



# Long Beach Airport Update

## Air Quality Improvement Program

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July 18, 2019

# LGB AQIP Update Agenda

1. 2017 and 2023 Business-as-Usual (BAU) Inventory
2. Measures and Initiatives / Emission Benefits
  - GSE Policy
  - Clean Construction Policy
  - Airport Clean Fleet Policy
  - EV Charger and Electrification Program
  - LEED Policy
  - Renewable Energy Initiatives
  - TNC Initiative
3. Approval Process

# 2017 and 2023 Business-As-Usual (BAU) Inventories

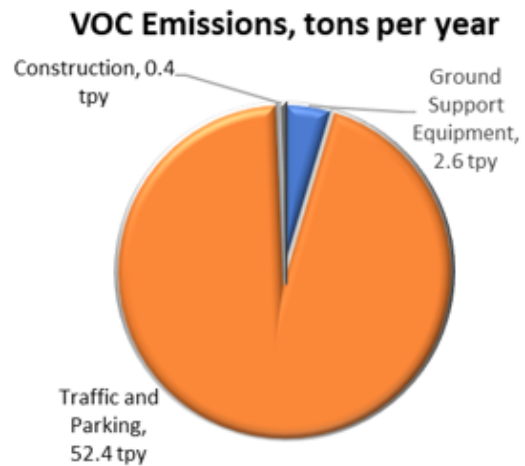
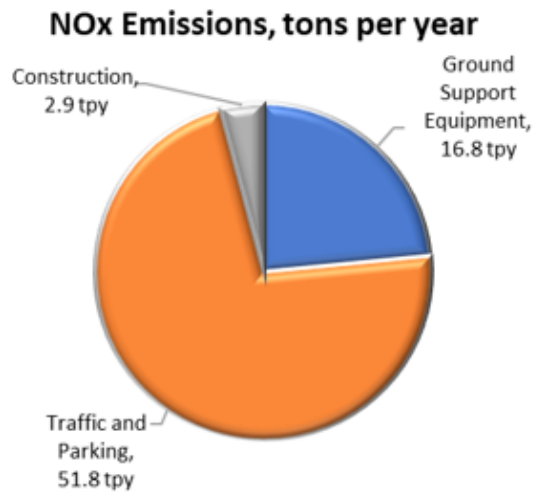


<b>LGB 2017 AQIP Emissions Inventory</b>		
Airport Emissions Source	Pollutant Emissions, tons per year	
	VOC	NOx
<b>Ground Support Equipment Total</b>	<b>2.55</b>	<b>16.78</b>
<b>Traffic and Parking</b>		
Regional Traffic	50.42	49.55
On-Airport Roadways & Parking Lots	1.99	2.25
Paved Road Dust Total	--	--
<b>Traffic and Parking Total</b>	<b>52.41</b>	<b>51.8</b>
<b>Construction Total</b>	<b>0.36</b>	<b>2.91</b>
<b>GRAND TOTAL</b>	<b>55.32</b>	<b>71.49</b>

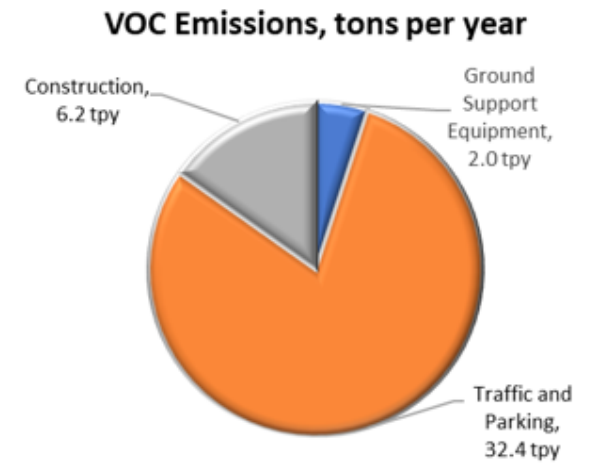
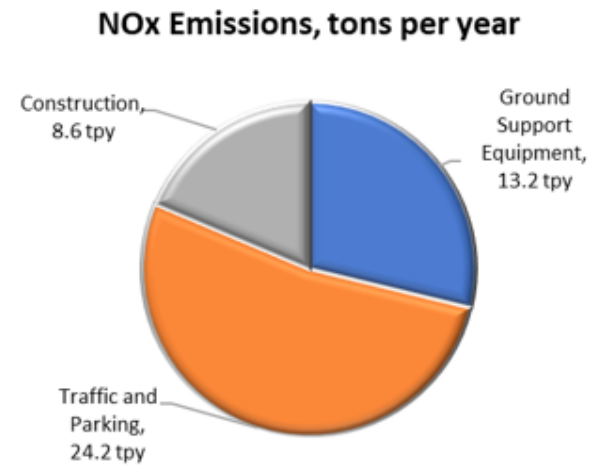
<b>LGB 2023 AQIP BAU Emissions Inventory</b>		
Airport Emissions Source	Pollutant Emissions, tons per year	
	VOC	NOx
<b>Ground Support Equipment Total</b>	<b>2.04</b>	<b>13.23</b>
<b>Traffic and Parking</b>		
Regional Traffic	31.14	23.16
On-Airport Roadways & Parking Lots	1.23	1.04
Paved Road Dust Total	--	--
<b>Traffic and Parking Total</b>	<b>32.37</b>	<b>24.2</b>
<b>Construction Total</b>	<b>6.17</b>	<b>8.59</b>
<b>GRAND TOTAL</b>	<b>43.27</b>	<b>59.9</b>

