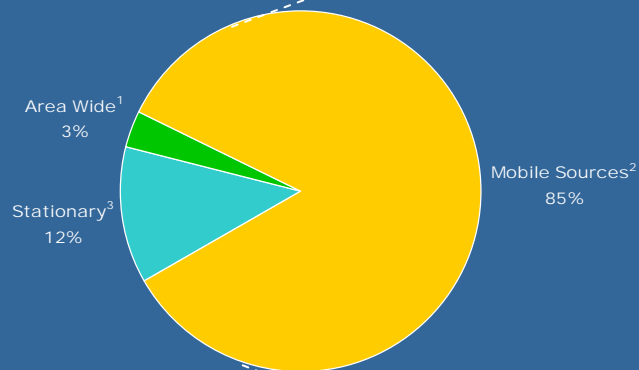




Bay Area NOx Emissions

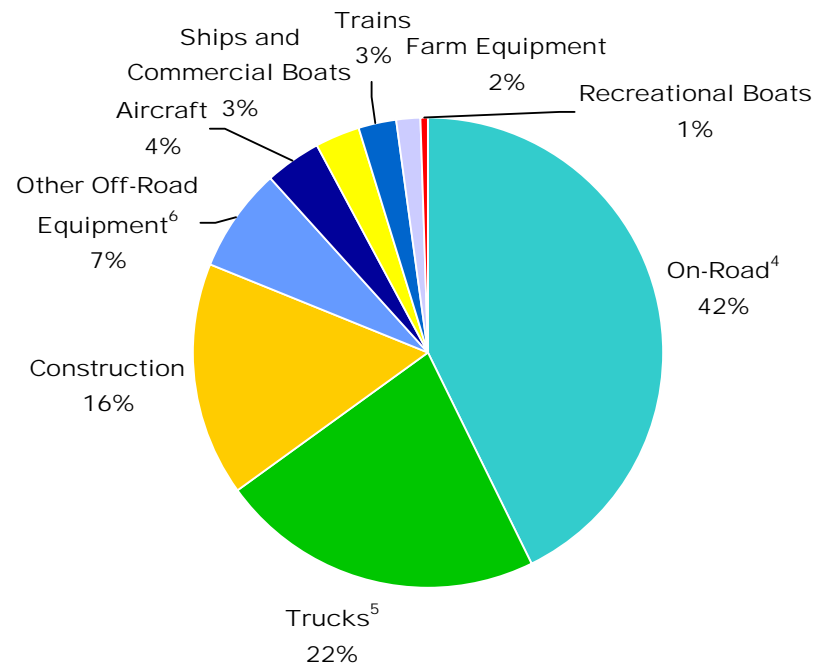
Bay Area NOx Emissions

560 Total Tons Per Day



Mobile Source NOx Emissions

472 Total Tons Per Day



Notes:

- 1) Includes all sources of dust and several burning processes
- 2) Includes vehicles, trucks, marine vessels, trains, aircraft, and other off-road equipment
- 3) Includes fuel combustion activities, waste disposal, cleaning and surface coatings, petroleum production, and industrial processes
- 4) Includes light and medium duty passenger and commercial cars and trucks, and buses
- 5) Includes Medium Heavy and Heavy Heavy Diesel trucks
- 6) Includes industrial equipment such as forklifts and cargo handling equipment, commercial equipment such as generator sets, and lawn and garden equipment

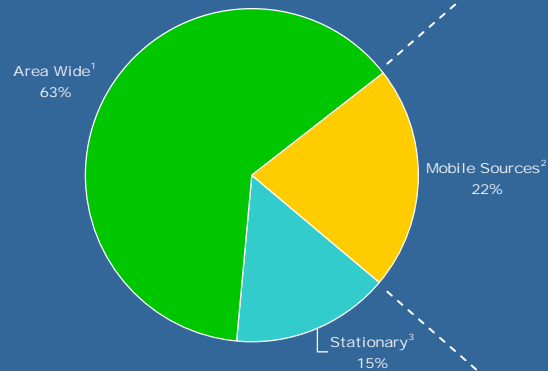
Source: California Air Resources Board 2004 Estimated Annual Average Emissions – <http://www.arb.ca.gov/aqd/almanac/almanac.htm>



