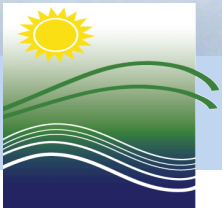




Connecticut Department of Energy and Environmental Protection



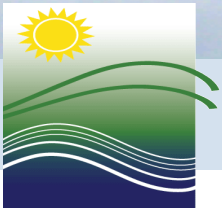
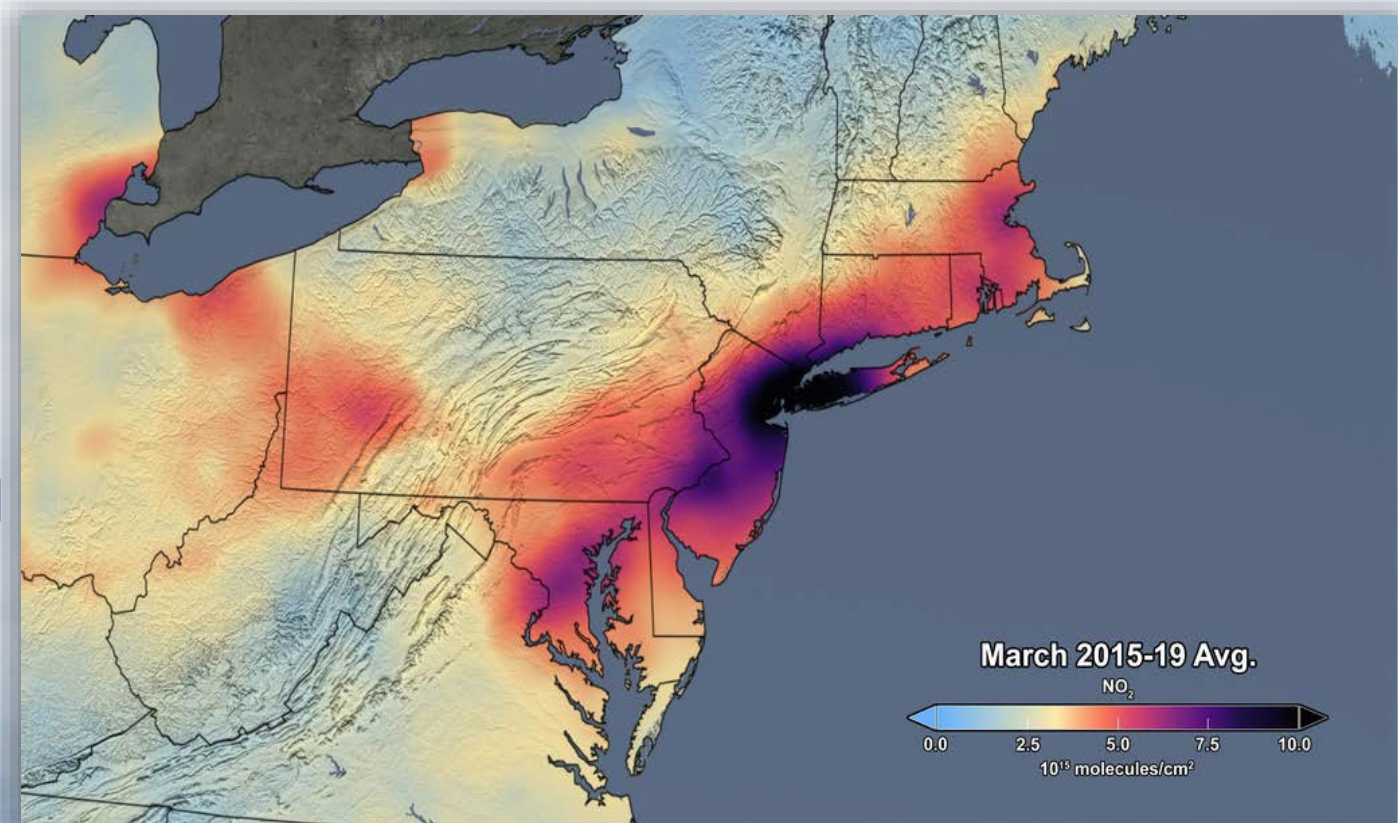
Impacts of COVID-19 Response on Air Quality in Connecticut



