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I-710 Corridor Project EIR/EIS

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Traffic Analysis Update

presented to the

Technical Advisory Committee

June 15, 2011



Traffic Operations Analyses

Review of Traffic Forecasting Results

2035 Alternative 1 (No Build)

- No changes to model runs
- Minor revisions to network and truck volume distributions
- No impact on previous Traffic Operational Analysis Report (TOAR)

Alternatives 5 and 6 Incorporate

- TSM / TDM / Transit / ITS Elements (previously included in Alternative 2 or 4)
 - Study area peak period auto trips reduced 2.8% from No Build (Transit Improvements, bike/ped improvements)
 - I-710 mainline capacity increased by 6% (ITS)
 - Capacity increased by 6% for 4+ lane arterials in the study area (ITS)
 - Capacity increased another 17% for five parallel arterials in the study area (Peak Period Parking Ban)

2035 Alternative 5A

- Adds general purpose lanes
- Enhanced geometric design
- Geometrics changes to Atlantic and Bandini resulted in changes to traffic area distribution and volume forecasts
- No new model runs

2035 Alternatives 6A, 6B and 6C

- Alt 6A – Increased Freight Corridor Capacity in model to 2,350 vph/ln
 - Segment 7 Phased improvements
 - Moved Miller Way to Patata St.
 - Segment 6 I/C revisions north of Slauson
 - Option M: Washington Boulevard design variation
- Alt 6B – Enhanced FC Capacity = 3,000 vph/ln
- Alt 6C – FC Tolling Concept with FC Capacity = 3,000 vph/ln
 - Increases truck volumes on FC
 - Increases auto volumes on mainline

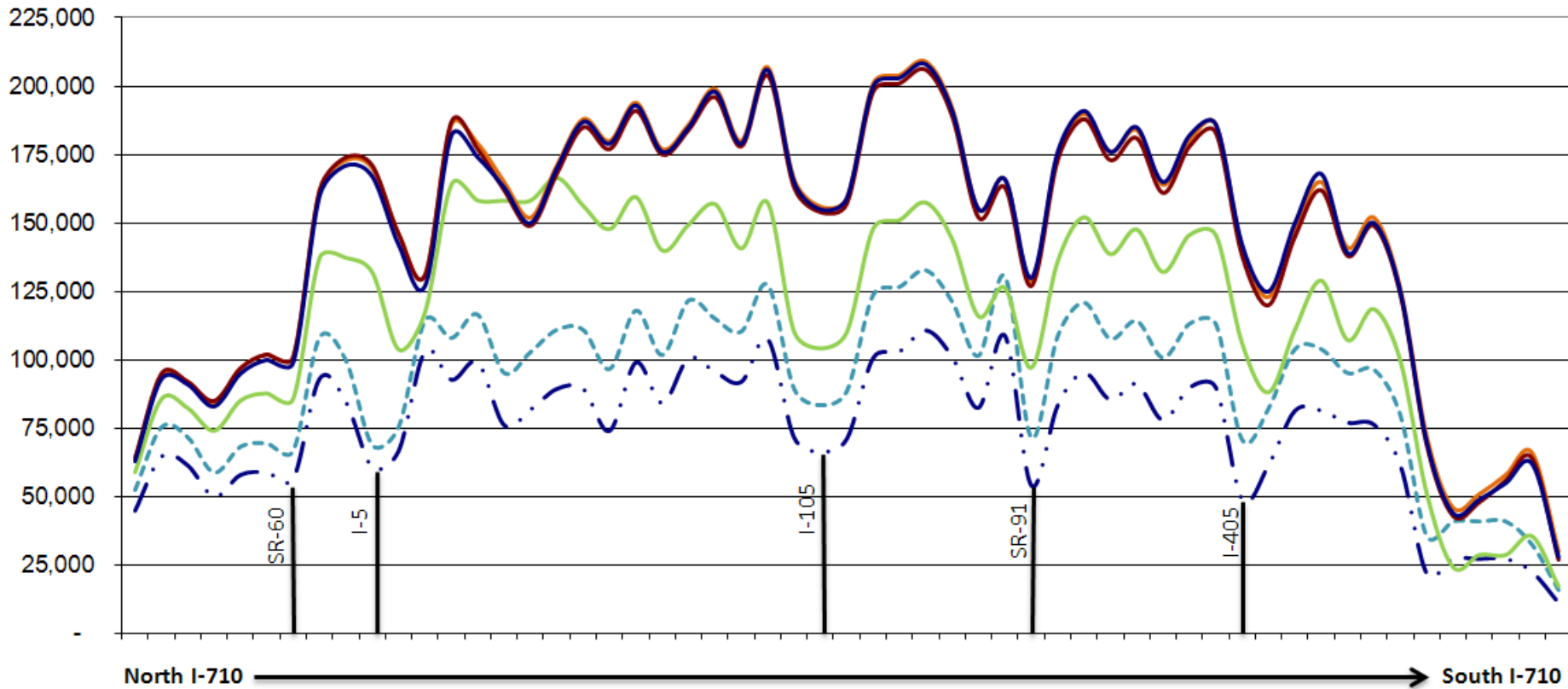
Revised 2035 Forecast ADT Volumes - General Observations

- Total vehicle volumes for all vehicle types (auto, port truck, non port truck) along I-710 are higher in Alternative 5A compared to Alternative 1
- Similarly, volumes along I-710 in Alternative 6A are higher than Alternative 5A
- Similarly, volumes along I-710 in Alternative 6B are higher than Alternative 6A
- Volume increase due to the increased mainline I-710 capacity provided in Alternative 5A compared to Alternative 1 and the added capacity of Alternative 6A/B and 6C over Alternative 5A
- Alternative 6C volumes slightly less than 6B due to toll diversion
- Alternative 6A, 6B and 6C each have different freeway volume forecasts due to FC capacity differences and toll element

All Vehicles – Daily Traffic

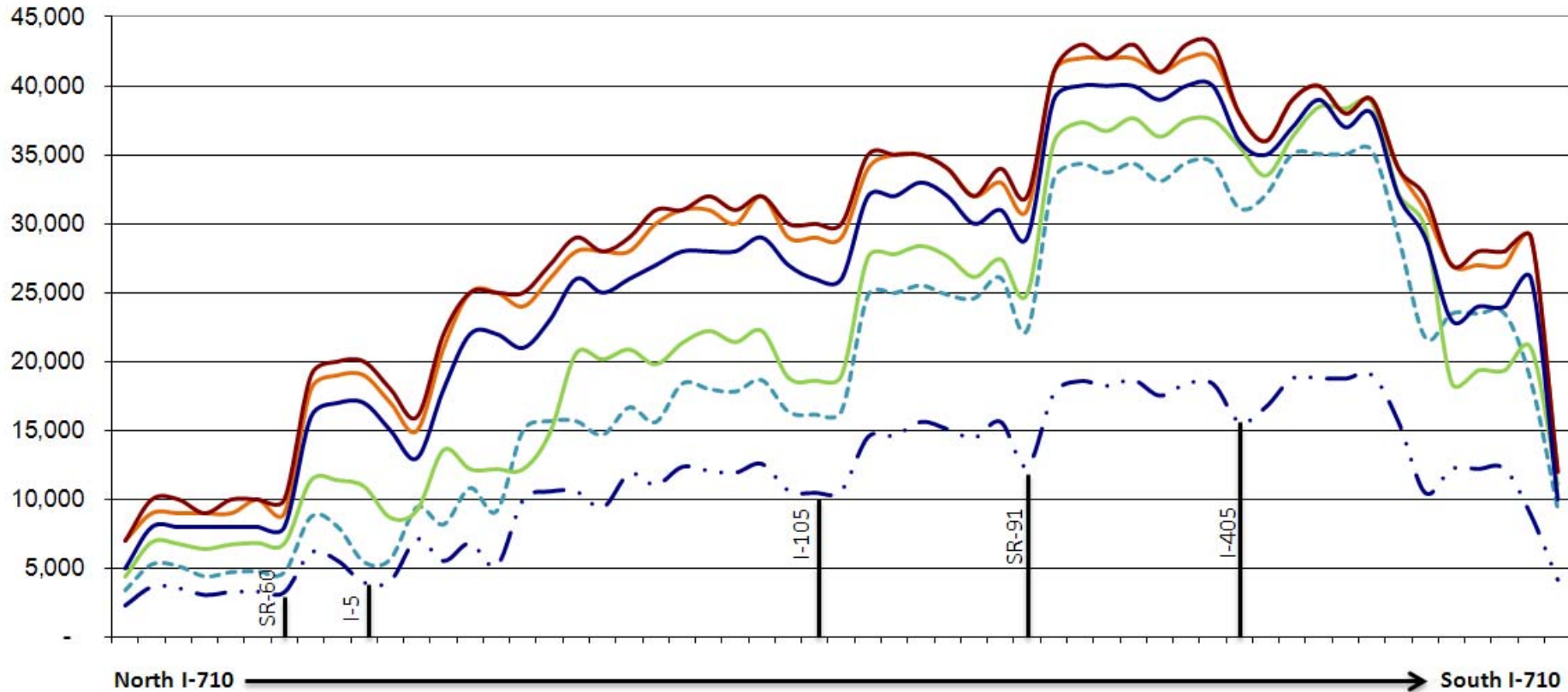
Daily Traffic on I-710 (All Vehicle Types, Southbound Direction)

