Project Description

The proposed project adds general-purpose and auxiliary lanes in each direction at strategic locations along State Route 55 (SR 55) between just north of the I-5/SR 55 Interchange and just south of the SR 55/SR 91 Interchange. The project is located in Orange County on SR 55 between Post Miles 10.4 and R17.9, with a total length of the project approximately 7.5 miles. Within the limits of the proposed project, SR 55 currently has three to four general-purpose lanes and an HOV lane in each direction, with auxiliary lanes between ramps at various locations. The regional location is shown on Figure 1. The Build Alternative is described below and depicted on Figures 2 and 3. The purpose of the proposed project is to provide congestion relief, improve traffic flow, and increase mobility on SR 55.

The Build Alternative includes the following:
- Add one northbound (NB) general-purpose lane between I-5 and SR 22
- Add one southbound (SB) general-purpose lane between I-5 and SR 22
- Provide additional capacity on the SB SR 55 Katella Ave off- and on-ramps
- Relocate the SB SR 55 Lincoln Ave off-ramp approximately 1,300 feet to the south

Type of Project (use Table 1 on instruction sheet)

Change to existing state highway.

County
Orange

Narrative Location/Route & Postmiles
State Route 55 PM 10.4 to R17.9

Caltrans Projects – EA# 0K7200

Lead Agency: Caltrans

Contact Person
Arman Behtash
Phone# (657) 328-6143
Fax#
Email arman.behtash@dot.ca.gov

Hot Spot Pollutant of Concern (check one or both) PM2.5 X PM10 X

Federal Action for which Project-Level PM Conformity is Needed (check appropriate box)

Categorical Exclusion (NEPA) X
EA or Draft EIS
FONSI or Final EIS
PS&E or Construction
Other

Scheduled Date of Federal Action: January 23, 2020

NEPA Assignment – Project Type (check appropriate box)

Exempt Section 326 – Categorical Exemption X Section 327 – Non-Categorical Exemption

Current Programming Dates (as appropriate)

<table>
<thead>
<tr>
<th></th>
<th>PE/Environmental</th>
<th>ENG</th>
<th>ROW</th>
<th>CON</th>
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<tr>
<td>Start Start</td>
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<td>June 2029</td>
<td>June 2031</td>
<td>June 2032</td>
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<tr>
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<td>January 2020</td>
<td>June 2031</td>
<td>January 2032</td>
<td>June 2035</td>
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</table>
### Project Purpose and Need (Summary):

**Purpose:** The purpose of the project is to add general purpose lanes to State Route 55 (SR 55) between SR 22 and Interstate 5 (I-5) and provide operational improvements on SR 55 between SR 22 and SR 91.

The purpose of the proposed action is to:

- Improve mobility and reduce congestion.
- Increase freeway capacity
- Improve traffic operations

In furtherance of the project’s purpose, additional project objectives are to minimize environment impacts and right of way impacts within the project limits.

**Need:** The study area currently operates at unacceptable levels of service during peak periods. Existing traffic volumes, traffic congestion, and travel delay along the SR 55 corridor are anticipated to grow as a result of forecasted increases in population, housing, and employment. Traffic operations along the corridor are impacted due to the following key factors/issues:

- Limited lane capacity on SR 55 during AM and PM Peak Periods.
- Inadequate freeway operations resulting from weaving, merging, and diverging within the project limits along the SR 55 corridor.

### Surrounding Land Use/Traffic Generators (especially effect on diesel traffic)

Through the project limits, the SR 55 serves the communities of Orange County, including the Cities of Tustin and Orange. It is used for commuting and intraregional travel along with direct and indirect access to employment centers, recreational attractions, shopping malls, medical centers, universities, airports, and other land uses. The proposed project is immediately surrounded by residential, commercial, and institutional uses. The SR 55 corridor is not a future freight corridor, nor will it serve future large-scale logistics centers.
## Opening Year: Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility

