Regional Express Lanes Application to the CTC

Presentation to Sunol Smart Carpool Lane Joint Powers Authority
on
September 12, 2011
T-2035 Express Lane Network

- Complete the HOV lane system
- Use freeway capacity more efficiently
- Offer travel options
- Cooperation with CMAs and Caltrans

800 miles total
- 500 miles of converted HOV lanes
- 300 miles of new lanes
Previously Authorized Corridors

280 miles

✓ Ala-680 SB Sunol Grade already in operation
✓ 237/880 operational early 2012
Current Approach

- Seek authorization from the CTC for a **smaller** regional network under existing law (S&H Code §149.7)
- Application demonstrates feasibility but **does not** commit to specific policies
- Already authorized express lanes could become part of the network through negotiated agreements
- Work with Caltrans on application and to develop “realistic delivery” approach
- Update costs and revenues to reflect current conditions

**Timeline:**
- **July 2010** Propose approach to MTC Legislation Committee
- Technical studies and CMA consultation
- **Sept. 2011** Submit application
- **Oct. 2011** CTC considers application
- **Dec. 31, 2011** CTC authority expires
Application to CTC

• Provides basis for CTC to grant authority for express lanes not authorized under current law
• Demonstrates feasibility based on reasonable assumptions
• **Does not** commit region to specific tolling policies, phasing, financing or project delivery

After CTC approval

• Establish final Express Lane Network in Plan Bay Area
• Conduct detailed analyses of revenue, toll policy, financing
• Develop policies for public input and agency consultation
• Explore delivery approaches and assign responsibilities
Authority Requested in CTC Application

New Authority for 290-mile* Facility
✓ 150 miles of converted HOV lanes
✓ 120 miles of new lanes
✓ 20 miles of operational gap closures (no tolling)

Financial Analysis
Includes Facility plus previously authorized lanes in Alameda County, subject to agreement (70 miles)

* Directional miles
When do HOV lanes fill?

Approximate year in which HOV lanes reach capacity
(Current HOV minimum occupancy)

- **Red**: By 2020
- **Yellow**: By 2035
- **Green**: Near capacity by 2035
“Bookends” for Financial Analysis in Application

Design Variation #1
(narrow footprint: $1.6B*)

Design Variation #2
(full standard: $6.8B*)

Cost

Smallest network, slowest completion

Revenue

Conservative Case
- 2+ HOV until lanes crowd or 2035
- Peak periods only
- Weekends

Likely Outcome

Base Case
- 2+ HOV until lanes crowd or 2020
- Daytime
- Weekends

- Low traffic demand
- Less tolling
  (e.g., HOV2+ indefinitely, peak periods only, lower toll rates)

- High traffic demand
- More tolling
  (e.g., HOV3+ upon opening, 24/7 tolling, higher toll rates)

- Financial analysis cases, expressed as tolling policy scenarios, provide an envelope for variations in other factors including costs and financing terms.
- Implementation of specific tolling policies would be subject to future MTC Commission actions, in consultation with regional partners.
- Emphasizes need to contain costs within Caltrans design assumptions.

* Costs in 2010$
Network Phasing

Phasing approach in financial analysis prioritizes segments based on financial feasibility, subject to operational considerations.

In general,
1. Conversions, first
2. Then gap closures
3. Then extensions and direct connectors
Financial Summary

Total amounts through 2040 (millions of inflated dollars)

<table>
<thead>
<tr>
<th></th>
<th>Base Case</th>
<th>Conservative Case</th>
</tr>
</thead>
<tbody>
<tr>
<td>Express Lane Toll Revenue</td>
<td>6,500</td>
<td>4,400</td>
</tr>
<tr>
<td>Debt Proceeds (Bonds/TIFIA)</td>
<td>2,100</td>
<td>2,400</td>
</tr>
<tr>
<td>Local Funding</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Grant Funding</td>
<td>400</td>
<td>800</td>
</tr>
<tr>
<td>Capital Costs</td>
<td>(3,000)</td>
<td>(3,600)</td>
</tr>
<tr>
<td>Operations, Maintenance and Rehabilitation</td>
<td>(1,500)</td>
<td>(1,300)</td>
</tr>
<tr>
<td>Debt Service</td>
<td>(3,400)</td>
<td>(2,300)</td>
</tr>
<tr>
<td>Other*</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td><strong>Potential Net Revenue</strong></td>
<td>1,300</td>
<td><strong>600</strong></td>
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</tbody>
</table>

* Net amount including financing fees, reserves funding/releases and interest income

** These at-risk surpluses emerge in the later years (after completion of the Network), and due to their bottom-line nature, are highly sensitive to variations in toll policy, revenue, cost, schedule and financing assumptions.
Questions and Considerations

1. Will there be net revenue to invest in transit operations or other projects?
   - Too early to count on net revenues, given the level of study to date.
   - Net revenue projected in this financial analysis accrues late and should be considered at-risk surplus.
   - If net revenue is projected after more detailed study, an expenditure plan will be developed based on consultation and public input.
   - The Network concept offers a concrete improvement for express bus in the form of a more extensive and actively managed right-of-way.
## Benefits to Bus Riders from Gap Closures

<table>
<thead>
<tr>
<th>Route</th>
<th>Peak Hour Bus Trips (current service)</th>
<th>Bus Rider Hours Saved</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. I-80 Yolo County to I-505</td>
<td>4</td>
<td>90</td>
</tr>
<tr>
<td>B. I-80 I-505 to Carquinez Bridge</td>
<td>40</td>
<td>840</td>
</tr>
<tr>
<td>C. I-680 Gold Hill Rd. to I-780</td>
<td>4</td>
<td>50</td>
</tr>
<tr>
<td>D. I-680 Route 242 to North Main St.</td>
<td>40</td>
<td>70</td>
</tr>
<tr>
<td>E. I-680 Alcosta Blvd. to SR 237</td>
<td>4</td>
<td>80</td>
</tr>
<tr>
<td>F. I-580 Greenville to San Joaquin County</td>
<td>40</td>
<td>360</td>
</tr>
<tr>
<td>G. I-880 Hegenberger to Lewelling</td>
<td>30</td>
<td>90</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>1,580</strong></td>
<td><strong>1,580</strong></td>
</tr>
</tbody>
</table>

### Bus Service on Express Lanes System

- **Daily Express Bus Trips**
  - Fewer than 20
  - 20–200
  - More than 200

- Convert existing, or phased and fully funded HOV lanes to express lanes
- Add new express lanes
- Operational gap closures

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Questions and Considerations

2. **Is financial feasibility dependent on increasing HOV occupancy requirements?**
   - The financial analysis demonstrates the Network is still feasible if increases in HOV occupancy requirements are deferred until 2035, except in the cases where lanes crowd with HOVs before then
   - Network could be completed sooner if occupancy requirements are increased in 2020.
Questions and Considerations

3. How will other agencies have input to future planning, implementation and operations?
   - Policies will be established for public input and consultation with Caltrans, CHP, CMAs.
   - phasing and design;
   - project development;
   - operations, including toll policies; and
   - and other corridor improvements.
Schedule for CTC Approval

*Getting authority is just the first step*

- **9/2** Advance copy of application submitted to CTC
- **9/9** MTC Planning Committee
- **9/15** CTC Informational Item
- **9/28** MTC Commission; BAIFA
- **10/26-27** CTC considers application
  - First hearing (northern California)
- **12/7-8** Second hearing (southern California)
- **12/31** CTC authority expires