— 2008 - - - 1 - - - 5 - - - 6A - - - 6B - - - 6CToll



All Trucks – Daily Traffic

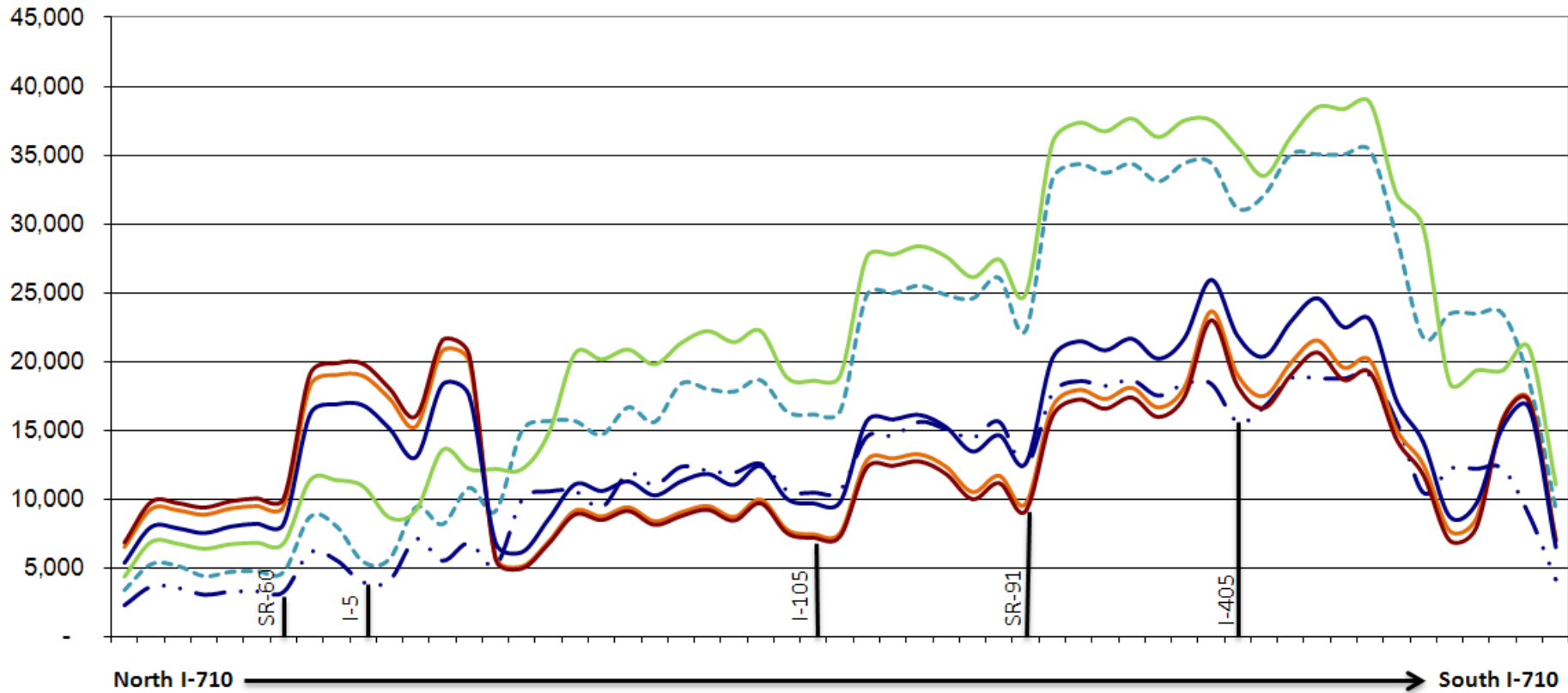
Daily Traffic on I-710 (All Trucks, Southbound Direction)



All GP Trucks – Daily Traffic

Daily Traffic on I-710 GP Lanes (All Trucks, Southbound Direction)

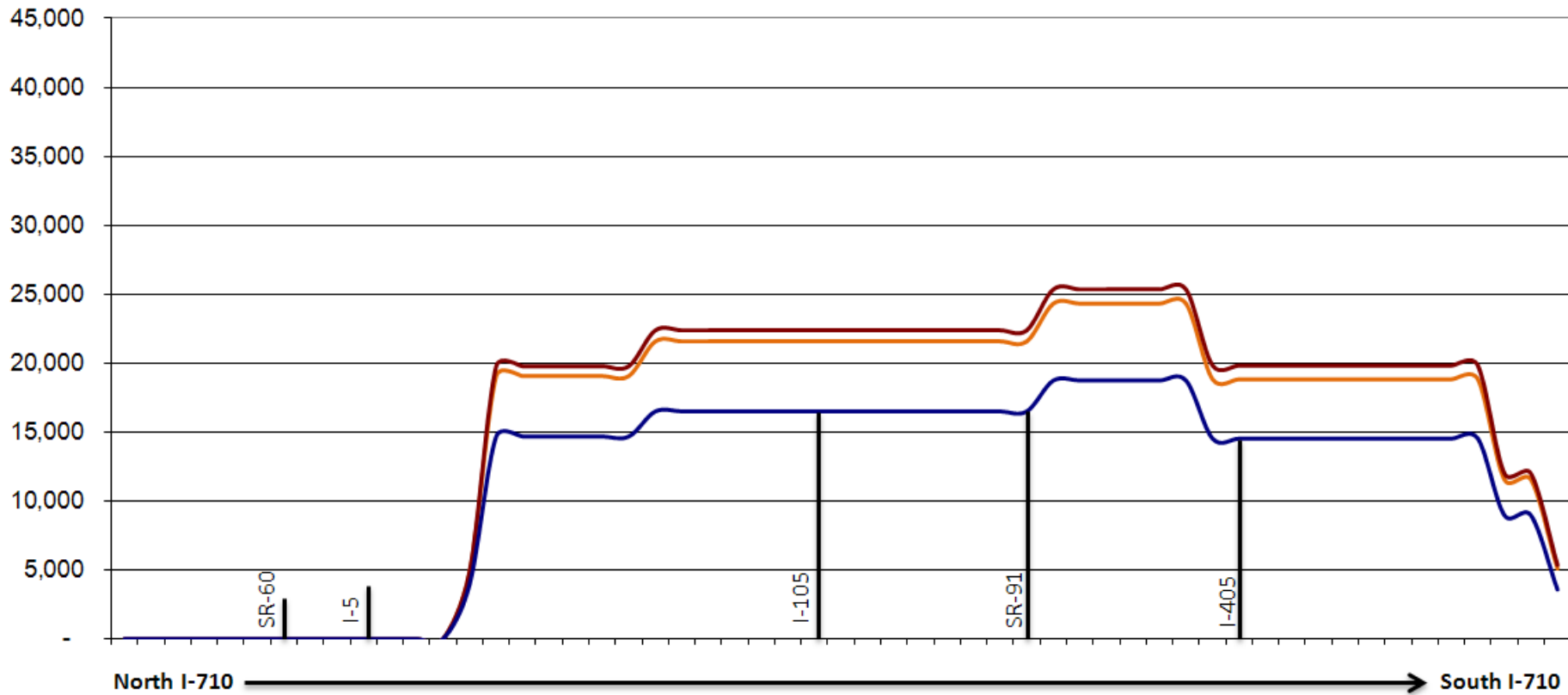
—•— 2008 - - - 1 — 5 — 6A — 6B — 6CToll



All FC Trucks – Daily Traffic

Daily Traffic on I-710 FC Lanes (All Trucks, Southbound Direction)