Bay Area PM 2.5 Emissions

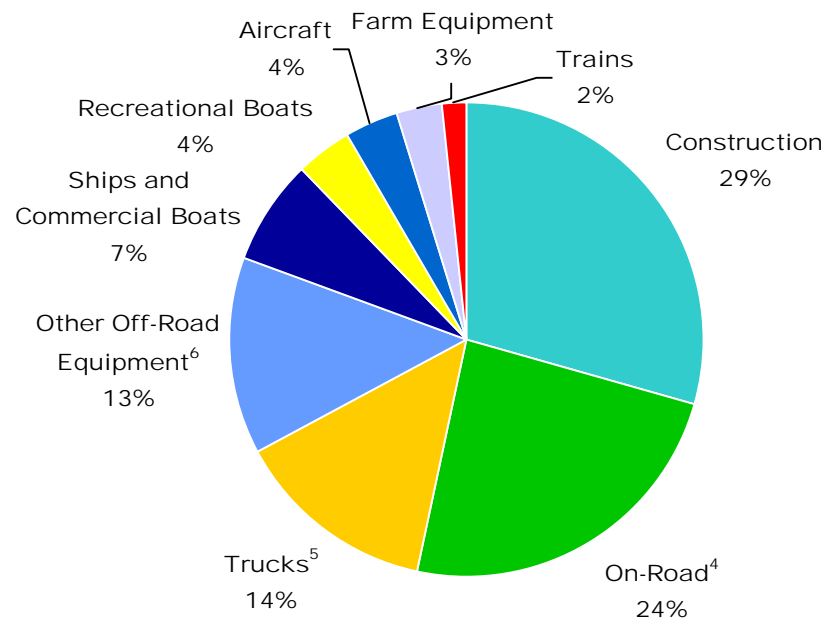
Bay Area PM 2.5 Emissions

78 Total Tons Per Day



Mobile Source PM 2.5 Emissions

17 Total Tons Per Day



Notes:

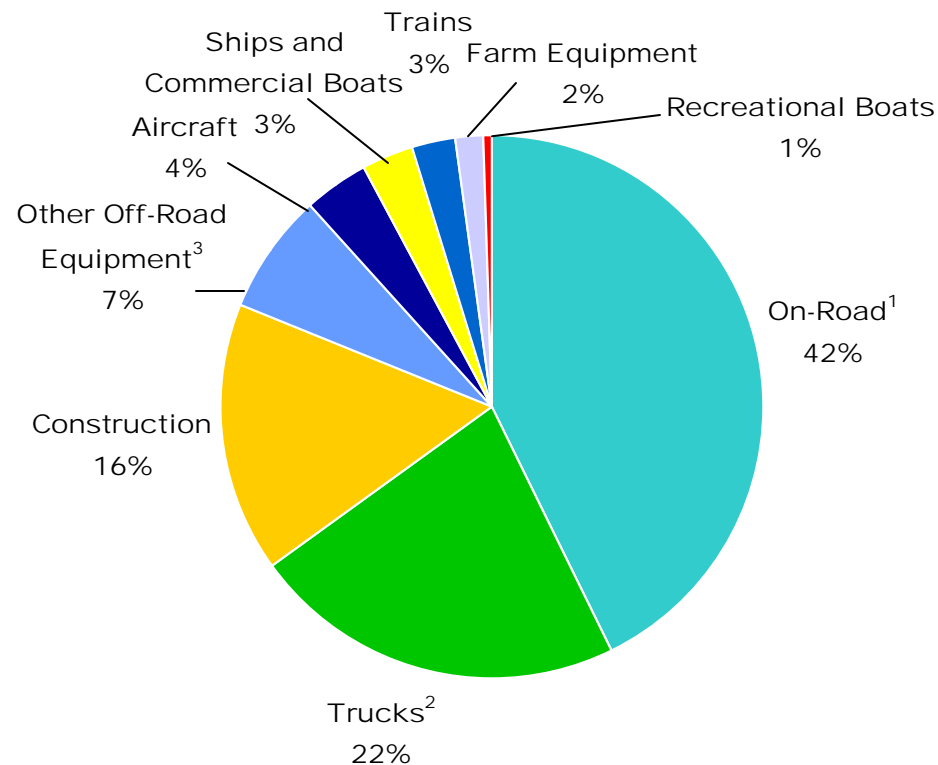
- 1) Includes all sources of dust and several burning processes
- 2) Includes vehicles, trucks, marine vessels, trains, aircraft, and other off-road equipment
- 3) Includes fuel combustion activities, waste disposal, cleaning and surface coatings, petroleum production, and industrial processes
- 4) Includes light and medium duty passenger and commercial cars and trucks, and buses
- 5) Includes Medium Heavy and Heavy Heavy Diesel trucks
- 6) Includes industrial equipment such as forklifts and cargo handling equipment, commercial equipment such as generator sets, and lawn and garden equipment

