

# Burlington Northern Santa Fe Corporation

## Wilmington (Watson) Railyard

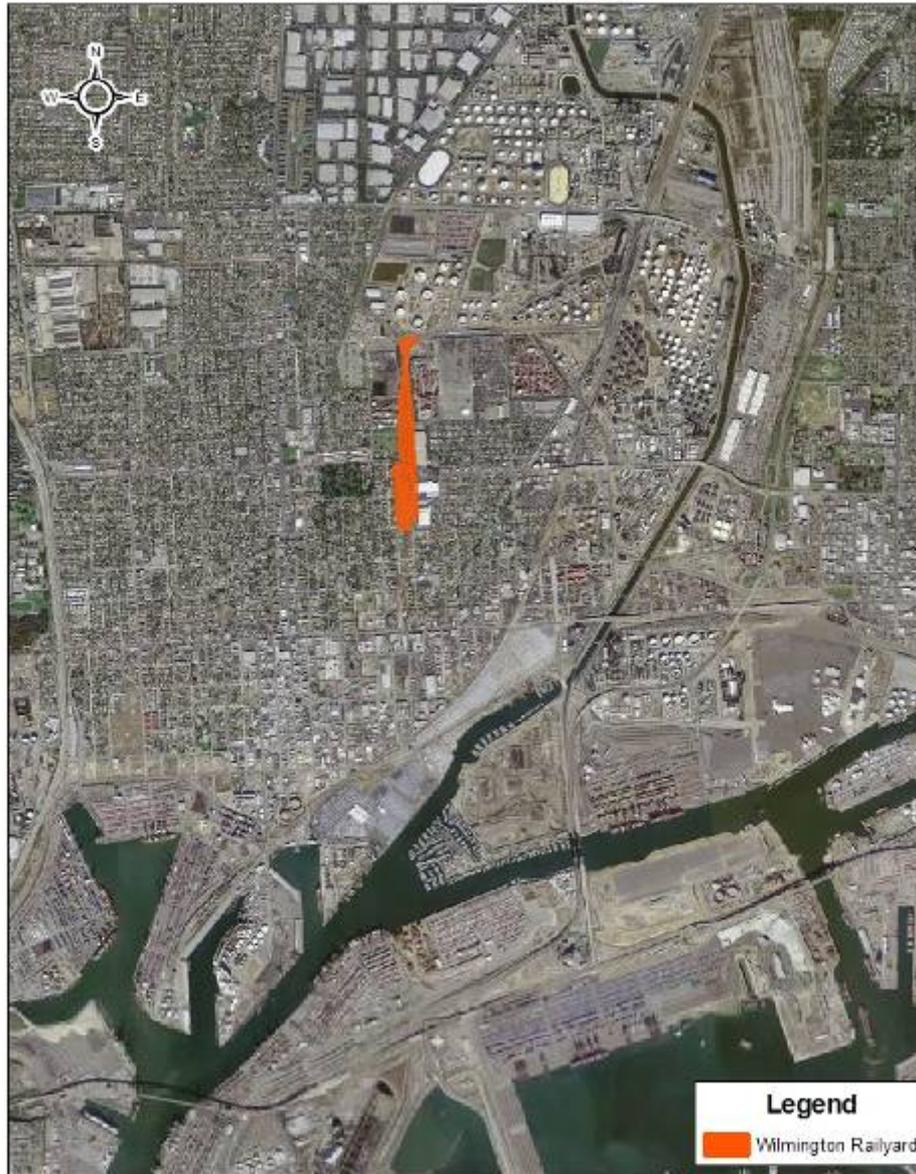
March 26, 2009



## **A Guide To Risk Management**

**Risk managers are responsible for protecting human health, but they must also consider public acceptance as well as technological, economic, social and political factors when arriving at their decisions.**