— 2008 - - - 1 — 5 — 6A — 6B — 6CToll

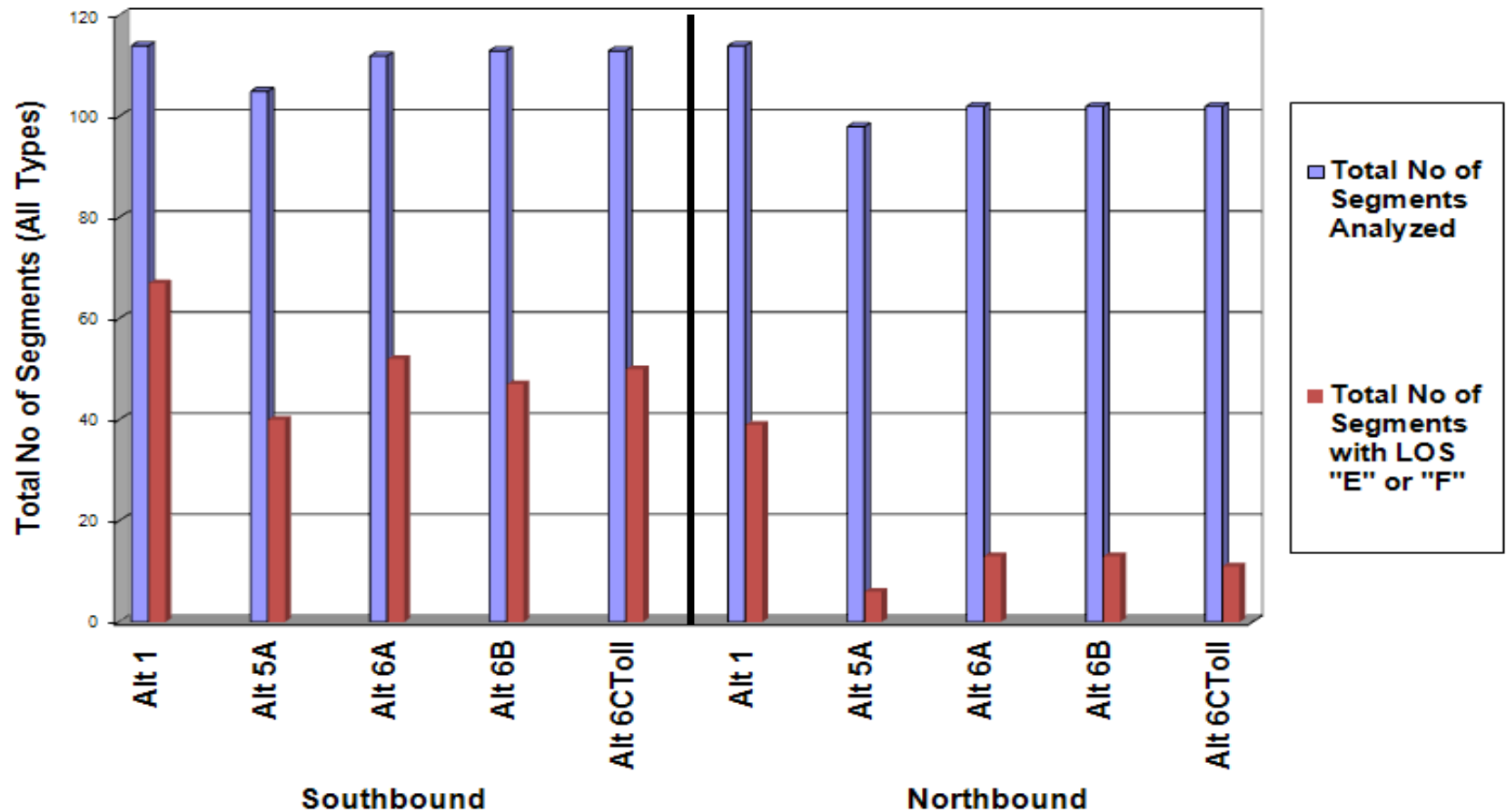


Traffic Operations Analyses

Overview of Freeway Traffic Operations Analysis Results

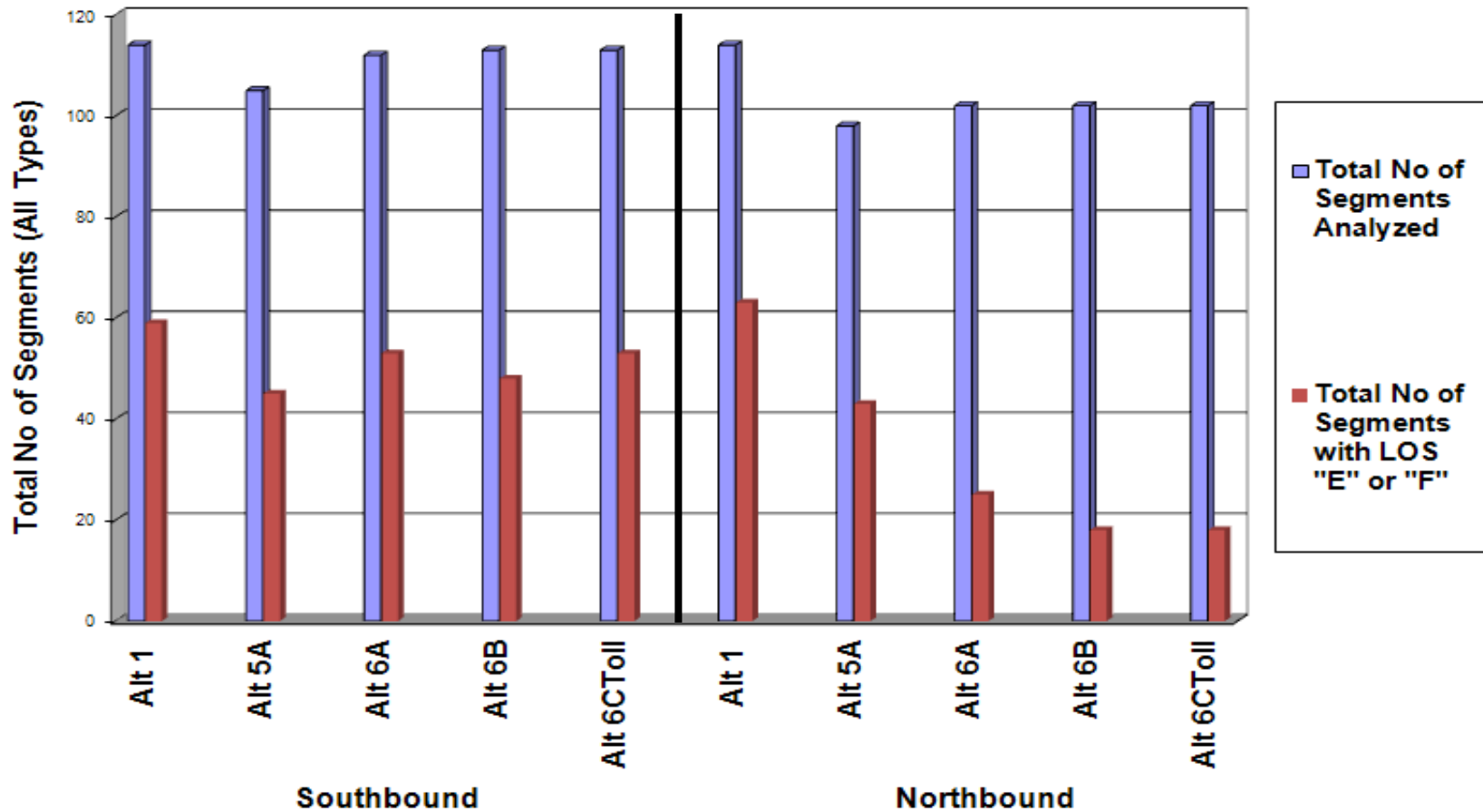
I-710 Mainline LOS Comparison

I-710 LOS Comparison AM Peak Hour



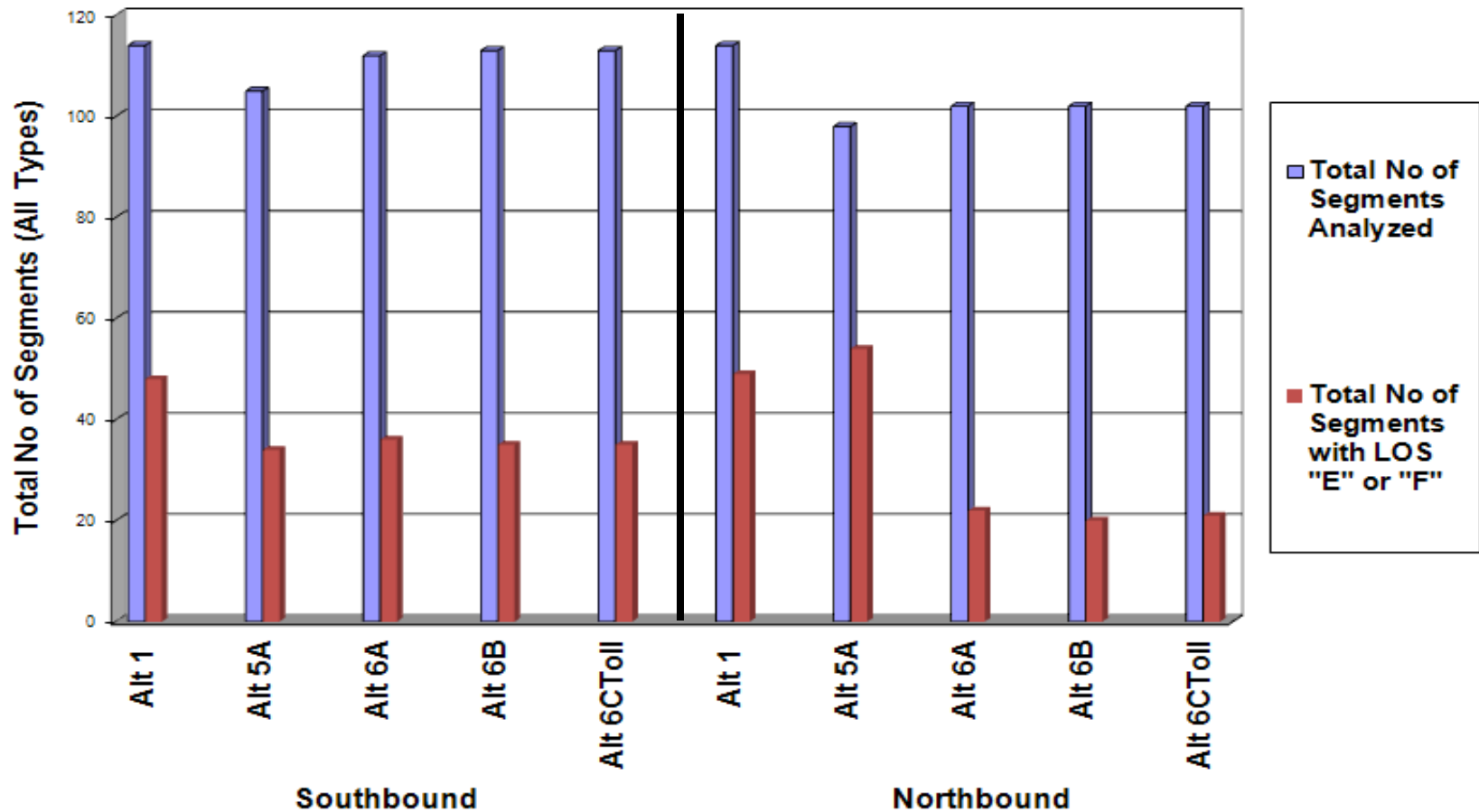