Source: California Air Resources Board 2004 Estimated Annual Average Emissions – <http://www.arb.ca.gov/aqd/almanac/almanac.htm>

Bay Area NOx mobile source emissions

Bay Area NOx Mobile Source Emissions

472 Total Tons Per Day



Notes:

- 1) Includes light and medium duty passenger and commercial cars and trucks, and buses
- 2) Includes Medium Heavy and Heavy Heavy Diesel trucks
- 3) Includes industrial equipment such as forklifts and cargo handling equipment, commercial equipment such as generator sets, and lawn and garden equipment

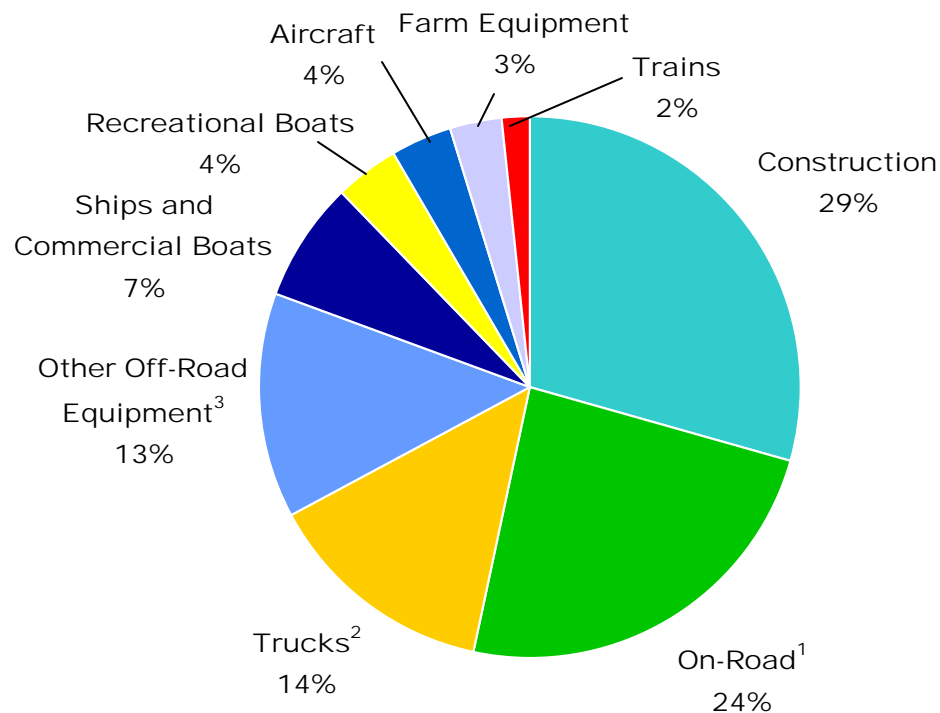
Source: California Air Resources Board 2004 Estimated Annual Average Emissions – <http://www.arb.ca.gov/aqd/almanac/almanac.htm>



Bay Area PM 2.5 mobile source emissions

Bay Area PM 2.5 Mobile Source Emissions

17 Total Tons Per Day



Notes:

1) Includes light and medium duty passenger and commercial cars and trucks, and buses

2) Includes Medium Heavy and Heavy Heavy Diesel trucks

3) Includes industrial equipment such as forklifts and cargo handling equipment, commercial equipment such as generator sets, and lawn and garden equipment

Source: California Air Resources Board 2004 Estimated Annual Average Emissions – <http://www.arb.ca.gov/aqd/almanac/almanac.htm>

