

# Burlington Northern Santa Fe Corporation

Commerce BNSF Railyards  
Commerce Mechanical, Commerce Eastern, and Hobart

HRA Mitigation



October 16, 2008



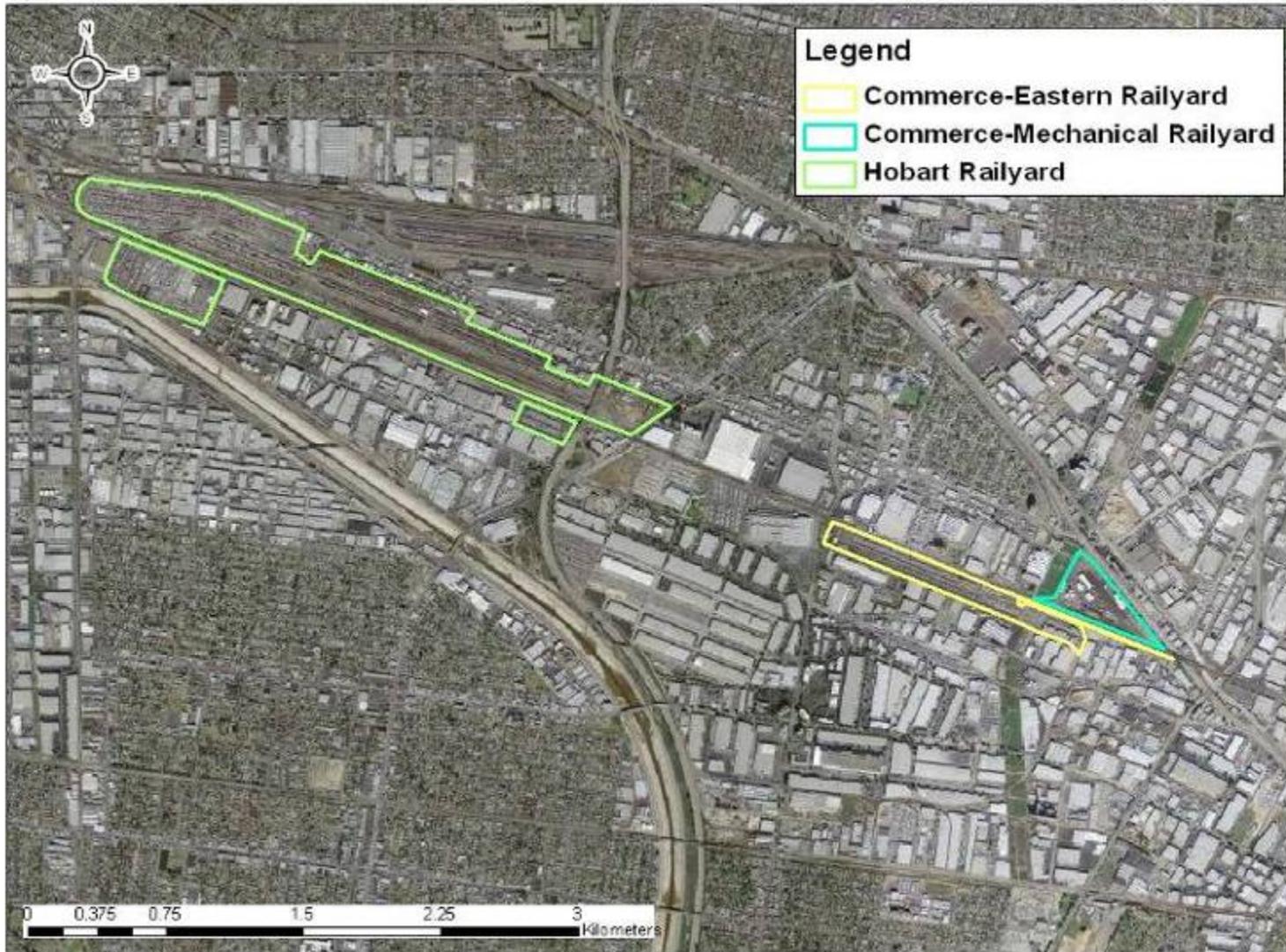
## **A Guide To Risk Management**

**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.**

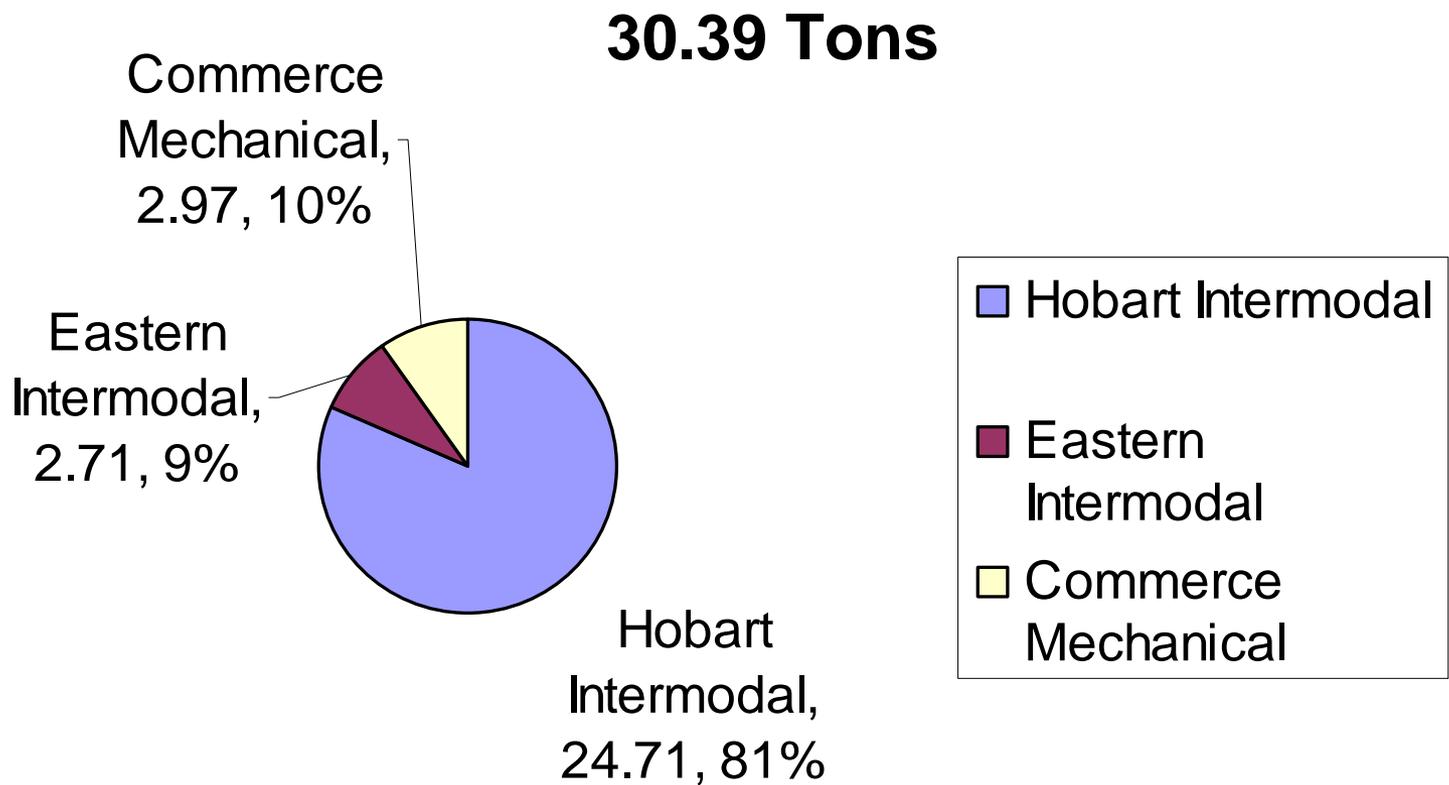
# Introduction

- **The railroads recognize there are serious air quality concerns, both for ozone and for particulate matter in Southern California.**
- **People living adjacent to rail yards are exposed to similar risks as those faced by persons living adjacent to freeways and other major transportation facilities.**
- **Diesel emissions from rail yards are going down, greater than 70% reductions are projected from 2005 to 2020 even after activity growth rates.**
- **Locomotives account for only one-third of the diesel particulate emissions from Commerce rail yards.**
- **On-road drayage trucks account for one-third of the diesel particulate emissions from rail yards.**

