101 Corridor Managed Lanes

TA BOD Meeting
May 5, 2016
Agenda Item 11a

Presentation Outline

- 101 Corridor Profile
- System Deficiencies
- Background
- Managed Lanes
- Proposed Purpose and Need
- Alternatives Under Consideration
- Schedule
- Budget
- Organization

101 Corridor Profile

- 26 miles of Highway 101 in San Mateo County linking San Francisco and Santa Clara counties
- 208 through-lane miles
- 230,000 trips/day
- Primary Access Route to:
  - San Francisco International Airport
  - Major employers
  - Port of Redwood City
  - East Bay via Dumbarton and San Mateo Bridges

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101 Corridor Deficiencies

- Congestion doubles travel time during the peak periods
- Demand is projected to grow 10-15% by 2020 resulting in:
  - Increased travel time
  - Diversion of traffic onto local streets
  - Reduce transit service reliability
  - Increased traffic congestion-related collisions (rear-end accidents)

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101 Bottleneck/Queueing

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Background

- **May '15: Caltrans approved Project Study Report/Project Development Support (PSR/PDS) to extend existing High Occupancy Vehicle (HOV) lanes on 101 Corridor in San Mateo County 14.5 miles, Whipple Road to I-380.**
- **May '15: TA Board authorized reallocation of savings from the PID phase to advance the start of traffic and other technical studies for the subject project.**
- **Oct '15: TA Board authorized allocation of $8.5 million of Measure A funding for the Project Approval/ Environmental Document (PA/ED) phase of the project.**

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Background (continued)

- **Oct '15 - May '16:**
  Received stakeholder and project team input
  - **Project alternatives expanded to include Express Lane (EL) to allow tolling of non-HOV vehicles through congestion pricing**
  - **Project limits extended seven miles south to a total length of 22.5 miles to better coordinate with Santa Clara County**
- **Oct '15: C/CAG requested the programming of state funding to supplement Measure A**
- **May '16: Approve Supplemental PSR/PDS to document these changes; execute cooperative agreement with Caltrans**

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General Purpose Lane vs. Managed Lane

GENERAL PURPOSE (GP) LANE

CONTROL:

- **Uncontrolled operation of the lane**

MANAGED LANE (ML)

High Occupancy Vehicle (HOV)

CONTROL:

- **Hours of operation**
- **Occupancy requirements**
- **Points of access**
- **Enforcement**

Express Lane / High Occupancy Toll (HOT) / Toll

CONTROL:

- **Hours of operation**
- **Occupancy requirements**
- **Points of access**
- **Enforcement**
- **Toll charged to non-HOV drivers**
- **O&M cost toll administration**

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Proposed Purpose and Need

Purpose:

Provide a continuous managed lane in each direction on 101 from the terminus of the Santa Clara County Express Lanes to I-380 to:

- **Provide more reliable travel time for the managed lanes**
- **Minimize operational degradation of the general purpose lanes**
- **Allow travel mode choice**
- **Increase overall person throughput**
- **Apply technology and/or design feature to help manage traffic**

Need:

- **101 is heavily congested resulting in an overall degradation of operations throughout the corridor.**
- **All users, whether they are in single or multiple passenger vehicles traveling on 101, experience delays.**

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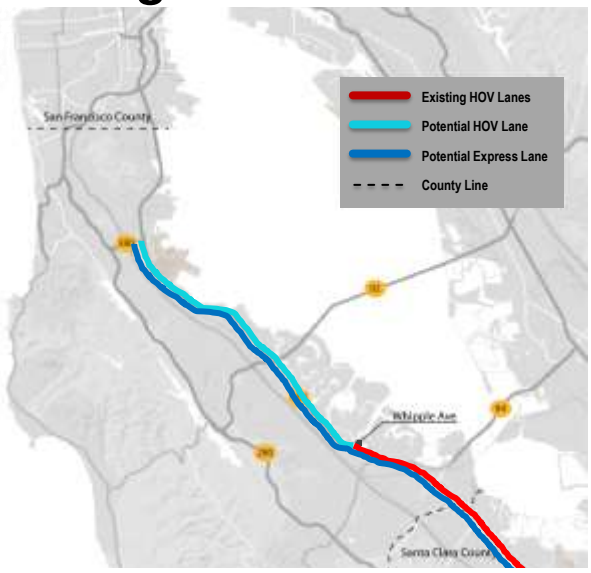
101 Managed Lanes