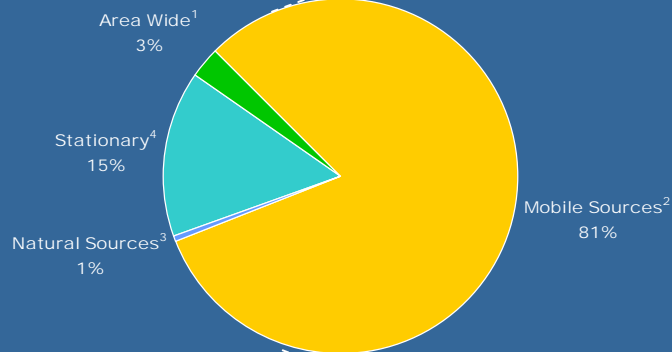
Therefore, for diesel sources in the Bay Area

- » Trucks and Construction Equipment are the drivers of NO_x, and
- » Construction, Trucks and Off-road Equipment are the drivers of PM_{2.5}.
- » Collaborative Projects that would have the greatest impacts include:
 - › Idle reduction strategies along major trucking corridors
 - › Truck engine retrofit program for large fleets and owner operated vehicles
 - › Green contracting agreements for public contracts
 - › Construction equipment retrofits through rental companies
 - › Inter-modal efficiency programs
 - › Electrification of port/switcher yard/transfer station equipment

California NOx Emissions

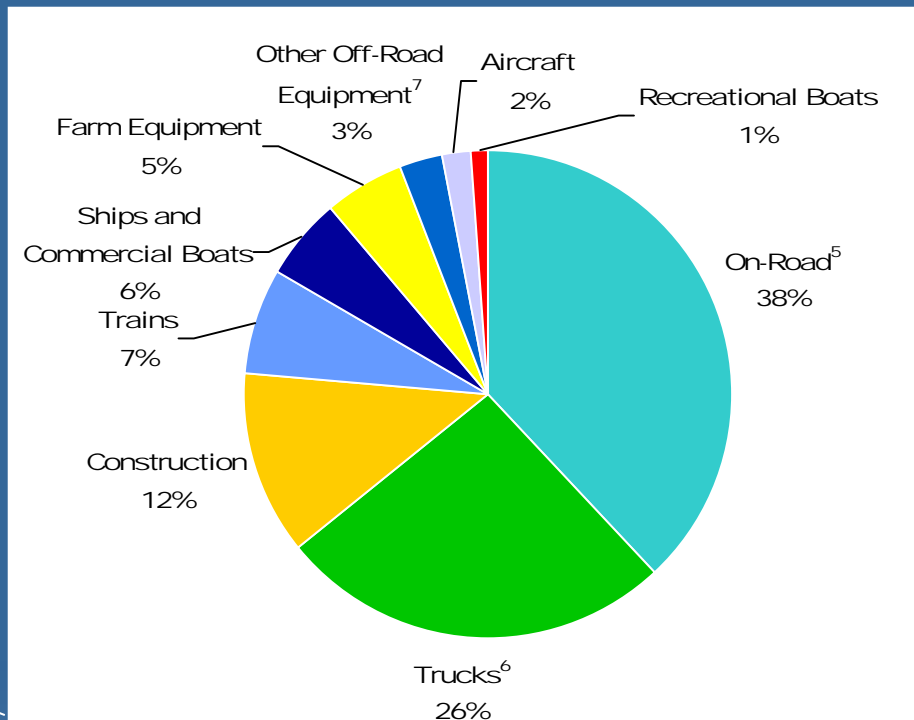
California NOx Emissions

3333 Total Tons Per Day



Mobile Source NOx Emissions

2708 Total Tons Per Day



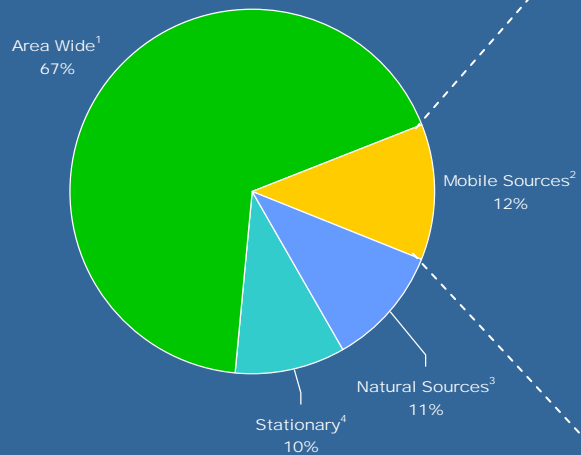
Notes:

