



EPA National Emission Inventory Update

WRAP Regional Haze Emission Inventories –
Lessons Learned Workshop
Doug Solomon, US EPA
September 26, 2007

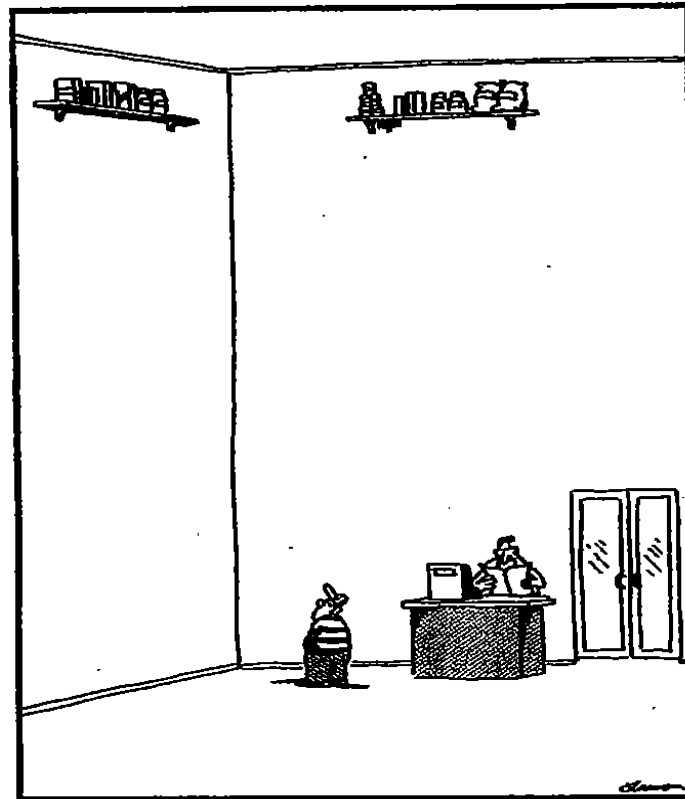


Presentation Overview

- Improved Access to 2002 NEI
- 2005 NEI Update
- NEI Reengineering

Background

We don't always make information easy to access...



Inconvenience stores

Background

For example, emissions pages on our web site...

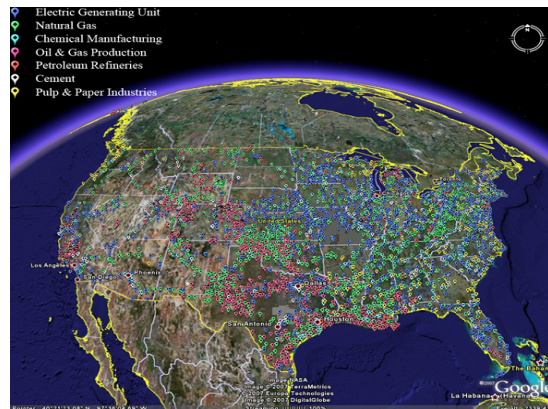
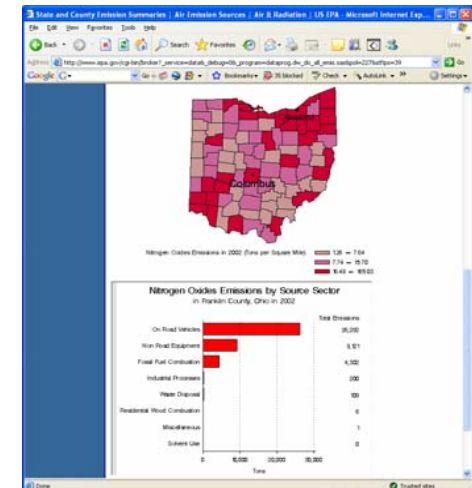
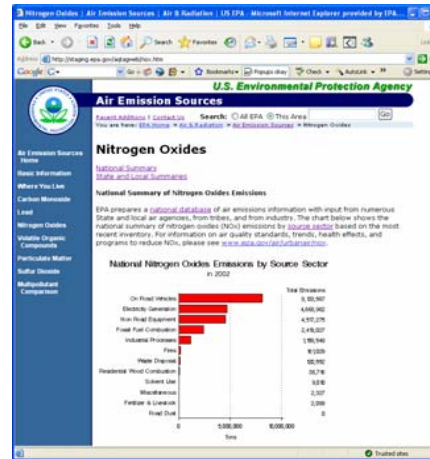
- Do not provide data in an “easy-to-use” format
- Do not answer some of the most common questions
- Do not provide the spatial, temporal, or sector-specific resolution many people need

