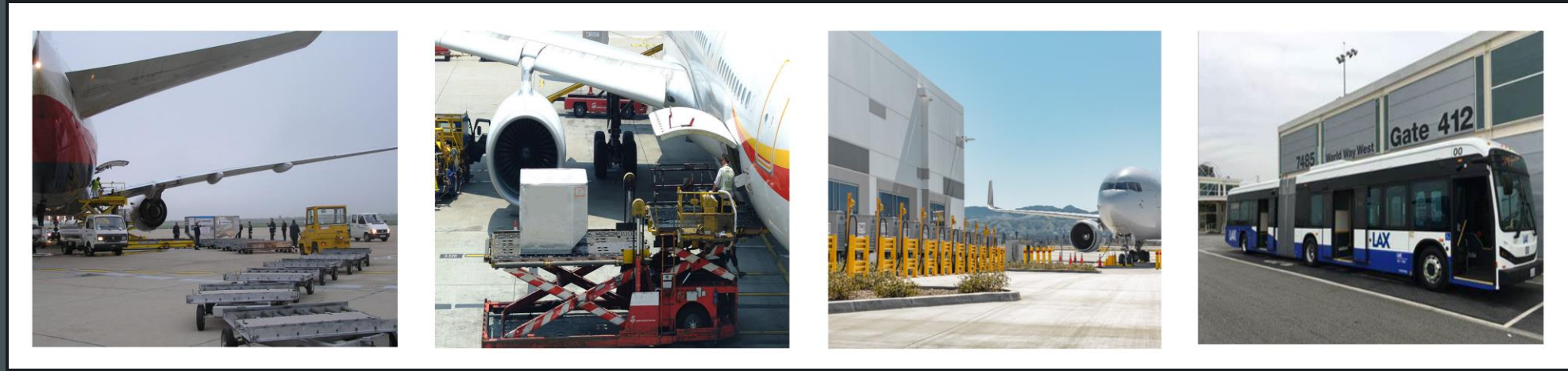




AIRPORT MOUS IMPLEMENTATION PROGRESS CALENDAR YEARS 2024-2025

**Working Group Meeting
October 8, 2026**



JOHN WAYNE AIRPORT
ORANGE COUNTY



AGENDA

South Coast AQMD Presentation

Hollywood Burbank Airport (BUR) Presentation

Los Angeles World Airports (LAX) Presentation

Long Beach Airport (LGB) Presentation

Ontario International Airport (ONT) Presentation

John Wayne Airport (SNA) Presentation

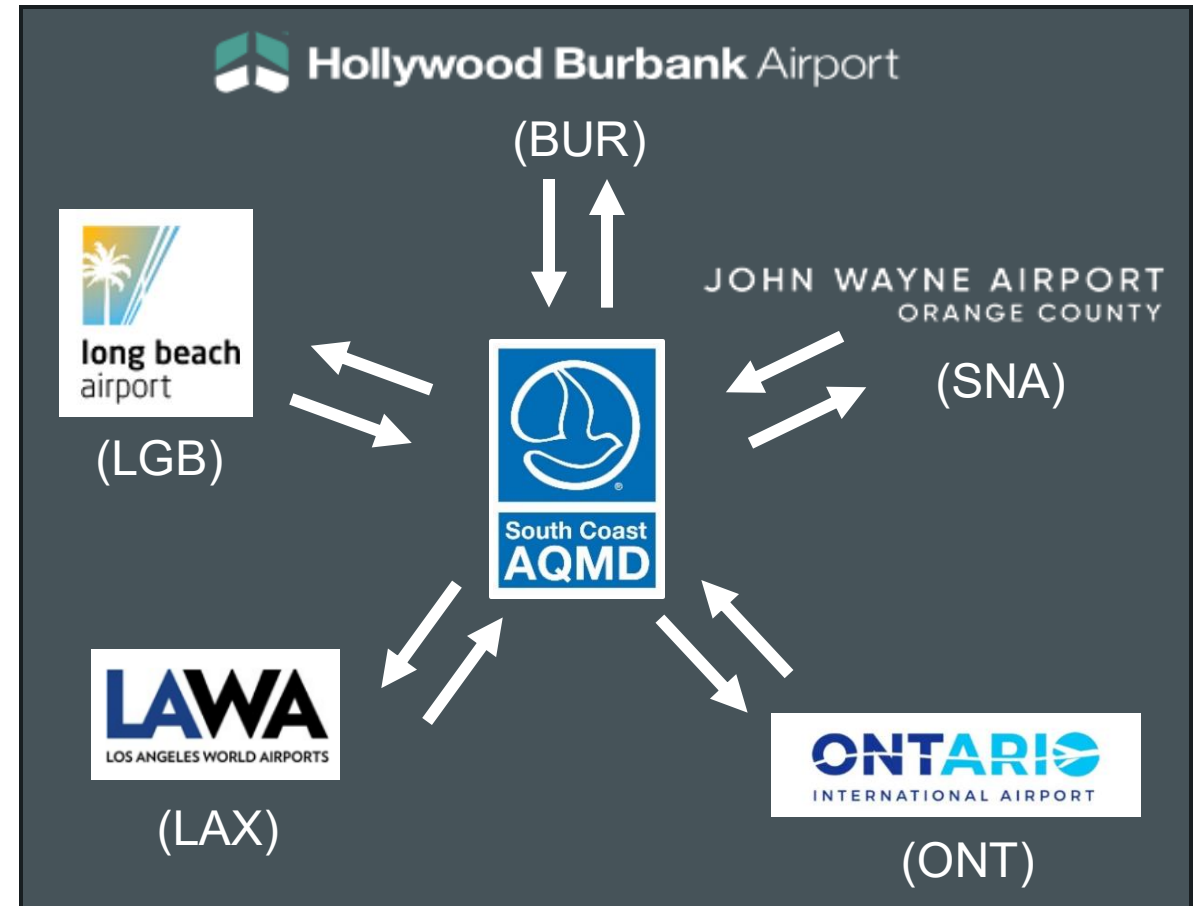
Public Comments



OVERVIEW OF AIRPORT MOU

BACKGROUND

- Five commercial airports signed individual MOUs with South Coast AQMD in 2019
- MOUs contain commitments to reduce non-aircraft emissions
- Performance targets established for milestone years 2023 and 2031
 - Separate emission reduction commitments by South Coast AQMD to U.S. EPA
- Term of MOUs: 2019 through 2032



MOU COMMITMENTS

Commercial Airports

- Meet specified performance targets by specified dates
- Performance targets vary by airport
