



# Midwest Air Quality Workshop

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Indiana Department of Environmental Management  
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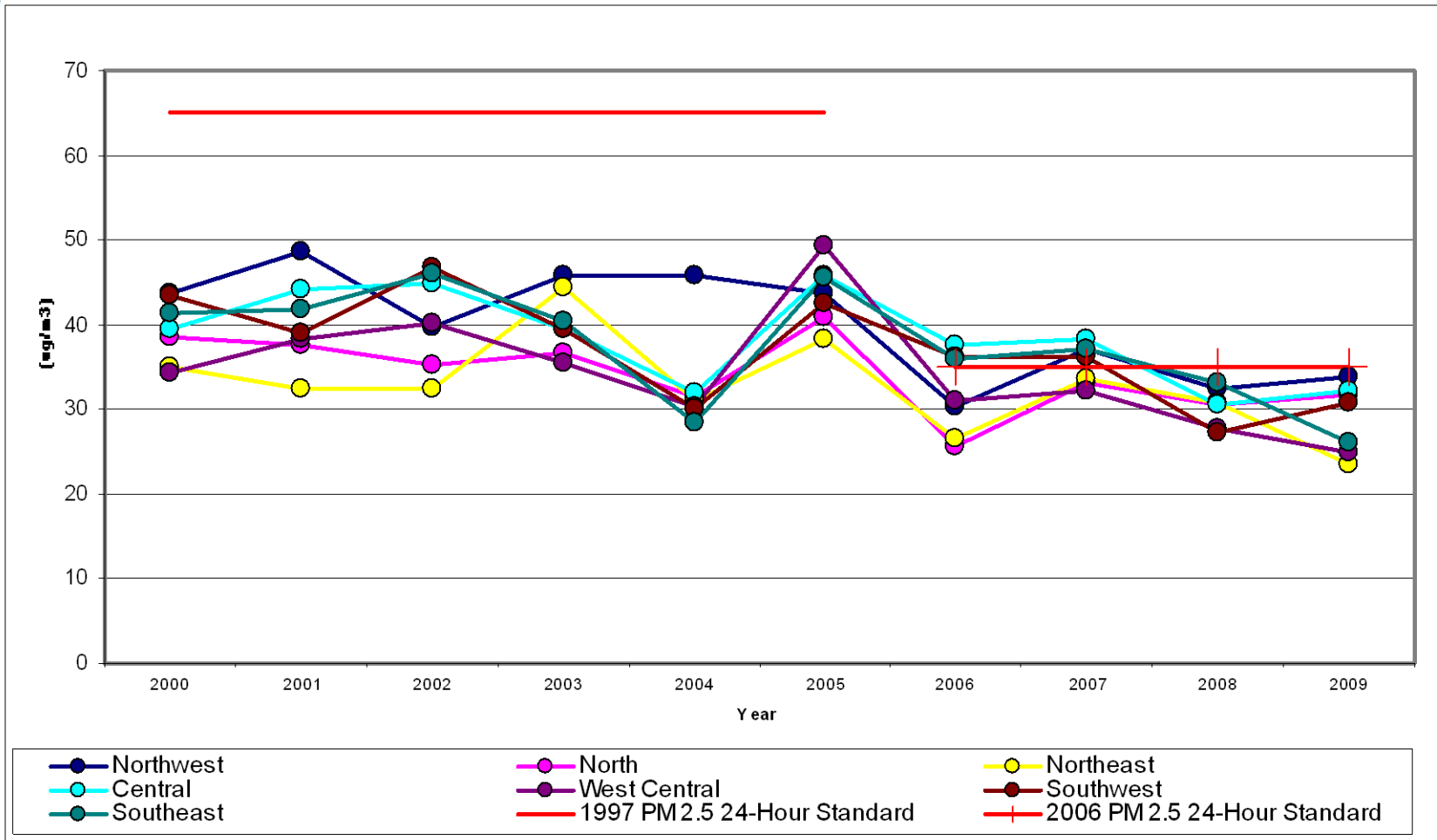


# National Ambient Air Quality Standards (NAAQS)

Where Does Indiana Stand?