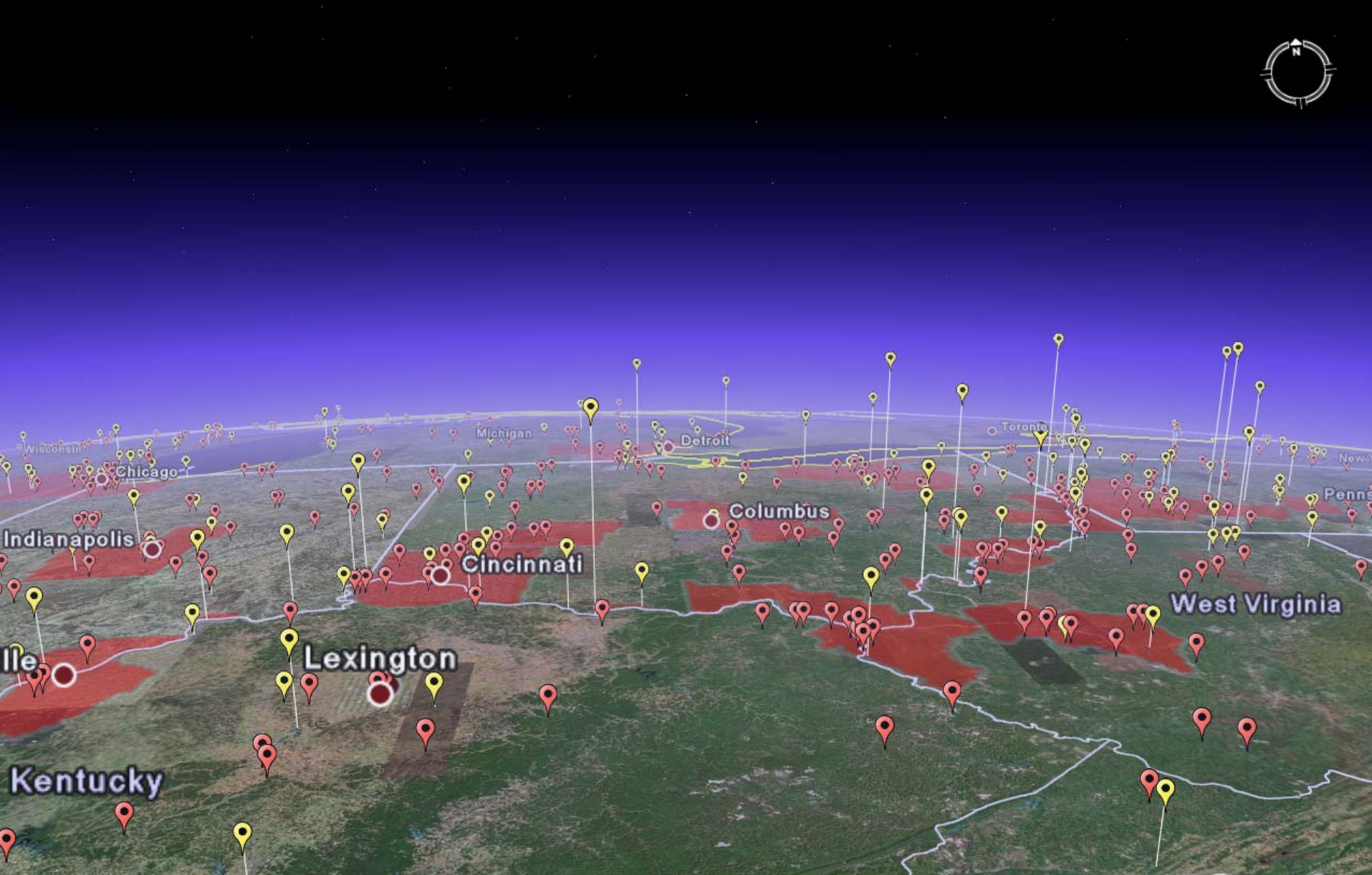


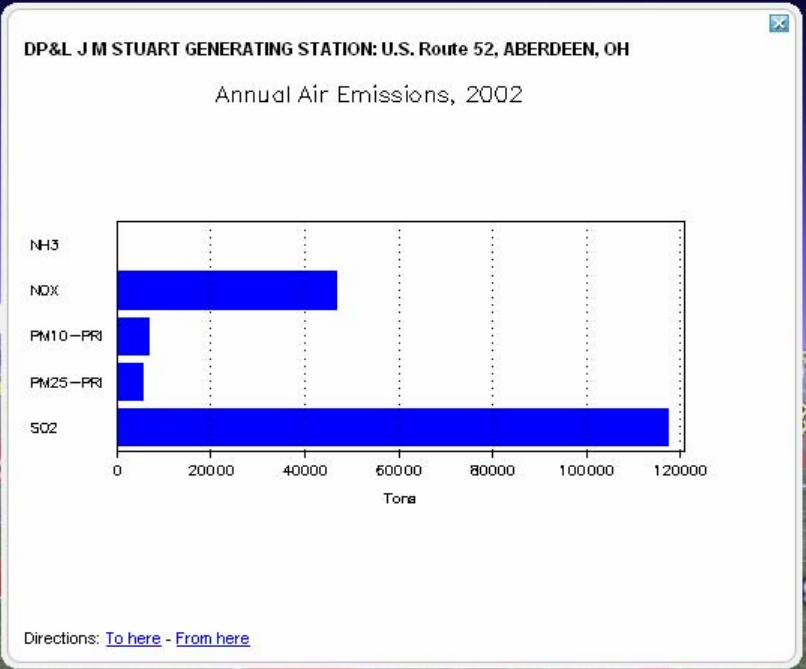