# BNSF Commerce Yards

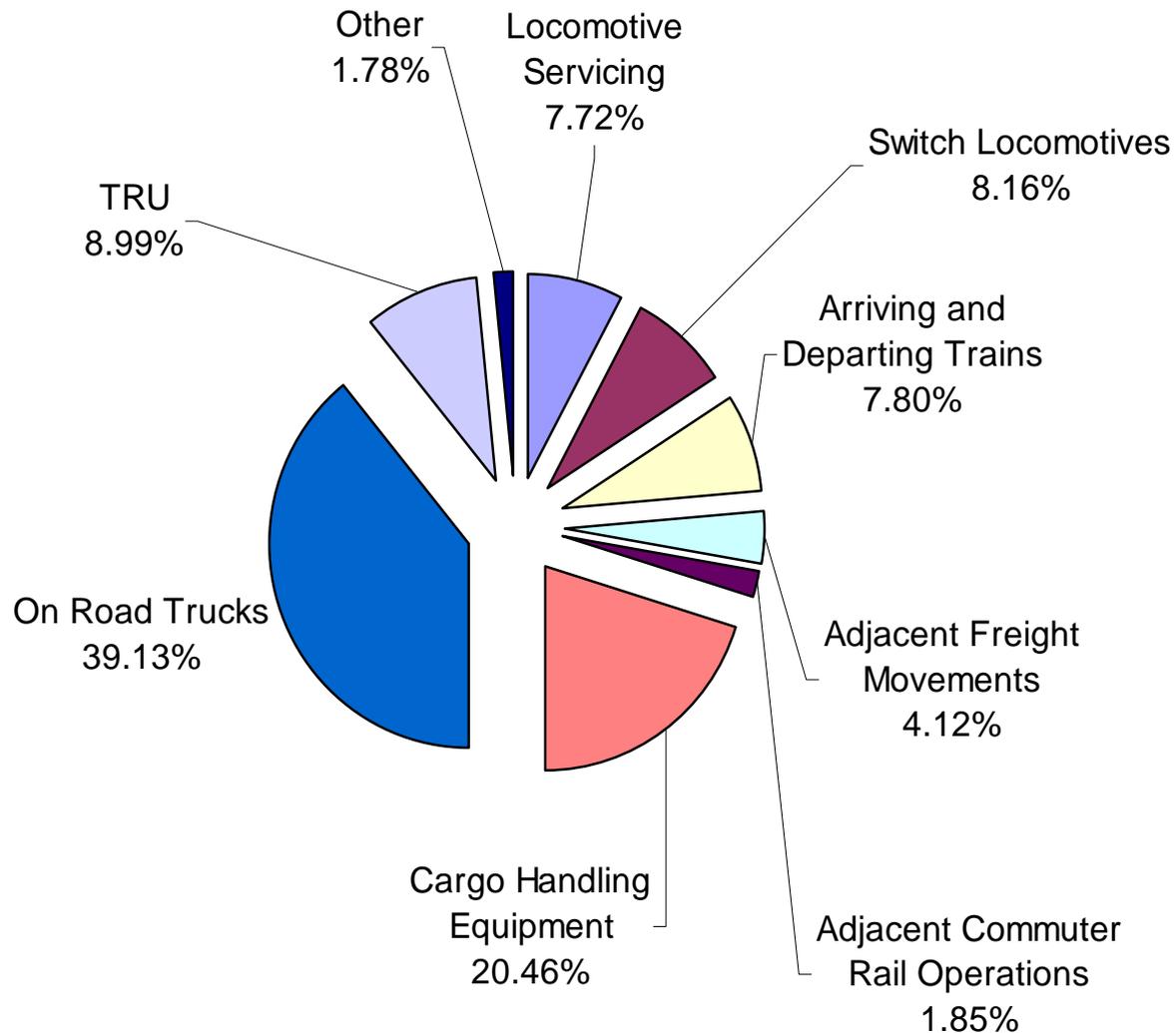


# Emissions by Facility



# Combined BNSF Commerce Yards: Sources of Diesel Exhaust Particulate (DPM) Emissions

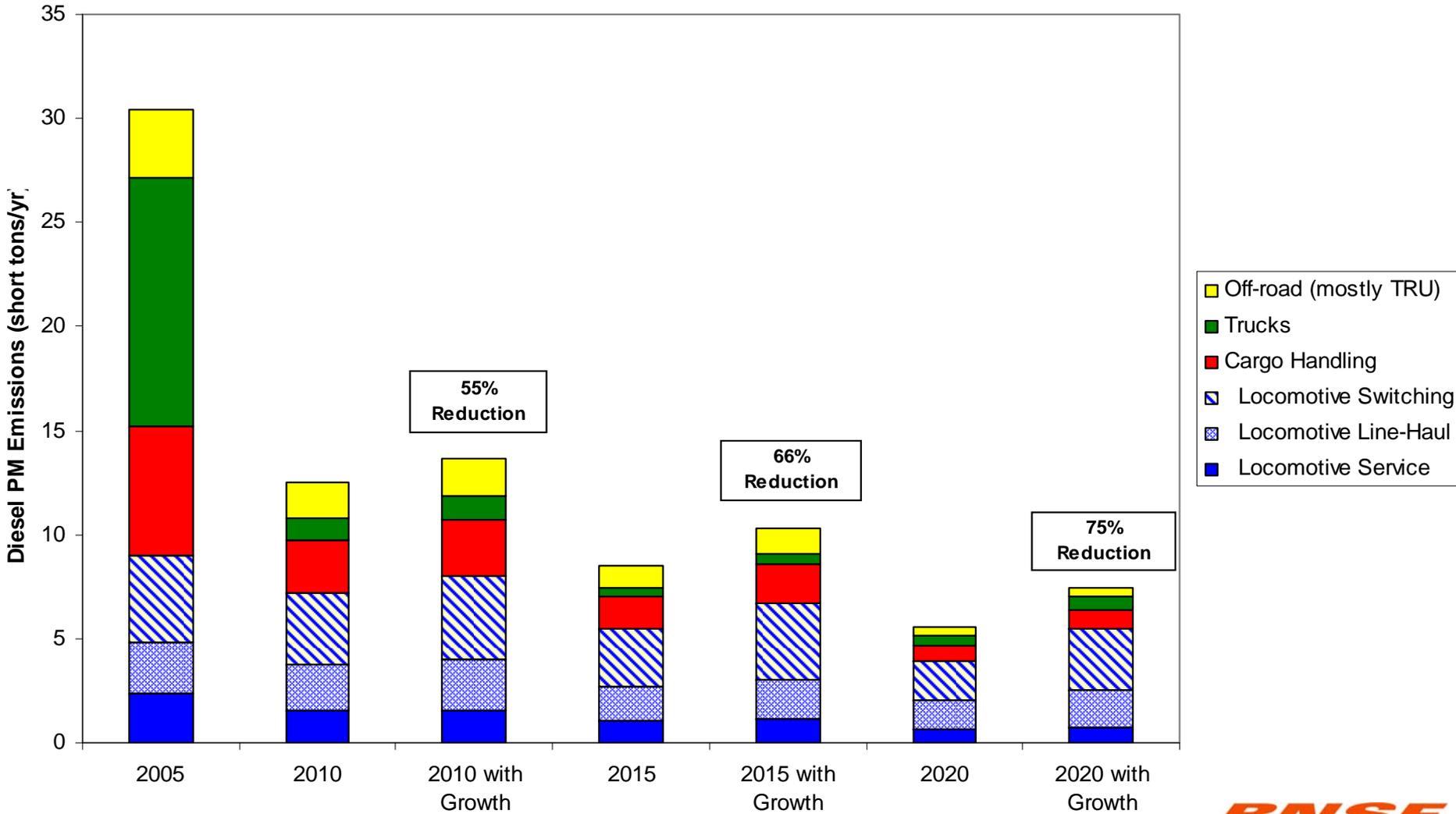
**30.4 tons**



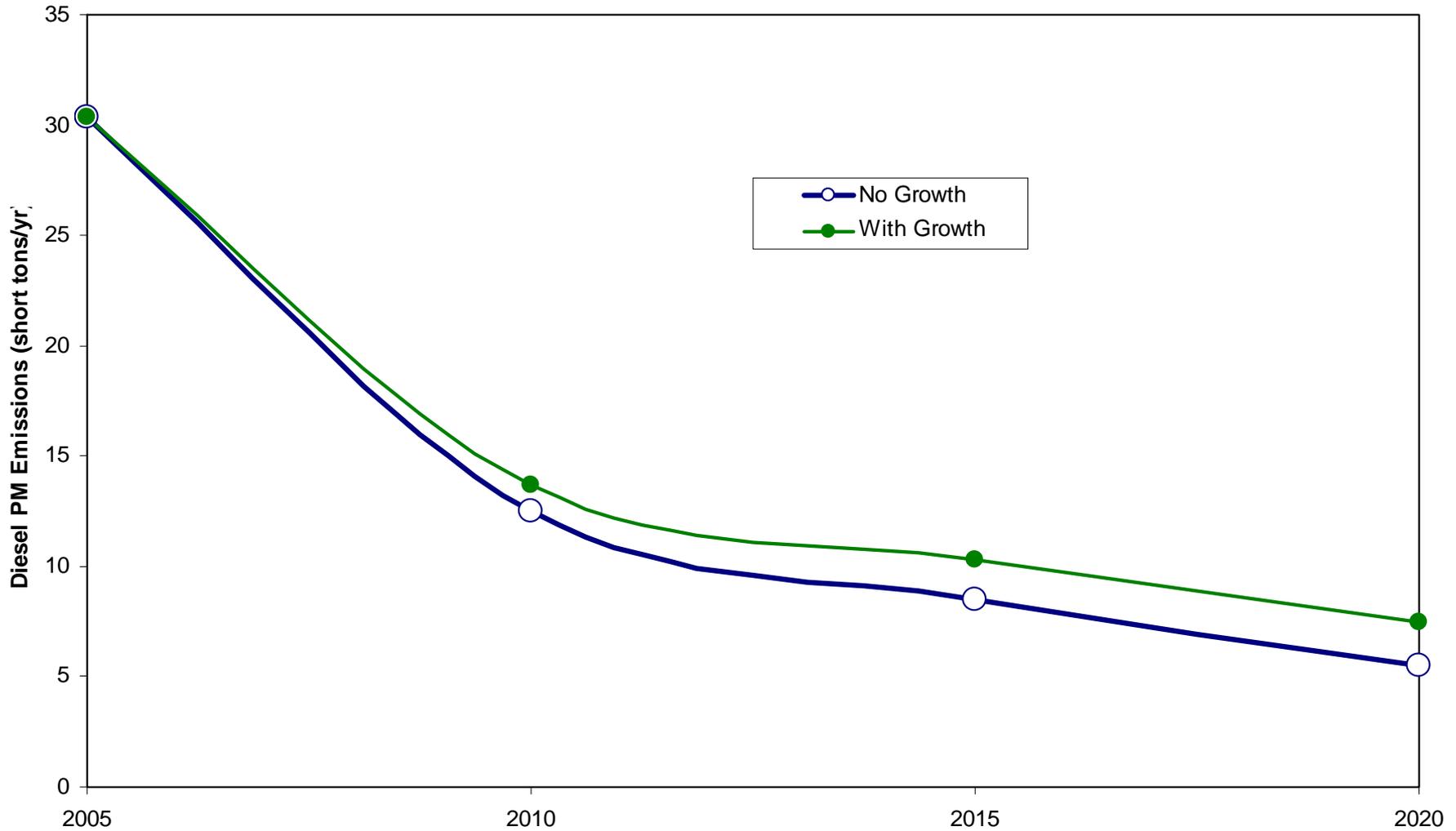
# Emission Reductions

- **Truck drayage fleet turnover for intermodal facilities (by others)**  
**Port/Intermodal truck rule**
- **Use of 15 ppm sulfur fuel for purchases in California**
- **Compliance with the 1998 MOU (Locomotive Fleet Average Agreement for the LA Basin) for nitrogen oxides**
  - **Large purchases of the newest Line Haul locomotives**
- **30% reduction in switch engine idling due to 2005 MOU**
- **RR reduced idling of current locomotives with idle control devices**
- **RR accelerated compliance with CARB cargo handling equipment rules including the use of LNG hostler trucks and 1/3 hostlers replaced annually**
- **Compliance with CARB rules for refrigerated units**
- **Compliance with CARB rules for off-road equipment**
- **Compliance with USEPA recently finalized rules for locomotive emissions**