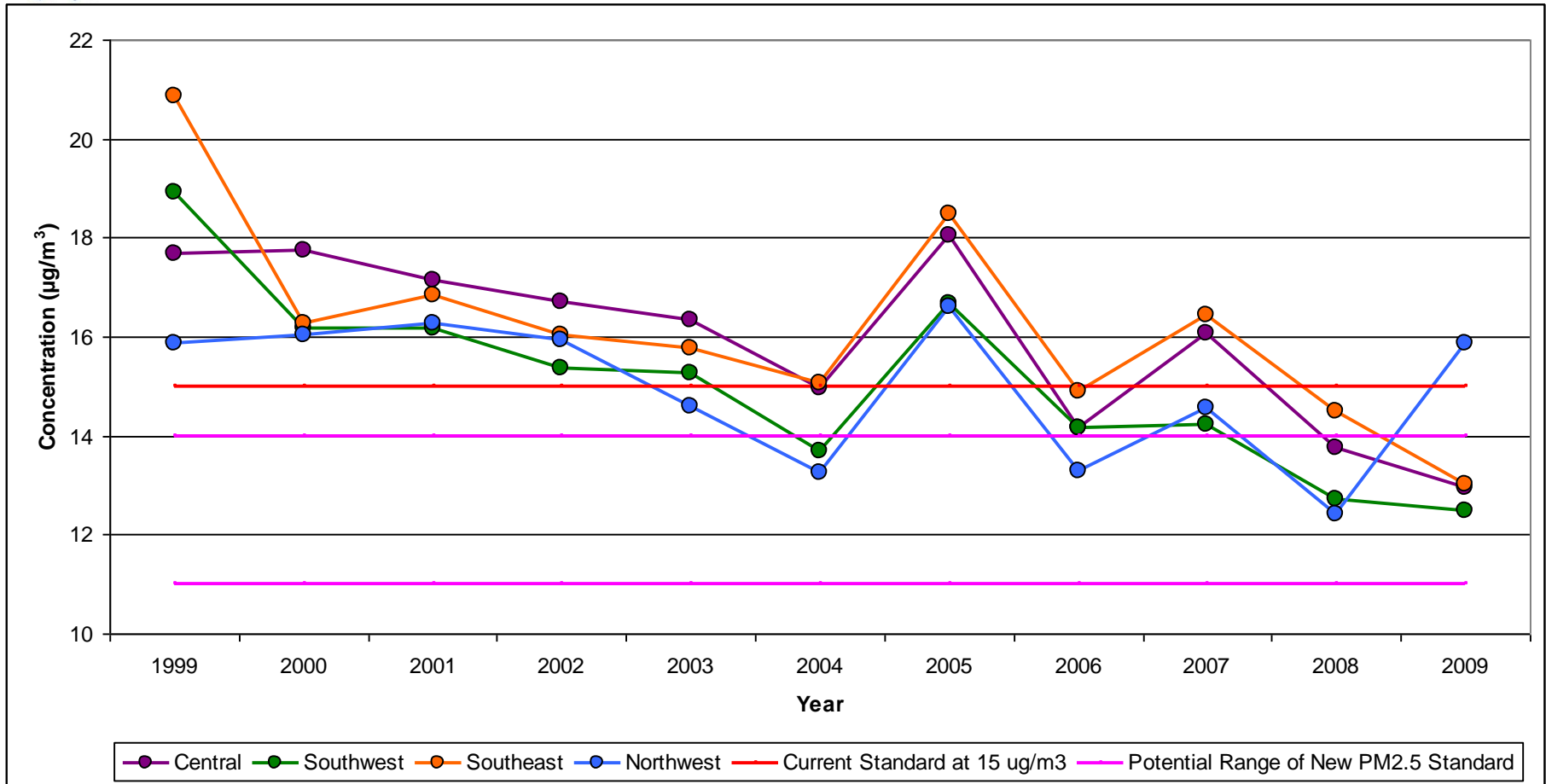


# PM<sub>2.5</sub> 24-Hour Trends 1999-2009





# PM<sub>2.5</sub> Annual Trends 1999-2009



Annual monitoring for PM<sub>2.5</sub> did not begin until 1999

Note: The Hammond-Purdue monitor had an exceedance of the standard in 2009 but the three-year design value is still well below the standard.

