

# 2010 Clean Air Plan

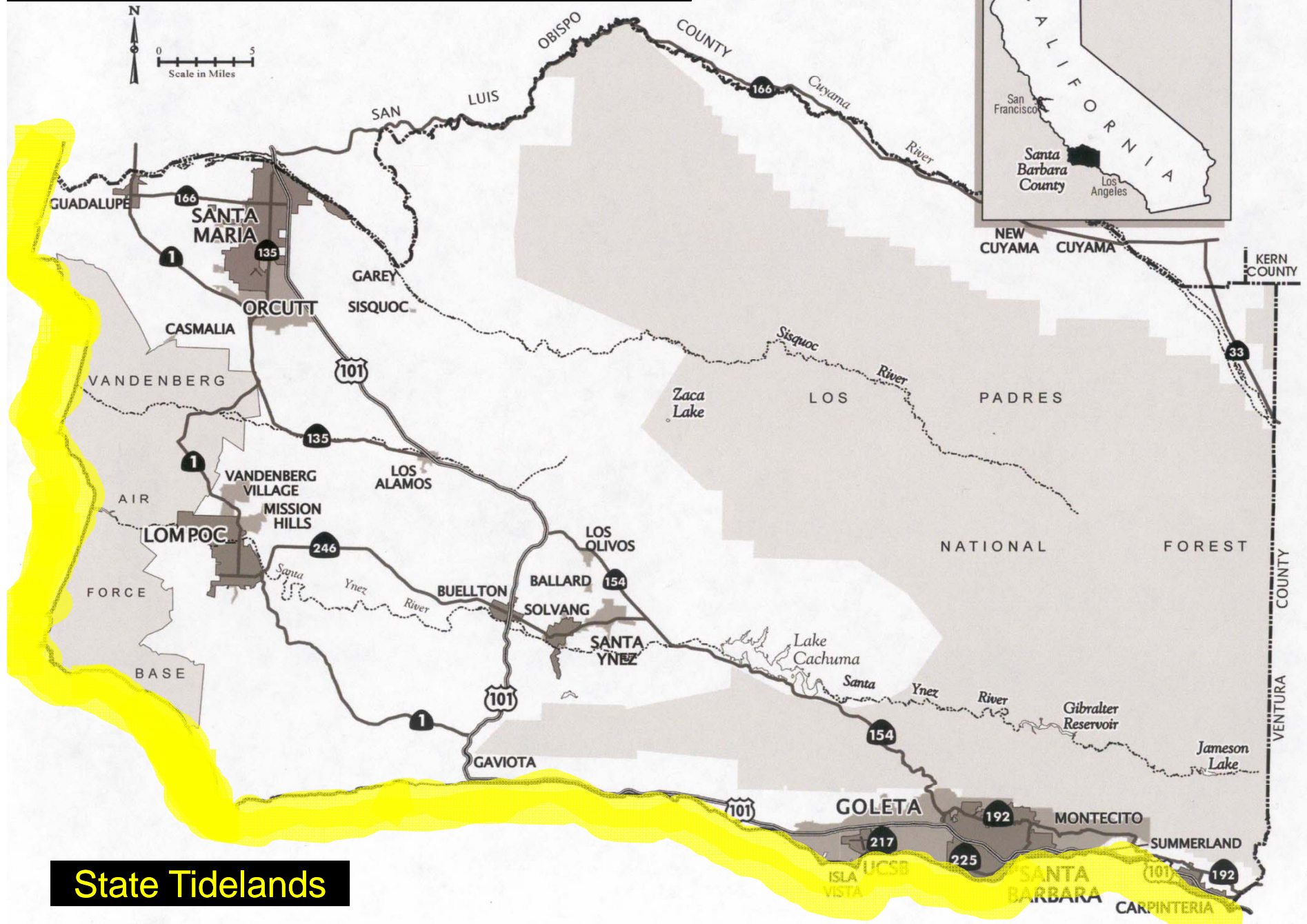
## Chapter 3: Emission Inventory

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# Purpose of Emission Inventory in 2010 Plan

- Estimate Emissions From Various Source Types
  - Reactive Organic Compounds (ROC)
  - Oxides of Nitrogen (NO<sub>x</sub>)
- Baseline to Evaluate Control Measures (Chapter 4)
- Forecast Future Emissions (Chapter 6)
  - Baseline of 2007
  - Activity Indicators
  - Control Factors

