to their places of employment when Marin opens. Mr. McGill stated that Marin Transit and Golden Gate Highway & Transportation District are partnering with MTC on a Blue Ribbon Transit Taskforce to assess and understand transit needs in the region as the County recovers.

Member Zach Macdonald discussed his belief that work patterns will change with more people working from home, and he asked if there are plans for an analysis of vehicular, bicycle and pedestrian traffic. He thought there is a need to understand traffic patterns as the County opens so that the agency is not relying on old data. Member Macdonald discussed the possibility of schools opening in shifts and the need to provide more crossing guards, and he noted that there is difficulty in purchasing new bicycles with second-hand bikes being sold at a premium.

Mr. McGill stated that the agency undertakes a traffic monitoring process every 2 years as part of the Congestion Management Program. He noted that a count is due to begin in September 2020 and that additional analysis is in progress to assess the impacts of COVID-19 on traffic, transit systems and to understand safety and GHG (greenhouse gas) impacts.

Chairperson Pelham opened the public comment period. Amy Van Doren, Director of Policy & Legislative Programs, Marin Transit, stated that Marin Transit has anticipated the need to mitigate crowding on vehicles and is providing more services in the Canal neighborhood. Ms. Van Doren confirmed that there has been an increase in ridership in the past 2 weeks and Marin Transit will continue to monitor the services they provide.

In response to Member Vogt, Ms. Van Doren stated that they are adhering to the number of passengers per vehicle that is recommended based on the size of the vehicle. She noted that all riders are required to wear masks and stated that as demand rises, they will not have the capacity to meet the demand at peak hours based on the number of passengers allowed on vehicles. Ms. Van Doren stated that their partners in other agencies are providing hand sanitizers on their transit vehicles, which staff might consider, and that they thoroughly clean each transit vehicle at night. She discussed the challenges of bussing students in the fall with Member Vogt and confirmed they are anticipating a rise in costs.

Chairperson Pelham thanked Ms. Van Doren for the comments and Mr. McGill for the presentation. Ms. Cotter confirmed there was no further public comment.

#### **8. Committee Member Hot Items Report (Discussion)**

There were none.

#### **9. Discussion of Next Meeting Date and Recommended Items for the Agenda (5 minutes)**

The next meeting was scheduled on Monday, July 20, 2020. Ms. Zhang asked the Committee members to advise her of items they would like to add to the agenda.

The meeting was adjourned at 7:15 p.m.



**DATE:** July 20, 2020

**TO:** Transportation Authority of Marin Citizens' Oversight Committee

**FROM:** Anne Richman, Executive Director  
Derek McGill, Planning Manager

**SUBJECT:** TAM and Marin Transit "Connect2Transit" Program in Uber App (Information), Agenda Item No. 5

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## **RECOMMENDATION**

None – Informational Item Only

## **BACKGROUND**

On September 12, 2017, TAM initiated a pilot program to provide on demand first/last mile services to and from Sonoma Marin Area Rail Transit SMART stations in Marin County. This program, "GetSMART" has been in operation continuously since then, expanding to include the Larkspur and Downtown Novato SMART Stations in December 2019. The GetSMART program was launched in partnership with Lyft, Inc, and Whistlestop to provide wheelchair accessible vehicles as part of this program.

In April of 2018, Marin Transit launched Marin Transit Connect, providing on demand service using wheelchair accessible vehicles in the northern San Rafael area. TAM and Marin Transit have been coordinating and exploring options to integrate TAM's GetSMART Program and the Marin Transit Connect Service to address first/last mile needs and provide employer support programs.

## **DISCUSSION/ANALYSIS**

On October 18, 2019, TAM partnered with Marin Transit to issue a Request for Proposals (RFP) for Mobility On Demand Software to provide both agencies opportunities to assess the current state of technology for the GetSMART and Marin Transit Connect Program. A proposer's conference was held on November 1, 2019 and proposals were due on November 27, 2019. The RFP received a very high level of interest, receiving 15 proposals at time of the submission deadline.

TAM and Marin Transit staff reviewed all the proposals and completed an initial scoring and ranking based on the criteria included in the proposal:

Criteria	Available Points
References / Experience with Similar Agencies	10
Ability to meet Scope of Work	50
Price Proposal	40
<b>TOTAL</b>	<b>100</b>

The initial scoring process identified five competitive proposals that were advanced into the second round of evaluation which included an oral interview process. Interviews with the five teams were completed between January 6 and 17, 2020. The review panel was composed of staff from Marin Transit, TAM, and a non-voting member from the Metropolitan Transportation Commission (MTC). Following oral interviews, staff re-scored all shortlisted vendors using the original criteria. The final scoring is shown in the table below. Based on the outcome of the interview scores, Uber was recommended as the top firm by the review panel and in May, the TAM and Marin Transit boards both approved entering into contracts with Uber.

Vendor	Score
Uber Technologies, Inc.	84
Spare Labs, Inc.	75
Via Mobility, LLC	75
RideCo, Inc.	75
Lyft, Inc.	69
Liftango, Inc.	59
Ecolane USA, Inc.	59
TransLoc	58
Bytemark, Inc.	55
HBSS Connect Corp	50
Routematch Software, Inc.	47
DemandTrans Solutions, Inc.	41
Shotl	36
Mobisoft Infotech, LLC	31
Solyd Transit, Inc.	5

Uber Technologies offers Marin Transit and TAM the ability to seamlessly integrate the Marin Transit Connect on-demand service and the GetSMART Program into a single app, providing an integrated user experience. Based on the user's desired origin and destination, the app will also show the user available public transit options (real-time predictions) and price to complete the trip as well as other on-demand services offered by Uber (UberPool, UberX, etc.). The proposal offers both agencies the required level of custom reporting and oversight needed to meet regulatory reporting requirements.

