



**DATE:** November 13, 2017

**TO:** Transportation Authority of Marin Finance and Policy Executive Committee

**FROM:** Dianne Steinhauser, Executive Director

**SUBJECT:** Update on Systems Approach to Improve Highway 101 (Discussion) – Agenda Item 8

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## **RECOMMENDATION**

Hear staff update on Highway 101 System of improvements. Provide feedback.

## **BACKGROUND**

TAM has been addressing the needs for mobility along the Highway 101 Corridor since the formation of the agency in 1994, as the Congestion Management Agency in Marin County. Back then, the Highway 101 Advisory Committee was exploring ways to close the 5-mile Carpool Lane Gap through Central San Rafael. There was significant discussion on whether to widen to the east or west of Highway 101 over Puerto Suello Hill. Golden Gate Transit was instituting a reversible commute lane on Highway 101. A new Bettini Transit Center in San Rafael was christened. A small contingent of dedicated electeds was continuing to attain rights to the Northwest Pacific Railroad right of way in the distant hope of establishing commuter rail service someday between Marin and Sonoma. Houses were affordable in Novato, and Sonoma County was growing substantially in both business and residential development, where houses were even more affordable.

Since then, TAM and its partners have continued to manage Highway 101 as a system of multi-modal elements that address the mobility needs of a varying sector of both businesses and residents. Marin has strongly supported the success of SMART operating between San Rafael and Santa Rosa, with both direct subsidization (\$8 million in 2011) and access improvements on connecting to the SMART system (Marin Transit routes to SMART stations, LYFT subsidy program GetSMART17, Emergency Ride Home, upcoming Bikeshare at SMART stations, extensive education on how to use SMART). TAM has fine-tuned work started by MTC under their Managed Lanes Improvement Program, MLIP, to assess and prioritize Park-and-Ride lots and Express Bus stops along Highway 101, in a joint study done with Golden Gate Transit and Marin Transit. TAM has shepherded numerous public discussions regarding ramp metering, with the new SB1 fund availability allowing the ramp metering program to go forward.

The 3.2-mile Highway 101 Gap Closure was finally completed through Central San Rafael in Spring of 2009 after the Marin ½-cent transportation sales tax gave it a boost of funds when passed by voters in November of 2004. The Marin Sonoma Narrows was a daunting program of projects totaling \$743 million when the EIR/ EIS was approved in 2010. But thanks to Caltrans and the State of California and Sonoma passing their sales tax for transportation, the Narrows Carpool Lane and Multi-use Path system is substantially complete, with the \$200 million remaining likely funded under a combination of State SB1 funds and MTC toll funds under RM3. TAM has started conceptual work and public outreach on the new high-speed connector from Northbound Highway 101 to Eastbound 580. The Route 37 Policy Advisory Committee, meeting for over two years now, has achieved substantial progress in defining a system of improvements addressing both congestion and sea-level rise in the Highway 37 corridor that spans 4 counties.

Highway 101 serves as Main Street through Marin County, a use that is well known in Marin, and inspired the TAM Board to exercise great caution in changing its availability. The proposed change in HOV Lane hours highlighted the fragility of our highway system. More-so than any other county in the Bay Area, Marin is a beneficiary- and a victim- of a one highway system. When Highway 101 breaks down, local roads become overloaded with travelers. Businesses and residents are stuck in traffic. Even without a breakdown, Marin has seen Highway 101 overloaded on a daily basis, with not only weekday commute demands, but very high weekend recreational demand as well.

## **DISCUSSION/ANALYSIS**

In effect, TAM and its partners in Marin - transit operators, Caltrans, MTC, and our local jurisdictions - have been managing Highway 101, and its connecting components including Highway 1 and Interstate 580 as a system. In an effort to remove Single Occupancy Vehicle trips, Marin has taxed itself to support local transit, Safe Routes to Schools, and Complete Streets. The Highway projects TAM has managed are multi-modal, with the establishment of carpool lanes, multi-use pathways for bicyclists and pedestrians, and transit stop improvements. The Highway 101 Gap Closure project adding a carpool lane and multi-use pathway over Puerto Suello Hill also built the first mile of new SMART rail system in Marin, as SMART was relocated westward to allow the carpool lane and especially the 12-foot MUP to be built.

TAM developed a Highway 101 System package of information last Summer of 2017, to use at the Marin County fair in TAM's booth. The document is attached and has been updated, to show new elements to the management of Highway 101. See Attached.

Marin experiences one of the highest levels of VMT, Vehicle Miles Travelled, per capita, of any county in the Bay Area and is predicted to be the highest in 2020. While TAM and the supportive community in Marin have made great strides in supporting non-vehicular modes of travel, with transit support, Safe Routes to School, investments in bike/ped facilities, and support for SMART as examples, TAM has not stepped into an expanded supportive role in addressing the shortage of housing in Marin, other than responding to MTC and ABAG mandates regarding support for PDA's. TAM may wish to initiate conversation regarding what if anything can be done by TAM to further support housing development in Marin.