<table>
<thead>
<tr>
<th>Directional Segment</th>
<th>No Build LOS¹</th>
<th>No Build AADT²</th>
<th>No Build Truck %³</th>
<th>No Build Truck AADT</th>
<th>Build LOS¹</th>
<th>Build AADT²</th>
<th>Build Truck %³</th>
<th>Build Truck AADT</th>
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<th>Change in Truck %</th>
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<td>7.7%</td>
<td>10,666</td>
<td>D/F</td>
<td>146,510</td>
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<td>11,281</td>
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<tr>
<td>between 17th and SR-22</td>
<td>D/F</td>
<td>146,580</td>
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<td>10,994</td>
<td>D/F</td>
<td>155,630</td>
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<td>11,672</td>
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<tr>
<td>between SR-22 and Chapman</td>
<td>D/F</td>
<td>152,440</td>
<td>5.9%</td>
<td>8,994</td>
<td>D/F</td>
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<tr>
<td>between Chapman and Katella</td>
<td>E/F</td>
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<td>E/F</td>
<td>143,180</td>
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<td>between Katella and Lincoln</td>
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<td>F/C</td>
<td>133,370</td>
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<td>between SR-91 and Lincoln</td>
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<td>7,787</td>
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<td>134,820</td>
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<td>7,954</td>
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<tr>
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<td>136,440</td>
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<td>9,764</td>
<td>F/C</td>
<td>137,200</td>
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<td>10,290</td>
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<td>527</td>
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<tr>
<td>between 17th and 4th</td>
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<td>10,181</td>
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<td>139,230</td>
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<td>10,721</td>
<td>7,010</td>
<td>540</td>
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</tbody>
</table>

**Notes:**

1. AM/PM LOS Data from Draft Traffic Operations Report.
2. AADT values were obtained from the Final Traffic Volume Report.
3. Existing truck % values were obtained from the most recent 2016 Annual Average Daily Truck Traffic on the California State Highway System prepared by Caltrans. Future year truck % is anticipated to remain the same as existing conditions due to the following reasons: a) Caltrans’ Annual Average Daily Truck Traffic data demonstrates that the truck % along SR-55 has remained unchanged from 2002 to 2016, and b) SR-55 is not planned to be a future freight corridor nor serve future large-scale logistics centers, so the future year truck % is expected to remain unchanged. Implementation of the project is not expected to increase truck %, so the truck % stays the same between the No Build and Build conditions.
## PM Conformity Hot Spot Analysis – Project Summary for Interagency Consultation

### Opening Year (2035)

<table>
<thead>
<tr>
<th>Bidirectional Segment</th>
<th>No Build AADT</th>
<th>No Build Truck %</th>
<th>No Build Truck AADT</th>
<th>Build AADT</th>
<th>Build Truck %</th>
<th>Build Truck AADT</th>
<th>Change in Total AADT</th>
<th>Change in Truck AADT</th>
<th>Change in Truck %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between 4th and 17th</td>
<td>270,740</td>
<td>7.7%</td>
<td>20,847</td>
<td>285,740</td>
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<tr>
<td>Between 17th and SR-22</td>
<td>276,760</td>
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<td>21,962</td>
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<tr>
<td>Between SR-22 and Chapman</td>
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<td>Between Chapman and Katella</td>
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<td>278,000</td>
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<td>16,402</td>
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<tr>
<td>Between Katella and Lincoln</td>
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<td>6,110</td>
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<tr>
<td>Between Lincoln and SR-91</td>
<td>253,540</td>
<td>5.9%</td>
<td>14,959</td>
<td>259,270</td>
<td>5.9%</td>
<td>15,297</td>
<td>5,730</td>
<td>338</td>
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</tbody>
</table>

### Notes:

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3. Existing truck % values were obtained from the most recent 2016 Annual Average Daily Truck Traffic on the California State Highway System prepared by Caltrans. Future year truck % is anticipated to remain the same as existing conditions due to the following reasons: a) Caltrans’ Annual Average Daily Truck Traffic data demonstrates that the truck % along SR-55 has remained unchanged from 2002 to 2016, and b) SR-55 is not planned to be a future freight corridor nor serve future large-scale logistics centers, so the future year truck % is expected to remain unchanged. Implementation of the project is not expected to increase truck %, so the truck % stays the same between the No Build and Build conditions.
### RTP Horizon Year / Design Year: Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility

<table>
<thead>
<tr>
<th>Directional Segment</th>
<th>Horizon Year (2055)</th>
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<tbody>
<tr>
<td></td>
<td>No Build LOS¹</td>
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<tr>
<td>between 4th and 17th</td>
<td>D/F</td>
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<td>between 17th and SR-22</td>
<td>D/F</td>
</tr>
<tr>
<td>between SR-22 and Chapman</td>
<td>F/F</td>
</tr>
<tr>
<td>between Chapman and Katella</td>
<td>F/F</td>
</tr>
<tr>
<td>between Katella and Meats</td>
<td>F/F</td>
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<tr>
<td>between Meats and Lincoln</td>
<td>F/F</td>
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<tr>
<td>between Lincoln and SR-91</td>
<td>F/F</td>
</tr>
<tr>
<td>between SR-91 and Lincoln</td>
<td>F/D</td>
</tr>
<tr>
<td>between Lincoln and Meats</td>
<td>F/C</td>
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<td>between Meats and Katella</td>
<td>F/D</td>
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<td>between Katella and Chapman</td>
<td>F/D</td>
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<td>between Chapman and SR-22</td>
<td>F/D</td>
</tr>
<tr>
<td>between SR-22 and 17th</td>
<td>F/D</td>
</tr>
<tr>
<td>between 17th and 4th</td>
<td>F/D</td>
</tr>
</tbody>
</table>

**Notes:**

1. AM/PM LOS Data from Draft Traffic Operations Report.
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3. Existing truck % values were obtained from the most recent 2016 Annual Average Daily Truck Traffic on the California State Highway System prepared by Caltrans. Future year truck % is anticipated to remain the same as existing conditions due to the following reasons: a) Caltrans’ Annual Average Daily Truck Traffic data demonstrates that the truck % along SR-55 has remained unchanged from 2002 to 2016, and b) SR-55 is not planned to be a future freight corridor nor serve future large-scale logistics centers, so the future year truck % is expected to remain unchanged. Implementation of the project is not expected to increase truck %, so the truck % stays the same between the No Build and Build conditions.
### PM Conformity Hot Spot Analysis – Project Summary for Interagency Consultation

#### Horizon Year (2055)

<table>
<thead>
<tr>
<th>Bidirectional Segment</th>
<th>No Build AADT²</th>
<th>No Build Truck %³</th>
<th>No Build Truck AADT</th>
<th>Build AADT¹</th>
<th>Build Truck %²</th>
<th>Build Truck AADT</th>
<th>Change in Total AADT</th>
<th>Change in Truck AADT</th>
<th>Change in Truck %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between 4ᵗʰ and 17ᵗʰ</td>
<td>285,870</td>
<td>7.7%</td>
<td>22,012</td>
<td>312,320</td>
<td>7.7%</td>
<td>24,049</td>
<td>26,450</td>
<td>2,037</td>
<td>0.0%</td>
</tr>
<tr>
<td>Between 17ᵗʰ and SR-22</td>
<td>291,310</td>
<td>7.5%</td>
<td>21,848</td>
<td>319,730</td>
<td>7.5%</td>
<td>23,980</td>
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<td>276,270</td>
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<td>16,300</td>
<td>11,330</td>
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<td>Between Lincoln and SR-91</td>
<td>264,360</td>
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<td>5.9%</td>
<td>16,184</td>
<td>9,940</td>
<td>586</td>
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</table>

### Notes:

2. AADT values were obtained from the Traffic Volume Report.
3. Existing truck % values were obtained from the most recent 2016 Annual Average Daily Truck Traffic on the California State Highway System prepared by Caltrans. Future year truck % is anticipated to remain the same as existing conditions due to the following reasons: a) Caltrans’ Annual Average Daily Truck Traffic data demonstrates that the truck % along SR-55 has remained unchanged from 2002 to 2016, and b) SR-55 is not planned to be a future freight corridor nor serve future large-scale logistics centers, so the future year truck % is expected to remain unchanged. Implementation of the project is not expected to increase truck %, so the truck % stays the same between the No Build and Build conditions.
Opening Year: If facility is an interchange(s) or intersection(s), Build and No Build cross-street AADT, % and # trucks, truck AADT

The proposed project is not an interchange or intersection, and therefore these data are not applicable.

RTP Horizon Year / Design Year: If facility is an interchange (s) or intersection(s), Build and No Build cross-street AADT, % and # trucks, truck AADT

The proposed project is not an interchange or intersection, and therefore these data are not applicable.

