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



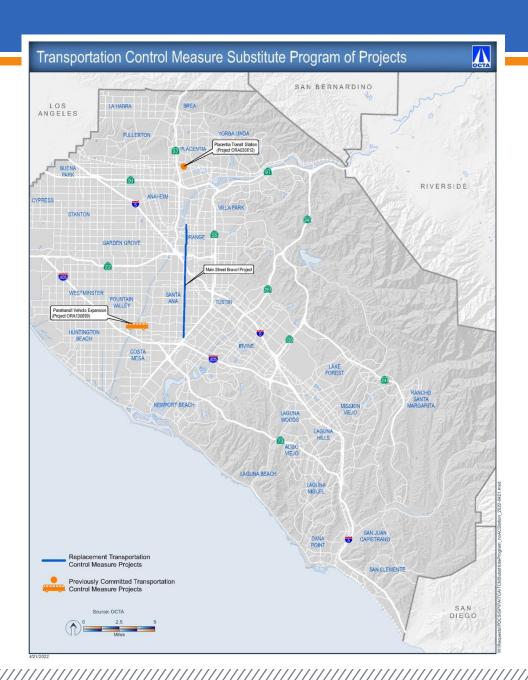
TCA TCM Substitution



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



TCA TCM Substitution Timeline

<u>TCWG Presentation</u>: Proposed TCM Substitution Methodology for Paratransit Vehicle Expansion and Placentia Transit Station in addition to other projects <u>TCWG Presentation</u>: Proposed TCM Substitution results for Paratransit Vehicle Expansion and Placentia Transit Station. Received guidance to further refine modeling approach.

<u>Implement</u>: Traffic Signal Synchronization Projects

22 June 2021

26 April 2022

23 June 2020

22 Feb 2022

31 Dec. 2022

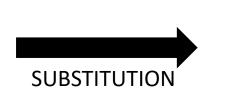
<u>TCWG Presentation</u>: TCM Substitution results for Paratransit Vehicle Expansion and Placentia Transit Station in addition to other projects. Received comments to split out projects into two separate requests.

<u>TCWG Presentation</u>: Updated TCM Substitution results for Paratransit Vehicle Expansion and Placentia Transit Station with new Main Street Bravo! Express Bus

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

Emissions Reductions from No Build (Kg/Day)

Year 2022 Emissions Reduction (Kg/Day)	Paratransit and Placentia	Proposed TCM Substitute Project
Summer ROG NOx	0.0 0.0	- 0.1 - 0.3
Winter NOx CO	0.0 0.0	- 0.2 - 1.4
Annual ROG NOx PM10 PM2.5	0.0 0.0 0.0 0.0	- 0.1 - 0.2 - 0.1 0.0

Year 2037 Emissions Reduction (Kg/Day)	Paratransit and Placentia	Proposed TCM Substitute Project
Summer ROG NOx	0.0 0.0	- 0.3 - 0.8
Winter NOx CO	0.0 - 0.1	- 0.9 - 4.7
Annual ROG NOx PM10 PM2.5	0.0 0.0 0.0 0.0	- 0.3 - 0.9 - 0.4 - 0.1

Year 2045 Emissions Reduction (Kg/Day)	Paratransit and Placentia	Proposed TCM Substitute Project
Summer ROG NOx	0.0 0.0	- 0.5 - 1.1
Winter NOx CO	0.0 - 0.1	- 1.1 - 6.5
Annual ROG NOx PM10 PM2.5	0.0 0.0 0.0 0.0	- 0.4 - 1.2 - 0.5 - 0.2

Questions?