TAM will continue its efforts to address the lowering of greenhouse gas emissions in Marin through ongoing support for programs supporting transit, walking and biking.

## **FISCAL CONSIDERATION**

None at this time. TAM may want to consider dedicating a small amount of funding in the near future to advancing the following elements: Bus-on Shoulder evaluation and development, Mobility innovation, and a follow up Innovations Workshop later this Spring.

## **ATTACHMENTS**

- A: Systems Approach To Improve Marin's Highways
- B: Highway 101 Projects Information

# SYSTEMS APPROACH TO IMPROVE MARIN'S HIGHWAYS



# SYSTEMS APPROACH TO IMPROVE MARIN'S HIGHWAYS

Highway 101 serves as the 'Main Street' for Marin County, connecting our local communities for work, school, services and recreation. Highway 101 is also a regional connection serving as a multi-modal system for carpools, regional transit services, auto trips and trucking, moving approximately 200,000 vehicles per day. In order for this critical system to remain effective and

efficient, TAM works with its partner agencies to support a number of highway improvements in Marin County. Projects for Highway 101, whether under construction, being designed, or being planned, are developed to work as an integrated system to address our mobility needs and facilitate the movement of our residents, workforce and visitors.



**Marin Sonoma Narrows HOV lane Completion**– To date Marin and Sonoma have been able to secure funds for constructing major portions of the Marin Sonoma Narrows and are coordinating with MTC and Caltrans in applying for competitive State Funding through SB1’s Solutions for Congested Corridors Program due in February 2018. A design contract is now in place for TAM, but only partially funded. Approximately \$125M is needed to complete the work in Marin, though efforts are underway to reduce the construction footprint and lower costs. This project was also included in Regional Measure 3 legislation for funding.

**Highway 37 Sea Level Rise Project** – At the August 2017 Board of Commissioners Meeting, the TAM Board authorized TAM staff to submit a Caltrans Planning Grant to address flooding in the Marin segment of the Highway 37 corridor, to be done in partnership with County of Marin Public Works/ Flood Control. A 4-county policy and advisory group have been meeting to address long term solutions to the corridor and a draft 1<sup>st</sup> phase corridor plan was presented to the TAM Board in October 2017.

**Sir Francis Drake Smart corridor** – TAM has funded make-ready infrastructure for Adaptive Signal Technology in the county’s portion of Sir Francis Drake West of Highway 101 and for the approach to the Richmond San Rafael Bridge on East Sir Francis Drake in Larkspur. In September 2017, TAM applied for an MTC IDEA grant for Adaptive Signal Technology throughout the Sir Francis Drake corridor from San Anselmo to Richmond San Rafael Bridge along with project partners.

**US 101/I-580 Direct Connector** – At TAM’s request, and with the support of our local legislators, this project is part of the approved SB595 Beall for Regional Measure 3, anticipated to go to the voters in 2018. The entry to the Richmond San Rafael Bridge from Northbound Highway 101 and Sir Francis Drake in Marin is the only toll bridge entry in the entire Bay Area that includes low speed local road traffic signals. The TAM Board has supported further development of this project via assignment of OBAG2 funds in July 2016 for initial planning and outreach.

**3<sup>rd</sup> lane on the Richmond San Rafael Bridge** – Anticipated to open in 2017, the 3<sup>rd</sup> lane on the Richmond San Rafael bridge is expected to add needed capacity to Eastbound-580 in the evening and now on the weekend peak periods. This BATA project includes major construction activities currently underway. A second major project phase to open a multi-use path on the upper deck westbound will go under construction in Spring 2018, with major bike/ped improvements in Marin shortly thereafter, all supported by BATA funding.

**Improving the Approaches to the Richmond San Rafael Bridge** – Construction of improvements to East Sir Francis Drake are underway to improve the flow of traffic to the bridge, funded by TAM in cooperation with City of Larkspur. Design is advancing on Bellam Boulevard concurrently to allow for a two-lane offramp and dedicated lane through the signal at Bellam to increase access to the eastbound 3<sup>rd</sup> lane on the Richmond San Rafael Bridge.

**Bus on Shoulder**- TAM has started discussions with Caltrans to advance Bus on Shoulder on Highway 101 from san Rafael to the northern county line, and is looking at potential planning grants from SB1 to advance this project.

**Park and Ride Improvements** – In Spring of 2016, TAM considered appropriate improvements in the Highway 101 Corridor in response to an MTC proposal for Express Bus and Park and Ride improvements, completing a study with a more complete set of improvements in coordination with Golden Gate Transit and Marin Transit Improvements in this corridor have focused on Rowland Boulevard, Smith Ranch Road and Manzanita park and rides.