I-710 Mainline LOS Comparison

I-710 LOS Comparison MD Peak Hour



I-710 Mainline LOS Comparison

I-710 LOS Comparison PM Peak Hour



AM Peak Hour

I-710
General Purpose
Lanes

LOS
Results

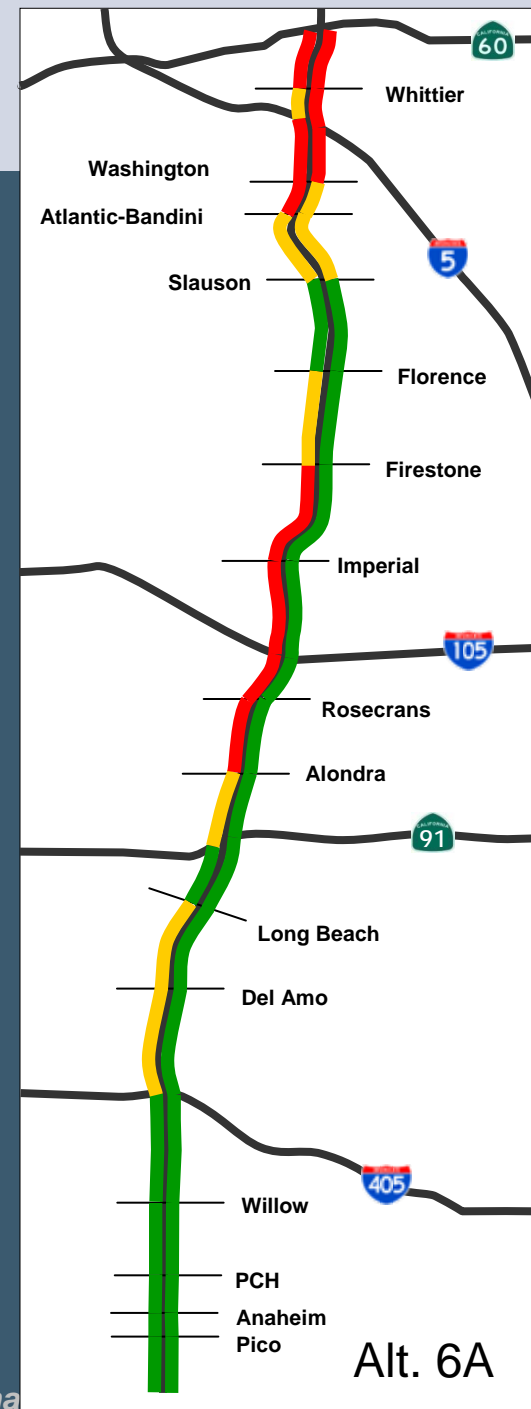
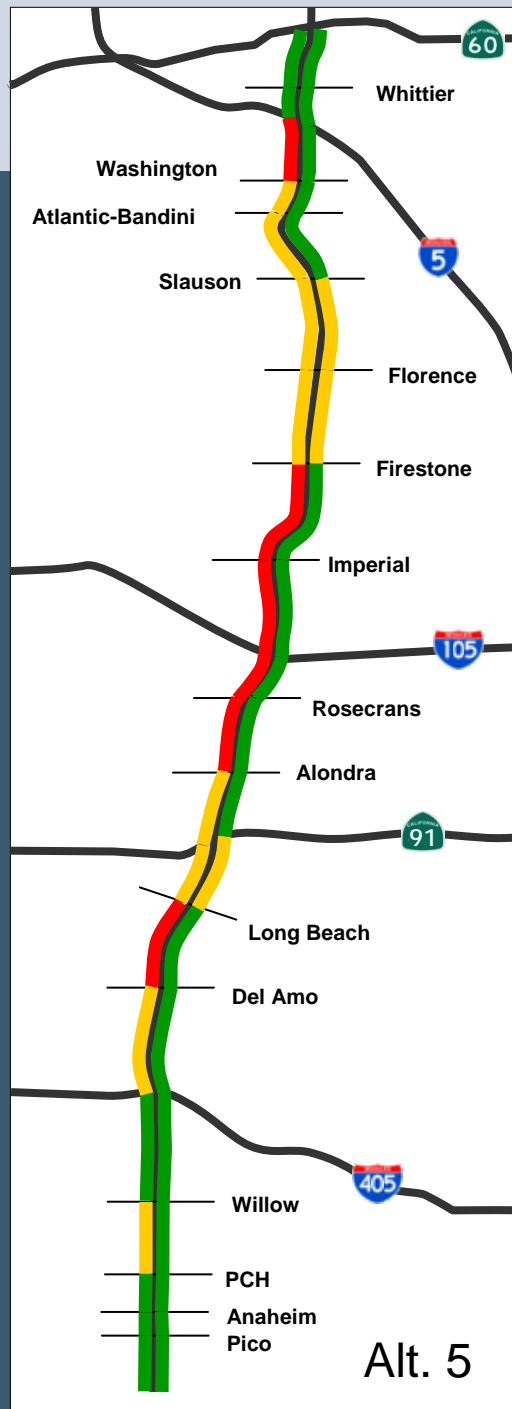
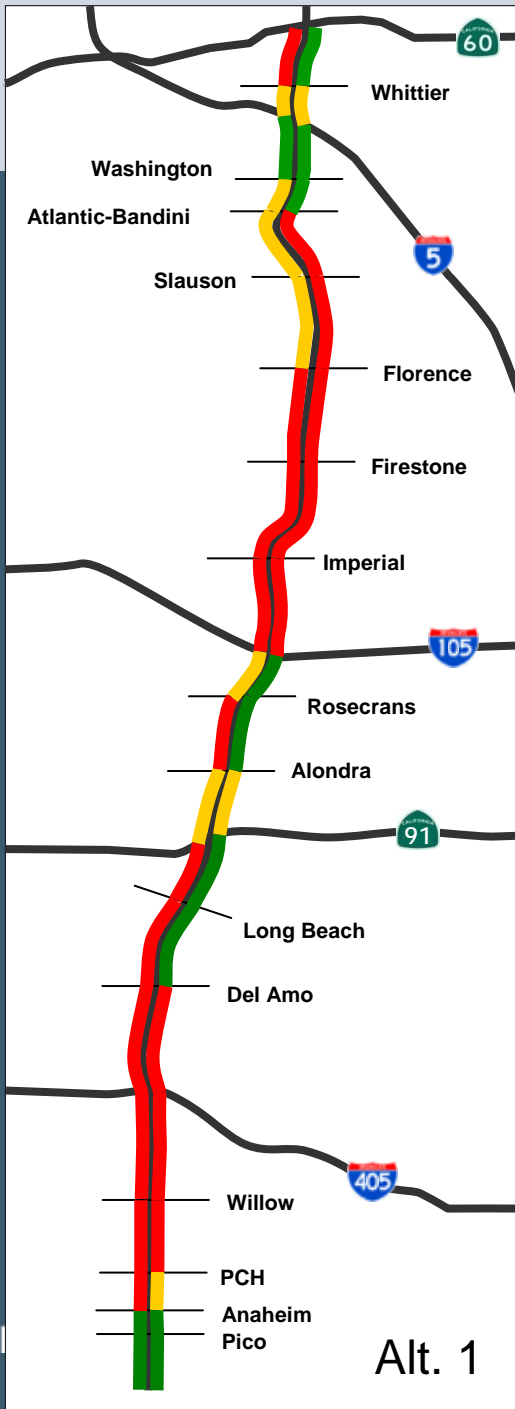
AM Peak
Hour