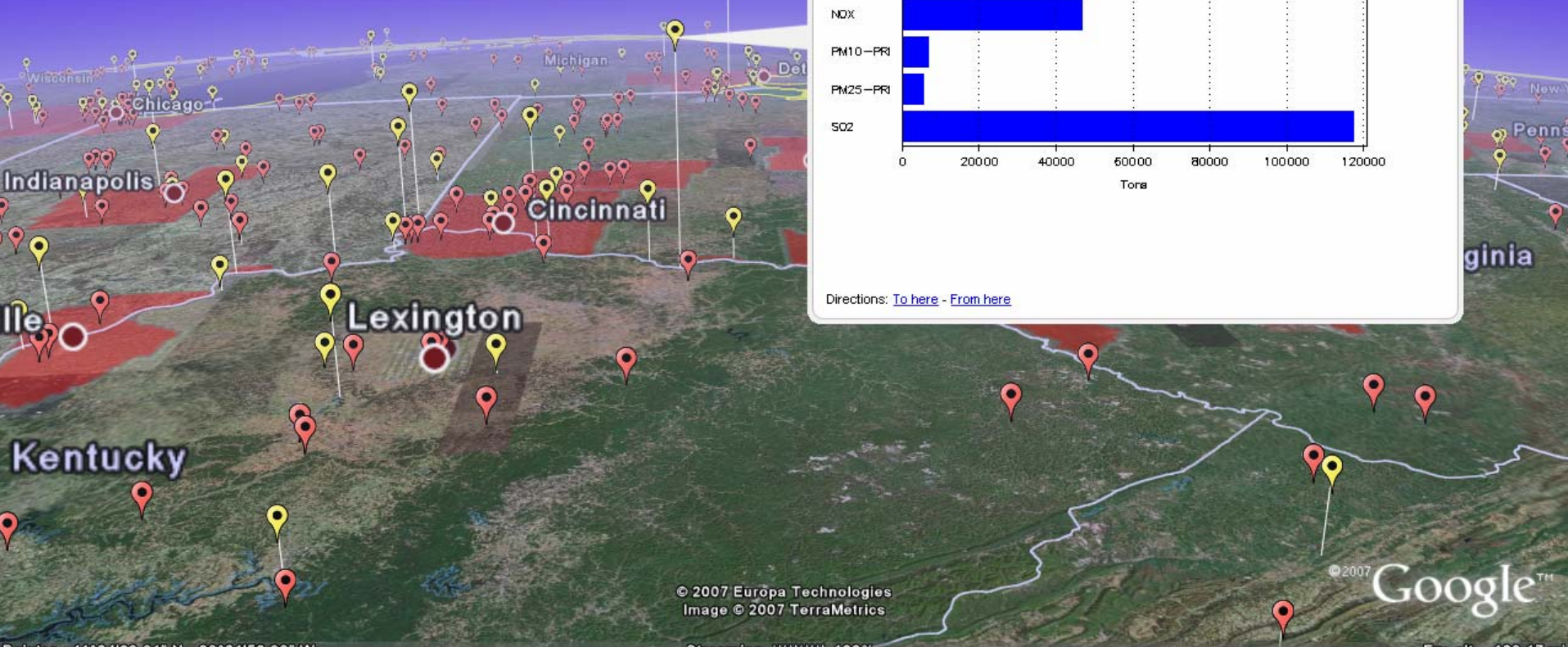
Background