**Bettini Transit Center Relocation** – Golden Gate Bridge Highway and Transportation District is underway with the start of an environmental document for the permanent relocation of the Bettini Transit Center to accommodate impacts from construction and operation of SMART to Larkspur Landing. Co-managed by Golden Gate and the City of San Rafael, the project is needed as a permanent solution to the SMART disruption of the existing transit center. A temporary or interim transit facility relocation to local city streets is being finalized currently and will be built as part of the SMART extension. Regional Measure 3 provides \$30 million for the permanent relocation, of the Bettini center.

**Ramp Metering in Southern Marin** – Ramp metering in Southern Marin is proceeding, with additional improvements at the Tiburon/ East Blithedale Interchange included by Caltrans. This operational improvement will provide consistency in traffic flow in southern Marin in the northbound direction, while not adversely affecting city streets. The project from Spencer Avenue to Sir Francis Drake is scheduled to start construction in the Summer/Fall of 2018.

**SMART Larkspur Extension** – SMART is currently in pre-construction activities to advance the SMART train to its southern terminus in Larkspur. This extension is fully funded and will provide rail connectivity to the Larkspur Ferry Terminal providing an alternative to users of the highway.

**Protect Manzanita Park and Ride and interchanges from Sea Level Rise** – TAM funded a flood management/ drainage study being conducted currently by the County of Marin to address flooding at the Donahue Street on/off ramps in Marin City. TAM is working with Caltrans to address flooding at the Manzanita Park and Ride.

**Improve Interchanges in Marin -**

- Tiburon Blvd/East Blithedale Interchange - In November 2012, the TAM Board approved programming OBAG funds for the Bicycle and Pedestrian Access Improvement Study at the East Blithedale/Tiburon Boulevard and Highway 101 Interchange, and a contract was approved on June 26, 2014. The study was expanded to address vehicular needs and the coordination between the modes- drivers, bicyclists, and pedestrians. The study results were presented and accepted by the TAM Board on December 1<sup>st</sup>, 2016. The overall goal of the effort was to improve multimodal access at this interchange, and a series of short, medium and long term improvements for consideration were developed. Traffic elements were developed in concert with the Mill Valley Traffic and Congestion Reduction Advisory Taskforce.
- Tamalpais Drive Interchange. As part of the Greenbrae Corridor Improvement Project, input was received from various project stakeholders at a workshop in 2006 regarding traffic operations, interchange design and pedestrian/ bicycle issues at the Tamalpais Drive Interchange. Several studies have been completed for this interchange including the TAM sponsored study completed in January 2007 as well as the engineering design of an auxiliary lane leading from the northbound on-ramp onto US101. Caltrans, who owns and operates the

interchange, is about to kick-off an effort to improve pedestrian accessibility and address operational safety including seismic performance.

- San Rafael Onramp at 2<sup>nd</sup> and Heatherton - In TAM's 2015 project submittal to the Regional Transportation Plan, TAM received a request from the City of San Rafael to improve the southbound US 101 onramp from Heatherton Avenue to develop two through lanes onto Highway 101 to develop better merging characteristics at the 101/580 interchange. TAM's Expenditure Plan Advisory Committee is likely recommending near term renewed sales tax funds to further develop this and several other Interchange improvement projects.
- Merrydale Road and North San Pedro Interchange– In TAM's 2015 project submittal to the Regional Transportation Plan, TAM received a request from the City of San Rafael to improve and standardize the interchange on North San Pedro Road and improve access on Merrydale Road. This project would modernize the interchange and provide safety improvements on Merrydale Road to improve circulation in the area.
- Manual T. Freitas Parkway Interchange - In TAM's 2015 project submittal to the Regional Transportation Plan, TAM received a request from the City of San Rafael to improve the interchange at Freitas Parkway and the intersection of Freitas Parkway, Civic Center Drive and Redwood Highway. The project includes improvements intended to reduce conflicts and improve area circulation.
- Lucas Valley – Smith Ranch Road Interchange – At the request of the City of San Rafael, Caltrans completed a Project Study Report in 2003 to address existing traffic congestion issues and increased traffic issues from a known development in the northwest quadrant of the interchange. The PSR proposed various operational improvements to the interchange. This PSR did not propose new elements for non-motorized users of the Lucas Valley undercrossing and very limited consideration for users crossing on/off ramps. Those needs may merit further study and scoping of improvements. Marin County also reports this undercrossing was flooded during the recent rains and was closed to users for a limited time period. This roadway currently provides access to the County's Emergency Operation Center. Marin County has requested potential improvements be considered regarding maintaining full and reliable access.