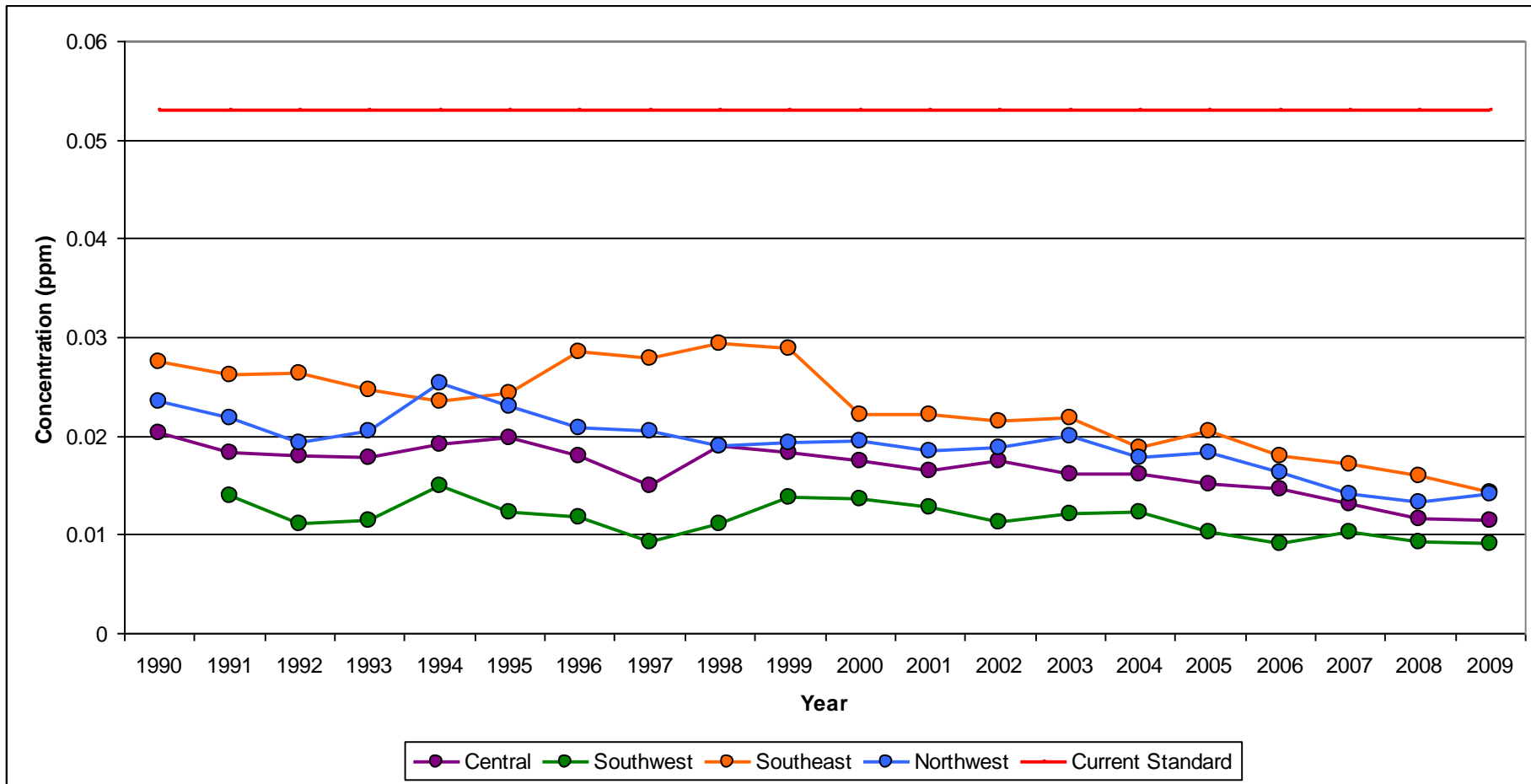


## PM<sub>2.5</sub> Redesignations

- Uncertainty associated with the implementation of CAIR has prevented approval of Indiana's redesignation requests.
  - Lack of support for demonstration for continuation of maintenance.
  - Areas pending include Central Indiana, Northwest Indiana, and Southwest Indiana.
  - Southeast Indiana and Lawrenceburg Township will be submitted in Fall 2010.
- U.S. EPA intends to propose approval of the pending PM<sub>2.5</sub> redesignations based on the proposed transport rule.
- Final approval would be issued following finalization of the transport rule in mid-2011.