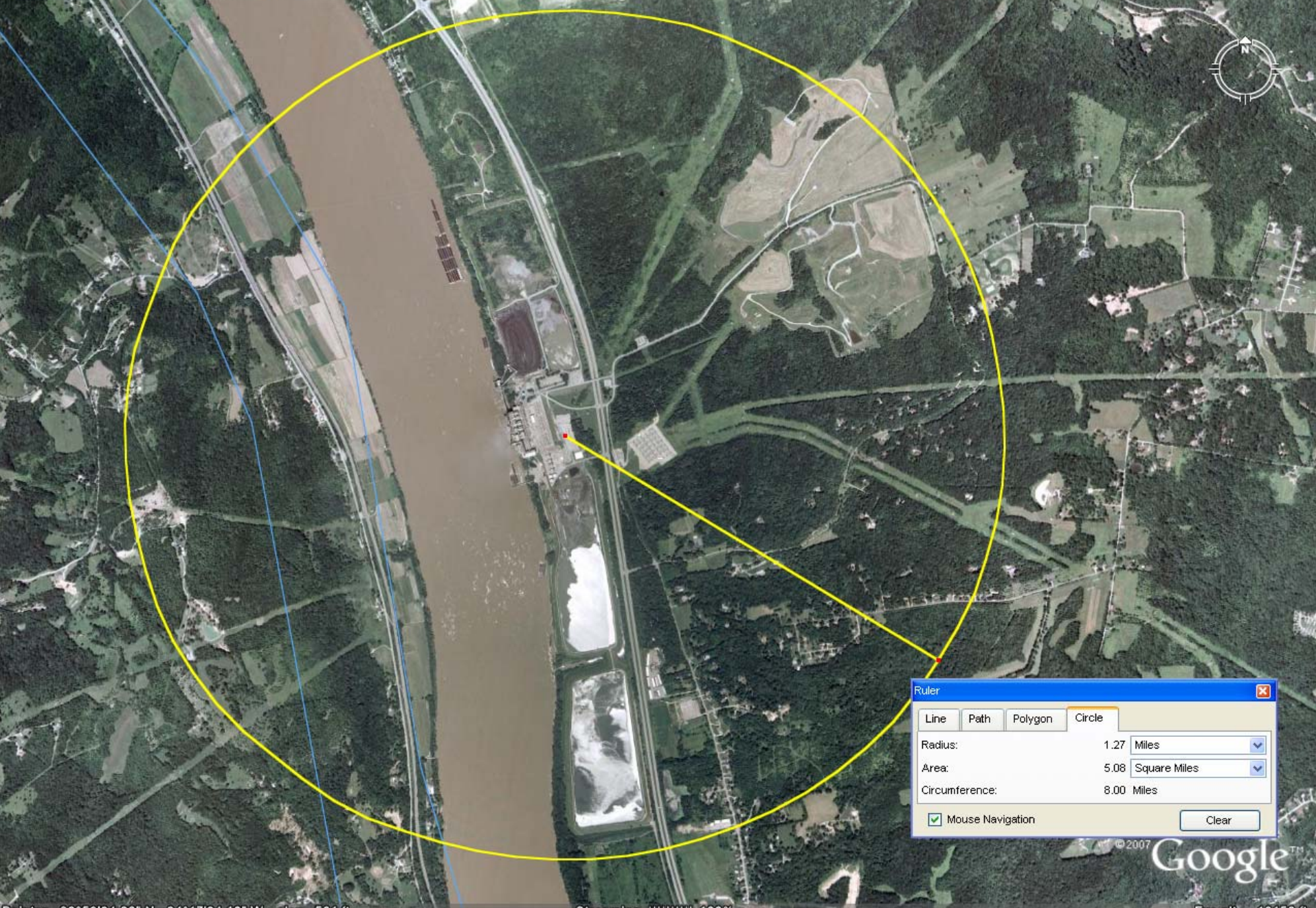
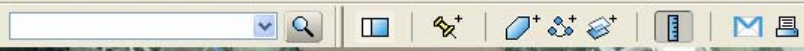
How are we changing that?

