

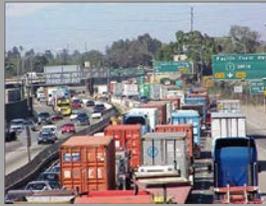
Freight Impacts on Communities and the Environment

Emissions



Emission related impacts include incidence of serious health problems such as asthma, other respiratory ailments, cancer, cardiovascular disease, and premature death.

Congestion



Congestion related impacts include increased idling and emissions, reduced economic productivity, increased fuel costs, and stress.

Noise



Noise related impacts include hearing loss, sleep disruption, interference with the learning process, and an increase in antisocial behavior.

Quality of Life



Other freight impacts include water quality degradation, blight, and vibrations.

Proximity



Communities close to heavy freight industry activity are disproportionately impacted by freight.

Significant Progress in Freight Impact Reduction

California has the most aggressive environmental goals, policies, and regulations in the United States. These policies set the stage for California to be a leader in reducing freight impacts on the communities and the environment.

MARITIME

The 11 publicly owned California deepwater seaports and their partners have implemented strategies including clean air programs, shore side power options, and ship speed reduction.

70%

Reduction in PM* emissions at the largest ports since 2005

FREIGHT RAIL

Union Pacific (UP) and Burlington Northern Santa Fe (BNSF) voluntarily agreed to reduce diesel emissions through the use of new technologies, engines, and practices.

50-70%

Reduction in PM emissions at the highest risk rail yards since 2005

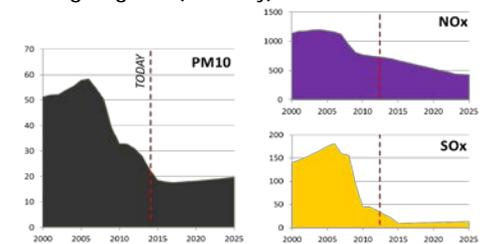
TRUCKING

CA has multiple regulations that apply to on-road diesel trucks including: Truck and Bus Regulation, Tractor-Trailer Greenhouse Gas Reduction, Periodic Smoke Inspection Program, Emission Control Label, and Commercial Vehicle Idling.

98%

Less PM and NOx* emissions, and 97% less SOx*, with new diesel truck engines

Progress in Reducing Freight Emissions in CA with Existing Programs (Tons/Day)



Source: ARB January 2014; <http://www.arb.ca.gov/board/books/2014/012314/14-1-5pres.pdf>

* Particulate Matter (PM)
Nitrogen Oxides (NOx)
Sulfur Oxides (SOx)

Looking Forward

Much has already been achieved to reduce freight impacts through better engines, cleaner fuels, infrastructure changes, and improved operations practices. But more improvement is still needed.

- Transition from the existing diesel-dependent freight system into one with significant numbers of zero and near-zero emission engines for trucks, locomotives, cargo-handling equipment, ships, and aircraft.
- Support the parallel development of the necessary supporting infrastructure, and implement logistical/efficiency improvements to reduce the emissions impact of moving freight.
- Incentivize and prioritize freight projects that maximize greenhouse gas (GHG), criteria pollutants, and air toxics emission impact reductions.
- Implement projects in designated freight corridors or regions to meet established State targets and establish a location specific impact reduction program to avoid, reduce or mitigate freight impacts on the community and environment.



Shore Power



Clean Fuel



Air Monitoring

Images Source: Port of Long Beach