- Provide data and emissions inventory reports to South Coast AQMD annually

South Coast AQMD

- Quantify SIP creditable emission reductions from implementation of airport MOU commitments
- Reporting to U.S. EPA and public on implementation progress
- Technical analysis and monitoring of MOUs implementation progress

SIP = State Implementation Plan

AIRPORTS' MOU MEASURES



Ground Support
Equipment (GSE) Fleet
Performance¹



Shuttle Bus
Electrification²



Heavy-Duty Vehicle
(HDV) Emission
Reductions³

¹ In all five Airports' MOUs

² In BUR, LAX, and SNA MOUs

³ In LAX and SNA MOUs



LATEST IMPLEMENTATION STATUS: AIRPORTS COMMITMENTS

IMPLEMENTATION STATUS - GSE FLEET AVERAGE EMISSION RATE

Fleet Emission Rate (g/bhp-hr), Performance Targets and Actual Performance

Airport	2023 Performance Target	2024 Fleet Average Emission Rate Performance	2025 Fleet Average Emission Rate Performance	2031 Performance Target
BUR	≤ 1.66	0.80	0.75	≤ 0.74
LAX	≤ 1.8	1.0	0.9	≤ 1.0
LGB	≤ 0.93	0.45	0.38	≤ 0.44
ONT	≤ 2.2	2.4	2.2	≤ 1.0
SNA	≤ 1.7	1.7	1.7	≤ 0.9