# Commerce 3 yards Reductions

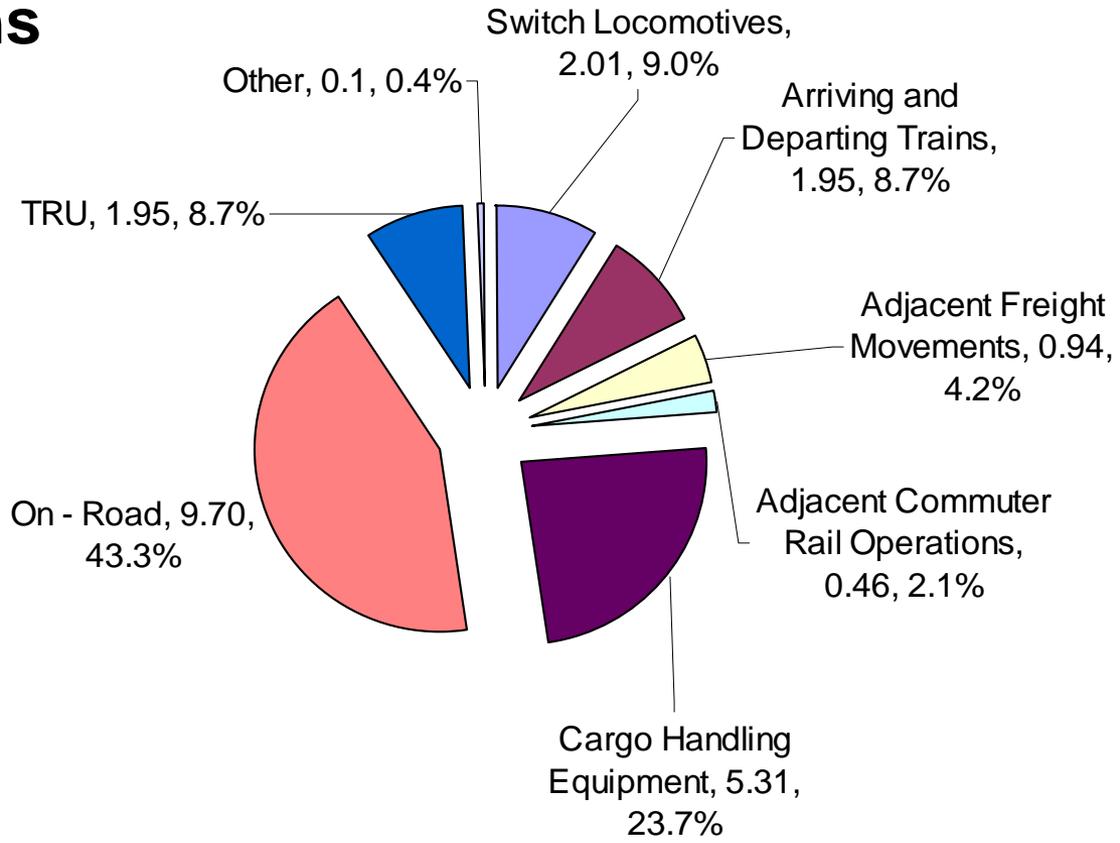


# Commerce 3 Yards Reductions

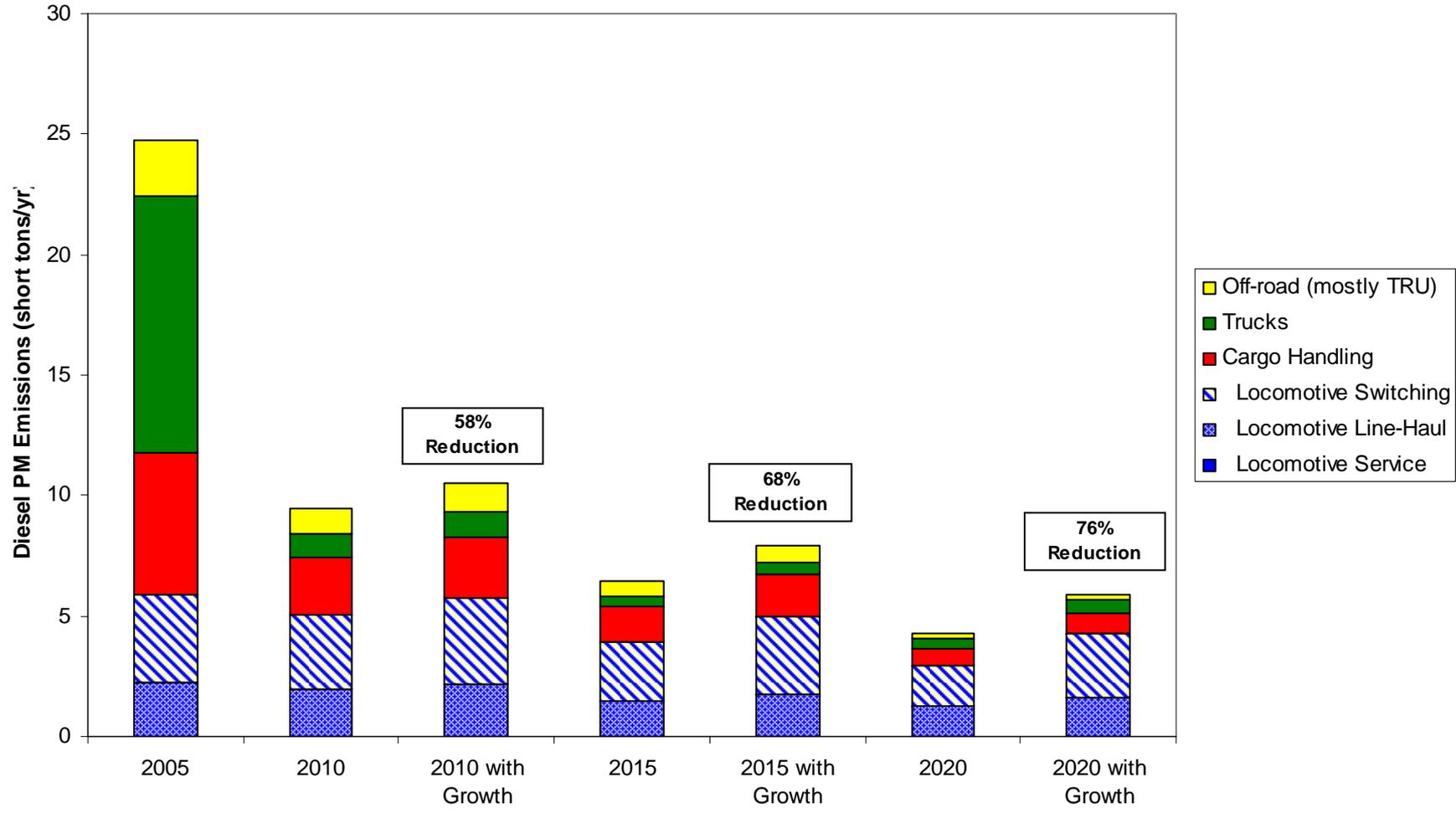


# Hobart Intermodal

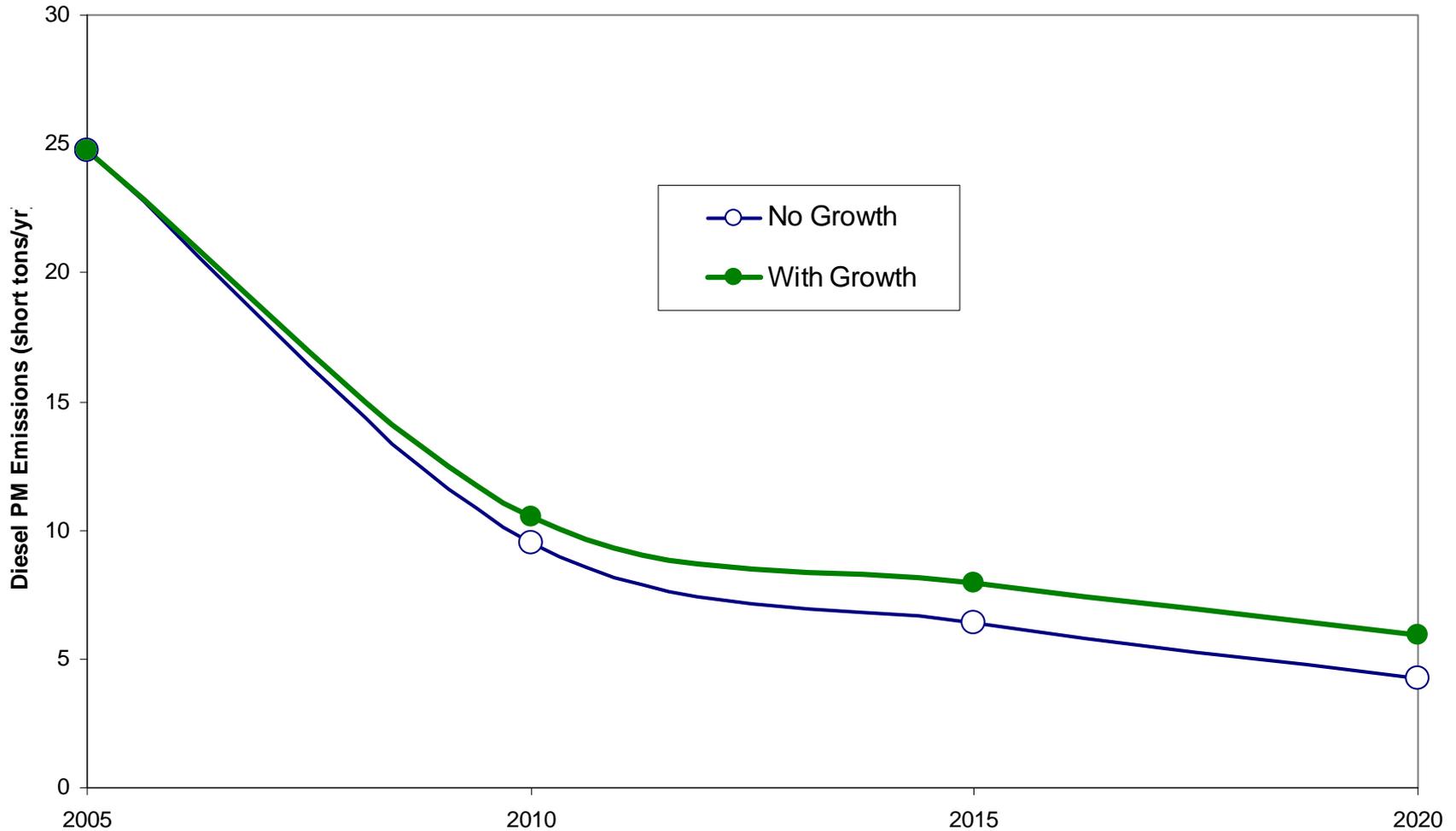