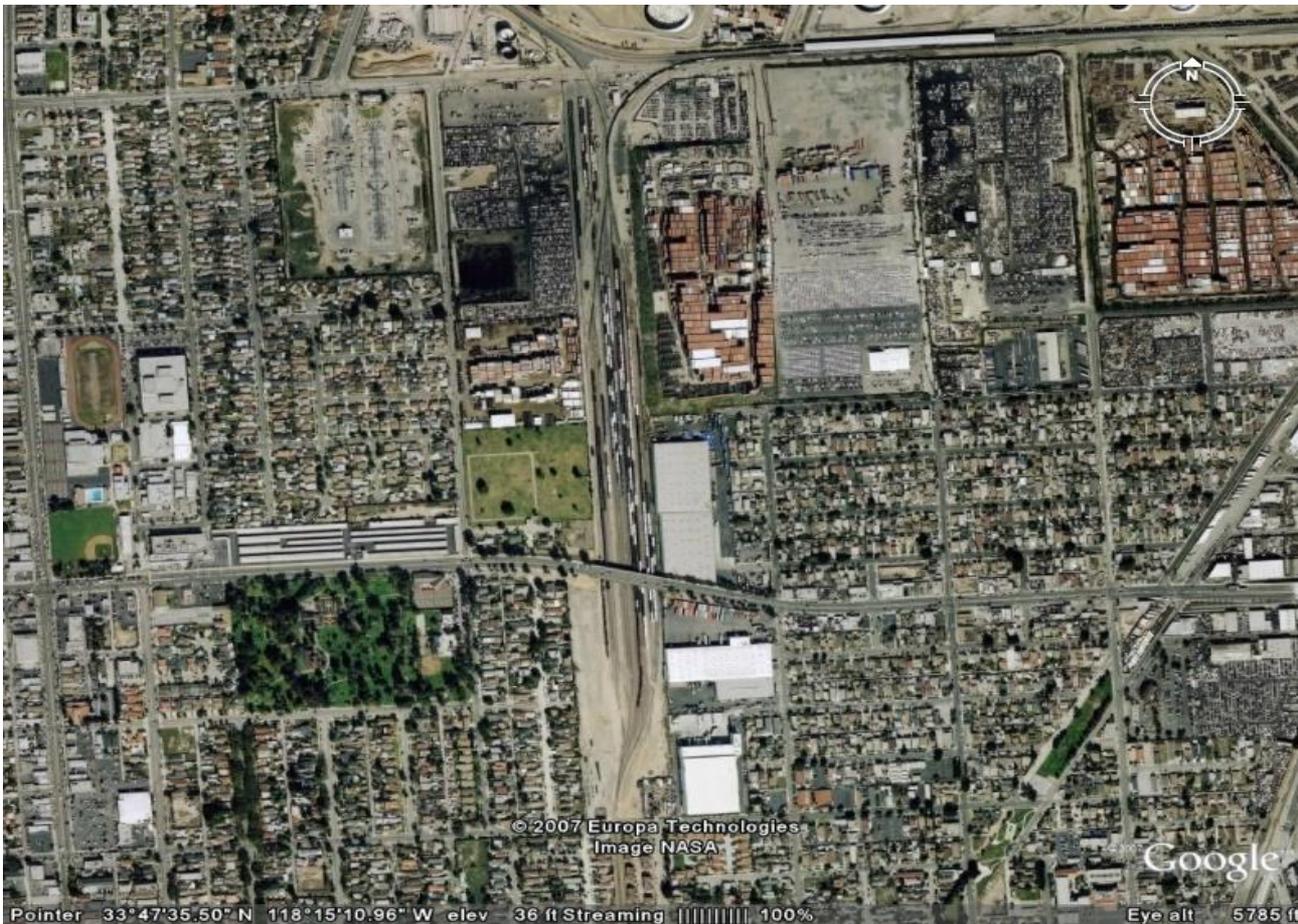
**General Facility Location  
BNSF Wilmington Yard  
Wilmington, California**



0 0.5 1 2 3 4 Kilometers

**ENVIRON**

**BNSF**



# Watson Information

## Watson

### 31 Acres

- **Primarily Classification (Switching) yard**
  - **13 trains / day**
  - **9 switch locomotives typically in use for switching the yard and local industry**
- **Some fueling operations**

## 2005 Emissions

**1.92 Diesel Particulate Matter in tons per year**

- **Linehaul locomotives** (Arriving & Departing trains) **72%**
- **Switch Engines** **22%**
- **Other (TRU, off road, basic services)** **6%**