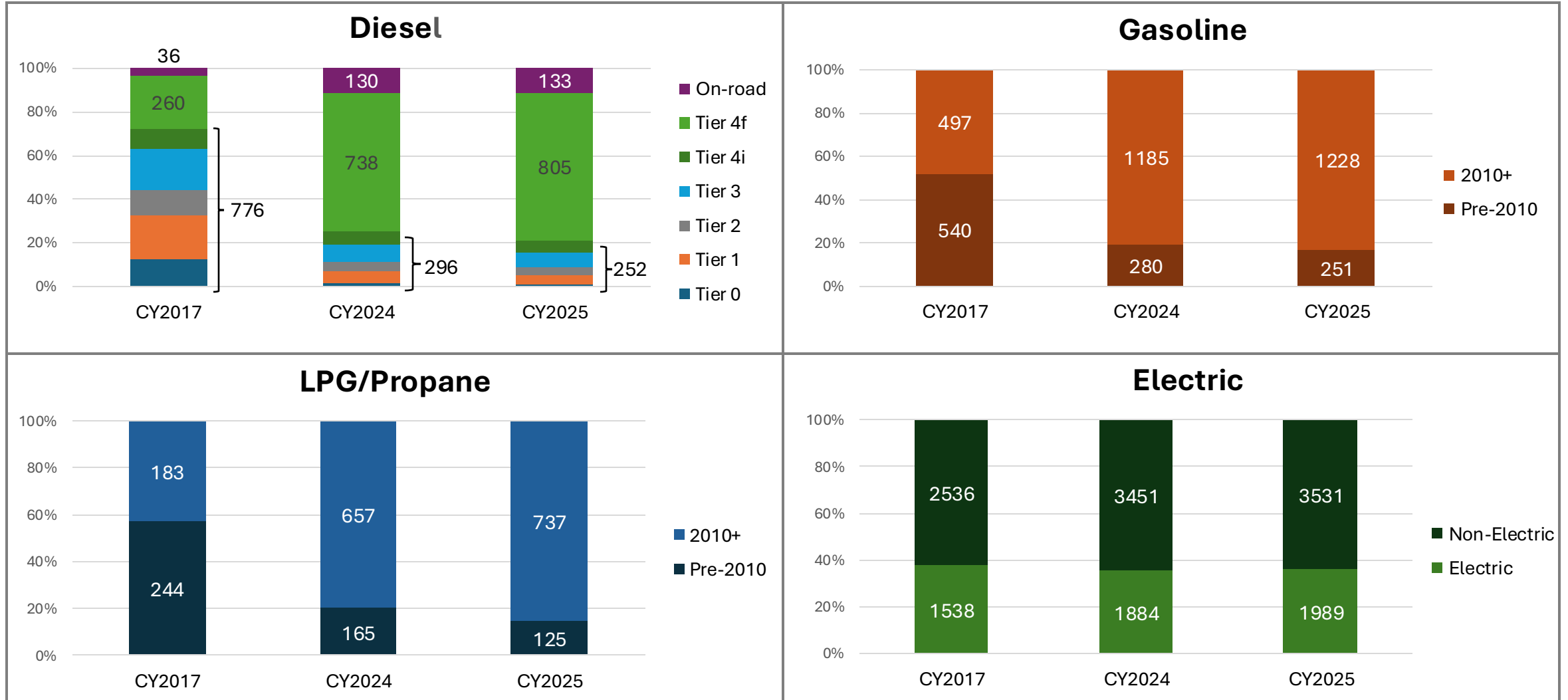
- Table shows airport-specific GSE fleet performance
- Airport-to-Airport performance factors not comparable with each other due to variations in calculation methodology¹