For Marin Transit, among other benefits, this proposal also allows for a significant expansion of the Marin Transit Connect service area to include roughly 2.5-mile radius around SMART stations in Marin. Uber's proposed platform allows the wheelchair accessible Marin Transit Connect service to show within the publicly available Uber app but allows the Marin Transit the ability to control service parameters including price, hours of operation, and service area.

For TAM, this arrangement allows for higher level of wheelchair accessible service while reducing the costs to TAM. Additionally, this allows TAM to expand the scope of services to include employer agreements, to provide for public-private partnerships for employers that wish to further cover the cost of rides using Uber shared rides service (UberPool) or Marin Transit Connect Vehicles.

As part of the next phase of the program, TAM will continue to focus on shared ride services (UberPool) when available post-COVID and expand the transit integration component, to a wide array of transit stops in Marin County. TAM will not be required to continue with a separate contract for ADA services under this arrangement, however the GetSMART service area will see a reduction in the service area, and a revised cost structure in alignment with the higher costs of Marin Transit Connect Service. Finally, TAM is also advancing electric vehicle integration opportunities within this partnership, to further TAM's shared mobility and environmental goals. It is also worth noting that TAM and Marin Transit staffs are in communication with Uber and Whistlestop staffs regarding health and safety protocols for the present COVID-19 situation.

Marin Transit and TAM entered into separate agreements with Uber to develop the technology to support the integrated program, and to provide first/last mile, employer agreements, and potential electric vehicle integration. The two agencies also entered into a Memorandum of Understanding (MOU) to formalize elements of the partnership including consistency on pricing, hours of operation, and service area and also require adequate notice if either agency decides to change their agreement with Uber or the terms and conditions of their service or subsidy. At their May 4<sup>th</sup> meeting, the Marin Transit Board of Directors authorized the General Manager to enter into agreement with Uber and to execute the MOU with TAM.

At the May 28<sup>th</sup> TAM board meeting, the TAM Board authorize the Executive Director to execute a two-year agreement with Uber Technologies, Inc. (Uber) for an amount not to exceed \$140,000 to provide first/last mile services to and from transit stations in Marin County and sign a Memorandum of Understanding (MOU) with Marin Transit to formalize an integrated, accessible on-demand transportation program.

On July 1, 2020 this service entitled "Connect2Transit" went live, transitioning Marin Transit Vehicles into the Uber app. For more information on this service, including frequently asked questions and voucher links to receive discounts to and from transit stations please visit: <https://connect2transit.com/>

## **FISCAL CONSIDERATION**

Funding for this program is available from Measure B, under Element 3.2, Commute Alternatives Program. Staff is recommending \$70,000 annually be made available over the two-year period for a total of \$140,000, of which \$70,000 is included in the approved TAM FY2020-21 Annual Budget. For reference, this is the same amount that was included for the current program for the last 18 months, reflecting a cost savings over the two-year program duration.

## **ATTACHMENTS**

None

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**DATE:** July 20, 2020

**TO:** Transportation Authority of Marin Citizens' Oversight Committee

**FROM:** Anne Richman, Executive Director  
Dan Cherrier, Principal Project Delivery Manager

**SUBJECT:** Status Update on NB US101 to EB I-580 Direct Connector Project (Information), Agenda Item No. 6

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## **RECOMMENDATION**

None – Informational Item Only

## **BACKGROUND**

Currently, traffic transitioning from Northbound US101 to Eastbound I-580 has two signed routes. Both routes, the Sir Francis Drake Boulevard and Bellam Boulevard exits, utilize local streets designed to serve local traffic. TAM worked with its on-call consultant team and developed seven alternative alignments for a permanent connector. After detailed discussions with Caltrans, City of San Rafael, County of Marin, and the City of Larkspur, the list of alternatives was narrowed to three (with some sub-alternatives, for a total of seven options) and more detailed analysis was performed. Costs of the alternatives ranged from \$135 million to \$265 million and they have varying degrees of impacts and right of way needs.

TAM successfully advocated to have the lower-cost connector placed into the voter approved Regional Measure 3 (RM3) to be administered by the Metropolitan Transportation Commission (MTC). Meanwhile, in November 2018 the Measure AA Transportation Sales Tax was passed by Marin County voters, with 2% of the sales tax to go to the connector project to provide more robust public outreach and accelerate the project. This local commitment has allowed the project to move forward while the RM3 Program has been delayed due to legal action.

The TAM Board awarded a contract to a team led by Kimley Horn Associates at the July 2019 Board meeting for initial Project work. The scope of services included an initial consideration of all the seven original alternatives as well as developing new ones thorough an extensive public outreach process, discussions with various stakeholder groups, creation of a Memorandum of Understanding (MOU) with stakeholders regarding design selection, coordination with all affected jurisdictions/property owners, visual simulations, and environmental studies. In addition, several Caltrans required documents: Project Study Report, Advance Planning Study, Design Exceptions, and Project Report, are to be completed. The probable California Environmental Quality Act (CEQA) document will be an Environmental Impact Report (EIR). The appropriate National Environmental Policy Act (NEPA) document will be determined based on the environmental studies. Caltrans has agreed to be the NEPA lead agency. A determination was made to “federalize” the project so it can be eligible for federal funds, if they became available during the life of the project. If the project is not initiated using the federal process, it can be very difficult to utilize federal funds later if needed.