# Santa Barbara County Air Basin



**State Tidelands**



# Annual/Planning Inventories

- 2007 Base Year Annual Inventory
  - Includes All Sources of Emissions
  - Units of tons per year
- 2007 Planning Inventory
  - Excludes Natural Sources
  - Converted to tons per day

# Emission Inventory Groupings

- **Stationary Sources**
  - Generally Permitted sources
- **Area-Wide Sources**
  - Unpermitted Sources
- **Mobile (On-road and Other Mobile)**
  - Cars, trucks, etc. and off-road mobile sources
- **Natural Sources**
  - Seeps, wildfires, biogenics (vegetation)

# Sources of Emissions - Subcategories

- **Stationary Sources** (Fuel Combustion, Waste Disposal, Cleaning and Surface Coatings, Petroleum Production and Marketing, Industrial Processes)
- **Area-Wide Sources** (Solvent Evaporation, Miscellaneous)
- **Mobile Sources** (On-Road, Other Mobile)
- **Natural Sources** (Seeps, Wildfires and Biogenics)

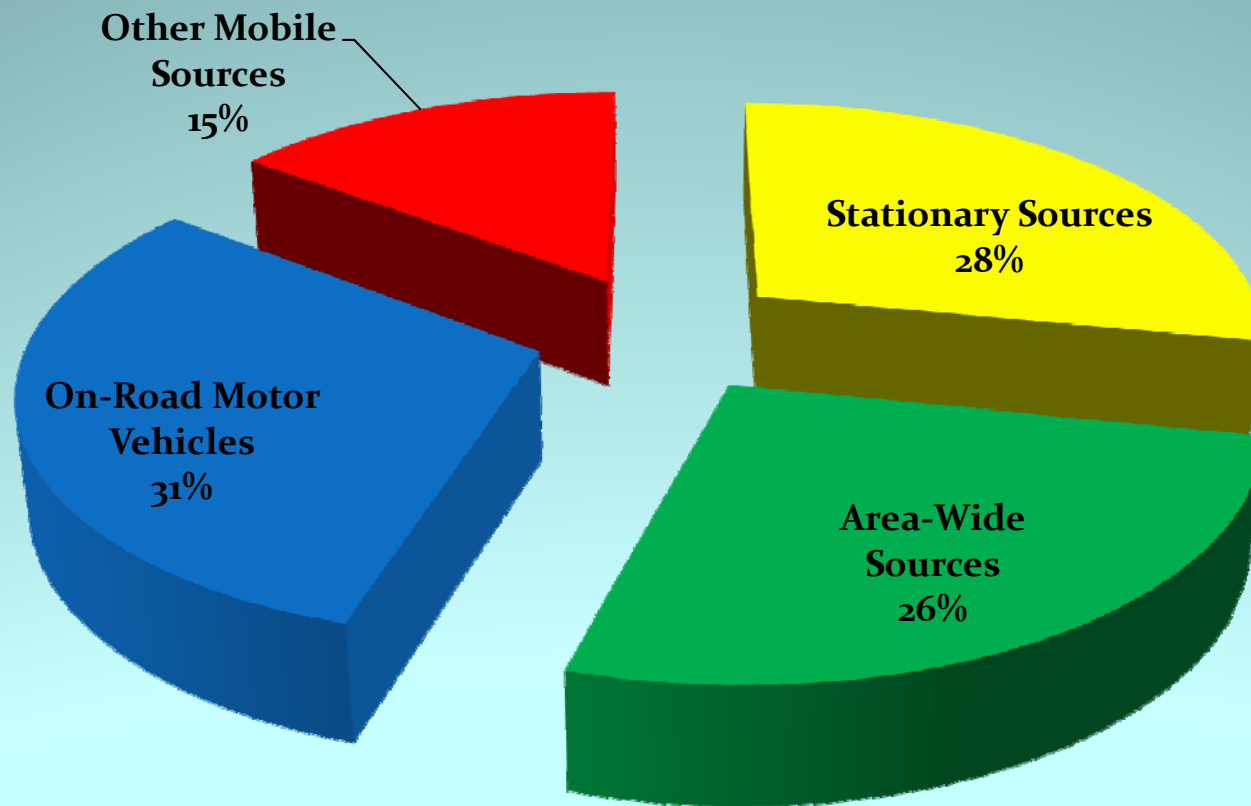
# Onshore Planning Emissions

## ROC and NOx

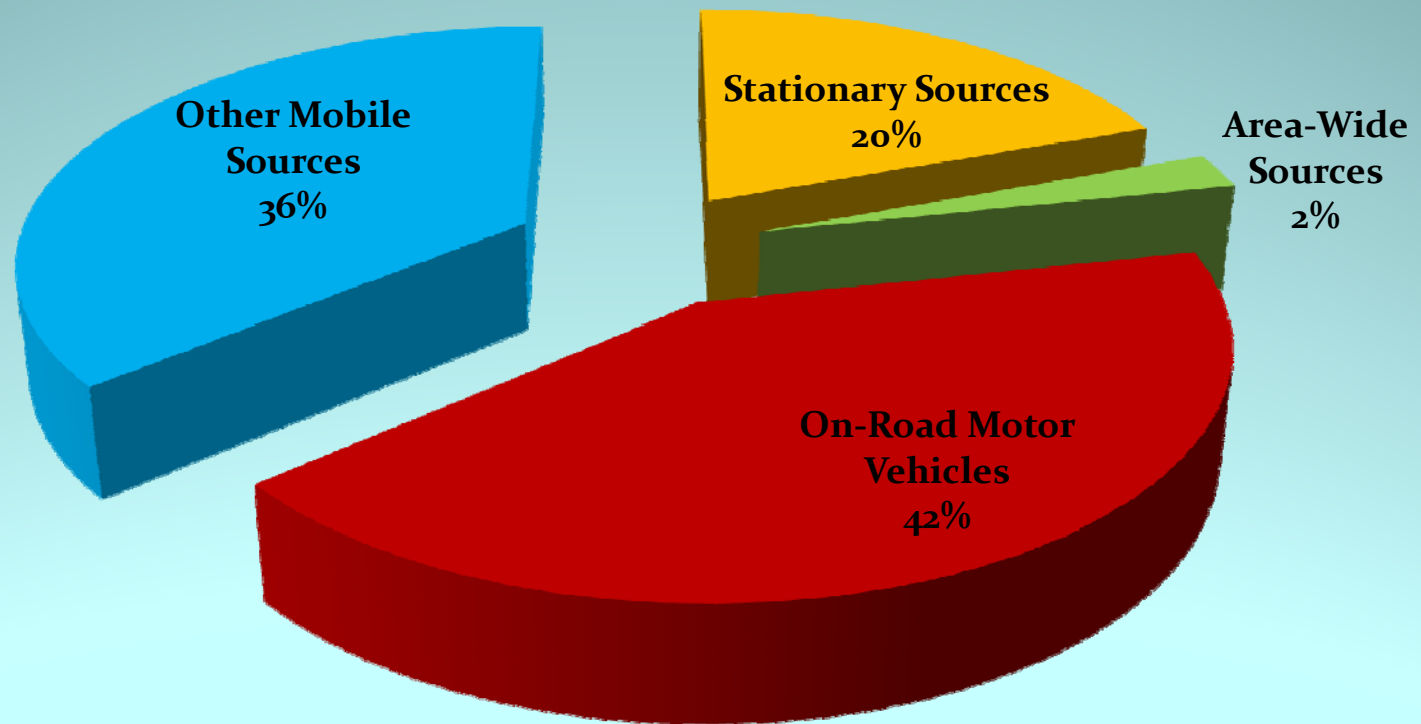
	ROC (tpd)	NOx (tpd)
Stationary Sources	8.85	7.60
Area-Wide Sources	8.36	0.91
On-Road Mobile Sources	9.66	16.54
Other Mobile Sources	4.64	14.21
<b>Total</b>	<b>31.51</b>	<b>39.26</b>