- Meets 2031 target
- Meets 2023 target
- Does not meet 2023 target

¹ Pg. 42 of the Final Staff Report for Facility-Based Mobile Source Measure for Commercial Airports (December 2019): [Link here](#)

Overall Result: Cleaner GSE Fleets in South Coast Air Basin

Fleet Composition for All Airports



IMPLEMENTATION STATUS – SHUTTLE BUSES

% ZE Buses in Fleet, Commitments, and Actual Achieved % ZE Fleet

Airport	MOU Commitment for 2023	% of Fleet ZE in 2024 ¹	% of Fleet ZE in 2025 ²	MOU Commitment for 2031
LAX	20% of fleet ZE	50%	51%	100% of fleet ZE
BUR	50% of fleet ZE	0%	50%	100% of Fleet ZE
SNA	50% of fleet ZE	0%	17%	80% of Fleet ZE

¹ LAX operated 40 buses (20 electric, 20 non-ZE).

BUR operated 9 non-ZE buses.

SNA operated total of 11 buses at various times - 5 were ZE but could not be operated routinely.

² LAX operated 39 buses (20 electric, 19 non-ZE).

BUR operated 8 buses (4 electric, 4 non-ZE).

SNA operated total of 13 buses at various times. End of 2025, SNA operated 6 buses (1 electric, 5 non-ZE).

 Meets 2023 target
 Does not meet 2023 target

IMPLEMENTATION STATUS - HEAVY-DUTY VEHICLES

Airport	MOU Commitment ¹	2024 Progress	2025 Progress
LAX	Distribute up to \$500,000 to incentivize adoption of zero or near-zero emission vehicles with vehicle weight $\geq 14,000$ lbs by December 31, 2021	\$175,000 remaining² and directed towards updated incentive program in 2023 Updated incentive program to use remaining \$175,000 not yet established	Reauthorized <i>LAX Alternative Fuel Vehicle Program</i> with \$175K in remaining funds Updated program³ limited to incentivizing zero emission vehicles only
SNA	Eliminate routine commercial passenger jet fuel deliveries by truck through the installation of a fuel pipeline by January 1, 2023	Jet fuel pipeline became operational in October 2019; supplied majority of routine fuel deliveries via pipeline	Transitioned all routine fuel deliveries to delivery through pipeline in March 2025

¹ LAX and SNA included measures aimed at lowering emissions from heavy-duty vehicle traffic at airports

² \$325,000 supported deployment of 15 vehicles at LAX by December 31, 2021

³ LAX Zero-Emission Heavy-Duty Vehicle Incentive Program

⁴ November 18, 2025 Working Group Meeting stated SNA met 2023 target; however, in 2023 not all routine fuel truck deliveries were replaced by pipeline

https://www.aqmd.gov/docs/default-source/planning/fbmsm-docs/airport-mou_2025-wgm.pdf?sfvrsn=f5f46b7e_2