## **DISCUSSION/ANALYSIS**

The team from Kimley-Horn has refined prior alternatives with additional details. A robust outreach and management structure was created. At the key of this effort is an Ad-Hoc Committee of various TAM Board members, an Executive Steering Committee (ESC) consisting of leadership from all the involved agencies including the cities of Larkspur and San Rafael, the County of Marin, MTC, Caltrans, and TAM. Technical development and analyses are overseen by a Technical Advisory Committee (TAC) with similar stakeholders. A key component to the existing outreach is a Stakeholder Working Group (SWG) made up of individuals from numerous community groups near the Project area. Membership of the SWG exceeds 20 people.

Meetings have occurred since January and every group has met at least once, with the TAC meeting four times. The second SWG meeting is scheduled for late July and will explore the various alternatives in depth.

The TAC has kicked off the work of developing a robust matrix to evaluation the alternatives. The matrix continues to evolve based on feedback from the other groups. It is expected that an initial look at the feasibility of the alternatives will occur this Fall.

According to the current project schedule, the environmental studies will begin in late 2021 with a signed environmental document ready in late 2023. Detailed design will take around two years and the project should be ready to go into construction in 2025 and be open for traffic in 2028.

## **FISCAL CONSIDERATION**

The RM3 funding is only sufficient for the low speed options near the existing ramp at Bellam Boulevard. A final alternative selection of any of the other options will require additional funding to be secured for the project, possibly impacting the overall schedule.

## **NEXT STEPS**

Initial alternative evaluation will be completed in the Fall. At that point, the ESC and the AD-Hoc Committees will determine if it is feasible to eliminate any of the current alternatives.

## **ATTACHMENTS**

None



**DATE:** July 20, 2020

**TO:** Transportation Authority of Marin Citizens' Oversight Committee

**FROM:** Anne Richman, Executive Director  
Bill Whitney, Principal Project Delivery Manager

**SUBJECT:** Highway 101 Interchange Studies Project Report (Information), Agenda Item No. 7

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## **RECOMMENDATION**

None – Informational Item Only

## **BACKGROUND**

The Highway 101 Interchange and Approaching Roadway Study is a new project that was included in the Measure AA ½-Cent Transportation Sales Tax Expenditure Plan. The Expenditure Plan allocates 3% of the revenue from the sales tax, estimated at \$24.8 million over the 30-year period of the Measure.

The Expenditure Plan states the following:

“Accessing Highway 101 in Marin is a major source of congestion on local roads, which reduces the connectivity of communities across Marin. These funds would be used to attract regional, state, and federal funds for a program of improvements to local road interchanges. These improvements would improve the operation and safety of these interchanges for all users, allowing smoother travel to and from Highway 101 and local roads. The funds provide seed money to perform the planning, the public outreach, and to develop the scope of improvements needed at these interchanges. The interchange planning would include recommended improvements for all users.”

The funds would address Highway 101 interchanges at eleven locations in Marin as listed below:

- Alexander Avenue
- Sausalito / Marin City
- Tiburon Blvd / East Blithedale
- Paradise Drive/Tamalpais Drive
- Sir Francis Drake Blvd
- San Rafael Onramp at 2nd Street and Hetherington Avenue
- Merrydale Road/North San Pedro Road
- Manuel T Freitas Parkway
- Lucas Valley/Smith Ranch Road
- Ignacio Blvd

- San Marin Drive/Atherton Avenue

The Board, at its April meeting, authorized the Executive Director to retain the professional services of the consulting firm of HNTB. HNTB has teamed up with Parisi Transportation Consulting as well as other consulting firms to provide specialized services such as structural condition assessment, development and prioritization of improvement concepts, and public outreach.

## **DISCUSSION**

### **Study Approach**

The overall approach to begin the study program is to identify operational and safety improvements for all users of an interchange and approaching roadways including adjacent intersections. Many of the Highway 101 interchanges were built many years ago when Marin's traffic was much different than today and are considered to have numerous operational deficiencies and non-standard features as compared to current design practices. They were also built during an era that was auto centric and did not accommodate or equally consider other users such as pedestrians and cyclists.

Staff is proposing a multi-step process to understand and document the existing conditions of the interchanges and approaching roadways and then identify deficiencies that contribute to congestion and impact mobility and safety. As a first step we are proposing to initiate an in-depth study of each interchange location and to prepare an independent report that will recommend a series of actions to address the identified needs.

The following will be the steps taken in this initial scope of work:

- Identify and Establish Program Goals and Objectives
- Develop Evaluation Criteria & Performance Metrics
- Conduct Focused Stakeholder Engagement
- Perform Cost-Effective Data Collection & Review of Existing Reports and Studies
- Perform Traffic Assessment & Forecasts
- Identify Deficiencies, Constraints and Opportunities
- Prepare Planning Level Cost Estimates and Cost-Benefit Analysis
- Determine Sea Level Rise Susceptibility and Adaptive Capacity
- Prepare Interchange Study Report (for up to 12 Interchanges)
- Prepare a Prioritization and Implementation Plan
- Identify and Pursue Funding Opportunities

TAM will work collaboratively with our member agency staff, including the Public Works Departments and Community Development Departments as well as Golden Gate Bridge Highway and Transportation District (GGBHTD) and Marin Transit, and Caltrans. We will also engage interested stakeholders throughout the communities where the interchanges are located. We envision a web-based survey to engage the public and solicit input and will host a small-scale workshop in Southern Marin, Central Marin and Northern Marin as the studies are developed.

