SM 101
MANAGED LANES PROJECT

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BACKGROUND

The Back-ups

The Project Limits

The Challenge:

- Congestion on 101 has been bad and will continue to get worse
- The jobs/housing imbalance will only worsen
- By 2020 projections show 4-7% more vehicles on 101
- Congestion and travel-time delays are bad in both directions during commute hours
- Carpools and buses are delayed by traffic, so there is limited incentive to share a ride
- Drivers exit the freeway to use local streets
- Travelers cannot plan trips efficiently

Reducing Congestion Will Require Multiple Projects:

- Managed Lanes on 101 in San Mateo County
- Caltrain Electrification
- Express Bus Service
- Connecting to HOV Express Lanes from Redwood City to southern Santa Clara County
- Managed Lanes into San Francisco
- Expanding the Park & Ride lot network

SM 101 Managed Lanes Project Purpose:

- Reduce congestion in the corridor
- Encourage carpooling and transit use
- Provide managed lanes for travel time reliability
- Minimize operational degradation of general purpose lanes
- Increase person throughput
- Apply technology and/or design features to help manage traffic

SM 101 Managed Lanes Project Goals:

- Find a solution quickly
- Secure public and political support for the project
- Secure required funding
- Minimize environmental impacts
- Stay within the current right-of-way whenever possible
- Don't make congestion worse in the other lanes
- Reduce regional car trips using local streets
- Build the project as soon as possible

SM 101 MANAGED LANES PROJECT

US 101

Caltrans · Transportation Authority · C/CAG

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TRAFFIC ANALYSIS
Lane Types

Control Factor	Genneral Purpose	Managed Lane (ML)	
		HOV	Express
Uncontrolled operation of lane	▲		
Hours of operation		▲	▲
Detail requirements		▲	▲
Points of access		▲	▲
Enforcement		▲	▲
Toll charged to non-HOV drivers			▲
O&M toll adminis-tration cost			▲

Traffic Analysis: The Alternatives

- **Alternative 1:** No project
- **Alternative 2:** Modify existing auxiliary lanes to make a new through lane from Whipple Road to I-380; convert median lane to an HOV lane
- **Alternative 3:** Convert the existing center lane to an Express Lane
- **Alternative 4:** Modify existing auxiliary lanes to make a new through lane from Whipple Road to I-380; convert median lane to an Express Lane

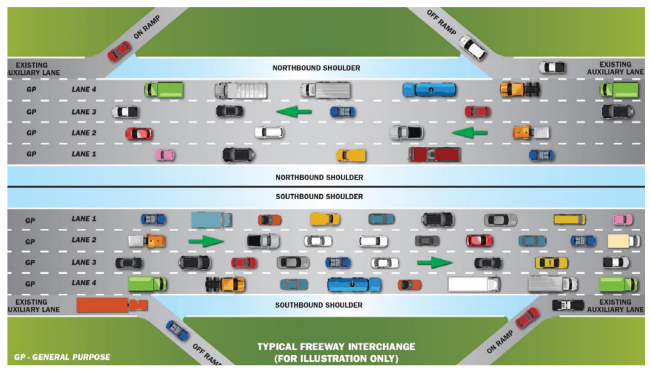
Traffic Analysis: Screening Criteria

- Key examples of traffic evaluation criteria:
- Vehicle hours of delay
- Change in travel times
- Person throughput
- Vehicle miles travelled

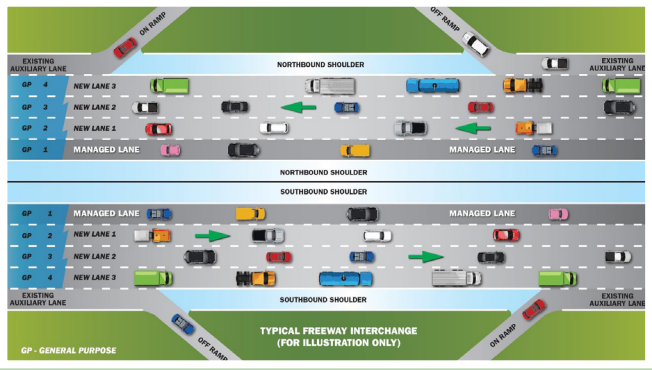
Preliminary Design: Considerations

- Auxiliary lane replacement
- Right of Way
- Environmentally sensitive areas
- Relocation of existing sound walls

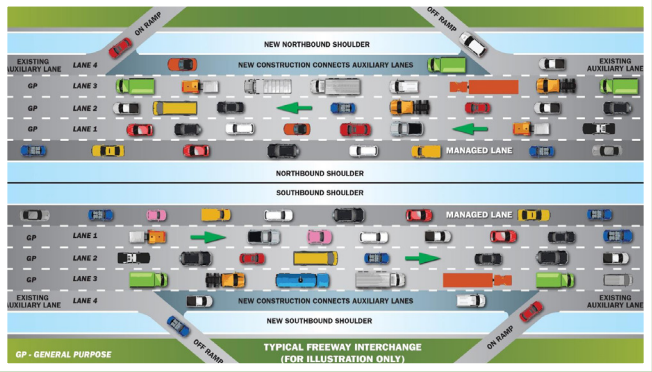
LANE CONFIGURATIONS



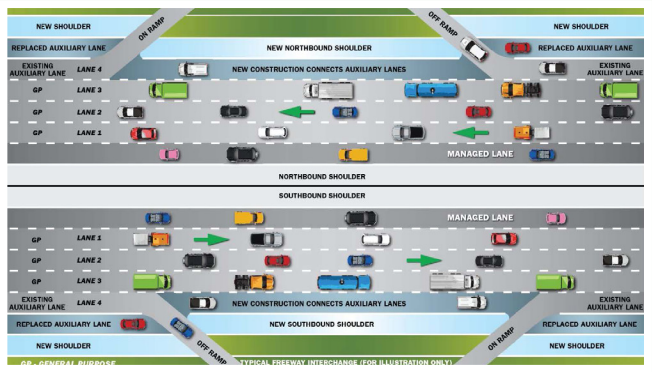
A
Existing Conditions



B
Managed Lane in Converted No. 1 Lane



C
Managed Lanes in Converted Auxiliary Lanes



D
Managed Lane in Converted Auxiliary Lanes with Auxiliary Lanes Replaced