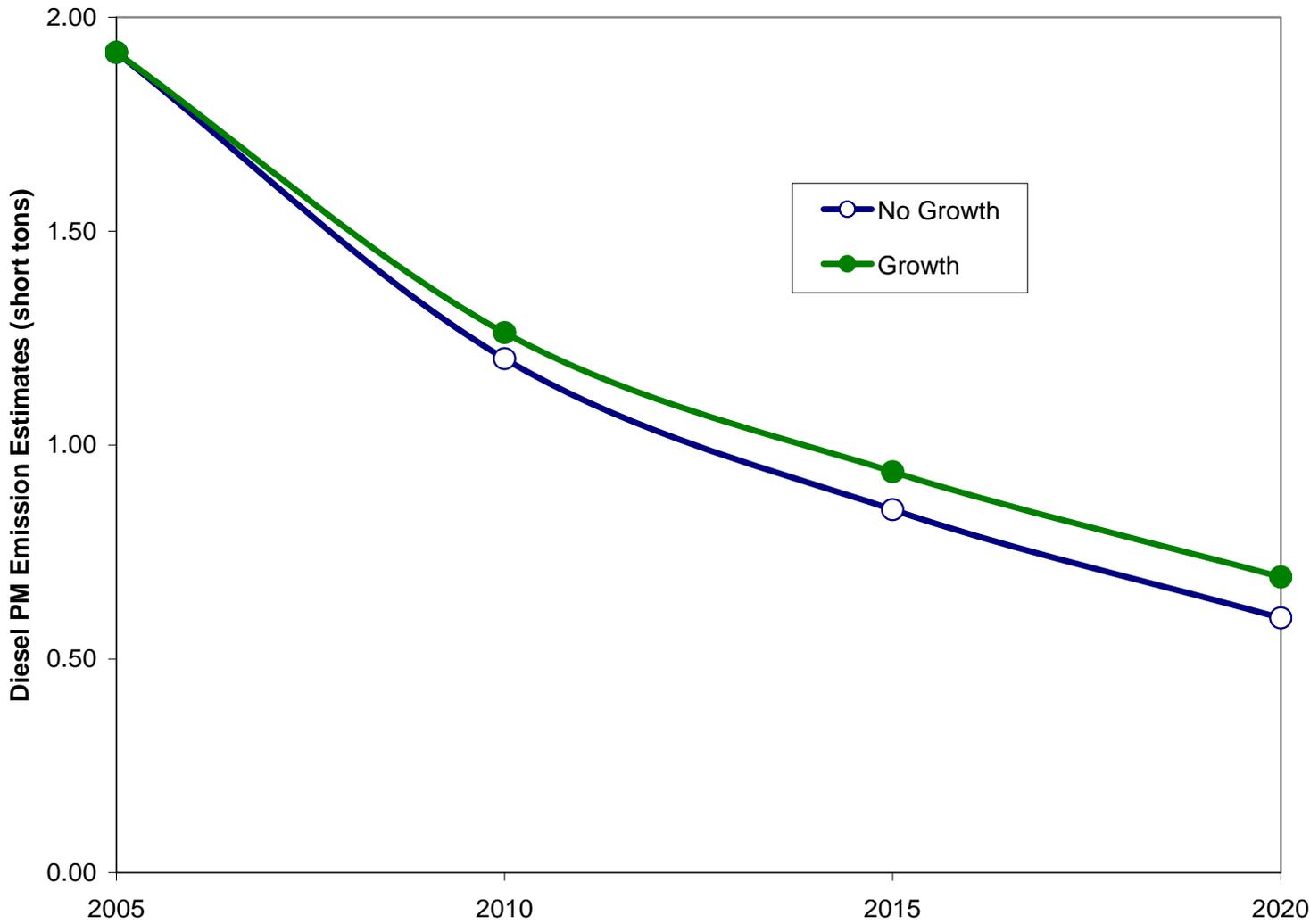
# Emission Reductions

- **Use of 15 ppm sulfur fuel for purchases in California**
- **Compliance with the 1998 MOU for nitrogen oxides**
- **30% reduction in switch engine idling due to 2005 MOU**
- **Reduced idling from current locomotives with idle control devices**
- **Compliance with CARB rules for refrigerated units**
- **Compliance with CARB rules for off-road equipment**
- **Compliance with USEPA new rules for locomotive emissions**