# 2017 and 2023 Business-As-Usual Inventories (cont.)

### LGB 2017 AQIP Emissions Inventory



### LGB 2023 BAU AQIP Emissions Inventory



# Policy Under Consideration: Electrification of GSE

**Baseline Year end 2017:** LGB GSE Fleet-Wide Average Factor of 1.5 g/bhp-hr

- Modeled after LAX approach
- Policy would require GSE Operators to reduce NO<sub>x</sub>+HC emissions to a fleet-wide average
- Enforcement: Lease and license requirements
- Airport to monitor compliance, require annual data collection, develop reporting procedures, and calculate emissions



## **Target Goals**

- 2023: LGB GSE Fleet-Wide Average Factor of 0.93 g/bhp-hr
- 2031: LGB GSE Fleet-Wide Average Factor of 0.44 g/bhp-hr

# Policy Under Consideration: Clean Construction



- LGB AIP Projects would require contractors to use the cleanest construction equipment on the market, and recycle construction and demolition debris. Exemptions may be considered for projects with limited duration and scope.
- LGB's Clean Construction Program seeks to ensure contractors follow sustainable construction practices such as using low-emission equipment, recycling construction and demolition waste, and minimizing non-essential trips through better schedule coordination.

# Policy Under Consideration: Clean Construction



**Would require** Tier 4 Off-road Equip and 2010 or newer haul trucks.

- On-road medium-duty and larger diesel-powered trucks with a gross vehicle weight rating of at least 19,000 pounds shall, at a minimum, comply with USEPA 2010 on-road emissions heavy-duty diesel engine emissions standards. Contractor requirements to utilize such on-road haul trucks or the next cleanest vehicle.
- All self-propelled off-road diesel-powered construction equipment 25 horsepower or greater shall meet, at a minimum, USEPA/CARB Tier 4 off-road emissions standards. Contractor requirements to utilize Tier 4 (final) equipment or next cleanest equipment available.
- The on-road haul truck and off-road construction equipment requirements shall apply unless certain circumstances exist and the Contractor provides a written finding consistent with project contract requirements.

**Target Goal:** 100% compliance for Long Beach Airport CIP construction projects by end of 2023.

# Policy Under Consideration: Airport – Owned Clean Fleet



**Baseline Year End 2017:** On-Road Fleet (0.07 tpy NOx), Service Trucks account for 0.06 tpy Nox

**Policy Under Development:** Beginning Fall 2019, the Airport is exploring if it can purchase commercially available passenger car, light-duty truck, or medium-duty vehicles that are certified at ultra-low-emission standards (SULEV) or cleaner when adding or replacing a vehicle in its fleet. Police and fire vehicles will not be subject to the policy. The intent of this policy is to secure emission reductions in excess of SCAQMD Rule 1191.

**Target Goal:** Convert the Airport-owned fleet (excluding police and fire vehicles) to vehicles that are certified at super-ultra-low-emission standards (SULEV) or cleaner by December, 2023.



# Policy Under Consideration: EV Chargers



**Baseline Year End 2017:** Six (6) EV Charging Stations for 3,447 Public Parking Spaces ( $\approx 0.2\%$  of spaces)

## **Action Plan Under Development:**

- Conduct pilot study to identify installation costs of EV charging stations.
- Develop Electric Vehicle Supply Equipment (EVSE) master plan including a building electrical capacity assessment and identify roles and responsibilities related to purchasing, installing, maintaining and replacing EV charging stations.
- Explore grant funding to support EV infrastructure.
- Collaborate with external stakeholders in a regional response to EV infrastructure challenges.

**Target Goals:** provide EV charging stations in public parking lots – potentially up to 2% of spaces by 2023 (a 10-fold increase in EV charging spaces from baseline), expand as necessary to accommodate demand in 2031.

# Policy Under Consideration: LEED Design



LGB is committed to advancing sustainable design for its airport improvements. LGB is developing a Sustainable Design and Construction Program, and exploring committing to LEED Silver or better for Phase 2 of LGB's Terminal Improvements Project.

## Possible Terminal Improvement Project Requirements:

- LEED Silver Policy will mandate energy efficient design, fundamental commissioning of building energy systems and optimization of overall energy performance.
- LEED Silver will be required as part of sustainable design construction scoring criteria in future procurement process
- LEED Sustainability Review Committee will be developed upon RFP Award to support LEED policy implementation and to monitor enforcement

# Policy Under Consideration: Renewable Energy Initiatives



## Action Plan:

To provide additional clean energy to Long Beach's power grid, LGB has explored the viability of installing additional photovoltaic solar on top of parking structures. The report consists of a comprehensive siting analysis, study and application of FAA guidelines to the selected sites, and an evaluation of funding opportunities and implementation options for the proposed solar power systems.

## **Status:**

- Complete solar power system design by the end of 2019.
- Complete installation and begin operation of the solar power system by the end of 2020.

# Policy Under Consideration: TNC Initiative

## Action Plan Under Development:

- Rematching TNCs (Uber, Lyft...etc) that departing passengers use to arrive at the Airport with arriving passengers looking to leave the Airport in a TNC
- Unmatched TNC trips represent 3.5 tpy NO<sub>x</sub> in 2023, and represent 2.2 tpy NO<sub>x</sub> 2031

# Long Beach Airport Process of Approval



## Public Comment

- SCAQMD Working Group Meetings
- Presentation at Airport Advisory Commission – Thursday, July 18 at 4:00 p.m.

## Adoption of AQIP/MOU

- Presenting to Long Beach City Council in October 2019

**THANK YOU**