- Linking the site directly to the data, providing...
- National, state, and local summaries
- Source category detail not previously available
- Geospatial access not previously available









Ruler

Line Path Polygon **Circle**

Radius: 1.27 Miles

Area: 5.08 Square Miles

Circumference: 8.00 Miles

Mouse Navigation

Clear



2005 NEI Overview

- Review of 2005 NEI Plan (distributed 9/2005)
- Status of 2005 NEI Version 1
- Plans for 2005 NEI Version 2
- Schedule for NEI 2005 Version 2
- Recap of Opportunities for S/L/T Input

Review of 2005 NEI Plan (distributed 9/2005)

- Reduced effort to allow EPA to focus on NEI Reinvention
- New Data
 - 2005 EGU emissions/heat input from ARP
 - 2005 NMIM run for onroad and nonroad emissions
 - Facility closures from S/L/Ts
 - 2005 wildfire/managed burn data
- Other stationary point and nonpoint from 2002 NEI
- Distribution via CHIEF Web Site
 - Summary files only
 - Post S/L/T CERR files and/or link to S/L/T web site

Status of 2005 NEI Version 1

- Completed 2005 EGU emissions
 - NOx/SO2 from CEMs
 - Other pollutants based on heat input from ARP
- Completed 2005 NMIM run for onroad and nonroad emissions
- Completed incorporation of facility closures from S/L/Ts
- Recently completed 2005 wildfire/managed burn data
- Summary files under development
- Plan to post summary files and S/L/T files and/or link to S/L/T web site by the end of September 2007
- If S/L/Ts want a link to their web site in addition to or instead of posting of CERR S/L/T files we need notification and web site address by September 15, 2007
- Will cal this version 2005 NEI Version 1

Plans for 2005 NEI Version 2

- Why a 2005 NEI Version 2
 - Concern about not having current stationary source emissions data inside and outside of EPA
 - OTAQ desire to have 2005 mobile source emissions data based on the best data available
- New for 2005 NEI Version 2
 - Non-EGU stationary source data based on S/L/T CERR files and Risk and Technology Review (RTR) data (HAPs)
 - New NMIM run for onroad and nonroad sources based on S/L/T inputs and final 2005 VMT

Schedule for NEI 2005 Version 2

- Through September 1, 2007 S/L/Ts have opportunity to submit new or revised 2005 stationary source CERR data
- Through September 30, 2007, S/L/Ts have opportunity to submit new or revised 2005 NMIM inputs for mobile sources (see May 29, 2007 NEI Listserv message)
- By March 31, 2008, EPA will complete development of 2005 NEI Version 2

Recap of Opportunities for S/L/T Input

- **September 1, 2007** – Last day to submit new or revised 2005 stationary source CERR data for use in 2005 NEI Version 2
- **September 15, 2007** – Last day to send web address, if S/L/Ts want a link to their web site in addition to or instead of posting of CERR S/L/T files
- **September 30, 2007** – Last day to submit new or revised 2005 NMIM inputs for mobile sources (see May 29, 2007 NEI Listserv message)

The NEI – What’s Broken and Why

- What’s broken
 - Uneven data quality
 - Long development time (3 years)
 - Limited transparency and access, especially for external stakeholders (States, locals, tribes, industry)
 - Lack of easy to use, standard, automated processes results in heavy reliance on contractors
- Why
 - Started as single user PC database
 - New data acquisition processes, data storage, and client requirements “tacked on” rather than redesign

The NEI: New Challenges

- Fully integrated multi-pollutant inventory
 - Criteria pollutants and precursors
 - Air Toxics
 - Greenhouse gases
- Better characterization of smaller source categories (we survived CAIR and mobile source rules because they're the strongest parts of the NEI)
- New program requirements will require better resolution; spatially and temporally
 - Sector approach
 - Voluntary/innovative programs
- Shrinking resource base requires more agreement on emission estimates among stakeholders (EPA, RPOs, States, Locals, Tribes, Industry)



The Emissions Inventory System (EIS)