Describe potential traffic redistribution effects of congestion relief (impact on other facilities)

The proposed project would improve overall performance, reduce congestion, increase ramp and mainlines capacity, and improve operational deficiencies at merge and diverge locations within the project limits. The proposed project would not divert traffic to other routes, and the travel demand volume is not predicted to vary substantially between the build and no-build conditions, as shown in the tables above. Thus, local traffic is not anticipated to be redistributed.

Comments/Explanation/Details (attach additional sheets as necessary)

Under 40 CFR 93.123(b)—PM\textsubscript{10} and PM\textsubscript{2.5} Hot Spots—the following criteria are utilized to determine the potential for a proposed project to qualify as a Project of Air Quality Concern.

(i) New highway projects that have a significant number of diesel vehicles, and expanded highway projects that have a significant increase in the number of diesel vehicles;

As shown in the tables above, the proposed project is an expanded highway project that would not result in a significant increase in the number of diesel vehicles along the 7.5-mile-long SR 55 corridor. Therefore, the proposed project would not result in a significant increase in the number of diesel vehicles and would not be considered a Project of Air Quality Concern under this criterion.

(ii) Projects affecting intersections that are at Level-of-Service D, E, or F with a significant number of diesel vehicles, or those that will change to Level-of-Service D, E, or F because of increased traffic volumes from a significant number of diesel vehicles related to the project;

The proposed project is along the freeway mainline and not at an intersection. Similar to the mainline analysis presented above, the proposed project would not add a significant number of diesel vehicles to an intersection. Therefore, the proposed project would not be considered a Project of Air Quality Concern under this criterion.

(iii) New bus and rail terminals and transfer points that have a significant number of diesel vehicles congregating at a single location;

The proposed project would not implement a new bus or retail terminal or transfer point. Therefore, the proposed project would not be considered a Project of Air Quality Concern under this criterion.

(iv) Expanded bus and rail terminals and transfer points that significantly increase the number of diesel vehicles congregating at a single location; and

The proposed project does not involve expansion of a bus or rail terminal or transfer point. Therefore, the proposed project would not be considered a Project of Air Quality Concern under this criterion.

(v) Projects in or affecting locations, areas, or categories of sites which are identified in the PM\textsubscript{10} or PM\textsubscript{2.5} applicable implementation plan or implementation plan submission, as appropriate, as sites of violation or possible violation.

The proposed project is not in or affecting a site of PM\textsubscript{10} or PM\textsubscript{2.5} air quality standard violation. Therefore, the proposed project would not be considered a Project of Air Quality Concern under this criterion.
Figure 1
SR 55 Improvement Project: I-5 to SR 91
Location Map
SR 55 IMPROVEMENT PROJECT (I-5 TO SR 91) NORTHBOUND

LEGEND
- EXISTING GENERAL PURPOSE LANE
- AUX EXISTING AUXILIARY LANE
- HOV LANE
- NEW GENERAL PURPOSE LANE
- RAMP IMPROVEMENT
- EXISTING TOLL LANE

NB RAMP IMPROVEMENTS
- 4TH ST ON & OFF RAMP IMPROVEMENT
- 17TH ST ON & OFF RAMP IMPROVEMENT

MARCH 2018
FIGURE 3
SR 55 IMPROVEMENT PROJECT (I-5 TO SR 91) SOUTHBOUND

LEGEND
- EXISTING GENERAL PURPOSE LANE
- Auxiliary lane
- HOV lane
- RAMP IMPROVEMENT
- RAMP RELOCATION

SR 91
LINCOLN AVE
MEATS AVE
KATELLA AVE
CHAPMAN AVE
SR 22
17TH ST
4TH ST / IRVINE AVE
1ST ST
MAIN ST
I-5

Existing
Alternative 1
No Build
Alternative 2
Build

SR 91
LINCOLN AVE
MEATS AVE
KATELLA AVE
CHAPMAN AVE
SR 22
17TH ST
4TH ST / IRVINE AVE
1ST ST
MAIN ST
I-5

SB RAMP IMPROVEMENTS
- RELOCATION OF SB LINCOLN OFF RAMP
- KATELLA AVE ON & OFF RAMP IMPROVEMENTS
- 17TH ST ON & OFF RAMP IMPROVEMENTS
- 4TH ST OFF RAMP IMPROVEMENTS

MARCH 2018