# Onshore Planning ROC Emissions



# Onshore Planning NOx Emissions

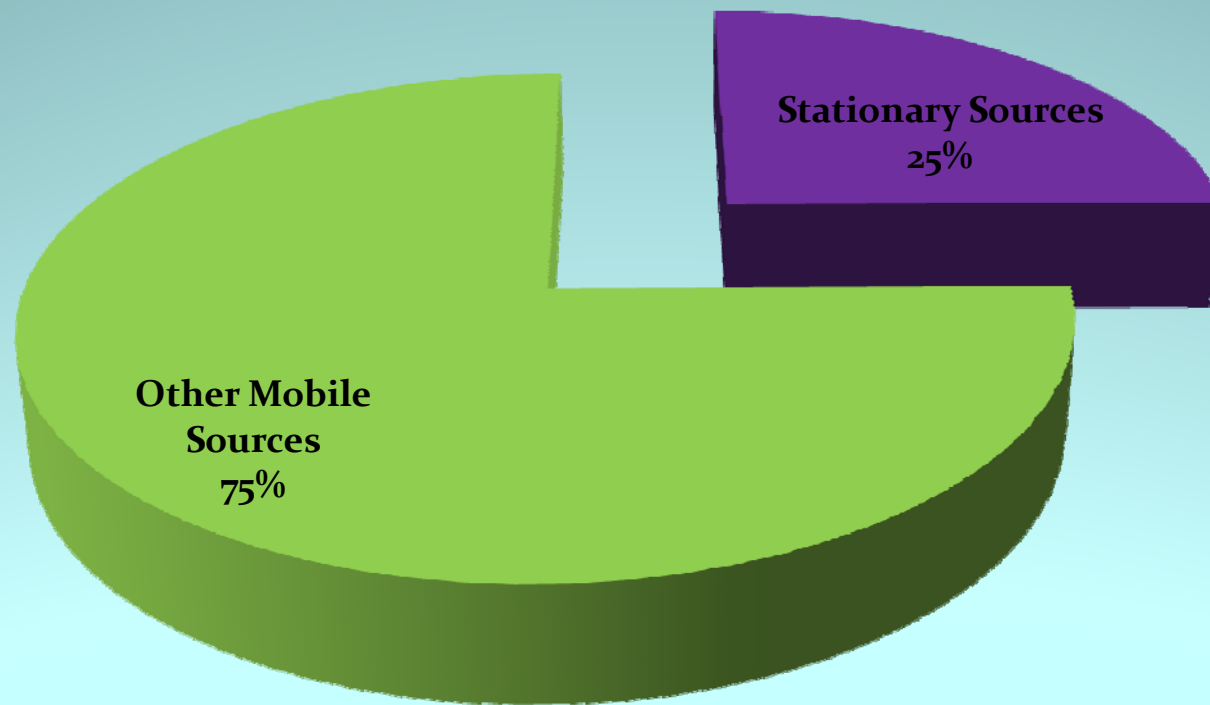


# OCS Planning Emissions

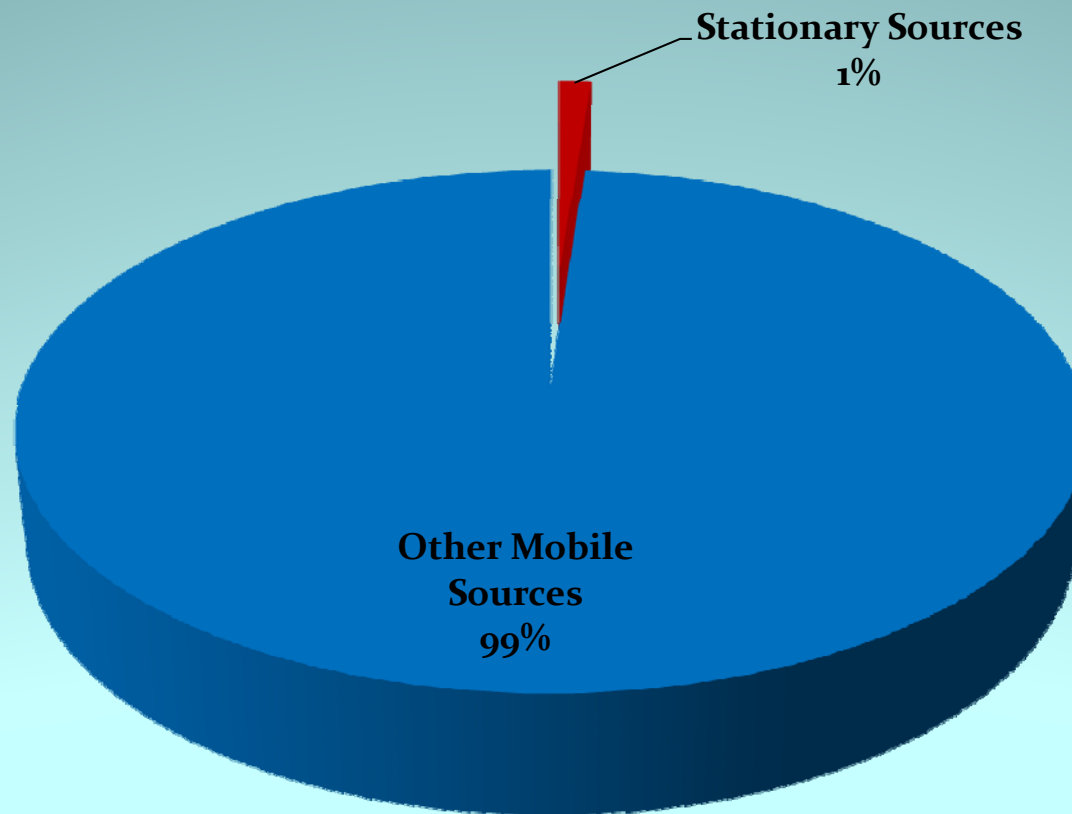
## ROC and NOx

	ROC (tpd)	NOx (tpd)
Stationary Sources	0.83	0.58
Other Mobile Sources	2.51	49.36
<b>Total</b>	<b>3.34</b>	<b>49.94</b>