Level of Service

LOS D or Better 

LOS E 

LOS F 



AM Peak Hour

I-710 General Purpose Lanes

LOS Results

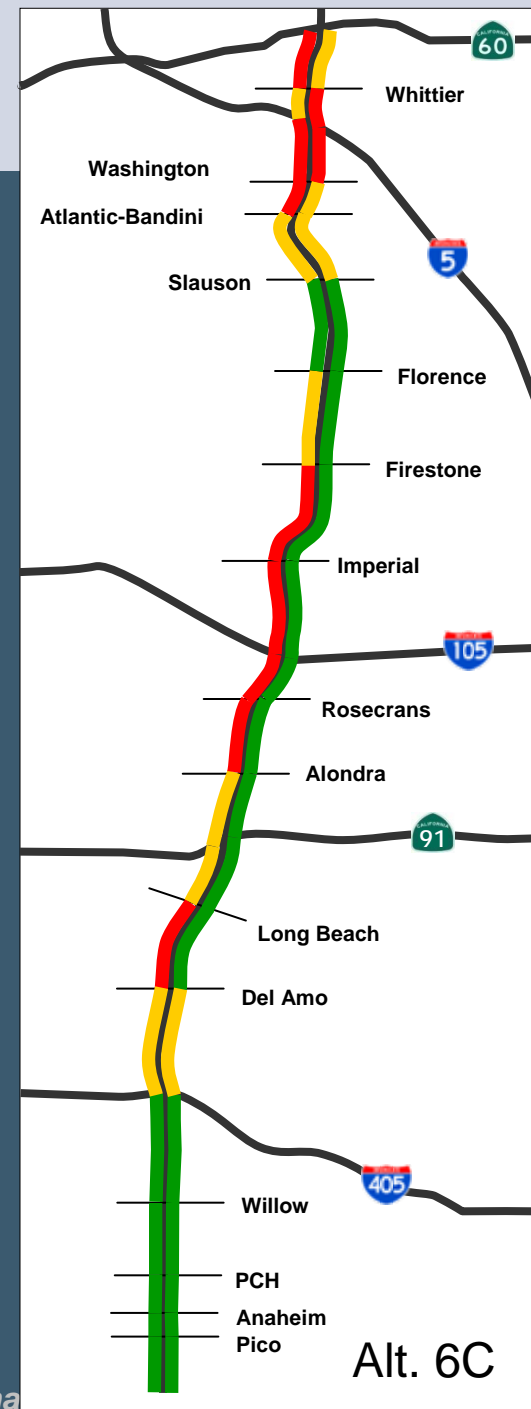
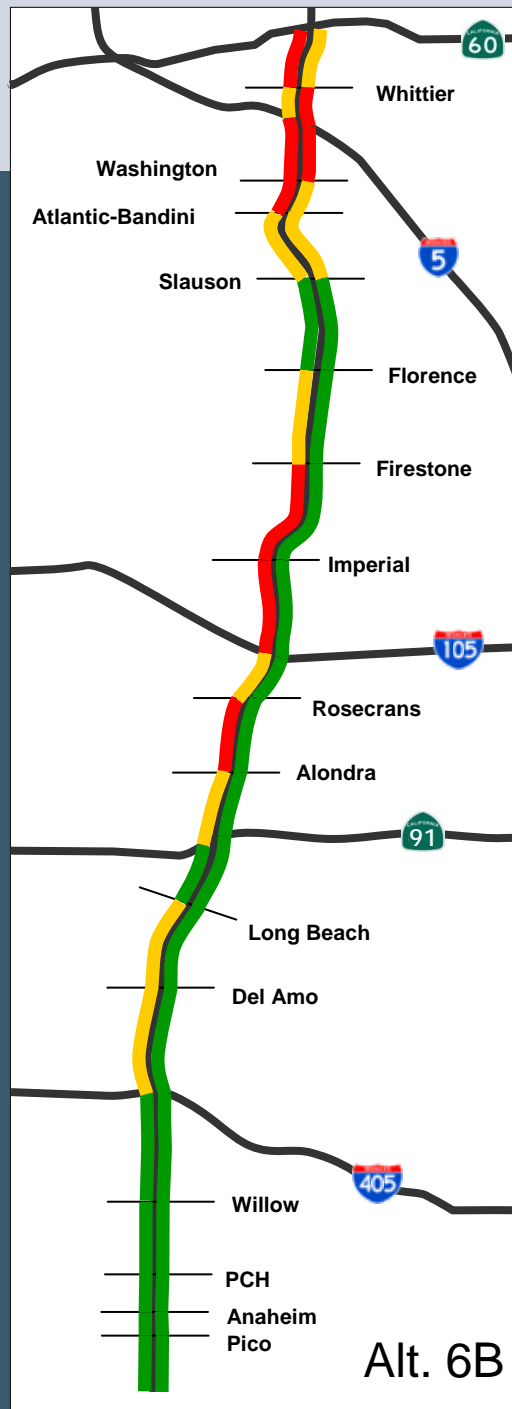
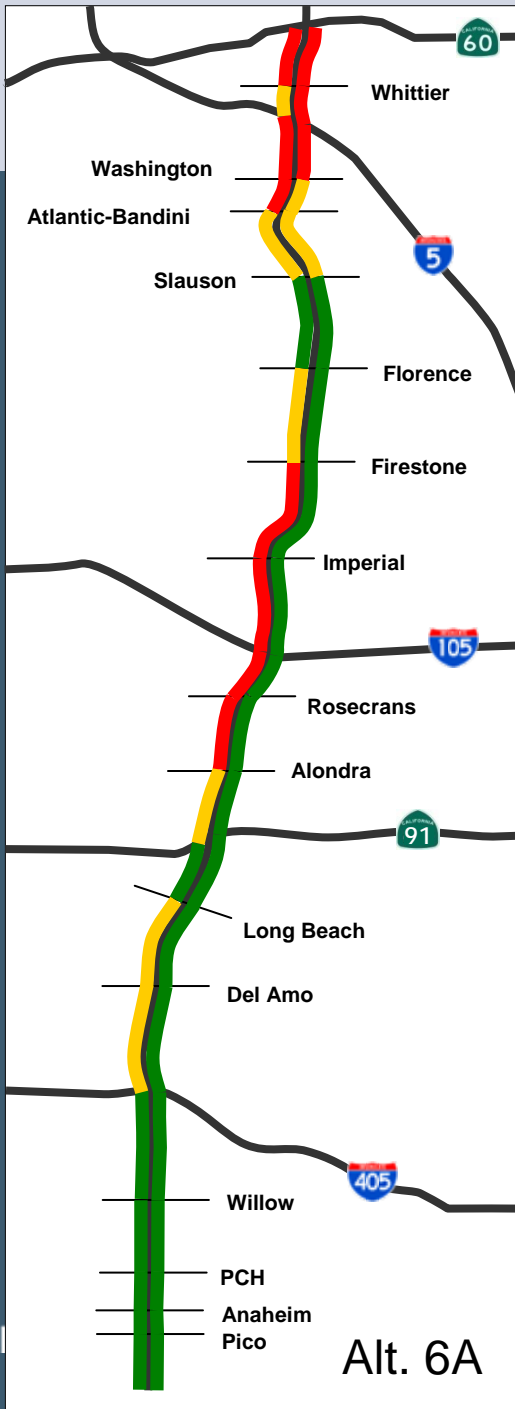
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MD Peak Hour