### **Goals and Objectives**

Establishing a clear and concise set of goals and objectives is a critical step to help guide TAM as we begin the study process. By using the foundation of program goals established by the Board the team can remain focused and advance these studies as efficiently as possible. Staff is proposing five major categories of Goals and Objectives that will set the stage to establish Evaluation Criteria. The evaluation criteria will then be used to

identify Performance Metrics. As the improvement options and/or alternatives are developed they can be evaluated and prioritized for further consideration. The proposed goals and objectives are as follows:

- Goal 1: Enhance Health and Safety
- Goal 2: Relieve Local Traffic Congestion
- Goal 3: Improve Multimodal Access to/from and across Highway 101
- Goal 4: Promote Economic Vitality
- Goal 5: Implementability

A Memorandum outlining the goals and objectives with draft evaluation criteria and performance measures is attached to this report (Attachment A). At this time, the evaluation criteria and performance measures are still being developed.

### **Consideration to Include an Additional Interchange Location**

The eleven interchanges listed in the Measure AA Expenditure Plan were selected using information from past Regional Transportation Plans (RTPs), previous studies and reports at interchange locations (Caltrans Project Initiation Documents (PID's), input from the Measure AA Expenditure Plan Advisory Committee and stakeholders, including jurisdictional partners and the public. The Expenditure Plan did not state the eleven "would" be studied, only that they "may be" studied. The Measure AA Expenditure Plan was crafted to not preclude other locations from being considered.

As the interchange program was being developed and based on previous discussions with TAM's Executive Committee, staff explored options to complete a high-level review of the remaining interchanges not included in the Measure AA Expenditure Plan, but which may warrant further consideration. There are known congestion points on local roads approaching Highway 101 that would not currently be considered a study area as part of this effort.

At the request of TAM, the consulting team has prioritized this effort as a first order of work to make the study process more effective and efficient. The attached Memorandum (Attachment B) defines the remaining access points to the Highway and outlines a process of elimination based on logical and technical criteria.

The Memorandum outlines specific considerations for the thirty access points and provides a discussion as to why certain locations warrant further consideration, or not. For example, the US 101/I-580 Interchange is being pursued separately and therefore is not included in this effort. The discussion narrows the remaining locations down to six logical candidates for consideration. A more in-depth analysis compared these six locations based on parameters such as traffic congestion, multi-modal safety including accident history, multi-modal access, and susceptibility to sea level rise and storm surge.

Based on the screening assessment and considering each of the factors, two interchanges stand out as potential candidates for evaluation as the additional, or twelfth study interchange: Shoreline Highway (Highway 1) and Alameda del Prado/Nave Drive. Both interchanges exhibit recurring traffic congestion, multimodal safety challenges, and multimodal access issues. Shoreline Highway also routinely experiences storm surge issues and is vulnerable to sea level rise. In contrast, the other four interchanges do not experience the same severity of problems.

When comparing the two interchanges, Alameda del Prado/Nave Drive experiences higher weekday traffic congestion, while on weekends Shoreline Highway can see substantial congestion levels and back-ups. The total number of reported collisions over a five-year period was about twice as high at Alameda del Prado/Nave Drive compared to Shoreline Highway.

The Shoreline Highway interchange is predicted to continue to experience impacts from sea level rise; on average the area floods 20 to 30 times a year between November and March. The interchange area has been studied over the years to address flooding and transportation issues with input from various stakeholders, including public and regulatory agencies. Many short-term strategies to address flooding have been implemented, but the ultimate solution that has been identified includes raising 1,500 feet of Shoreline Highway and 1,300 feet of Highway 101, including the Richardson Bay Bridge, by seven to nine feet (Caltrans Fact Sheet, US 101/State Route 1 Junction, January 2020). The ultimate plan is estimated to cost about \$160 million. These projects are proposed to be added to the State Highway Operation and Protection Program (SHOPP) 10-Year Plan in FY 2024.

Another potential consideration in selecting between the Shoreline Highway and Alameda del Prado/Nave Drive interchanges is the intention of the language in the Measure AA Expenditure Plan. According to the plan, TAM's tax-generated funds "would be used to attract regional, state, and federal funds for a program of improvements to local road interchanges." Shoreline Highway is a state highway (Highway 1) that is owned and maintained by the State of California. Alameda del Prado and Nave Drive are local roadways within the City of Novato.

Therefore, due to Caltrans' implementation of short-term measures and intention to include major improvements to the Shoreline Highway interchange in the 2024 SHOPP, as well as the intention of the Measure AA Expenditure Plan, staff recommends including Alameda del Prado/Nave Drive as the twelfth interchange in TAM's program.

## **FISCAL IMPACTS**

The study is fully funded with Measure AA funds and no additional funds are requested for this action.

## **NEXT STEPS**

Upon approval of the TAM Board, staff will continue to advance the Study Program based on the established goals and objectives and include the Alameda Del Prado/Nave Drive Interchange as the twelfth interchange in addition to the eleven listed in the Measure AA Expenditure Plan. The team will begin to collect traffic and usage data at the interchange and local road locations. There is a large library of "big data" that exists pre-Covid19 and will be used in the studies, however the team will collect current vehicular, bicycle and pedestrian data and adjust it as necessary using engineering judgement and experience.