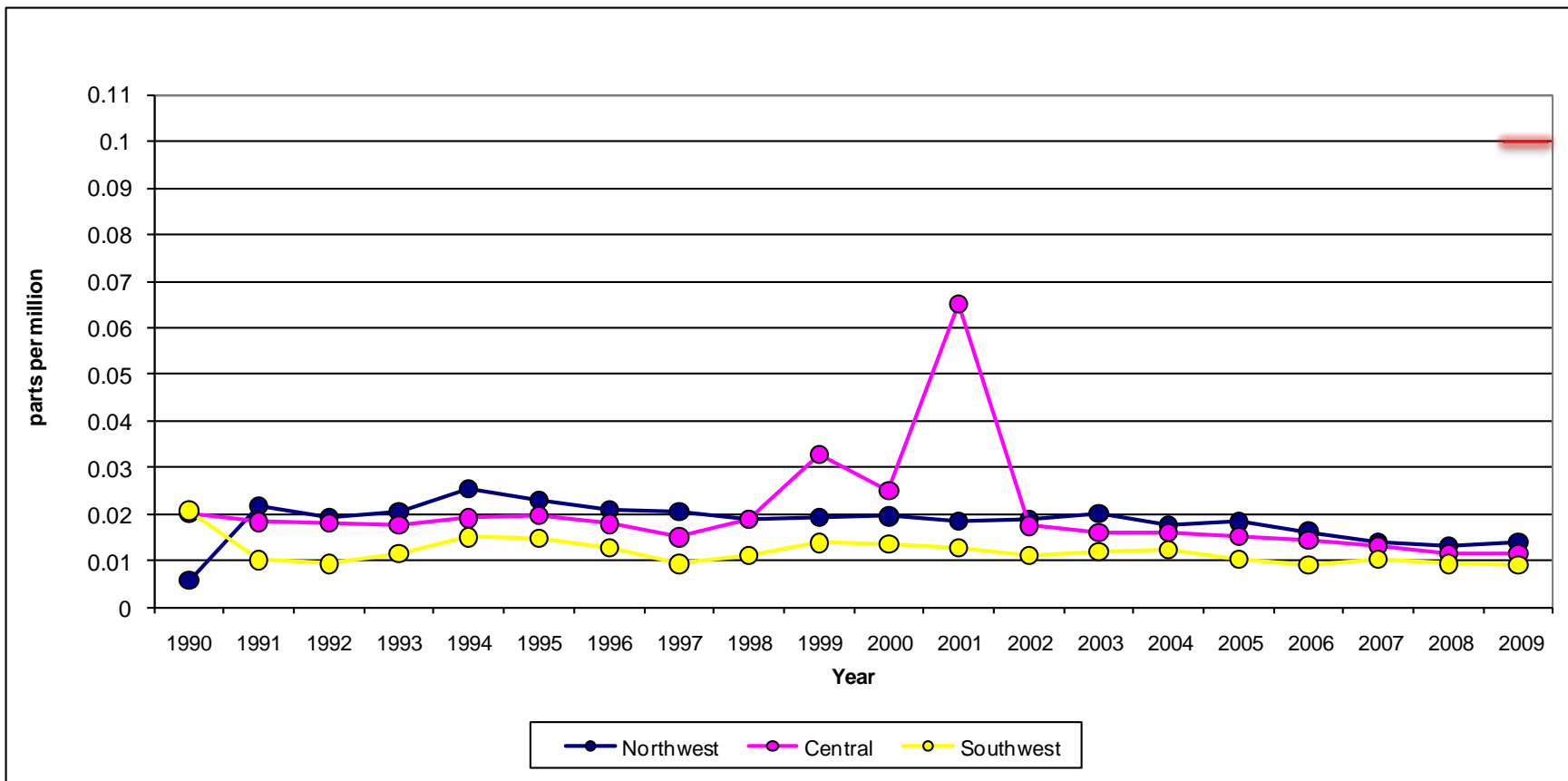


# Annual NO<sub>2</sub> Trends 1990-2009





# 1-Hour NO<sub>2</sub> Trends 1990-2009

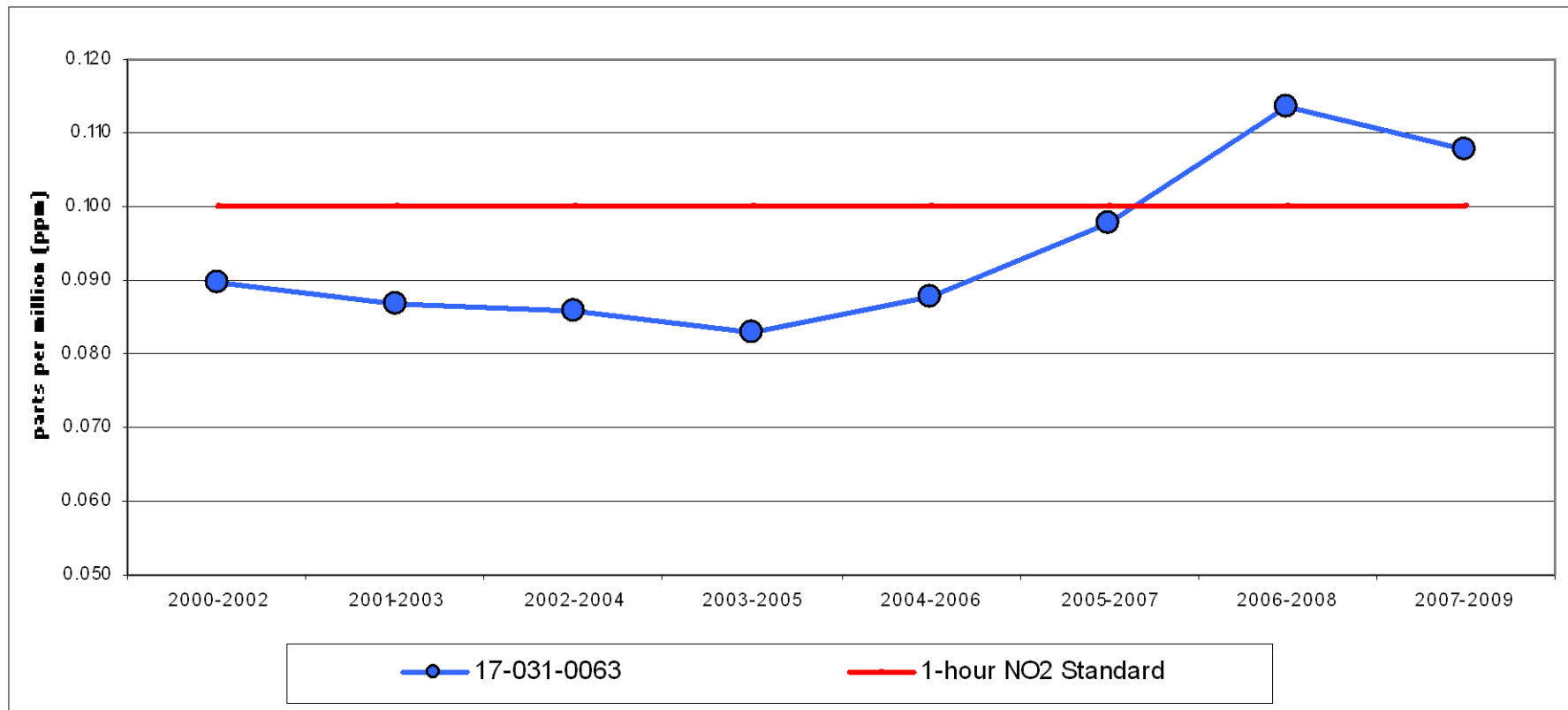


New  
1-Hour  
Standard



# Franklin Rd, Chicago NO<sub>2</sub> Monitor Data

Only monitor in the country that is over the 1-hour NO<sub>2</sub> standard.