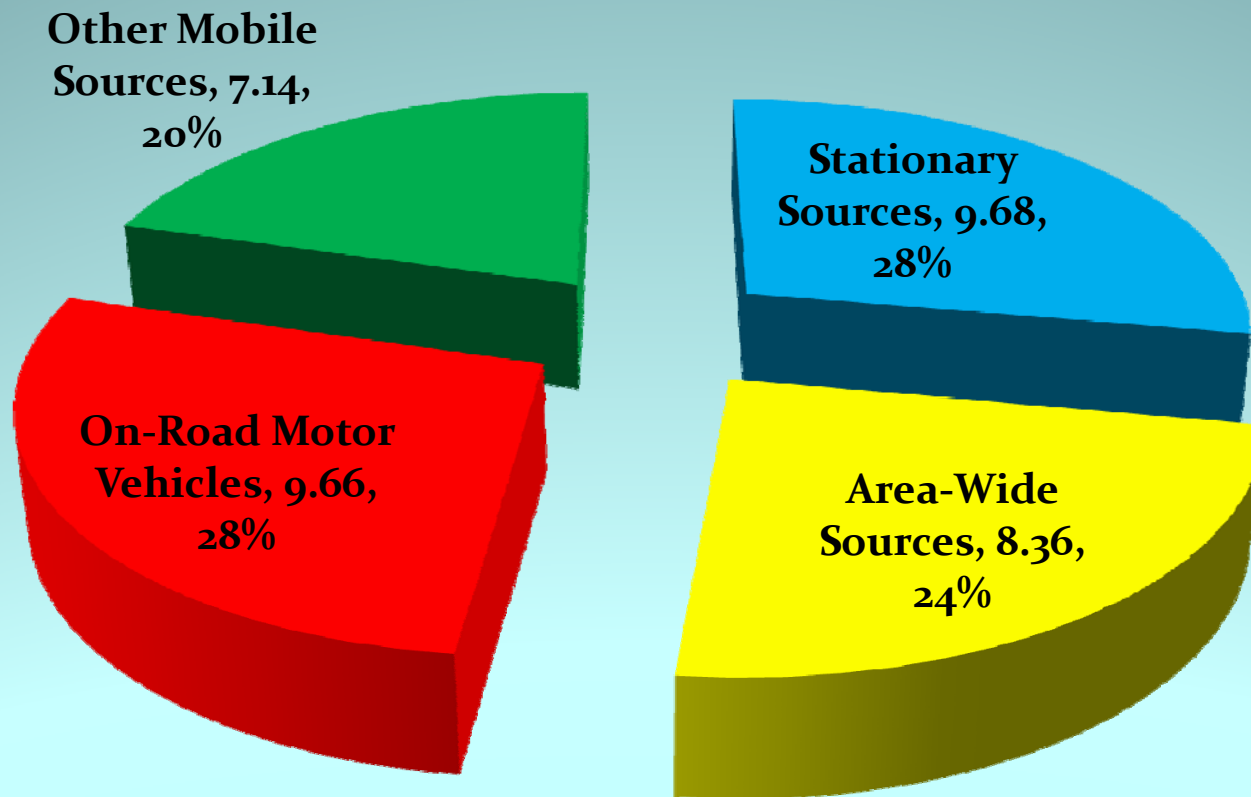
# OCS Planning ROC Emissions



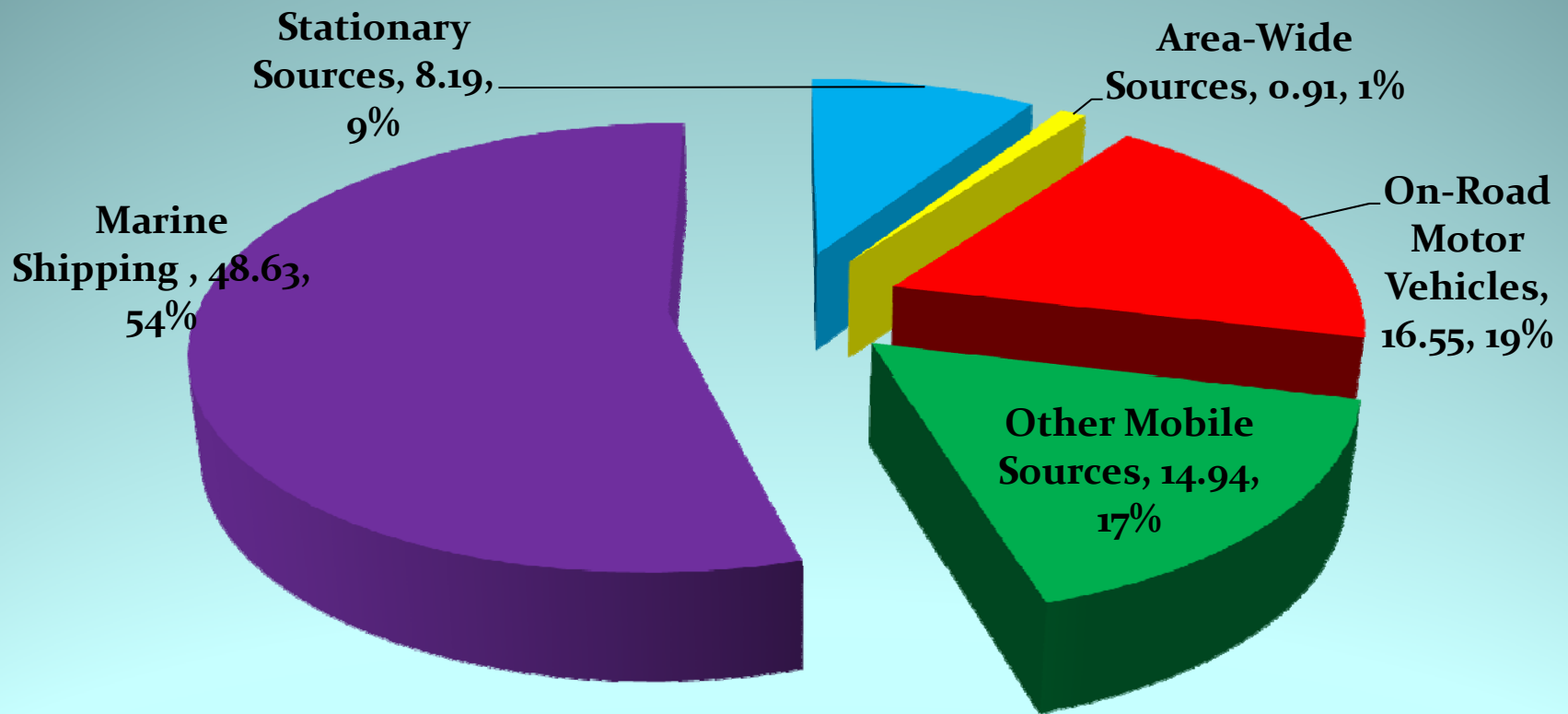
# OCS Planning NOx Emissions



# Combined OCS and Onshore Inventory Planning ROC Emissions



# Combined OCS and Onshore Inventory Planning NOx Emissions



# Natural Sources

- Excluded from Planning Inventory
  - Biogenic (vegetation)
  - Geogenic (seeps)
  - Wildfires
  - 47,379 tons per year ROC = 80% of onshore total
    - 48% biogenics (vegetation) – 22,533 tpy
    - 38% wildfires - 18,060 tpy
    - 14% seeps – 6,786 tpy
- Wildfire Emissions 2007 - Zaca Fire (240,000 acres)
- Wildfire Emission zero in 2007 Plan (2002)



# Marine Shipping Routes