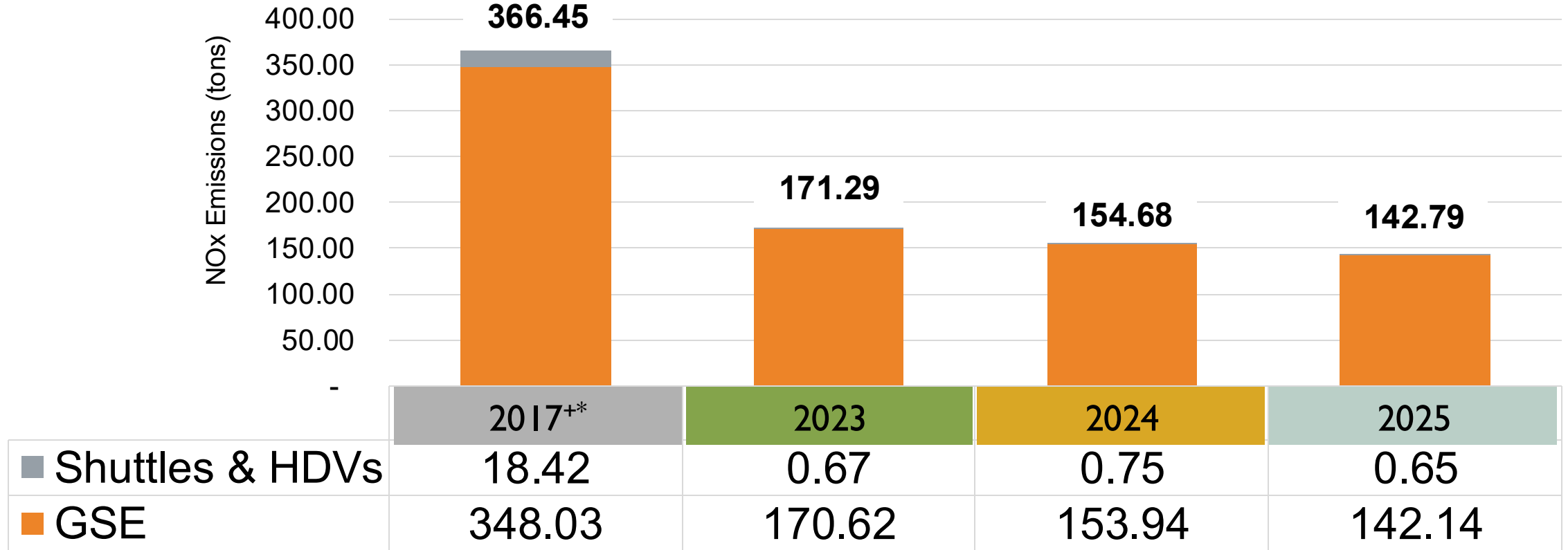
 Meets 2023 Target
 Does not meet target