## **ATTACHMENTS**

Attachment A: Goals and Objectives Memorandum

Attachment B: Selection Process to Identify Twelfth Interchange Memorandum



## Memorandum

**Date:** June 30, 2020  
**To:** Bill Whitney, TAM  
**From:** Kim Franchi, HNTB  
 David Parisi, Parisi Transportation Consulting  
**Subject:** Highway 101 Interchange and Approaching Roadway Study:  
 Goals and Objectives

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### INTRODUCTION

Throughout Marin County, Highway 101 serves as the primary north-south roadway and key link between communities. Twelve interchanges with existing deficiencies will be studied as part of TAM's Highway 101 Interchanges and Approaching Roadways project. Deficiencies identified to date include traffic congestion, intermodal connectivity, non-standard or outmoded design features, flooding, and vulnerability to sea level rise (SLR). The HNTB/Parisi team is working to objectively develop, evaluate, and prioritize potential improvements. This will facilitate implementation of approvable, phase-able, and fundable mobility solutions that effectively leverage local, state, and federal funding for short, medium, and long-term projects.

This memorandum provides a summary of proposed project goals and objectives, evaluation criteria, and associated performance measures against which improvement concepts can be developed, evaluated and prioritized. The HNTB/Parisi team requests feedback regarding the goals and objectives, their prioritization or relative weighting, and the evaluation methodology.

### GOALS AND EVALUATION CRITERIA

The goals and objectives outlined below were compiled from the 2017 Strategic Vision Plan, 2018 Measure AA Final Expenditure Plan, the latest Highway 101 corridor planning documents, and numerous local, regional, and statewide sources, as referenced herein. They are intended to be aligned with the larger planning context to guide development of the Highway 101 Interchanges program as a whole and of the proposed interchange improvement concepts themselves. They are also intended to be aligned with the guiding principles outlined in the Measure AA Strategic Plan, which identifies the following themes on how the sales tax funds should be spent:

1. Maximize leveraging of outside fund sources
2. Support timely and cost-effective project delivery, ensuring all strategies progress towards measurable improvements
3. Maximize the cost-effective use of sales tax dollars
4. Promote a balanced use of funds throughout the County
5. Promote high environmental and conservation awareness

A summary of the proposed goals and evaluation criteria is included in Table 1.

## Highway 101 Interchange and Approaching Roadway Study Goals and Objectives

- **Goal 1: Enhance Health and Safety<sup>1</sup>**
  - **Evaluation Criterion 1:** Improve safety for all modes
    - *Performance Measure:* Reduction in prevalence of incidents  
*Scoring:* Higher scoring for concepts that would remedy non-standard design features or other features that contribute to potentially unsafe conditions
    - *Performance Measure:* Increased walking/biking<sup>2</sup>  
*Scoring:* Higher scoring for improvements that propose new or improved pedestrian/bicyclist infrastructure, including improvements that connect to existing infrastructure or close gaps
  - **Evaluation Criterion 2:** Reduces greenhouse gas (GHG) emissions and improves air quality
    - *Performance Measure:* Improved travel times  
*Scoring:* Higher scoring for improvements that improve traffic flow, thereby reducing emissions
    - *Performance Measure:* Reduction in delay  
*Scoring:* Higher scoring for improvements with the highest forecasted reduction in vehicle delays
    - *Performance Measure:* Incorporation of transportation system management (TSM) measures  
*Scoring:* Higher scoring for improvements that include TSM elements, thereby reducing vehicle emissions
- **Goal 2: Relieve Local Traffic Congestion<sup>3</sup>**
  - **Evaluation Criterion 1:** Alleviates congestion and improves traffic flow for current and future traffic
    - *Performance Measure:* Degree of improvement in
      - Level of Service (LOS) and average vehicular delays
      - Vehicle hours of delay
      - Vehicle miles traveled (VMT)*Scoring:* Higher scoring for concepts where greatest improvements would occur
- **Goal 3: Improve Multimodal Access to/from and across Highway 101<sup>4</sup>**
  - **Evaluation Criterion 1:** Enhances intermodal connectivity and removes access barriers
    - *Performance Measure:* Improved connectivity for vehicular and active transportation  
*Scoring:* Higher scoring for concepts that provide most improvement in connectivity for transit users, bicyclist, and pedestrians
  - **Evaluation Criterion 2:** Encourages mode shift from single-occupancy vehicles
    - *Performance Measure:* Mode shift to non-single occupant vehicles  
*Scoring:* Higher scoring for improvements that facilitate transit or HOV usage

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<sup>1</sup> The “Getting Around Marin” online survey identified safety as a priority after travel time and flexibility (TAM Strategic Vision Plan, Figure 16 page 47). Factors that rated lower than safety included cost, comfort, and environment. This is also consistent with goals listed in MTC Plan Bay Area 2040 (Table 2.1 page 27) and is listed in the Caltrans US 101 North Comprehensive Corridor Plan.

<sup>2</sup> A guiding principle of the TAM Strategic Vision Plan was promoting a healthy environment and health population (Figure 1 page 14). The walking/biking network was identified as a means to support public health (page 37) by encouraging exercise.