I-710 General Purpose Lanes

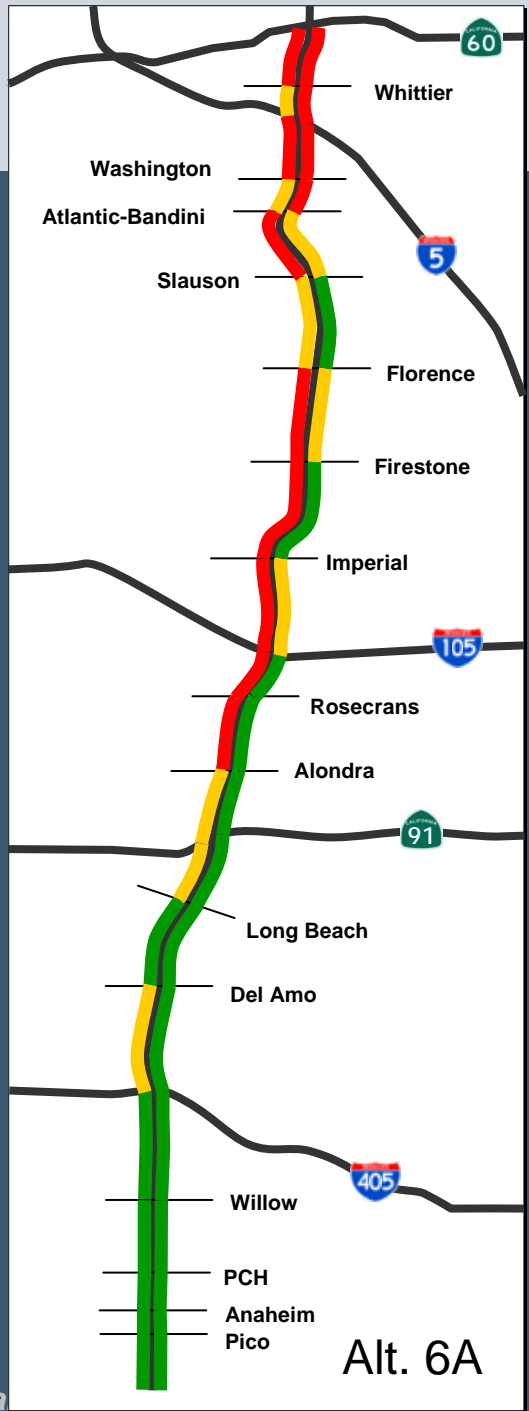
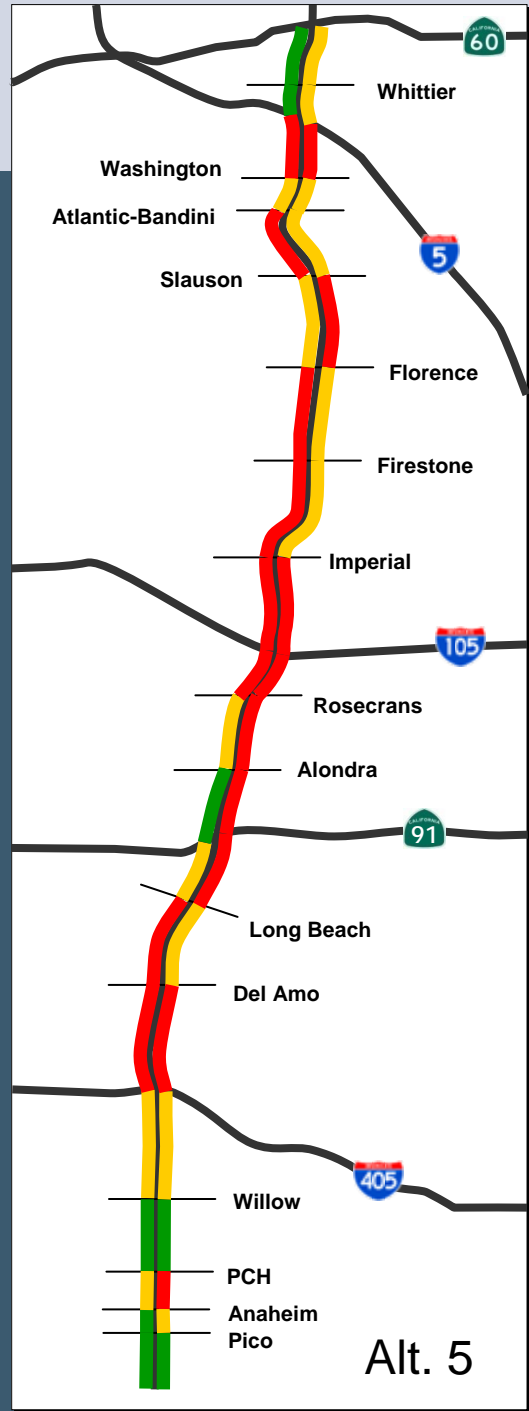
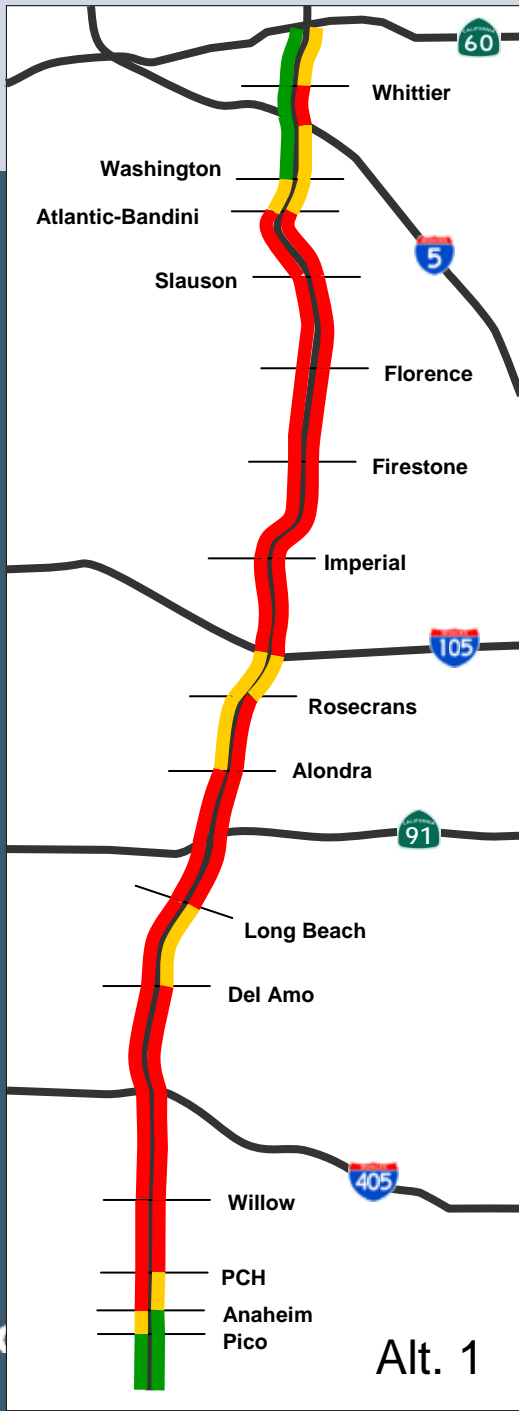
LOS Results

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I-710 General Purpose Lanes

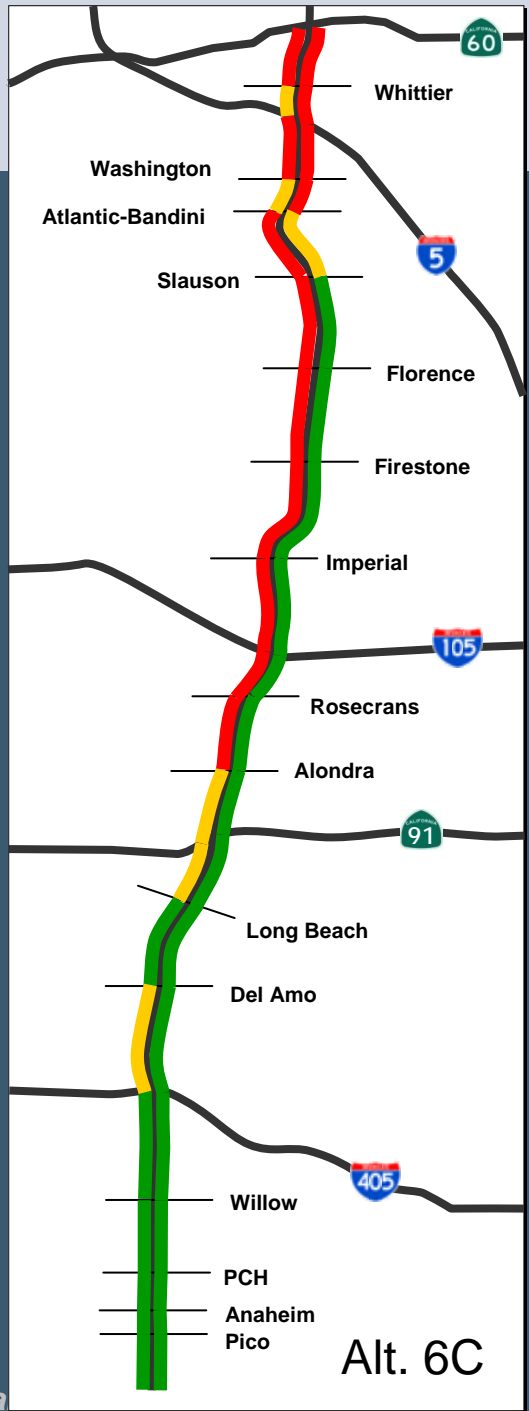
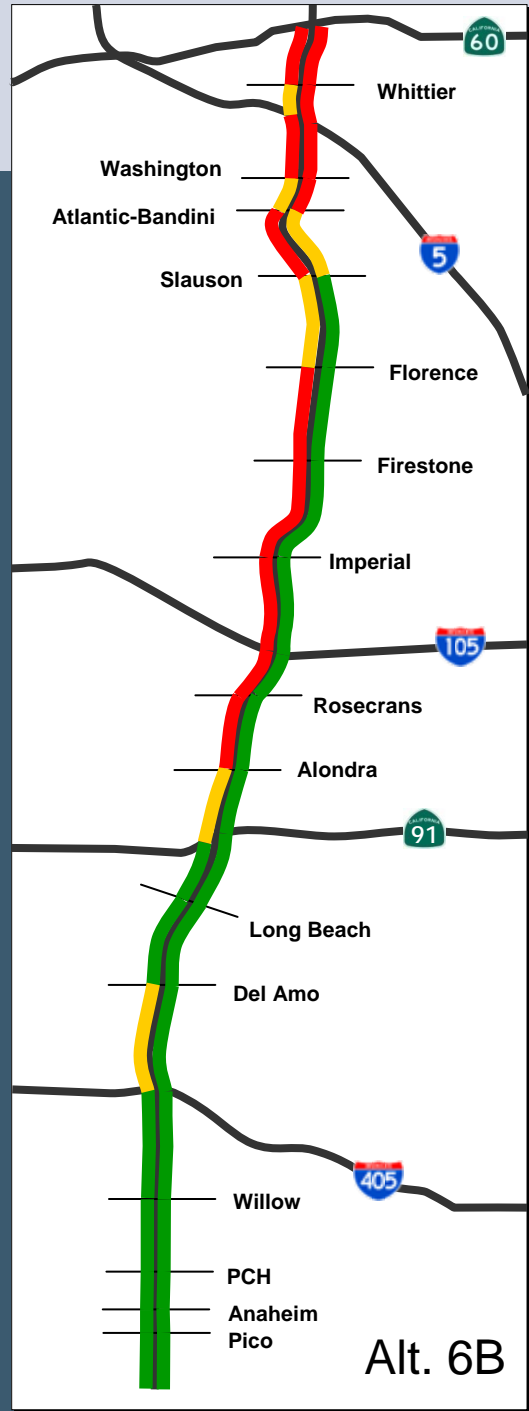
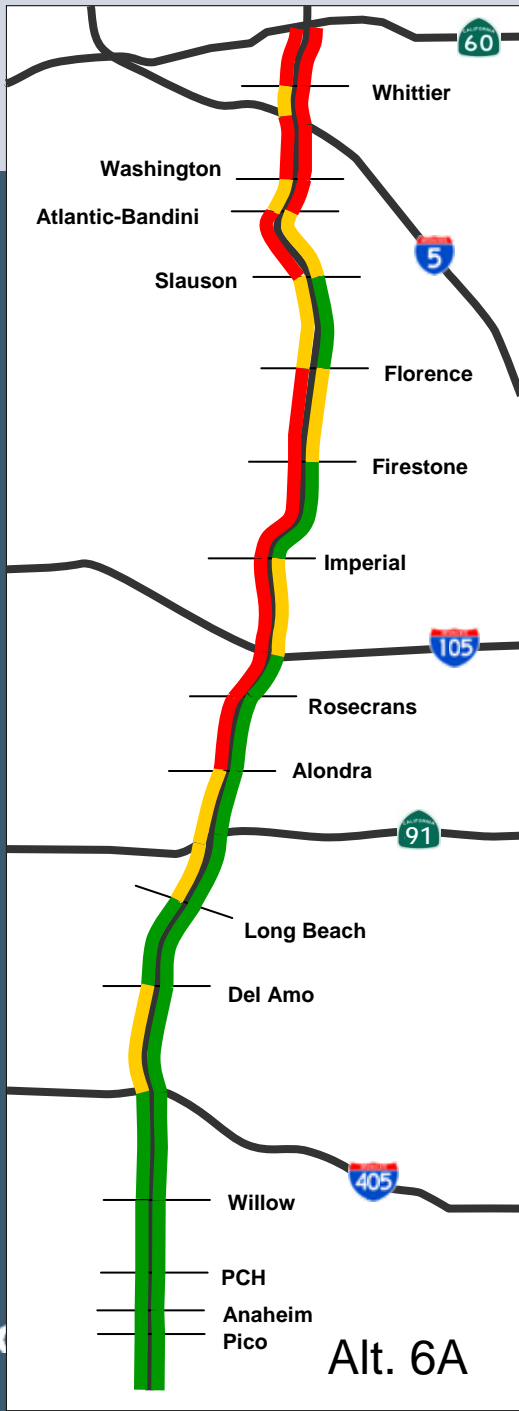
LOS Results