NOX EMISSIONS AND REDUCTIONS

NOX EMISSIONS INVENTORY

Emissions Inventory for Equipment Covered by MOUs

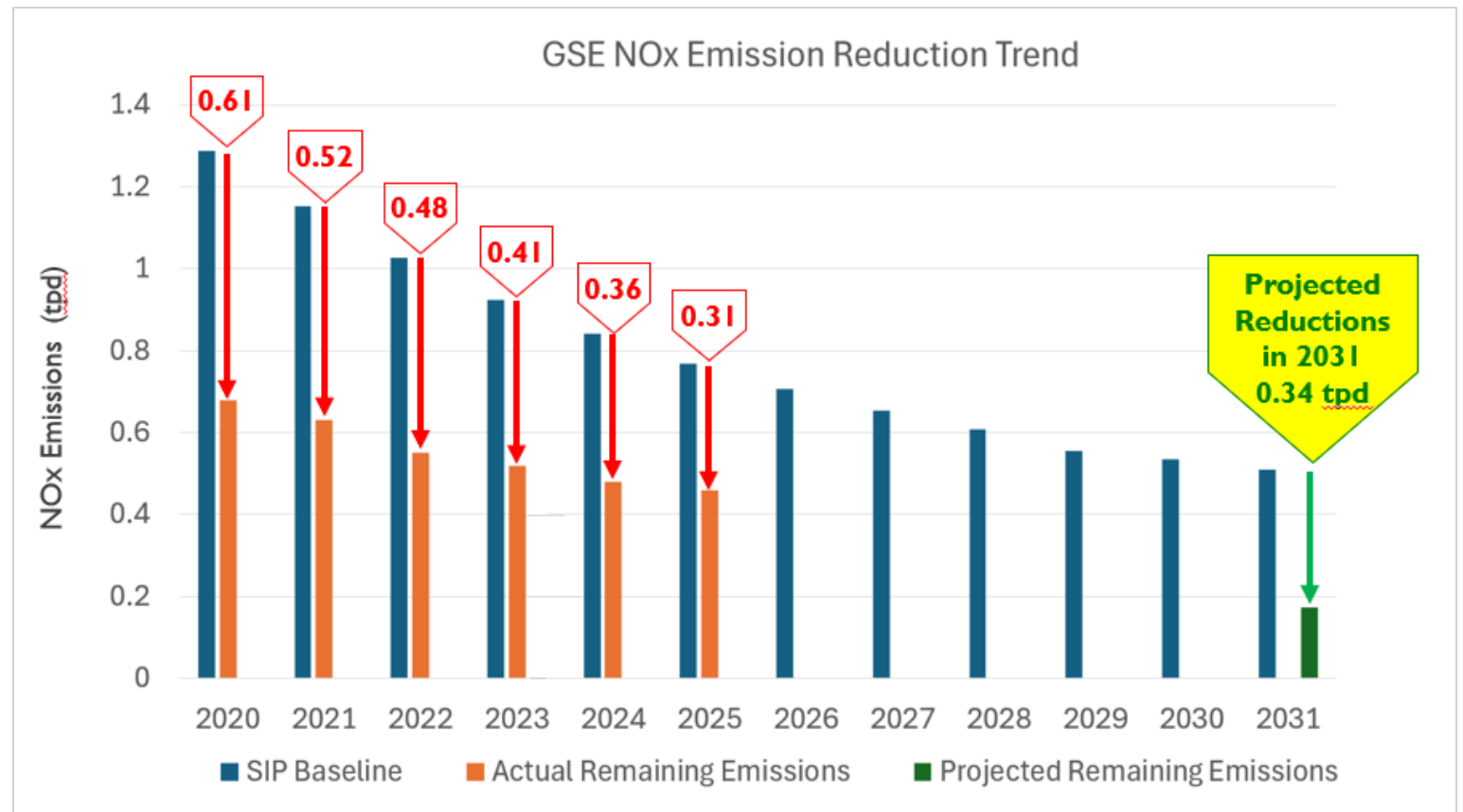


* 2017 non-GSE emissions baseline were calculated using airport reported emissions from the 2020 progress report before accounting for reductions from implementation of shuttle and HDV measures

