

Mobile Air Quality Observation System

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Utah's Wasatch Front experiences poor air quality episodes throughout the year due to our unique weather, topography, and emissions. During winter, inversions trap unhealthy concentrations of fine particulate matter (PM_{2.5}), high pressure during summer leads to elevated ozone (O₃) levels and wildfires (PM₁), and the drying up Great Salt Lake releases dust (PM₁₀) during windy periods.

- **Air quality data are needed to help inform the public and stakeholders on the conditions they are experiencing and help characterize how air pollution affects the public's health.**
- University of Utah researchers have deployed air pollution sensors on three TRAX light rail cars and nine electric buses across the Wasatch Front and will expand to 16 buses this year.
- Mobile air quality data are available to the public to monitor how air quality varies across the Salt Lake Valley and Weber County at minute scales. See <http://utahaq.chpc.utah.edu/>
- This is the only non-UDAQ platform available to capture spatial variations in ozone (O₃), dust (PM₄ and PM₁₀) from the Great Salt Lake, and wildfire smoke (PM₁) in real time.
- Supported H.B. 344 "Student Asthma Relief Amendments".
- Ongoing funding is necessary to 1) support the dissemination of the information to air quality decision makers, the public, and researchers, 2) to utilize the mobile data set for air policy outcomes and mitigation actions, 3) apply stringent quality control measures to the data set, 4) maintain and calibrate the instrumentation, and 5) further develop the real-time website.