<sup>3</sup> Transportation priorities identified during 2015 public outreach were ranked (TAM Strategic Vision Plan). Congestion relief was the public’s top priority (Figure 15, page 45). Reduced congestion is consistent with the goals of the Caltrans US 101 North Comprehensive Corridor Plan.

<sup>4</sup> Public outreach identified multimodal priorities (bike facility installation/upgrades) as the second transportation priority (TAM Strategic Vision Plan). Bus, rail service, and safe routes to school were ranked as priorities three through six (Figure 15, page 45). Improved multimodal access is consistent with the goals of the Caltrans US 101 North Comprehensive Corridor Plan, as well.

## Highway 101 Interchange and Approaching Roadway Study

### Goals and Objectives

- **Goal 4: Promote Economic Vitality<sup>5</sup>**
  - **Evaluation Criterion 1:** Accommodates future land use changes and growth
    - *Performance Measure:* Assessment of future operating conditions with forecast growth
    - Scoring:* Higher scoring for improvements that accommodate future anticipated growth with multimodal solutions<sup>6</sup>
  - **Evaluation Criterion 2:** Cost effectiveness
    - *Performance Measure:* Cost-benefit ratio
    - Scoring:* Higher scoring for interchanges with favorable ratios
  - **Evaluation Criterion 3:** Reduces transportation costs
    - *Performance Measure:* Peak period travel time
    - Scoring:* Higher scoring for improvements with lower peak period travel times<sup>7</sup>
- **Goal 5: Implementability**
  - **Evaluation Criterion 1:** Attractiveness to funding sources
    - *Performance Measure:* Funding criteria/potential
    - Scoring:* Higher scoring for projects that meet funding criteria<sup>8</sup>, or could be substantially funded by multiple sources
  - **Evaluation Criterion 2:** Ease of regulatory approval
    - *Performance Measure:* Project can obtain necessary approvals
    - Scoring:* Higher scoring projects with limited right-of-way and/or permitting needs
    - *Performance Measure:* Environmentally cleared (or exempt)
    - Scoring:* Higher scoring for improvements with minimal environmental impacts (or exempt)
    - *Performance Measure:* Consistency with Regional Plans
    - Scoring:* Higher scoring for improvements whose needs have been identified in other published local or regional planning documents

### REFERENCES:

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California Department of Transportation. 2018. US 101 North Comprehensive Corridor Plan.

Metropolitan Transportation Commission. 2017. Plan Bay Area 2040.

Metropolitan Transportation Commission. 2016. San Francisco Bay Area Goods Movement Plan.

Transportation Authority of Marin. 2019. 2019 Congestion Management Program Update.

Transportation Authority of Marin. 2017. Getting Around Marin: Strategic Vision Plan.

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<sup>5</sup> Consistent with the goals of the Caltrans US 101 North Comprehensive Corridor Plan.

<sup>6</sup> Table 10 (page 39) lists major development projects in the near-term (TAM Strategic Vision Plan).

<sup>7</sup> US 101 is identified as a major goods movement corridor (MTC San Francisco Bay Area Goods Movement Plan). This highway also connects agriculture shippers with markets in the Bay Area. Highway reliability is a key to movement of goods (Table 4.1, page 27).

<sup>8</sup> For example, improvements that reduce traffic congestion, improve pedestrian/bike infrastructure, and expand transit services meets several categories of Marin County Measure AA funding (TAM 2019 CMP Update).

# Highway 101 Interchange and Approaching Roadway Study Goals and Objectives

Table 1: Goals and Draft Evaluation Methodology

Goals & Objectives	Draft Evaluation Criteria	Draft Performance Measures	Prioritization/Weight (0-5)
<b>Enhance Health and Safety</b>	Improves safety for all modes	Reduction in prevalence of incidents	
	Increased walking/biking	Improved pedestrian/bicyclist infrastructure & gap closure	
	Reduces greenhouse gas emissions and improves air quality	Improved travel times	
		Reduction in delay	
		Incorporation of TSM Measures	
<b>Relieve Local Traffic Congestion</b>	Alleviates congestion and improves traffic flow for current and future traffic	Level of Service and average vehicular delays	
		Vehicle hours of delay	
		Vehicle miles traveled (VMT)	
<b>Improve Multimodal Access to/ from and across Highway 101</b>	Enhances intermodal connectivity and removes access barriers	Improved connectivity for vehicular and active transportation	
	Encourages mode shift from single-occupancy vehicles	Mode shift to non-single-occupant vehicles	
<b>Promote Economic Vitality</b>	Accommodates future land use changes and growth	Assessment of future operating conditions with forecast growth	
	Cost effectiveness	Cost-benefit ratio	
	Reduces transportation costs	Peak period travel time	
<b>Implementability</b>	Attractiveness to funding sources	Funding criteria/potential	
	Ease of regulatory approval	Project can obtain necessary approvals	
		Funded, environmentally cleared, or exempt	
		Consistency with Regional Plans	



## Memorandum

**Date:** July 2, 2020  
**To:** Bill Whitney, TAM  
**From:** Kim Franchi, HNTB  
 David Parisi, Parisi Transportation Consulting  
**Subject:** Highway 101 Interchange and Approaching Roadway Study:  
 Selection of 12<sup>th</sup> Study Interchange

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### Background

The Highway 101 Interchange and Approaching Roadway Study is a new project that was approved by Marin voters as part of the Measure AA – Transportation Sales Tax Expenditure Plan. The Expenditure Plan, adopted in June 2019, allocates 3% of the revenue from the sales tax, estimated at \$24.8 million over the 30-year period of the Measure, to fund a program of improvements to local road interchanges.

