Coronavirus Traffic Reductions & Air Quality

Emission Reductions for March & April
2019 vs 2020
WFRC, May 2020
Decrease in Freeway Volume Due to COVID-19
Reported by UDOT as of mid April
NOx Emission Impact from Coronavirus Traffic Reductions

Assumes 15% less truck traffic and 40% less traffic from other vehicles based on UDOT traffic counts March 2020.

*Emissions for 2020 by category interpolated from Salt Lake County PM2.5 State Implementation Plan. Point, Non-road, and Area Sources were not modified for the coronavirus.
VOC Emission Impact from Coronavirus Traffic Reduction

Assumes 15% less truck traffic and 40% less traffic from other vehicles based on UDOT traffic counts March 2020.

*Emissions for 2020 by category interpolated from Salt Lake County PM2.5 State Implementation Plan. Point, Non-road, and Area Sources were not modified for the coronavirus.
Coronavirus & Ozone Pollution, Bountiful Station
March & April: 2019 vs 2020

Ozone standard 70 ppb

ppb


2019 2020
Coronavirus & PM2.5 Pollution, Rose Park Station
March & April: 2019 vs 2020

PM2.5 Standard 35 µg/m³
Air Quality Lessons from Coronavirus Experience

- Telecommuting is an effective strategy
  - Reduced VMT
  - Reduced vehicle emissions
  - Low implementation cost
- Vehicles are ~33% of emissions
- Air quality is complex
  - Emissions profile
  - Weather
  - Temperature/Inversions
- More studies to follow