

ABSTRACT: AN INVESTIGATION OF SUMMERTIME EMISSIONS ALONG THE WASATCH FRONT ACCORDING TO THE POST-SMOKE 2017 EMISSIONS INVENTORY

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Emissions inventories play a crucial role in the Utah Division of Air Quality's efforts to understand and mitigate harmful air pollution. Typical emissions inventories contain estimations of a pollutant's emission rate on an annual basis per emission source (tons per year). Air quality modelers use this annualized estimation to further describe the pollutants' spatial distribution, temporal distribution, and chemical speciation using the Sparse Matrix Operating Kernel Emissions model (SMOKE). Post-SMOKE inventories help us understand emissions during peak pollution seasons along the urban corridor.

The Northern Wasatch Front (Salt Lake, Davis, and parts of Tooele and Weber counties) is a designated ozone nonattainment area. The reports included in this presentation highlight post-SMOKE inventories for a representative ozone exceedance day in July, 2017. The reports are interactive and allow users to deeply explore emissions sources that contribute to ozone formation in the nonattainment area. Researchers at the Utah Division of Air Quality are excited to share these model results in an easily accessible format that can help inform the public about ozone precursor emissions.