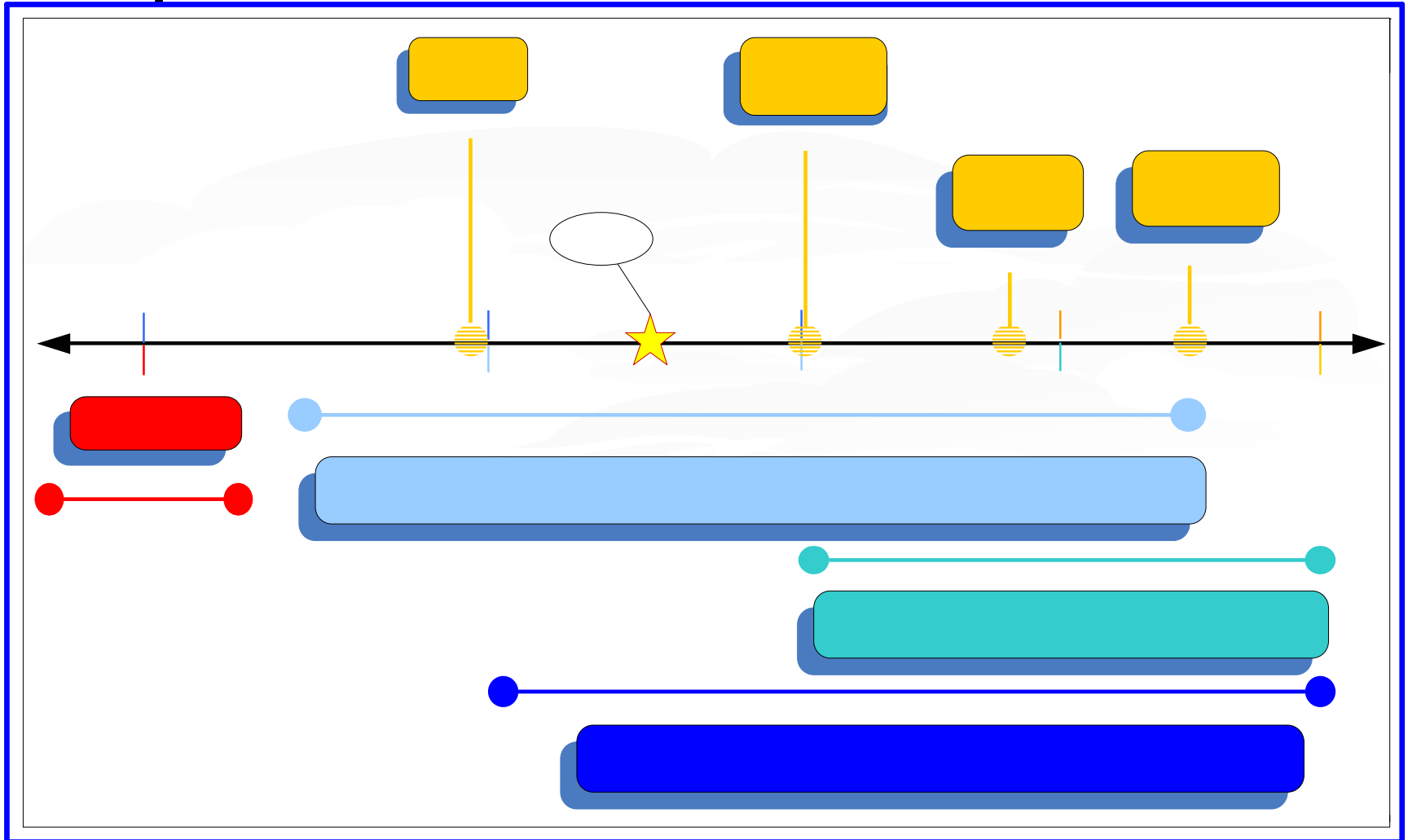
- Reduce time to create a national “bottom up” inventory from 3 years to 12 to 18 months
- Build quality assurance steps into the inputs/outputs of the system
- Develop EPA inventory process tools
- Provide Region, State, Local and Tribal access to the database to view, correct and retrieve data
- Develop public/industry access to historic and current emissions inventory data
- Generate model-ready inventory outputs
- Enhance capabilities to acquire, quality assure, store, and distribute a “bottom up” GHG inventory



2008 NEI Highlights

- Publish plans and data early
- Complete 2008 NEI in 2 years
- “Static” Facility Data
- Events Component
- Enhanced information on regulations and controls
- Multiple emission values based on data source
- QA Environment
- Data analysis reports
- Greatly improved transparency and access

Emissions Inventory System Project Schedule



Overall project schedule

- Still on Schedule!
- 12/2007 – 2008 NEI/EIS Implementation Plan
- 10/2008 – Web Portal Opens
- 10/2008 – Facility Inventory loaded and ready for revisions
- 07/2009 – EIS open for 2008 EI submissions
- 07/2009 EIS QA Environment opens
- 06/2010 – 2008 EI submissions due
- 12/2010 – 2008 NEI Complete
- 12/2010 EIS Public Web Site opens