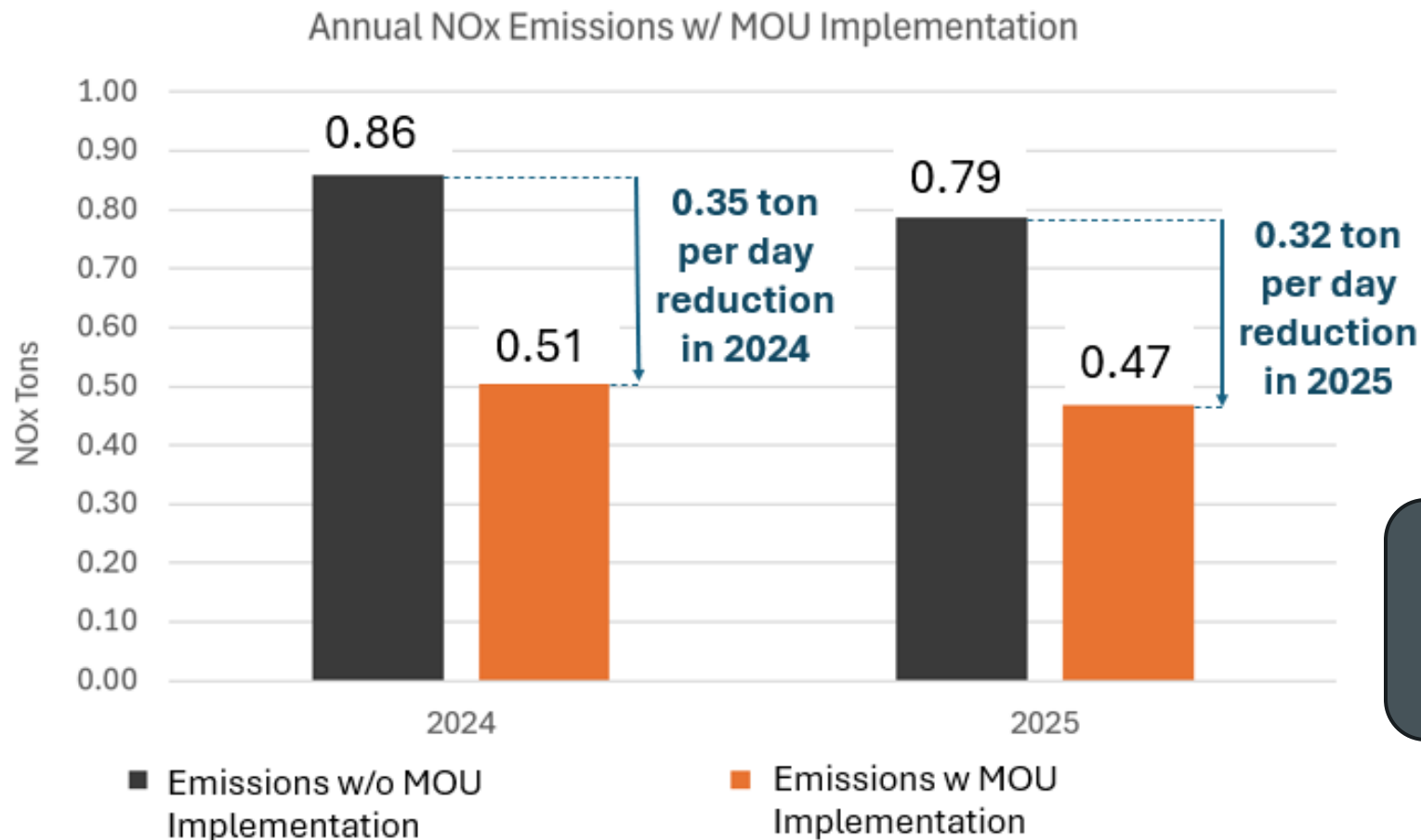
* GSE emissions reflect latest revised emission inventory reported by each airport and may differ from original emission inventory reported in the 2019 Airport MOUs Staff Report

GSE NOX REDUCTION TREND

- As of 2025:
 - All airports met their 2023 average emission rate target
 - Two airports did not meet target in 2023
 - **Emission reductions** continued to decline and fell below **2031 projected emission reductions**
- **Actual remaining emissions** may continue to decrease at slower rate than declining **SIP baseline** resulting in further decline in **emissions reductions**