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101 Managed Lanes

Build Alternatives Under Consideration

Santa Clara County to I-380

Convert General Purpose	Add a Lane
1. HOV 2+	1. HOV 2+
2. HOV 3+	2. HOV 3+
3. HOT 2+	3. HOT 2+
4. HOT 3+	4. HOT 3+

Preferred Alternative Selection Criteria

- **Freeway Operational Improvements**
  - **Increased Person Throughput**
  - **Travel Time Reliability**
  - **Congestion Relief**
- **Cost to Implement Alternatives**
- **Ease and Speed of Alternative Implementation**
- **Compatibility with Adjoining Segments**

Anticipated Environmental Documents

- **CEQA: Initial Study (IS)**
- **NEPA: Environmental Assessment (EA)**
- **Technical Studies**
  - Land use
  - Community Impacts
  - Visual/Aesthetics
  - Cultural Resources
  - Hydrology and Floodplains
  - Geology, Soil, & Seismic
  - Water Quality & Storm Water Runoff
  - Paleontology
  - Hazardous Waste/Materials
  - Air Quality
  - Noise and Vibration
  - Energy & Climate Change
  - Biological Environment
  - Cumulative Impact
  - Context-Sensitive Solutions

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101 ML Environmental Schedule

- **28 months to complete**
- **Key Schedule Milestones**

Event	Date
Start	Jun-16
Finalize technical studies	Jan-18
Draft environmental document and public circulation	Apr-18
Final environmental document	Aug-18
Project Report Approval	Sep-18

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Environmental Phase Cost Estimate

Task	Budget
Project Management	$2,060,000
Traffic	$1,430,000
Environmental	$2,850,000
Right of Way and Mapping	$230,000
Preliminary Design	$4,330,000
Systems Management Interface	$350,000
Public Outreach	$250,000
Total	**$11,500,000**

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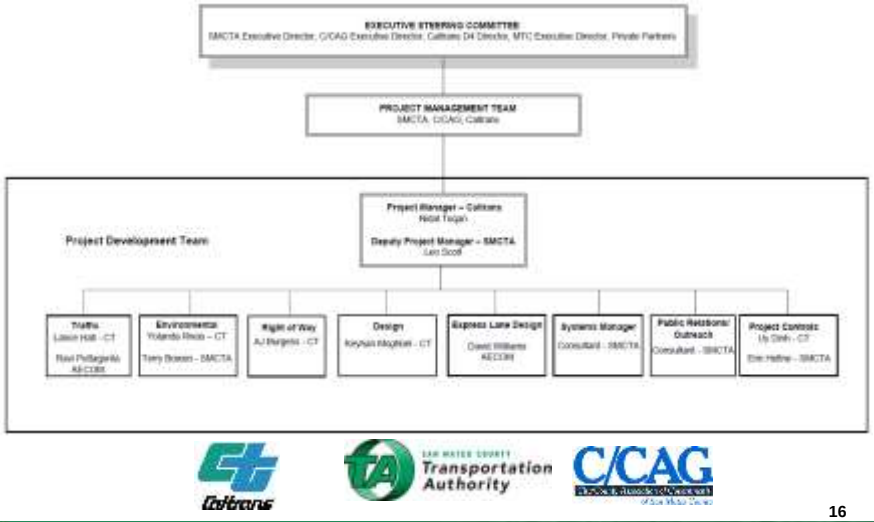
Integrated Project Delivery Team



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Organization

Integrated Project Delivery Team	Project Management Team	Executive Steering Committee
• MEMBERS: • Caltrans • C/CAG • SMCTA	• MEMBERS: • Caltrans • C/CAG • SMCTA	• MEMBERS: • Caltrans • MTC • C/CAG • SMCTA • Private Sector
ROLE: Perform necessary preliminary design, environmental & technical studies to environmentally clear the project consistent with purpose and need	ROLE: Coordinate technical, policy and funding aspects. Serve as an intermediary between Integrated Project Delivery Team and Executive Steering Committee	ROLE: Through collaboration and consensus-based decisions, support and advise the Project Management Team and other appropriate agencies / stakeholders.

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SAN MATEO COUNTY Transportation Authority

101 Corridor Managed Lanes

Caltrans | SAN MATEO COUNTY Transportation Authority | C/CAG