Accessing Highway 101 in Marin is a major source of congestion on local roads, which reduces the connectivity of communities across Marin. The allocated funds will be used to attract regional, state, and federal funds for a program of improvements to local road interchanges. These enhancements will improve the operation and safety of these interchanges for all users, allowing smoother travel to, from and across Highway 101 and local roads.

Pursuant to the Expenditure Plan, the following 11 interchanges will be addressed:

- Alexander Avenue
- Sausalito/Marin City
- Tiburon Blvd./East Blithedale Avenue
- Paradise Drive/Tamalpais Drive
- Sir Francis Drake Boulevard
- San Rafael On-Ramp at 2<sup>nd</sup> Street and Hetherton Avenue
- Merrydale Road/North San Pedro Road
- Manuel T. Freitas Parkway
- Lucas Valley Road/Smith Ranch Road
- Ignacio Boulevard
- San Marin Drive/Atherton Avenue

These interchanges were selected based on input from stakeholders, including jurisdictional partners and the public, during the development of the Expenditure Plan. Each represents significant access for adjacent communities along Highway 101. Some of the interchanges have been cooperatively planned amongst partners for years and other locations have had long-standing visions for improvements that have not yet been planned in detail. The interchanges vary in age; many of them were built in the 1950s and 1960s and have not been altered in meaningful ways to meet current and future demands of vehicles, transit, bicyclists, and pedestrians.

The Transportation Authority of Marin has contracted with the HNTB Parisi team to support the interchange program. HNTB Parisi will assess the above 11 interchanges plus an additional twelfth interchange to be selected and approved by the TAM Board.

### **Selection of the 12<sup>th</sup> Interchange for Assessment**

There are 30 interchanges located along Highway 101 in Marin County. These include interchanges with other State Highways (e.g., Highways 1, 37 and 131), multi-ramp interchanges with local arterial roadways, and isolated single-lane ramps to or from Highway 101. Some interchanges are located very close to one or more of the selected 11 interchanges. For example, the Vista Point interchange is in proximity to Alexander Avenue; the Madera Boulevard interchange closely interacts with the Paradise Drive/Tamalpais Drive interchange; and the Fifer Avenue/Industrial Way interchange functions with the Sir Francis Drake Boulevard interchange. Thus, the assessment of these three interchanges will be integrated into the overall work for the interchanges that they are adjacent to.

The remaining 16 Highway 101 interchanges within Marin County are:

- Spencer Avenue
- Rodeo Avenue
- Shoreline Highway (Highway 1)
- Redwood Hwy. Frontage Road (Seminary)
- Redwood Hwy. Frontage Road (Southbound Off-Ramp)
- Casa Buena Drive
- Interstate 580/Bellam Boulevard
- Francisco Blvd. West
- Mission/Irwin/Hetherston Streets
- Lincoln Avenue/Villa Avenue
- Miller Creek Road
- Alameda del Prado/Nave Drive
- Highway 37/S. Novato Blvd.
- Rowland Boulevard
- DeLong Avenue
- San Antonio Road

Three of the above 16 interchanges will be studied as part of other on-going or planned interchange planning efforts. The Interstate 580/Bellam Boulevard interchange is being considered as part of TAM's Highway 101 to I-580 Direct Connector project. The Francisco Boulevard West interchange's ramps were recently relocated and realigned during the HOV Gap Closure project. The Highway 37/South Novato Boulevard interchange will be evaluated by Caltrans as part of the Highway 37 project.

Seven of the above interchanges serve a low number of daily traffic volumes, and several of these have a limited number of directional highway ramps and/or provide restricted connectivity. The Spencer Avenue, Rodeo Avenue, Redwood Highway Frontage Road (Southbound Off-Ramp), Casa Buena Drive, Lincoln Avenue/Villa Avenue, Miller Creek Road and San Antonio Road interchanges each only accommodate between 1,000 and 12,000 vehicles each weekday along their ramps (compared to the 11 study interchanges which serve an average of 55,000 vehicles each on weekdays).

The Spencer Avenue interchange serves limited uses to the west of Highway 101 and the Rodeo Avenue interchange southbound ramps are discontinuous west of the highway. Redwood Highway Frontage Road (Southbound Off-Ramp) is served by a single southbound off-ramp to the frontage road (near the Arco fueling station) and the Casa Buena Drive southbound on-ramp is a single connector on the west side of the highway in Corte Madera. Both the Lincoln Avenue/Villa Avenue and Miller Creek Road interchanges have limited connectivity east of Highway 101. The San Antonio Road interchange

primarily serves the Redwood Landfill and Olompali State Historic Park and was recently reconstructed in conjunction with the Marin-Sonoma Narrows Project.

It is recommended that none of the 10 interchanges identified above be evaluated as part of TAM's interchange study for the reasons provided.

This would leave the following six interchanges as candidates for the 12<sup>th</sup> interchange to be evaluated:

- Shoreline Highway (Highway 1)
- Redwood Highway Frontage Road (Seminary)
- Mission/Irwin/Hetherton Streets
- Alameda del Prado/Nave Drive
- Rowland Boulevard
- DeLong Avenue

TAM and the HNTB Parisi team are developing goals and objectives that will be used to comprehensively evaluate the 12 interchanges to be studied. These goals and objectives will be vetted with partner stakeholders. They will likely cover the intent of the Expenditure Plan and focus on a variety of measures including, but not limited to, addressing traffic congestion relief, improving safety, enhancing multimodal access, and considering sea level rise and flooding.