NO_x REDUCTION PROGRESS FOR ALL MOU MEASURES



SIP target
reduction is 0.37
ton per day in
2031

AIRPORT ACTIONS – MEETING GSE MEASURES COMMITMENTS

LAX Zero-Emission GSE Policy

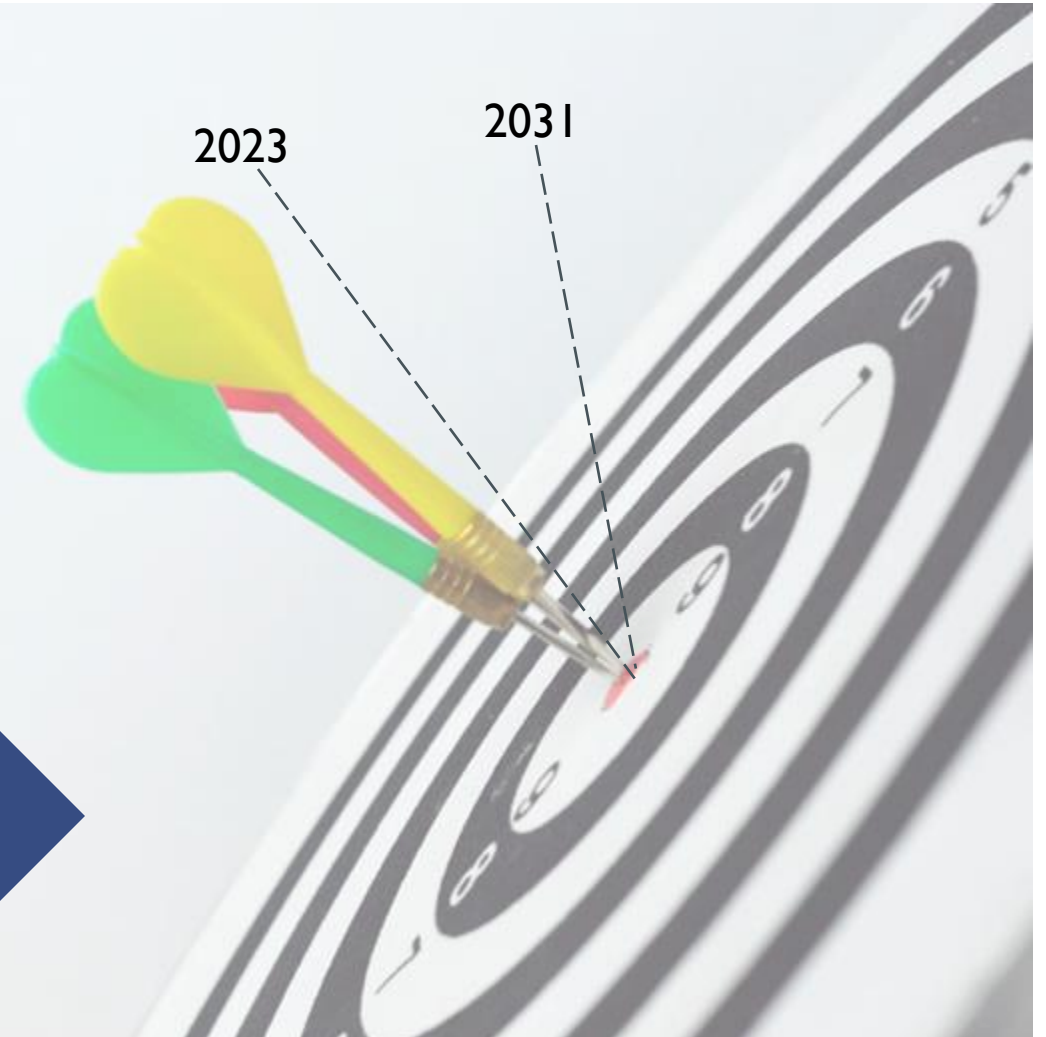
- Mandates ZE phase-in to 100% by 2033

SNA Lease Amendments

- Incorporates MOU emission requirements

ONT Motor Vehicle Operating Permit (MVOP) Program

- Requires tenants to meet MOU targets



ADDRESSING CHALLENGES

LAX - Heavy-duty trucks

- Relaunched incentive program to distribute remaining \$175,000 in 2026

BUR - Shuttle buses

- New operator contracts contain requirements aligned with MOU commitments

SNA – Shuttle buses

- Ongoing challenges with SNA's electric bus operation
 - Manufacturer bankruptcies/no technical support
 - Limited replacement options

NEXT STEPS FOR SOUTH COAST AQMD

- 
- Mobile Source Committee Meeting **October 16, 2026**

- 
- Release South Coast AQMD's CY2021-2023 Progress Report and submit to U.S.EPA

- 
- Release South Coast AQMD's CY2024-2025 Progress Report and submit to U.S. EPA

STAFF CONTACTS

SOUTH COAST AQMD AIRPORT MOUS TEAM

Daniel C. Hernandez
Air Quality Specialist
909-396-2126

dchernandez@aqmd.gov

Ricky Lai
Air Quality Specialist
909-396-2634

rlai@aqmd.gov

Melissa Gamoning
Program Supervisor
909-396-3115

mgamoning@aqmd.gov

Elaine Shen
Planning & Rules Manager
909-396-2715

eshen@aqmd.gov

For more information, visit <http://www.aqmd.gov/airportsmous>.