- 1) Includes all sources of dust and several burning processes
- 2) Includes vehicles, trucks, marine vessels, trains, aircraft, and other off-road equipment
- 3) Represents non-anthropogenic sources, primarily wildfires
- 4) Includes fuel combustion activities, waste disposal, cleaning and surface coatings, petroleum production, and industrial processes
- 5) Includes light and medium duty passenger and commercial cars and trucks, and buses
- 6) Includes Medium Heavy and Heavy Heavy Diesel trucks
- 7) Includes industrial equipment such as forklifts and cargo handling equipment, commercial equipment such as generator sets, and lawn and garden equipment

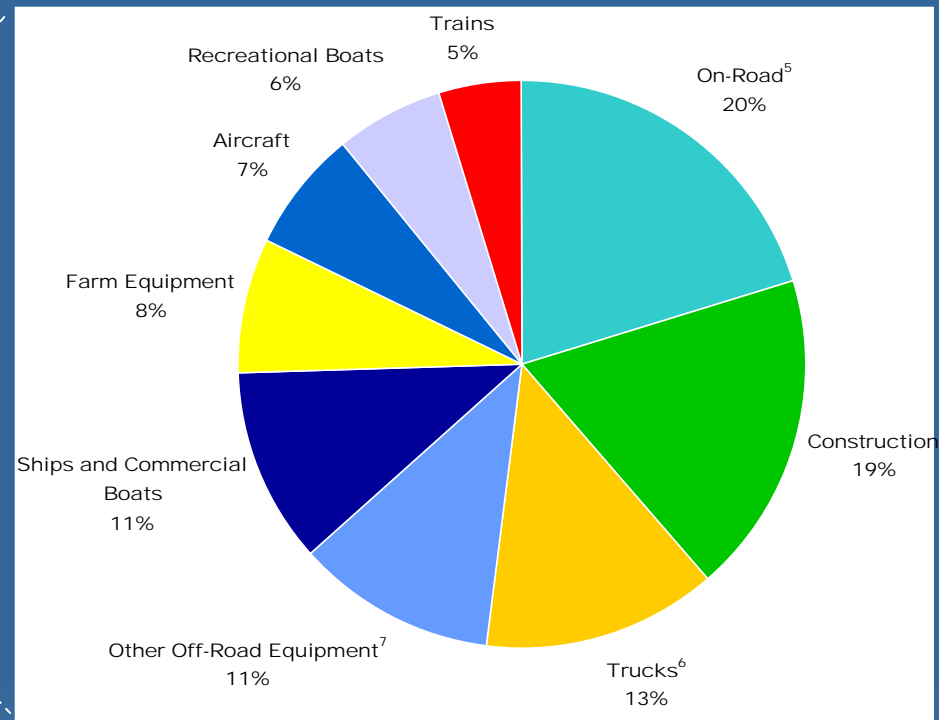
Source: California Air Resources Board 2004 Estimated Annual Average Emissions – <http://www.arb.ca.gov/aqd/almanac/almanac.htm>

California PM 2.5 Emissions

California PM 2.5 Emissions 860 Total Tons Per Day



Mobile Source PM 2.5 Emissions 102 Total Tons Per Day



Notes:

- 1) Includes all sources of dust and several burning processes
- 2) Includes vehicles, trucks, marine vessels, trains, aircraft, and other off-road equipment
- 3) Represents non-anthropogenic sources, primarily wildfires
- 4) Includes fuel combustion activities, waste disposal, cleaning and surface coatings, petroleum production, and industrial processes
- 5) Includes light and medium duty passenger and commercial cars and trucks, and buses
- 6) Includes Medium Heavy and Heavy Heavy Diesel trucks
- 7) Includes industrial equipment such as forklifts and cargo handling equipment, commercial equipment such as generator sets, and lawn and garden equipment

Source: California Air Resources Board 2004 Estimated Annual Average Emissions – <http://www.arb.ca.gov/aqd/almanac/almanac.htm>