US 101 Part-time Transit Lane Feasibility Study
GGBHTD Board of Directors Transportation Committee

August 26, 2021
Kimley Horn
Project Goals

• Demonstrate feasibility of Part Time Transit Lane (PTTL) bus operations in Marin
  • Reduce transit travel times
  • Improve transit competitiveness with automobiles
  • Equitably serve low-income communities
  • Reduce transit operation costs in the corridor
  • Increase corridor person throughput and decrease VMT
  • Determine cost effectiveness in terms of transit travel time benefits achieved, transit ridership and capital costs
  • Maintain or improve CHP’s enforcement ability on US 101
  • Maintain or improve safe operations in the corridor
Study Purpose

- Assess the feasibility of part-time transit lanes (PTTL) on US-101 in northern Marin County
  - Determine geometric suitability
  - Develop concept plans and evaluate travel benefits
  - Determine next steps for implementation
  - Assess relationship to other ongoing US-101 projects
  - Educate the public about PTTL and receive input
  - Coordinate with CHP, Caltrans, Golden Gate Transit, Marin Transit, MTC, County of Marin, and cities of Novato and San Rafael to develop a potential PTTL project
Existing Congestion

• Southbound Direction
  • Average AM delay of over 16 minutes
  • Minimal recurring PM delay
  • Congestion extends from roughly North San Pedro Road to De Long Avenue

• Northbound Direction
  • Minimal recurring AM delay
  • Average PM delay of up to 3 minutes, but generally not recurring
Operational Scenarios

- Speeds drop below 35 mph
  - Typical in AM peak period
- Buses can go up to 15 mph above traffic, not to exceed 35 mph
- Buses yield to any enforcement, construction, maintenance, incidents, or weather occupying or affecting shoulder
- Express buses may benefit during peak of the peak by using PTTL instead of congested HOV
Capital Improvements Summary

- Limited shoulder widening in some segments through restriping or limited widening within ROW
- Static signage and markings
- CHP Enforcement Areas
- Drop inlet grate modifications
- Re-paving
- *Does not modify in-line station locations or access*
- Total cost of improvements (2021$): $6 - $7M
- TAM would seek grants to fund project
Array of Potential Benefits

- **Environment**
  - VMT and GHG reductions can serve as mitigation to climate change impacts

- **Transit Operations**
  - Opportunity to make schedules more efficient and for operator to provide more service for the same cost
  - Longer distance regional bus services may benefit by using PTTL during peak of the peak

- **Users**
  - Improved reliability
  - Bus service becomes more competitive with auto travel

- **Opportunity to serve as a key component of post-COVID transit recovery strategies**
  - Consistent with MTC Blue Ribbon Task Force identification of transit priority treatments to spur transit recovery
PTTL have the potential to provide greater proportional benefits to services with a higher propensity of use by historically disadvantaged communities.

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<td>80%</td>
<td>32%</td>
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<td>Household Income &lt;$50K</td>
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<td>38.1</td>
<td>19.4</td>
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Source: MTC On-board surveys, 2017-2018; U.S. Census Factfinder, 2019
Coordination with Planned Improvements

- Key projects happening in the study area
  - Marin-Sonoma Narrows
  - HOV Hours of Operations
  - Ramp Metering Phases I and II
  - Highway 101 Interchange and Approaching Roadway Study
  - SR-37 Corridor Projects
California Vehicle Code does not allow for enforcement of PTTL for public transit buses only

Monitor active legislation
  - Assembly Bill (No. 476) is at the California Legislature and may be considered next year
  - Would establish a statewide pilot program for PTTL implementations

Align with future Caltrans design guidance on PTTL
Subsequent Phase Efforts

- Identify grant programs and other funding sources
- Implementation process and approach driven by feedback received from stakeholder agencies
  - Prepare detailed safety analysis and performance monitoring plan
  - Continue to work to address CHP concerns
- Determine Caltrans and environmental clearance process (may be able to leverage SB288), advance design, and refine capital cost estimates
- Develop Concept of Operations and refine operating costs
- Monitor San Diego I-805 implementation to stay abreast of lessons learned
Q&A