ATTACHMENT 3

EMPACT

AIR MONITORING PROJECTS

From 1998 to 2001, the Environmental Monitoring for Public Access and Community Tracking (EMPACT) Program funded 33 grants to local government agencies (Metro Grants). Metro Grants support locally proposed and managed environmental monitoring and communication projects that emphasize active partnerships between local and state government, research institutions, non-governmental organizations (NGOs), the private sector, and the federal government. Metro Grants receive up to $400,000 in federal funds and are required to contribute a local match to encourage sustainability beyond the federal funding period.

To learn more about other EMPACT projects and to order EMPACT technology transfer handbooks, please visit www.epa.gov/empact. All project abstracts, progress reports and final reports are posted to www.epa.gov/ncer. For more information, you may contact **Madalene Stevens**, EPA Project Officer, at 202-564-2278, stevens.madalene@epa.gov.

The following is a summary of the nine EMPACT Metro Grants conducting air-monitoring programs.

1. AirBeat: Time-Relevant Communication of Ozone and Particulate Air Pollution, A Pilot Project to Raise Awareness and Promote Exposure Reduction - Boston, MA
(Local Contact: Jennifer Charles, JenEnviro@aol.com)
http://airbeat.org/

This project developed and implemented real-time ambient air pollution monitoring and data management techniques for ozone, fine particulate matter ($PM_{2.5}$), black carbon soot (BC), and visibility to allow time-relevant communication of these data to the public in a way that can be readily available, easily understood, applied by members of the community to reduce human exposure, and used to increase public awareness and understanding of pollution sources, health effects, and precautionary measures. These data are targeted to the urbanized Roxbury neighborhood of Boston. This project is the basis for a technology transfer handbook currently being developed.

2. BurlingtonEcoInfo: Community Based Environmental Monitoring in the Burlington Ecosystem, The Next Step in Building a Sustainable City - Burlington, VT
(Local Contact: Betsy Rosenbluth, brosenbluth@yahoo.com)
http://www.uvm.edu/~empact/

The goal of this project is to engage citizens in developing environmental information accessible to a broad cross-section of residents and to use this information to inform collaborative actions

that address priority problems in their urban ecosystem. This is a multi-media project that includes both air and water monitoring data. Hourly ozone measurements are included on the web site.

3. ECOPLEX: Environmental Conditions On-Line for the Dallas-Fort Worth MetroPLEX - Denton, TX
(Local Contact: Kevin Theusen, kevin.thuesen@cityofdenton.com)
http://www.ecoplex.unt.edu/

The goal of this project is to inform citizens of the current, historical, and near-term forecasts of environmental conditions to which they are exposed, including water, land, sun and air. The web site features ozone data and ozone alerts.

4. AirInfoNow - Tucson, AZ
(Local Contact: Beth Gorman, bgorman@deq.co.pima.az.us)
http://www.airinfonow.com/

This project aims to develop a unified approach among the collaborating agencies for environmental data collection, management, reporting, and education using air quality as a pilot medium. The web site reports live air quality index values for PM_{10} and $PM_{2.5}$, ozone, and carbon monoxide, features a web cam visibility photo, and has an extensive education component. The web site, phone hotline, and newsletter are available in both English and Spanish.

5. Paso del Norte Environmental Monitor - El Paso, Texas
(Local Contact: Ricardo Dominguez, rdominguez@elpasompo.org)
Project web site not yet developed. See http://ozonemap.org/ and http://air.utep.edu/ for related sites.

This project is using currently monitored ozone, carbon monoxide and particulates combined with local weather, current traffic conditions and international bridge crossing delays to compile information into a predictive traffic model to be broadcast to the public in order to encourage alternative modes of transportation. This project encompasses the tri-state / bi-national area of El Paso, TX, Sunland Park, NM and Ciudad Juarez, Chihuahua, Mexico and the web site will be presented in both English and Spanish. This project is the basis for a technology transfer handbook currently being developed.

---

6. The Tulsa Air and Water Quality Information System (TAWQIS) - Tulsa, Oklahoma
(Local Contact: Monica Hamilton, mhamilton@ci.tulsa.ok.us)
http://e-tulsa.org/

This project assists people in the metropolitan community and the surrounding regions of Northeastern Oklahoma connect environmental data to their daily lives and promote public involvement in environmental policy. This objective will be reached by providing environmental information, and public awareness and educational programs. This project includes both air and water monitoring data. The web site features real-time ozone data.

7. Providing Timely Public Access to Daily Air Quality Information About Birmingham, AL and its Regional Environment - Birmingham, Alabama
(Local Contact: Sam Bell, SBell@jcdh.org)
http://vortex.nsstc.uah.edu/empact_bhm/

This project will develop and implement a greatly improved and sustainable program of local air quality monitoring and timely and effective public access to useful information about metro Birmingham as well as regional (southeastern and eastern US) air quality and related meteorology. The public outreach will also include a program for the promotion of public awareness and education about air quality and related health effects. The web site features the current local air quality index; timely ozone, PM_{10}, $PM_{2.5}$, and SO_2 levels; and extensive mapping capabilities.

8. Rapid Mapping for Clean Air in Commerce City - Commerce City, CO
(Local Contact: Lynn Robbio Wagner, wagner@tchd.org)
Project web site not yet developed

This project will demonstrate innovative methods for providing timely reporting of the spatial and temporal distribution of air pollutants in a heavily industrialized urban community. This methodology will utilize data from real-time measurements of meteorological parameters and concentrations of air pollutants, atmospheric dispersion models (ADMs), and a Geographic Information System (GIS) to map the spatial distributions of selected air pollutants.

---

9. Real-Time Monitoring and Communication of Levels of Fine Particles, Ozone and Black Carbon in Northern Manhattan - New York, New York
(Local Contact: Swati Prakash, Swati@weact.org)
Project web site not yet developed

The primary objective of this project is to develop and implement real-time monitoring, data management, and public communication of ambient levels of fine particulate matter ($PM_{2.5}$), ozone and black carbon soot (BC) in the urbanized Northern Manhattan neighborhoods of Harlem and Washington Heights. The project will use instrumentation that is sensitive to diesel fuel emissions, including an Aetholometer for real-time monitoring of black carbon. Data will be communicated to residents in a way that is accessible, understandable, and can be utilized to reduce their exposure and health risks.