The HNTB Parisi team has collected data, conducted limited analyses, and compared each of the six candidate interchanges based on the above measures. The following areas were of specific focus:

- *Traffic congestion relief:* Using INRIX roadway analytics data for weekday conditions throughout 2019, the percentage of the weekday between 7 AM and 7 PM that experiences congestion, i.e., non-free flow speeds, along interchange roadways and off-ramps was reviewed based on prevailing travel speeds throughout the day. In addition, total daily ramp volumes were reviewed.
- *Multimodal safety:* Reported collisions over a five-year period were reviewed, including collisions that involved a fatality or severe injury, as well as the modes involved in the collisions (vehicle, bicyclist and/or pedestrian). In addition, the presence of key non-standard design features was considered.
- *Multimodal access:* Each interchange was qualitatively reviewed to identify the level of pedestrian and bicycle amenities, including presence of continuous sidewalks, bikeways, crosswalks, and access to transit facilities. In addition, the level of public transit use based on bus routes and park-and-ride facilities was considered.
- *Sea level rise and flooding:* A review was undertaken on the potential five-year and 100-year water level at each of the six interchanges due to predicted sea level rise and the potential for flooding from storm surges.

The following table summarizes the comparison of the six candidate interchanges based on the above parameters.

### Comparison of Six Candidate Interchanges

Interchange	Traffic Congestion Relief		Multimodal Safety				Multimodal Access		SLR & Storm Surge
	Weekday Congestion	Ramps ADT	Total Collisions	Fatal / Injury	Ped / Bike	Key Nonstd. Conditions	Pedestrian & Bicycle	Transit Service Use	Flooding / Vulnerability Risk
Shoreline Highway (Highway 1)	43%	44,200	6	0 / 0	0 / 2	SB Decel	Constrained	Substantial	High
Redwood Highway Frontage Road	39%	20,100	1	0 / 0	0 / 0	SB Accel	Constrained	Minor	Moderate-High
Mission/Irwin/Hetherton Streets	46%	51,500	4	0 / 0	0 / 1	n/a	Constrained	Minor	Moderate
Alameda del Prado/Nave Drive	48%	37,800	11	0 / 1	0 / 0	NB Accel	Constrained	Substantial	Low-Moderate
Rowland Boulevard	47%	40,300	3	1 / 0	0 / 0	n/a	Limited	Substantial	High
DeLong Avenue	30%	26,800	3	0 / 0	0 / 0	n/a	Limited	Minor	Low-Moderate

## **Recommendation**

Based on the screening assessment and considering each of the factors, two interchanges stand out as potential candidates for evaluation as the twelfth study interchange: Shoreline Highway (Highway 1) and Alameda del Prado/Nave Drive. Both interchanges exhibit recurring traffic congestion, multimodal safety, and multimodal access issues. Shoreline Highway, also, routinely experiences storm surge issues and is vulnerable to sea level rise. In contrast, the other four interchanges do not experience the same severity of problems.

When comparing the two interchanges, Alameda del Prado/Nave Drive experiences higher weekday traffic congestion, while on weekends Shoreline Highway can see substantial congestion levels and back-ups. The total number of reported collisions over a five-year period were about twice as high at Alameda del Prado/Nave Drive compared to Shoreline Highway. No pedestrian or bicycle-related collisions were reported within the former interchange area, while two bike crashes were reported within the Shoreline Highway interchange.

Both interchanges have constrained pedestrian and bicycle infrastructure. Shoreline Highway has sidewalk gaps and no bicycle facilities. At the Alameda del Prado/Nave Drive interchange, pedestrian accessibility is constrained, and cyclists must navigate through free-flowing highway ramp movements. Both interchanges include park-and-ride lots (the Manzanita and Alameda del Prado park-and-rides) and serve major transit lines.

The Shoreline Highway interchange is predicted to continue to experience high risks from storm surge issues and impacts from sea level rise; on average the area floods 20 to 30 times a year between November and March. The interchange area has been studied over the years to address various flooding (and transportation) issues with input from various stakeholders, including public and regulatory agencies. Many short-term strategies to address flooding have been implemented, but the ultimate solution that has been identified includes raising 1,500 feet of Shoreline Highway and 1,300 feet of Highway 101, including the Richardson Bay Bridge, by seven to nine feet (Caltrans, US 101/State Route 1 Junction, January 2020). The ultimate plan is estimated to cost about \$160 million. These projects are proposed to be added to the State Highway Operation and Protection Program (SHOPP) 10-Year Plan in FY 2024. Another potential consideration in selecting between the Shoreline Highway and Alameda del Prado/Nave Drive interchanges is the intention of the language in the Expenditure Plan. According to the plan, TAM's tax-generated funds "would be used to attract regional, state, and federal funds for a program of improvements to local road interchanges." Shoreline Highway is a State highway (Highway 1) that is owned and maintained by the State of California. Alameda del Prado and Nave Drive are local roadways within the City of Novato.

Therefore, due to Caltrans' implementation of short-term measures and intention to include major improvements to the Shoreline Highway interchange in the 2024 SHOPP, as well as the Expenditure Plan's language, it may be appropriate to include Alameda del Prado/Nave Drive as the twelfth interchange in TAM's program.