Proposed Transportation Control Measure Substitution of the Placentia Metrolink Station and Access Bus Expansion Projects with The Main Street BRAVO! Bus Line

April 26, 2022

TCWG SCAG
TCA TCM Substitution

Replace Paratransit Vehicle Expansion and Placentia Transit Station (ORA130099 and ORA030612) in OC scheduled for completion by the end of 2022

Substitute with the new Main Street Bravo! Express Bus Service along Main Street to be completed by the end of 2022
23 June 2020
TCWG Presentation: Proposed TCM Substitution Methodology for Paratransit Vehicle Expansion and Placentia Transit Station in addition to other projects

22 June 2021
TCWG Presentation: Proposed TCM Substitution results for Paratransit Vehicle Expansion and Placentia Transit Station. Received comments to split out projects into two separate requests.

22 Feb 2022
TCWG Presentation: Proposed TCM Substitution results for Paratransit Vehicle Expansion and Placentia Transit Station. Received guidance to further refine modeling approach.

26 April 2022
TCWG Presentation: Updated TCM Substitution results for Paratransit Vehicle Expansion and Placentia Transit Station with new Main Street Bravo! Express Bus

31 Dec. 2022
Implement: Traffic Signal Synchronization Projects
TCM Meets Substitution Requirements

Paratransit Vehicle Expansion

Placentia Transit Station

Main Street Bravo! Bus

EQUIVALENT EMISSIONS REDUCTION
SIMILAR GEOGRAPHIC AREAS
FULL FUNDING
SIMILAR TIME FRAME
TIMELY IMPLEMENTATION
LEGAL AUTHORITY
Emissions Analysis Methodology

Step 1: Obtain roadway daily VMT and speed data from OCTAM for “No Project”, “Original Committed Projects”, and “With Proposed Substitute” Alternatives

- Existing 2016 and Future 2045

Step 2: Run EMFAC 2017 using input data from OCTAM for “No Project”, “Original Committed Projects”, and “With Proposed Substitute” Alternatives

- Performed for summer, winter, and annual

Step 4: Compare emissions outputs from Steps 2 and 3 between the alternatives to identify the emission-related improvements
OCTAM Model Information

Traditional 4-Step Model

TransCAD Platform

Consistent with SCAG Model

OCP 2018 SCAG RTP

Base Year 2016 Future Year 2045

OCTAM VMT and Speeds Input to EMFAC 2017
Emissions Analysis Findings

Compared projected emissions from the “Originally Committed Projects” and “With Proposed Substitute” alternatives with No Build

Results show “With Proposed Substitute” alternative will yield less than or equivalent amounts of emissions for all criteria pollutants for all milestone years compared to “Originally Committed Projects”

The results are summarized in the staff reports tables
<table>
<thead>
<tr>
<th>Year 2022</th>
<th>Emissions Reduction (Kg/Day)</th>
<th>Paratransit and Placentia</th>
<th>Proposed TCM Substitute Project</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summer</td>
<td>ROG 0.0 NOx 0.0</td>
<td>- 0.1 - 0.3</td>
<td></td>
</tr>
<tr>
<td>Winter</td>
<td>NOx 0.0 CO 0.0</td>
<td>- 0.2 - 1.4</td>
<td></td>
</tr>
<tr>
<td>Annual</td>
<td>ROG 0.0 NOx 0.0 PM10 0.0 PM2.5</td>
<td>- 0.1 - 0.2 - 0.1 - 0.0</td>
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<td>ROG 0.0 NOx 0.0</td>
<td>- 0.3 - 0.8</td>
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<tr>
<td>Winter</td>
<td>NOx 0.0 CO 0.0</td>
<td>- 0.9 - 4.7</td>
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<tr>
<td>Annual</td>
<td>ROG 0.0 NOx 0.0 PM10 0.0 PM2.5</td>
<td>- 0.3 - 0.9 - 0.4 - 0.1</td>
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<td>- 1.1 - 6.5</td>
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Questions?