Positive Aspects

- Corridor of national/regional significance
- Traffic sensors
  - Presence of multiple PeMS stations along freeway mainline
  - PeMS stations already installed on most on/off ramps
- Ramp metering
  - Ramp meters on almost all interchanges north of I-405
  - Fully metered freeway-freeway interchange (I-105)
- Arterial traffic signal control
  - Existing Traffic Management Centers in the cities of Southgate and Compton
  - Efforts under way to implement centralized traffic signal status monitoring within local jurisdictions (expected completion sometime in 2014)
  - Sensys traffic sensors currently being deployed along a section of Long Beach Boulevard (anticipated completion in summer 2013)
Positive Aspects

- **Transit**
  - Corridor is parallel to Metro Blue Line and crossed by Metro Green Line
  - Two Metro Rapid bus lines within the corridor, one going to downtown Los Angeles and the other to Pasadena
  - Transit signal priority is currently active or available on some arterials within the corridor

- **Other**
  - Significant sections of the I-710 freeway have recently been rehabilitated
Areas of Concern

- **Freeway traffic sensing**
  - Health of PeMS stations along ramps (based on February 2012 data)

- **Freeway congestion**
  - Congestion on surrounding freeways makes it difficult to develop effective alternate routes
  - Truck traffic is currently growing faster than the general traffic and is expected to nearly triple by 2035 → Potential need to change management strategies over time
  - Some of the bottlenecks are due to causes that may be difficult to address with traffic management strategies (for instance, congestion along I-710 North in the AM peak)
  - Portion of congestion likely attributable to the high frequency of accidents along I-710

- **Ramp metering**
  - Some ramp meters have been turned off to reduce problems caused by trucks entering the freeway at slow speeds
  - Short ramp lengths within the I-710/I-405 interchange not suitable for the implementation of ramp meters
Areas of Concern

- **Arterial traffic control**
  - Limited real-time traffic detection along arterials within the central portion of the corridor
  - Not all cities may have the ability to centrally monitor and control traffic signal operations
  - Cities in the north of the corridor may not have the necessary resources to support the deployment and operation of an ICM system

- **Rerouting opportunities**
  - Lack of available capacity at many key intersections, particularly close to the freeway, may create significant difficulty in using the arterials as detour routes
  - High density of traffic signals along surrounding arterials (typically 4 to 5 signals per mile) may impose long travel times and reduce their attractiveness
  - Motorists may not be willing to travel 2 to 4 miles along congested arterials to reach a light-rail station along the Metro Blue line
  - Political difficulty of rerouting truck traffic through residential areas
Areas of Concern

- **Transit**
  - Limited parking availability at most light-rail stations along the corridor (particularly along the Blue Line) will limit mode shift opportunities

- **Uniqueness of corridor**
  - The high volume of trucks and high number of accidents involving trucks make I-710 an atypical corridor → Potential difficulty of replicating deployment elsewhere
Remaining Questions

- **Accuracy of earlier intersection capacity analysis**
  - 2008/09 data
  - Analysis based on single-day traffic flow counts
  - Changes in signal timing/controller since analysis?
  - Intersection geometrical changes since analysis?
## Summary

<table>
<thead>
<tr>
<th>Item</th>
<th>Rating</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Geometry</td>
<td>Good</td>
<td>Some parallel arterials in close proximity of I-710</td>
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<tr>
<td>Freeway Traffic Detection</td>
<td>Very Good</td>
<td>Sensors on mainline and most ramps</td>
</tr>
<tr>
<td>Arterial Traffic Detection</td>
<td>Fair</td>
<td>Significant uncertainty regarding existing traffic detection capabilities along key arterials</td>
</tr>
<tr>
<td>Traffic Demand Patterns</td>
<td>Good</td>
<td>Grid-pattern traffic; atypical proportion of trucks</td>
</tr>
<tr>
<td>Existing Freeway Control</td>
<td>Good</td>
<td>No existing HOV lanes; ramps metered; only one freeway interchange metered</td>
</tr>
<tr>
<td>Existing Arterial Control</td>
<td>Fair</td>
<td>Primarily time-of-day control</td>
</tr>
<tr>
<td>Existing Transit Services</td>
<td>Good</td>
<td>Metro Blue Line running parallel to I-710, but at some significant distance on some sections of the corridor</td>
</tr>
<tr>
<td>Park-and-ride capabilities</td>
<td>Poor</td>
<td>Few existing facilities exhibit high occupancy rates</td>
</tr>
<tr>
<td>ICM Opportunities – Peak Hour</td>
<td>Challenging</td>
<td>High congestion level on freeway; arterials with limited extra capacity at some intersections; incident response needs</td>
</tr>
<tr>
<td>ICM Opportunities – Off Peak</td>
<td>Excellent</td>
<td>Incident response needs</td>
</tr>
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