**24.71 tons**



# Hobart Intermodal Reductions

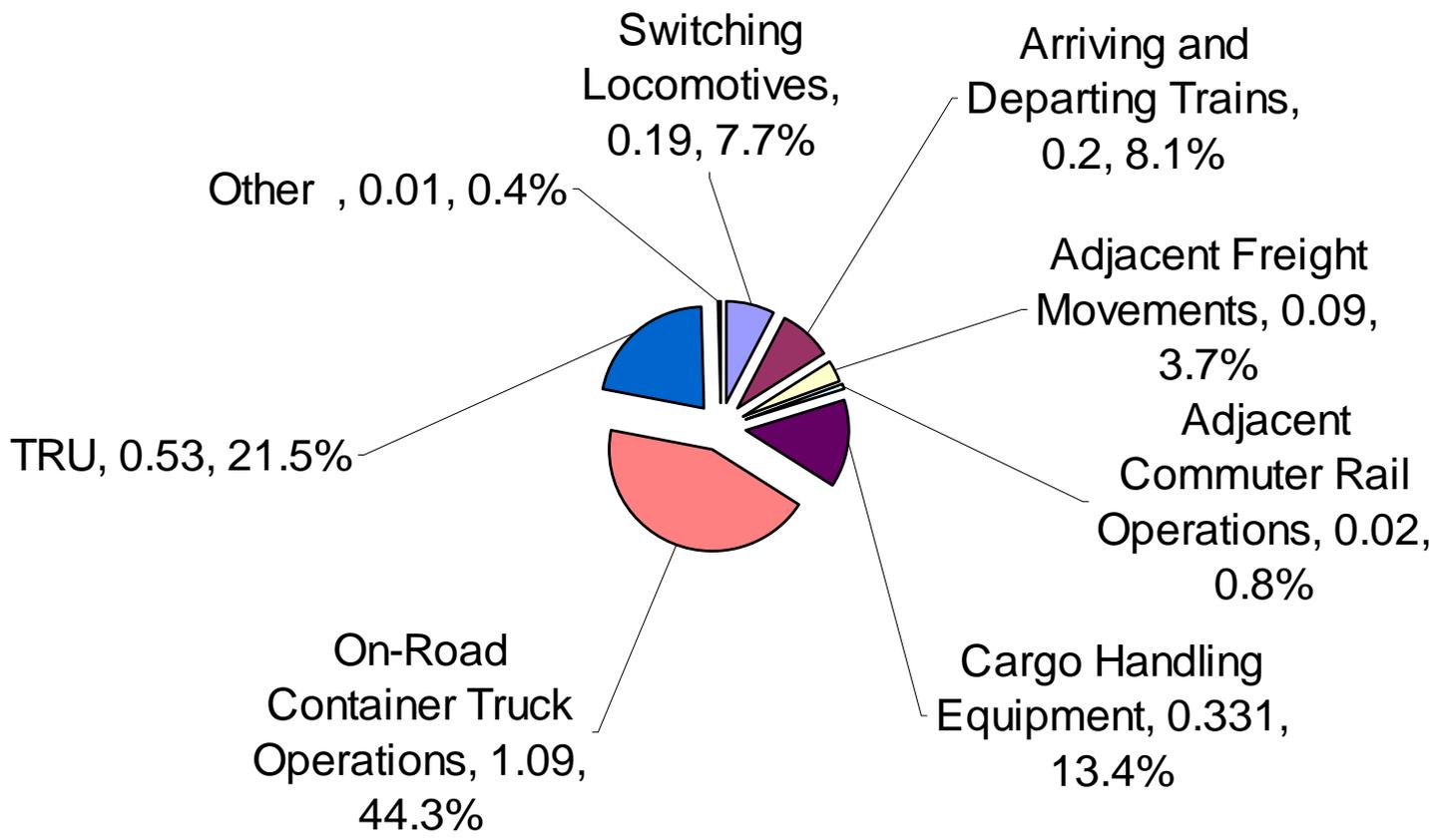


# Hobart Intermodal Reductions

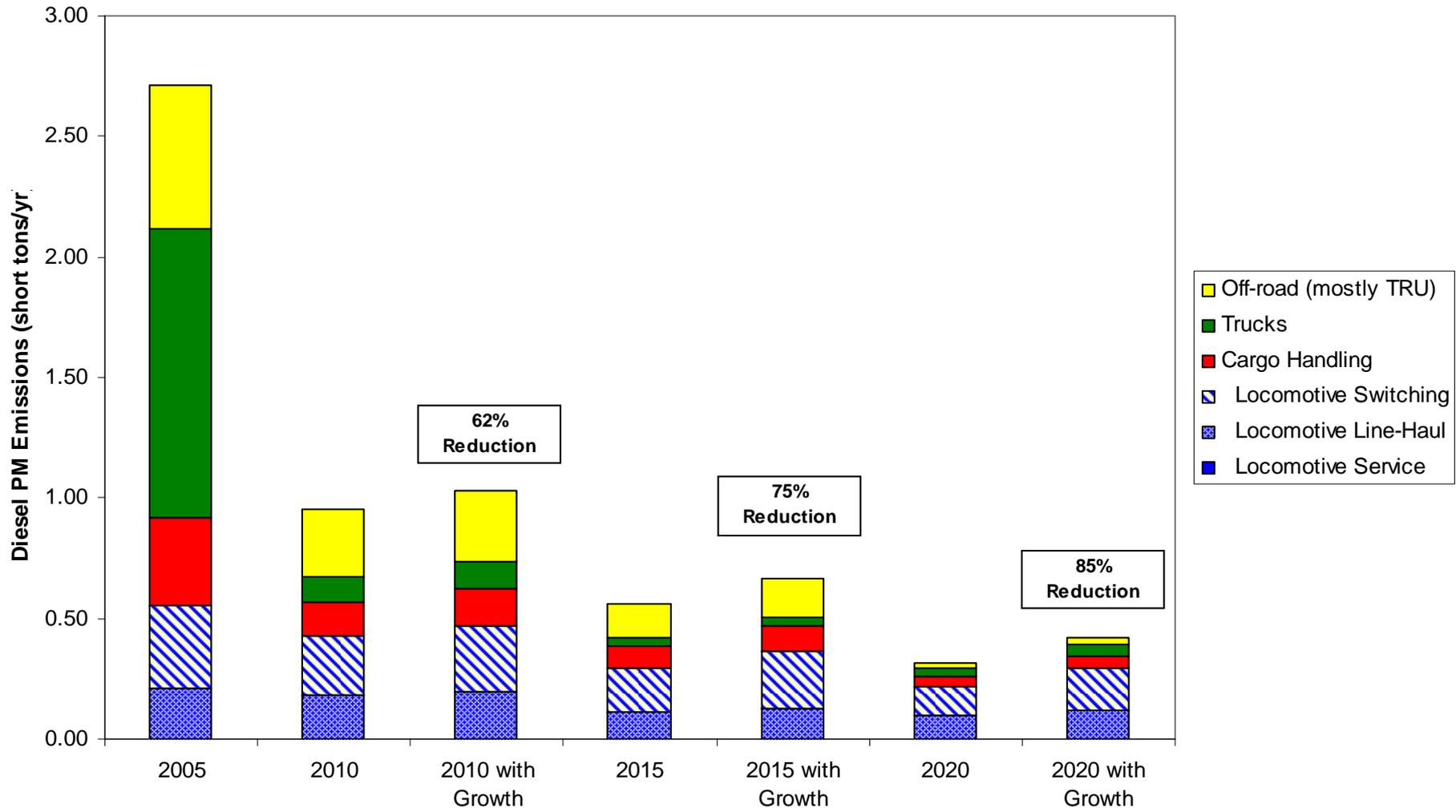


# Commerce Eastern Intermodal

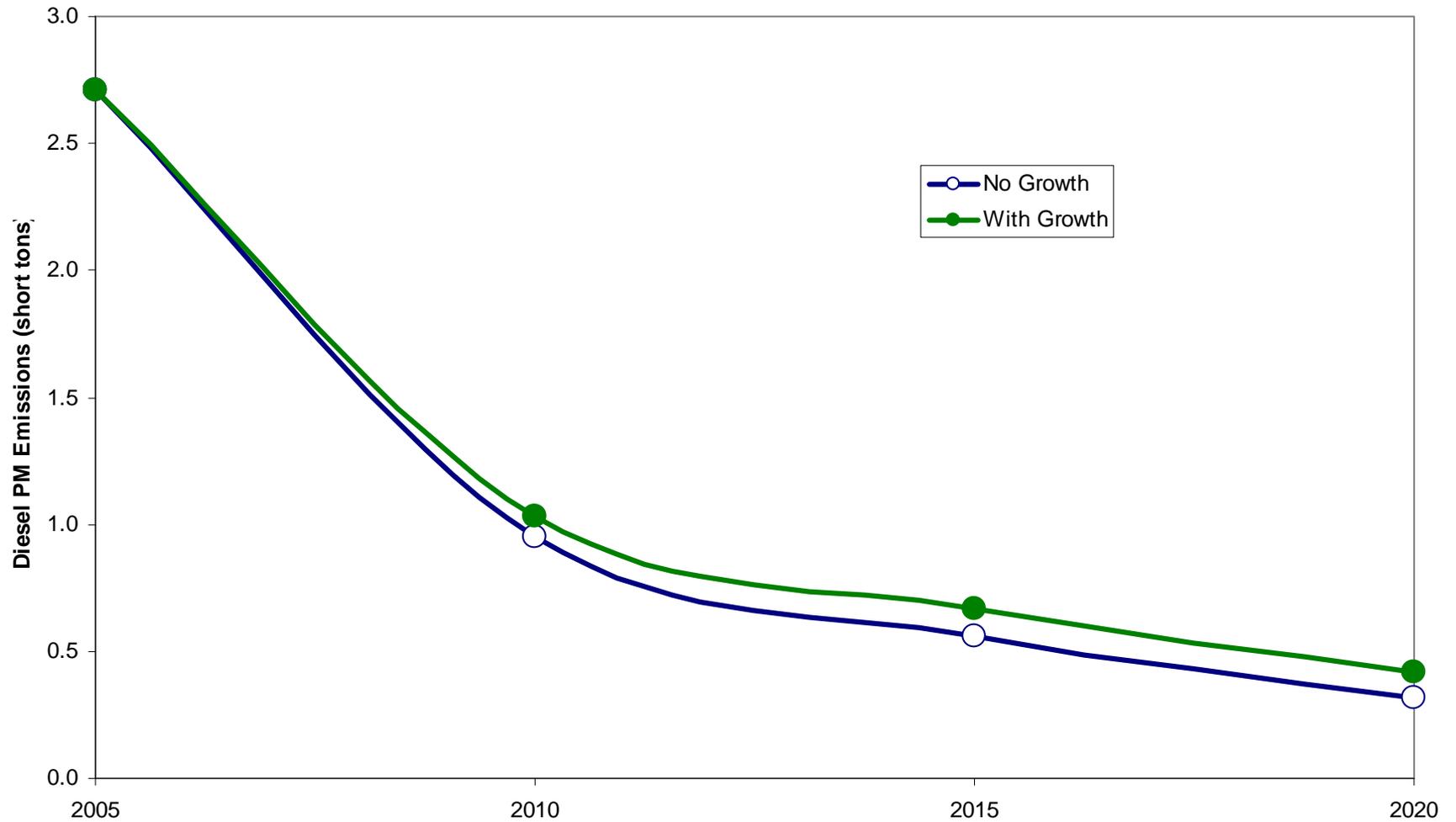