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PM Peak Hour

I-710
General Purpose
Lanes

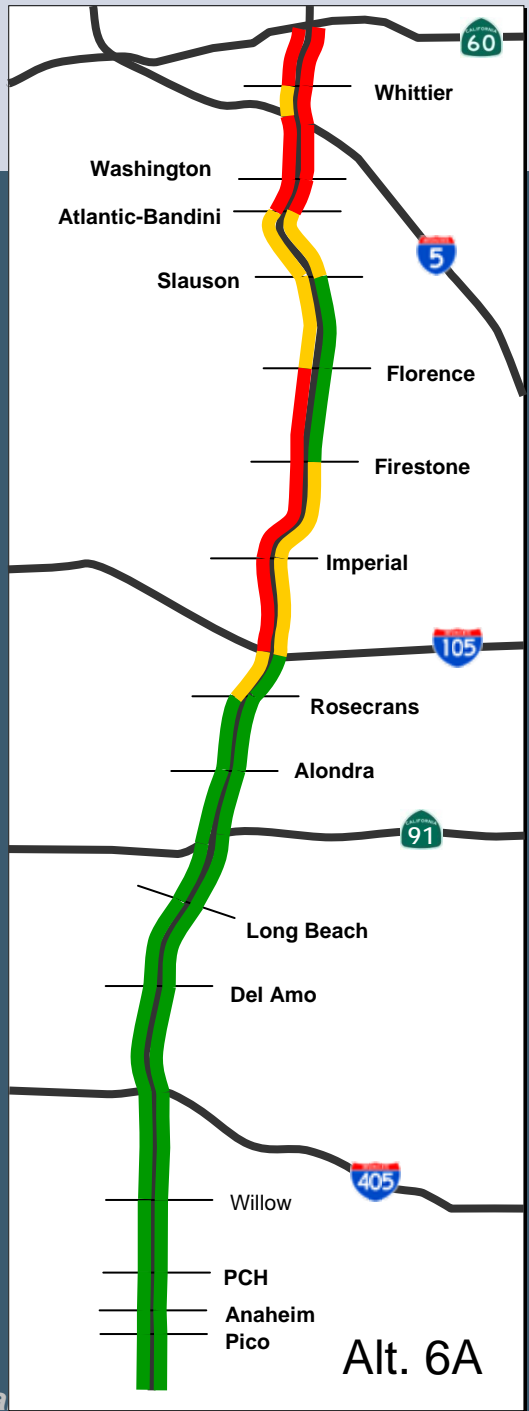
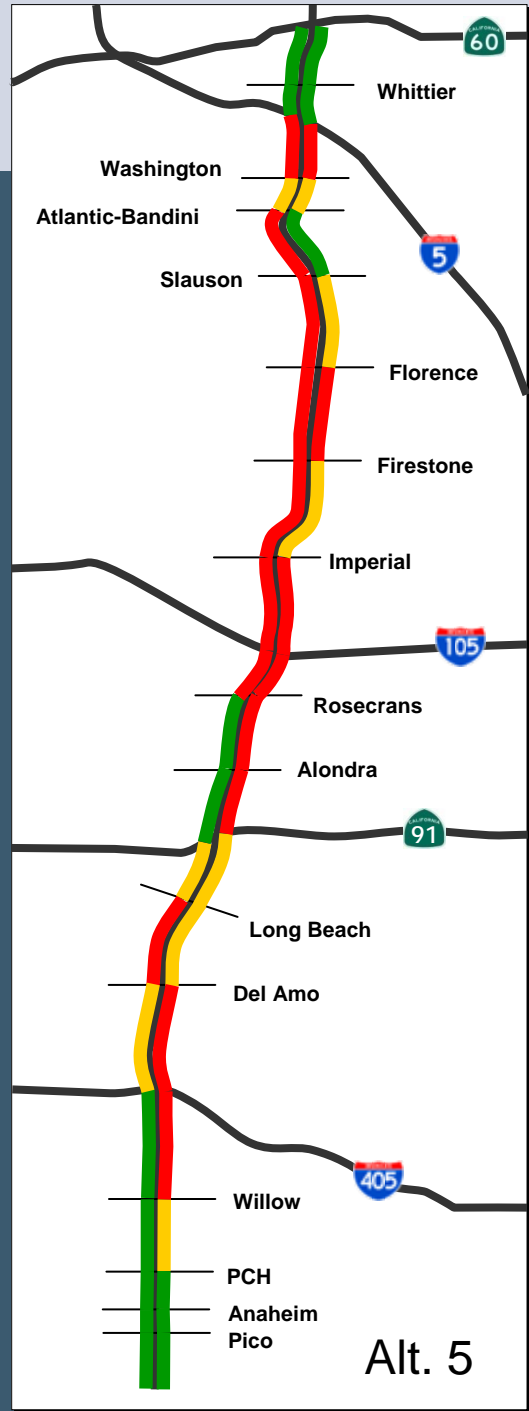
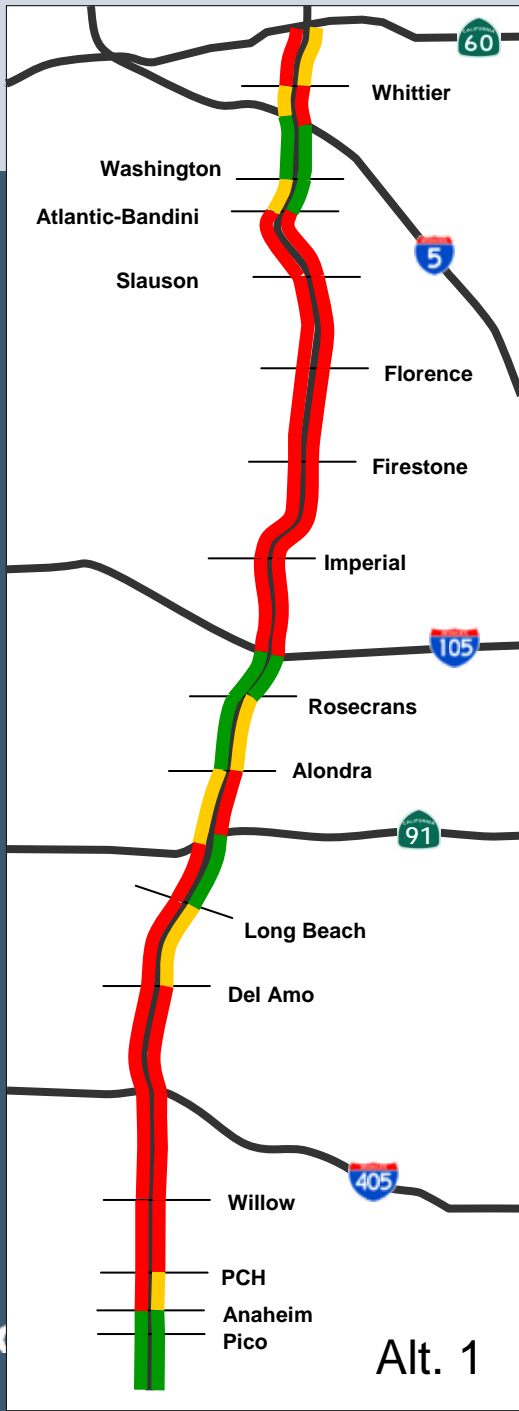
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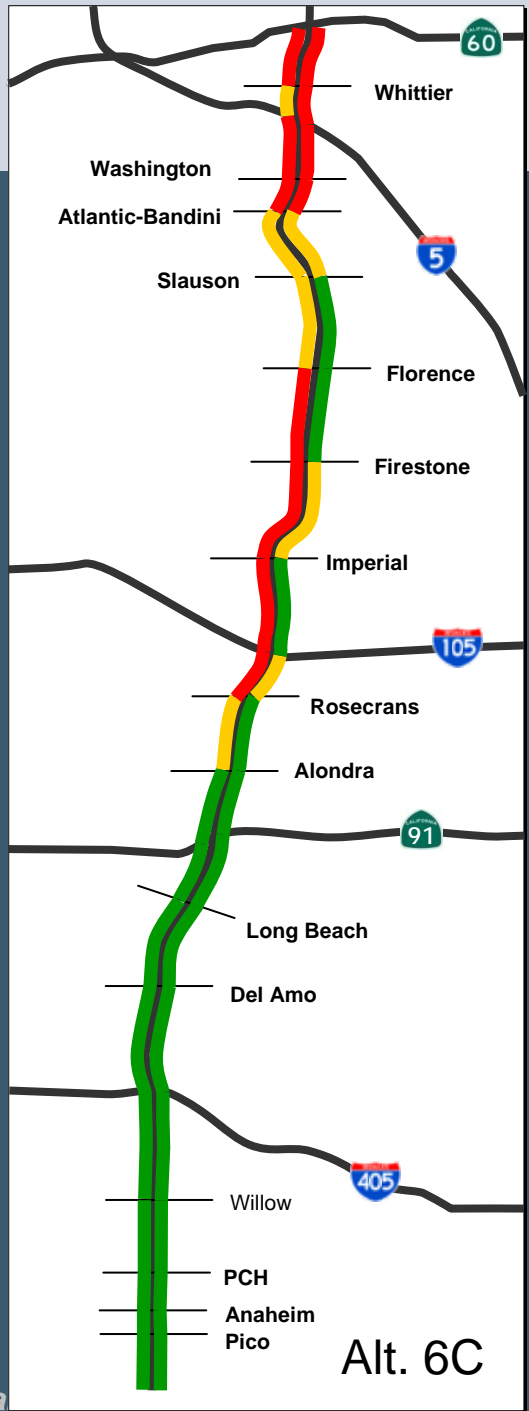
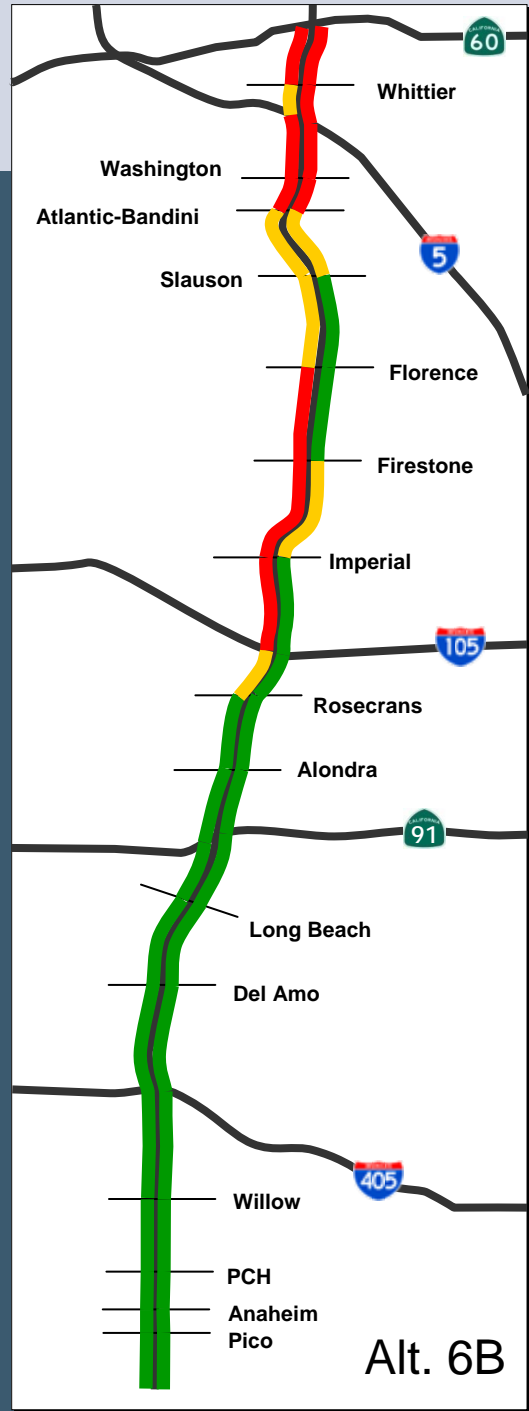
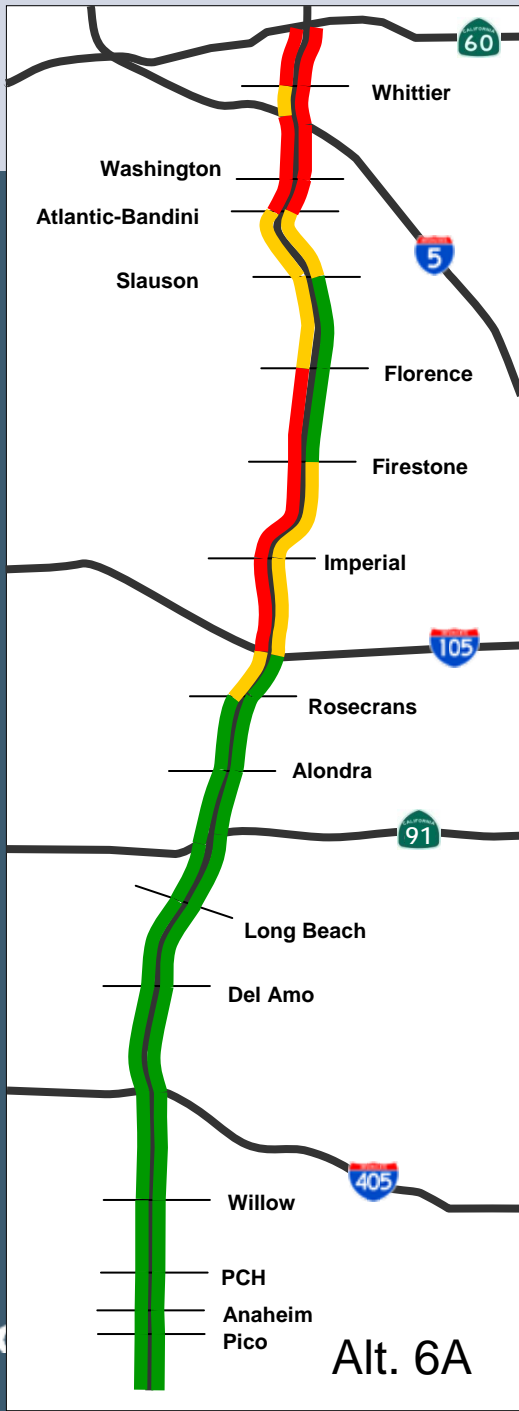
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Summary

- I-710 is currently experiencing significant delay and congestion
- By 2035 (Alternative 1) the No Build condition is expected to deteriorate further
- Alternative 5A will improve traffic operations in the I-710 Corridor compared to No Build

Summary

- Alternative 6A will improve operations and decrease truck trips on mainline freeway
- Alternative 6B will reduce trucks on mainline and improve overall throughput
- Alternative 6C will increase truck volumes in the GP lanes compared to 6A and 6B

Next Steps

- Evaluate Tolling Alternative Further
- Complete Draft Traffic Operational Analysis Report
- Complete Intersection Traffic Impact Analysis Report
- Develop and review design improvements to accommodate each scenario
- Meet with TAC Cities to review results