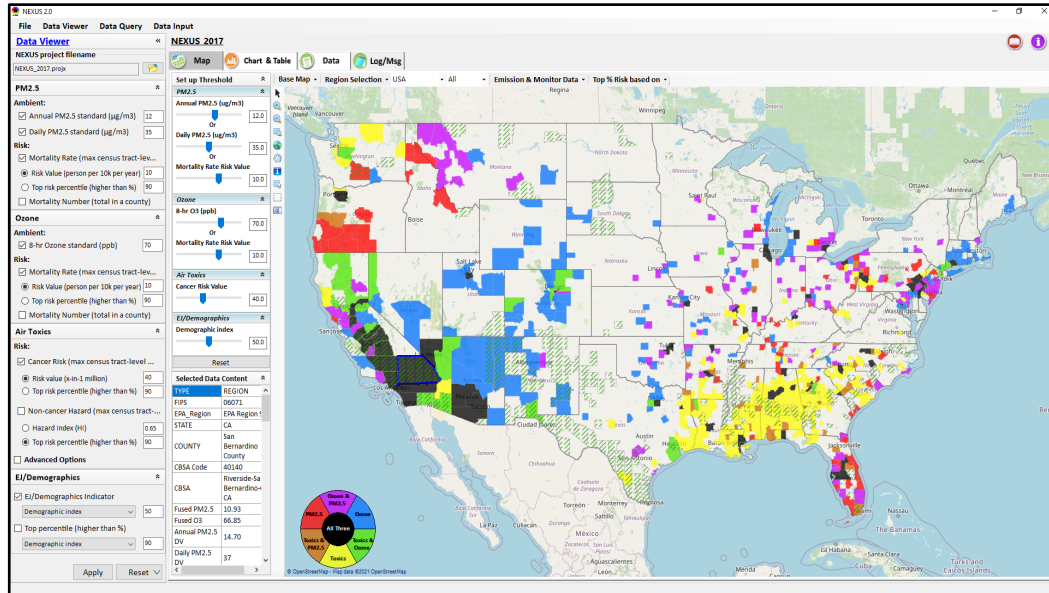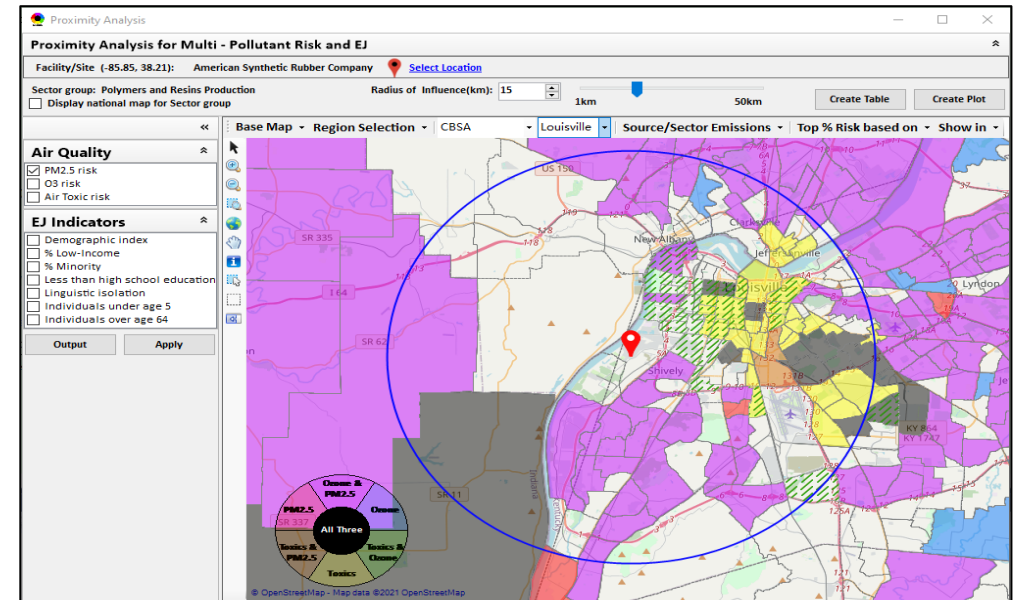# "NEXUS" Multi-Pollutant Advanced Screening Tool
AAPCA Briefing

Data Viewer: National/Regional Level

Proximity Analysis: Community Level

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Overview

- **Multi-Pollutant Background**

- **NEXUS Background**

- **Live Demo**

Multi-Pollutant Background

- Support a comprehensive, MP treatment of air quality problems to effectively improve air quality and make the most efficient use of available resources

  - ➢ <u>Primary Goal</u> - identify & evaluate local control strategies targeting emissions of O_3 & $PM_{2.5}$ and their precursors while at the same time reducing Air Toxics of concern for communities to maximize both health benefits and air quality improvements

- MP planning has the potential to reduce the costs and increase benefits associated with air quality management (AQM)

- Supports S/L/T air agencies in developing MP, risk-based AQM plans and implementing strategies that reduce air pollution emissions & improve public health

- Success has been demonstrated in Detroit and SC; another project is currently underway in Louisville, KY

- Tools needed to analyze MP data are either available currently or being developed in OAQPS (e.g., NEXUS)

NEXUS Background

- "NEXUS" is an advanced screening tool for multi-pollutant (MP) risks and EJ/Demographic analysis developed by OAQPS's MP team

- "NEXUS" integrates a suite of MP data, including emissions, monitoring, modeling, fused AQ data and health risk data for $PM_{2.5}$, O_3 & air toxics as well as EJ/demographic data, into one single platform to allow national and areal overlay mapping & analysis of MP ambient & risk data

- The NEXUS tool will essentially provide a 'conceptual model' of an area's MP issues to facilitate engagement with state/local/tribal agencies & community stakeholder groups

NEXUS is currently for internal EPA use. A beta version is available for EPA staff to use and provide feedback on for improvement. Additional updates/improvements are necessary before the NEXUS tool is ready to be released to the public.

"NEXUS 3.0" Live Demo