Connecticut Department of Energy and Environmental Protection

In March 2020 COVID-19 Restrictions Took Effect

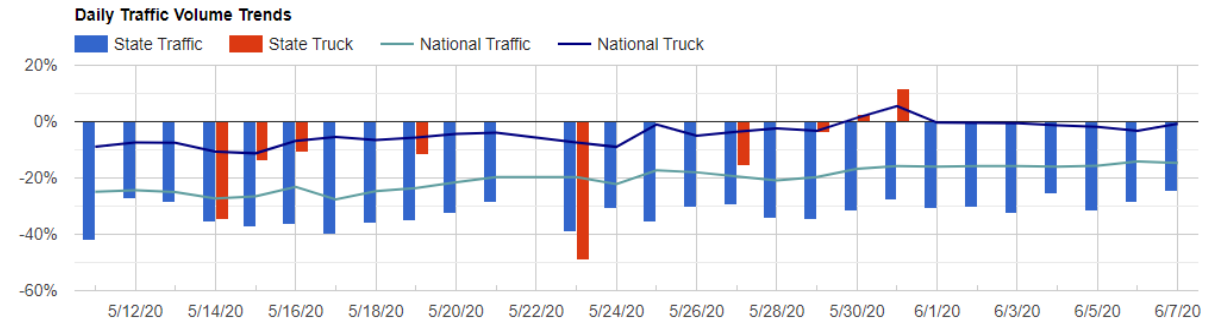
- Beginning in Mid-March 2020 drastic steps were taken to slow the spread of COVID-19 – almost immediately, there were fewer cars on the road as nonessential activity halted
- Satellite data from NASA's Ozone Monitoring Instrument, or "OMI," shows that nitrogen dioxide levels across the I-95 corridor decreased by 30% when compared to 2015-2019 levels
- The "TROPOMI" satellite, which has higher resolution than OMI, also showed significant decrease in nitrogen dioxide levels



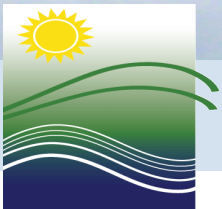
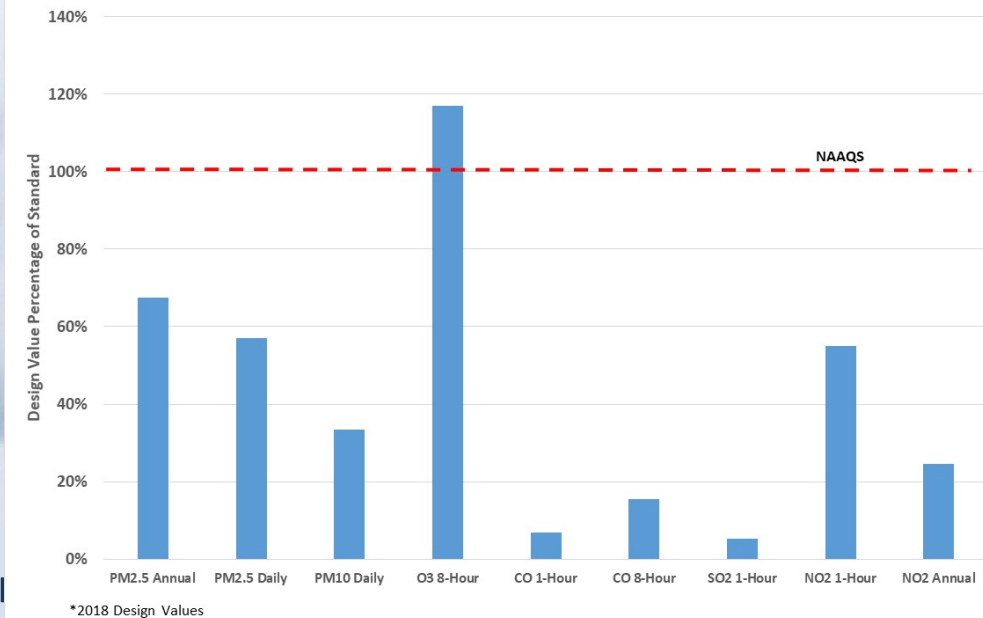
Air Monitoring During COVID-19

- Roadway traffic monitors ~25%-40% traffic reductions
- Ambient air quality monitoring data decreases of: 13-37% for NO_2 , 7-21% for CO, 0-57% for SO_2 , and 23-34% for black carbon.
- Fine particulate matter ($\text{PM}_{2.5}$) data did not indicate a pattern of reduction.
- Ozone production does not increase until temperatures are regularly 80°F or higher, so we believe impact on monitored ozone levels is minimal at this time.

Connecticut

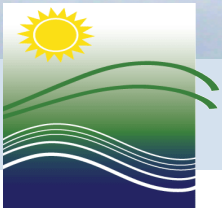


Connecticut Pollutant Levels* As Percentage of National Ambient Air Quality Standards (NAAQS)



Observations and Conclusions

- Under normal conditions, Connecticut's air quality in early spring is generally very good due to weather patterns and reduced power demand (e.g., lower space heating demands and no air conditioning demands).
- Unprecedented actions to fight Covid-19 resulted in greatly reduced activity at airports, power plants, industrial and commercial source, as well as significantly reduced vehicle traffic in Connecticut and nearby states.
- The data are preliminary data and not fully quality assured, but if accurate, are likely related to the reduction in all fossil fuel combustion associated with a wide variety of sources including power plants, manufacturing, and reduced light duty vehicle traffic both in Connecticut and in the greater NYC metro area as well as ongoing implementation of clean air programs.
- AQ Videos see: <https://portal.ct.gov/DEEP/Air/Air>
- Traffic data see: <https://www.ms2soft.com/traffic-dashboard/>





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