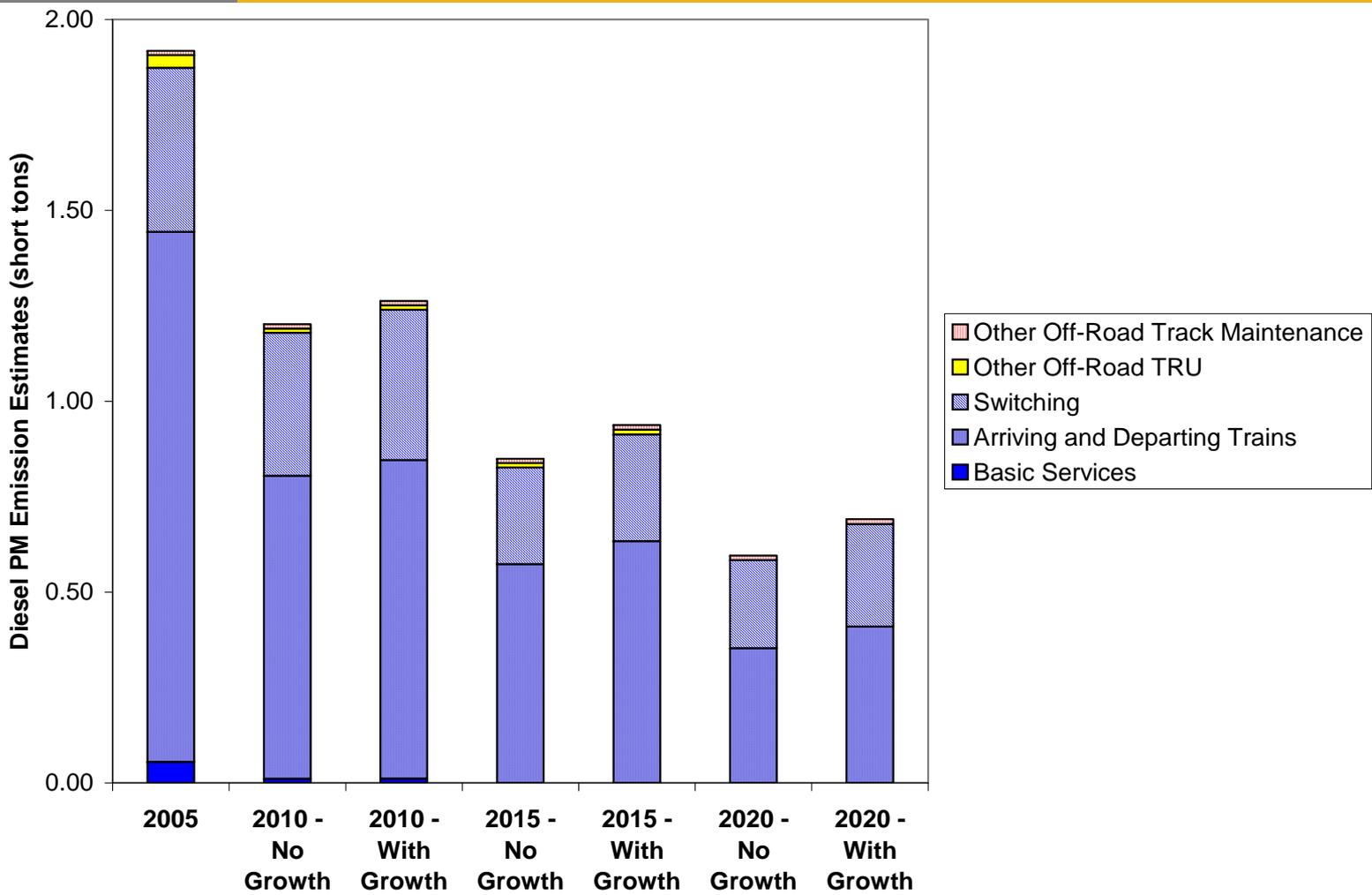
# Emission Reductions

<b>Wilmington – Watson</b>	<b>PM Emissions (short tons)</b>			
<b>Facility Operations</b>	<b>2005</b>	<b>2010</b>	<b>2015</b>	<b>2020</b>
Basic Services	0.06	0.01	0.00	0.00
Switching	0.43	0.37	0.25	0.23
Arriving and Departing Trains	1.39	0.79	0.57	0.35
On-Road Fleet Vehicle	0.00	0.00	0.00	0.00
Other Off-Road TRU	0.03	0.01	0.01	0.00
Other Off-Road Track Maintenance	0.01	0.01	0.01	0.01
<b>Total</b>	<b>1.92</b>	<b>1.20</b>	<b>0.85</b>	<b>0.60</b>

# Emission Reduction



# Emission Reductions



# Summary

- **The railroads recognize there are serious air quality concerns, both for ozone and for particulate matter in Southern California.**
- **People living adjacent to the Watson rail yard are exposed to far less emissions than by persons living adjacent to freeways and other major transportation facilities.**
- **Diesel emissions from the Watson rail yard are going down, 64-69% reductions are projected from 2005 to 2020 depending on growth.**

***BNSF***<sup>SM</sup>

The logo features the letters "BNSF" in a bold, italicized, orange sans-serif font. A thick black horizontal bar is positioned below the letters, starting from the left edge of the "B" and extending to the right edge of the "F". A small "SM" trademark symbol is located to the upper right of the "F".