**2.71 Tons**



# Commerce Eastern Reductions

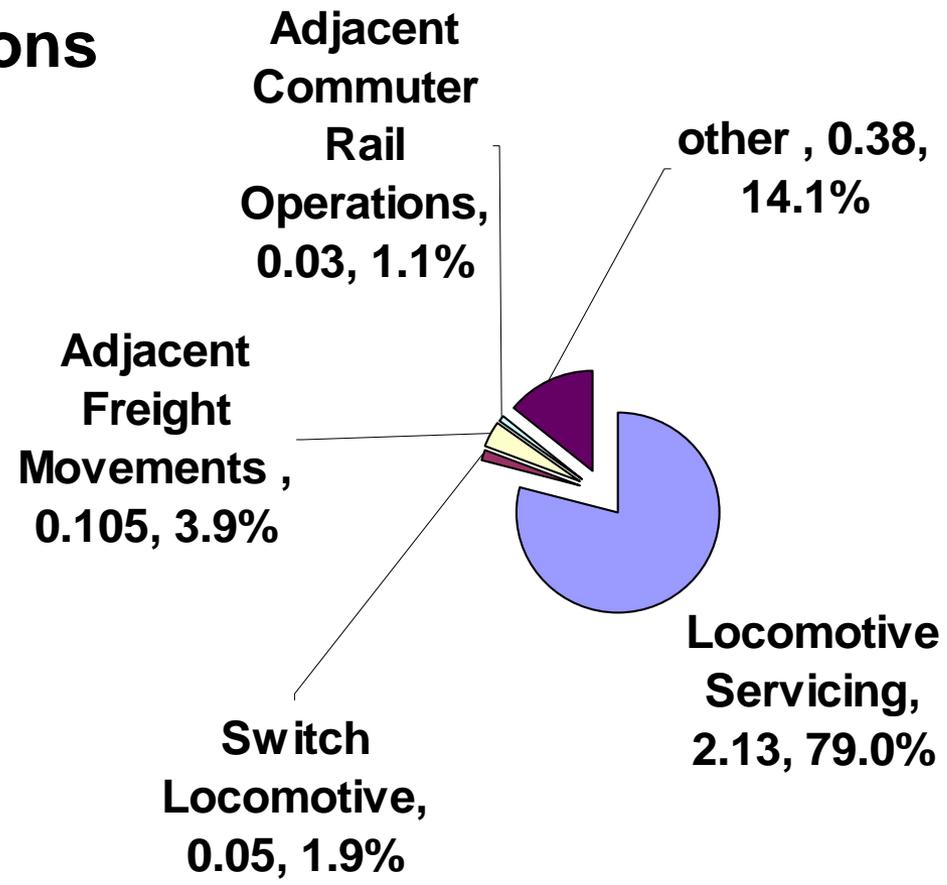


# Commerce Eastern Reductions

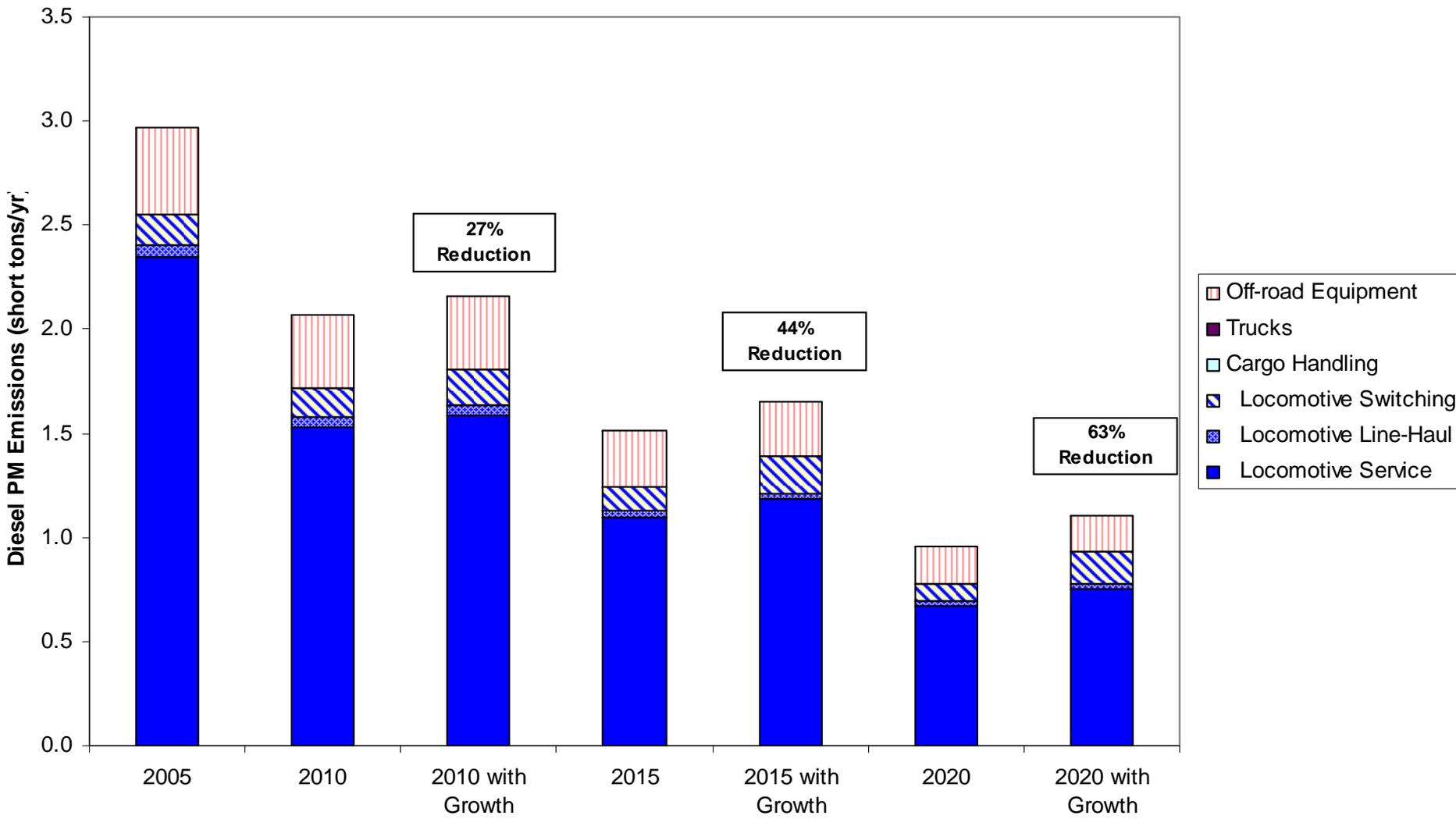


# Commerce Mechanical

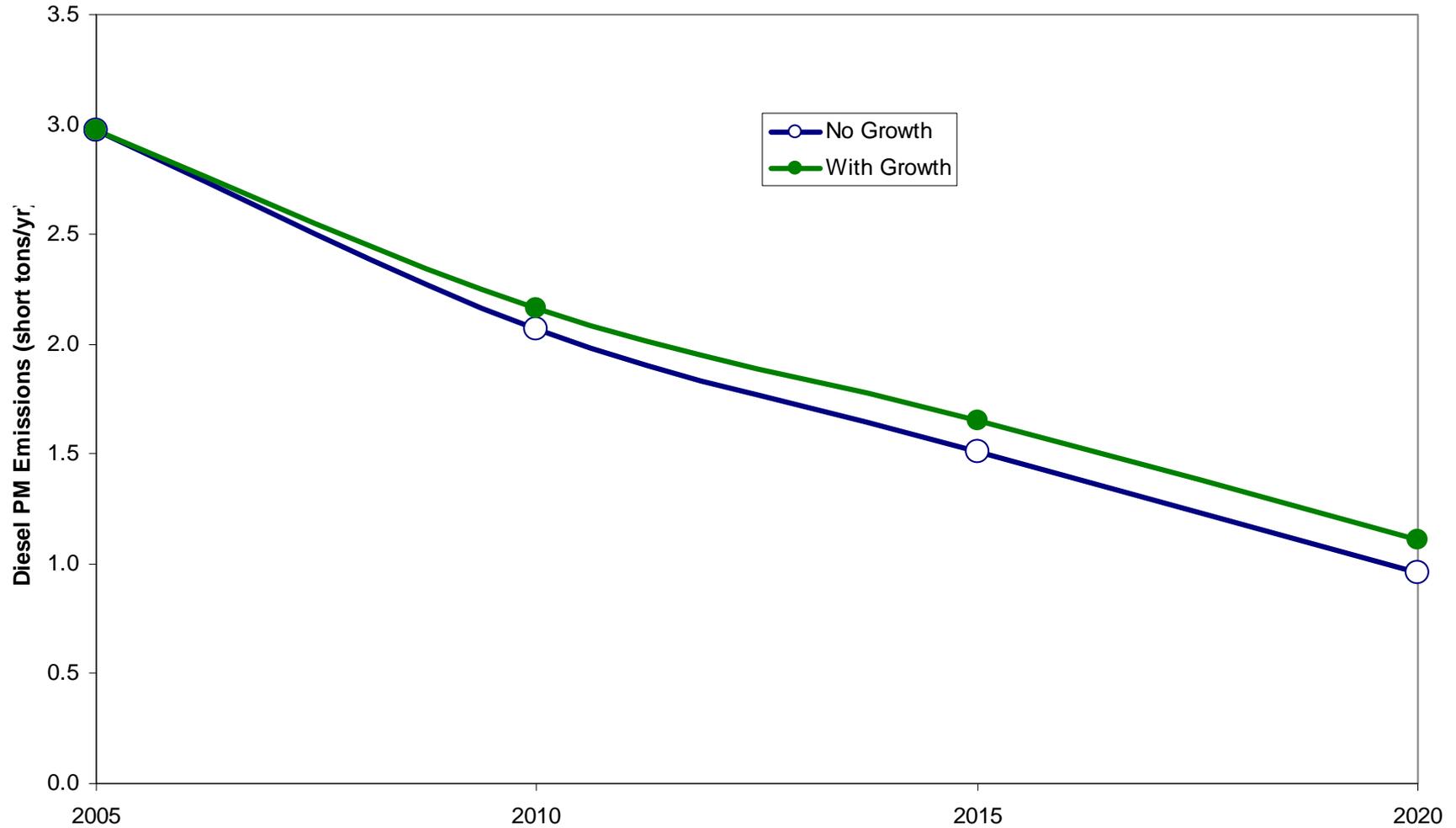
**2.97 Tons**



# Commerce Mechanical Reductions



# Commerce Mechanical Reduction



# Emission Reductions

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# Evaluation Criteria

- **Safe**
- **Technically Feasible**
- **Legally Allowable**
- **Operationally Practical**
- **Economically Viable**
- **Other issues**



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



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RAILWAY