

Agenda Item No. 4



**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










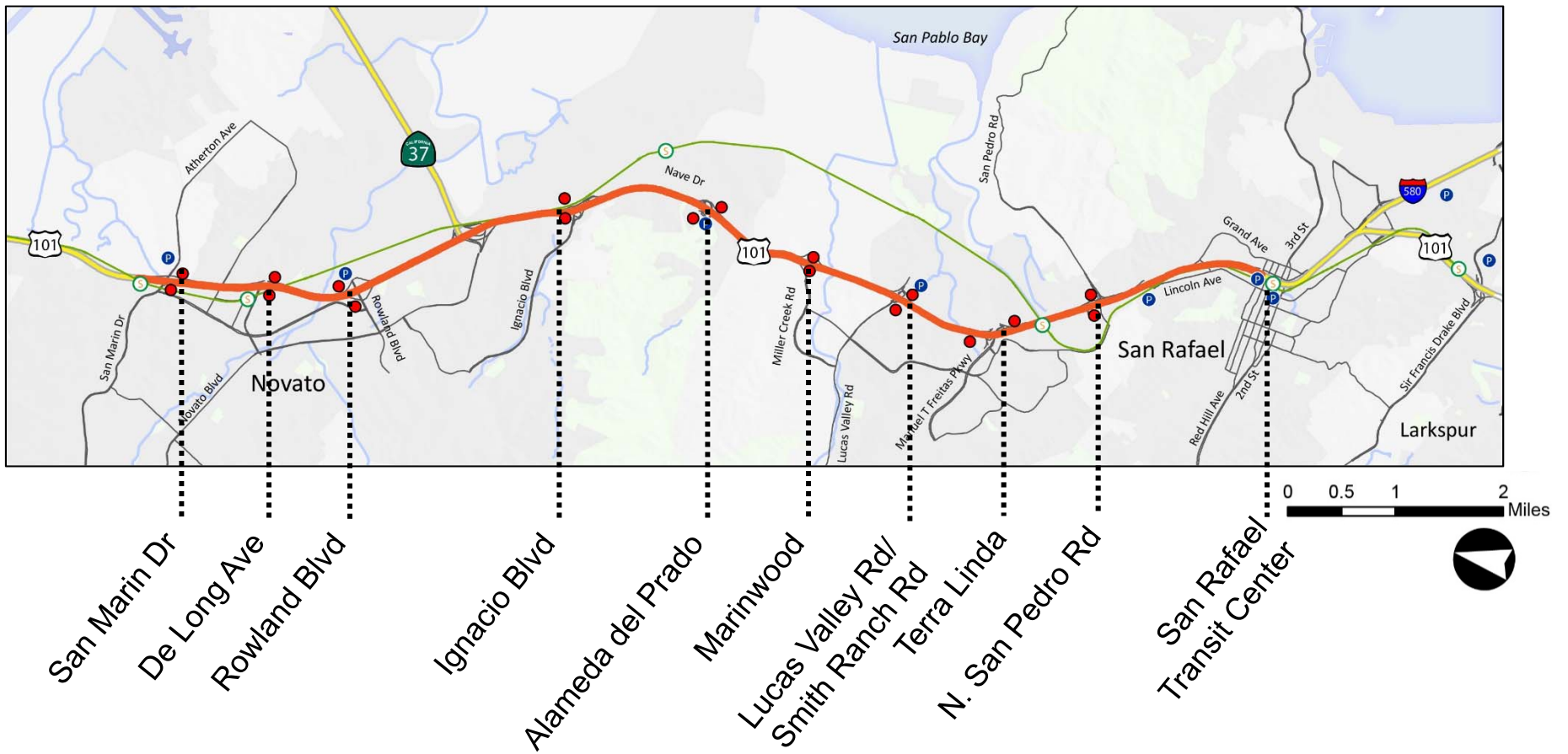
# Study Purpose

- 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

# Study Area

**Legend**

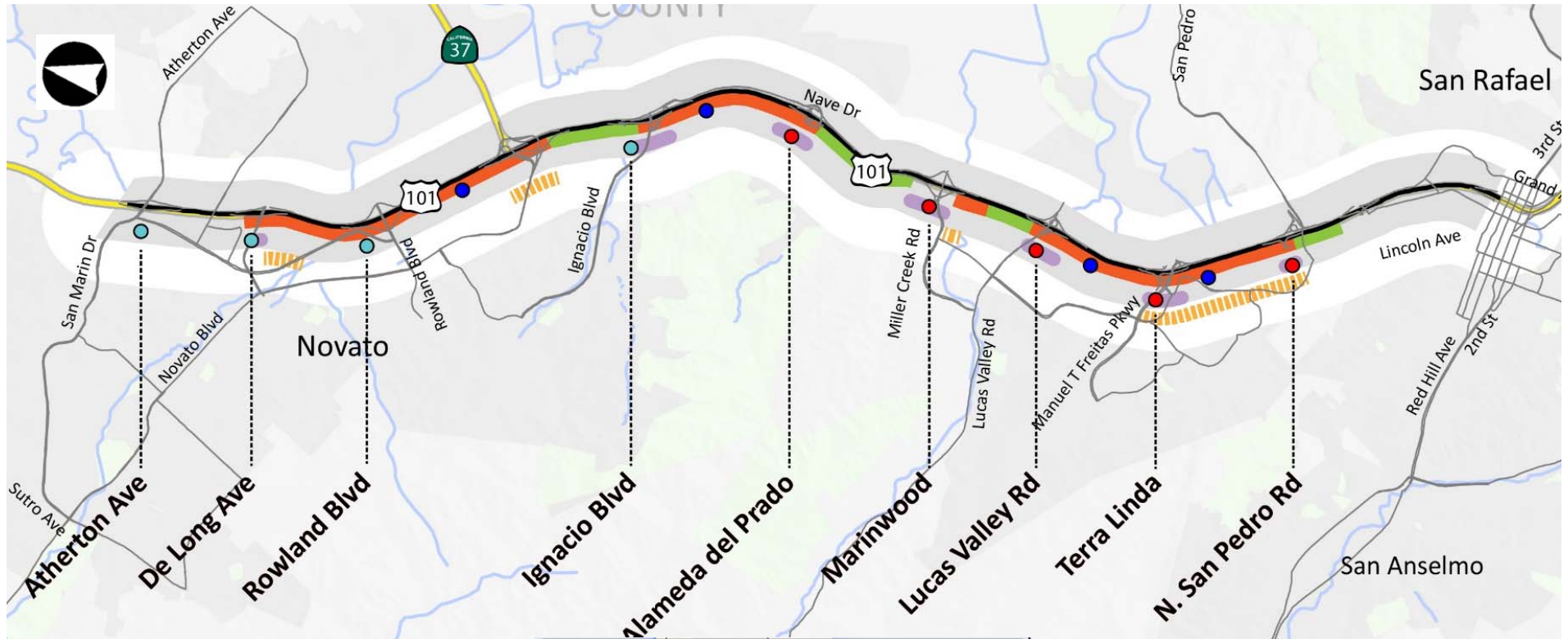
-  US 101 Study Corridor
-  Freeways
-  Arterials
-  SMART Rail Corridor
-  SMART Station
-  Park-and-Ride
-  In-line bus stop



# 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

# Concept Summary



**Legend**

Auxiliary Lane	Proposed CHP Pullout
Ramp/Bus Bypass	Bus Bypass on U.S. 101
Proposed PTTL	Bus Stop on Ramp
Restriping	
Freeways	
Arterials	

# 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

# Equity Benefits

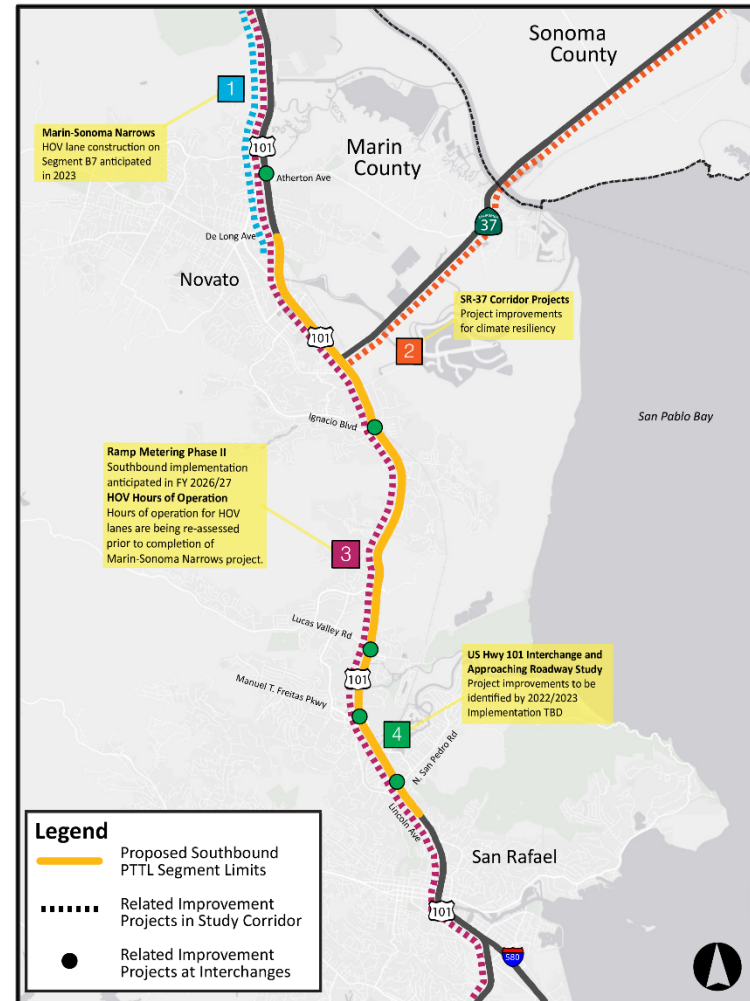
- PTTL have the potential to provide greater proportional benefits to services with a higher propensity of use by historically disadvantaged communities

Characteristic	Internal to Marin (MT 35, 49, 71X, 245)	Marin – San Francisco (GGT 38, 54, 54C, 56X, 58, 70)	Sonoma – SF, via Marin (GGT 72X, 74, 76, 101, 101X)	Marin County General Population
Minority %	80%	32%	31%	29%
Household Income <\$50K	46%	19%	22%	20%
Language other than English spoken at home	45%	9%	15%	23%
Daily average travel time savings for routes (minutes)	68.9	38.1	19.4	-

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



# Legal/Statute Coordination

- 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