2005 vs. 2016

Overall Container Volumes up 1%
Containers (TEUs) per ship up 46%
Container ship calls down 31%
All ship arrivals down 25%
2016 Air Emissions Inventory

- **Diesel Particulate Matter**: Down 88%
- **Nitrogen Oxides**: Down 56%
- **Sulfur Oxides**: Down 97%
- **Greenhouse Gases**: Down 22%

*Compared to 2005 Levels*

Port of LONG BEACH
Clean Air Goals

- Diesel Particulate Matter: 2016: 88%, 2023: 77%
- Nitrogen Oxides: 2016: 56%, 2023: 93%
- Sulfur Oxides: 2016: 97%
2016

Middle Harbor “go live”
More zero-emissions equipment
Fewer, bigger ships
Emissions methodology updated for OGVs
Moving Forward

2017 Clean Air Action Plan Update
Striving to lower NOx Levels
State and Federal Regulations
Technology Advancement
www.polb.com/emissions