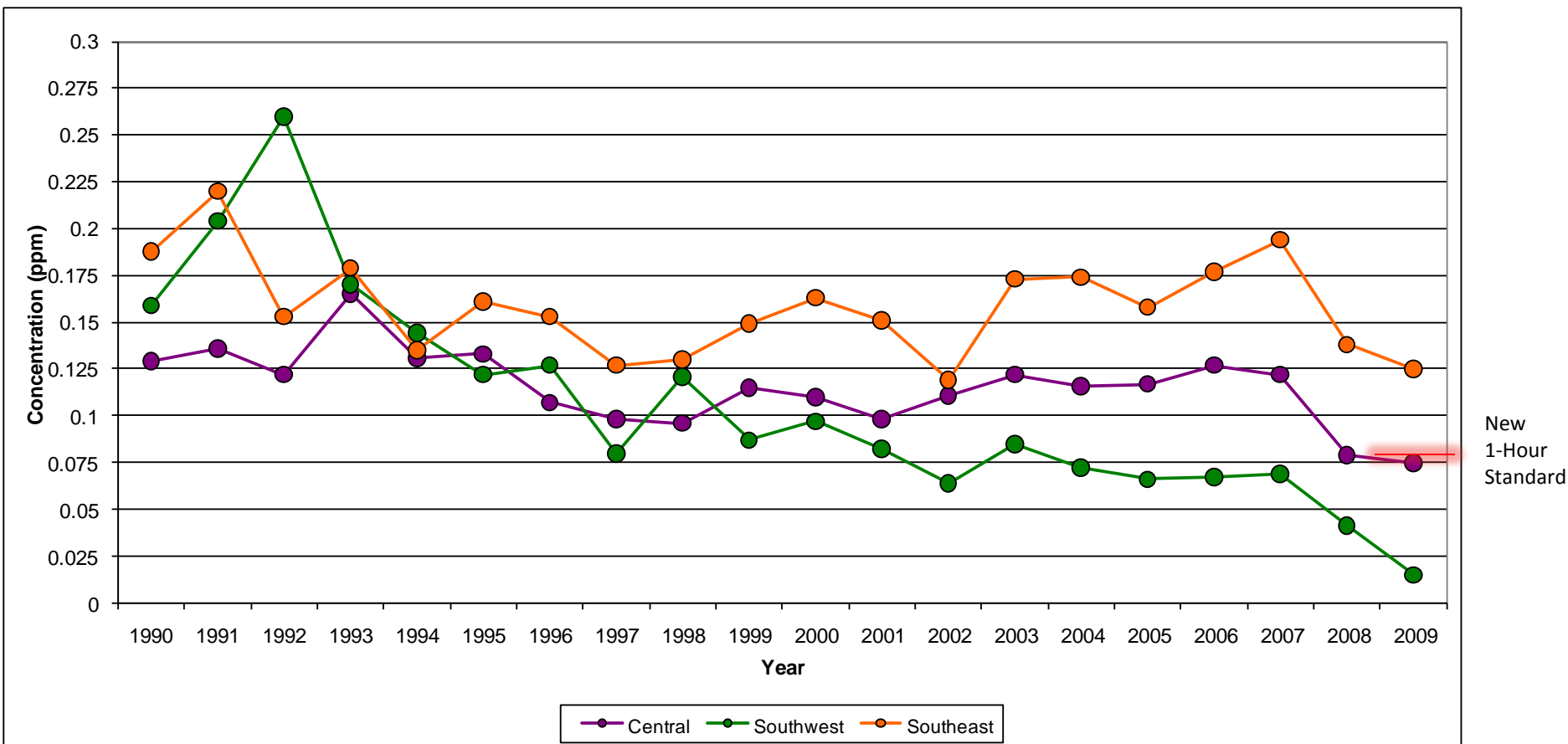


# New NO<sub>2</sub> Monitoring Requirements

- Near-Road Monitors
  - Within 50 meters from edge of selected major roads (based on annual average daily traffic).
  - Potential issues: road grades, noise barriers, air flow, access to monitor.
  - Start operating January 1, 2013.
- Indiana counties requiring near-road monitors: Lake, Marion.
- Unclear whether NO<sub>2</sub> NAAQS will pose a challenge until near-road monitoring network is in place.



# SO<sub>2</sub> Annual Trends 1990-2009



Note: The new 1-hour SO<sub>2</sub> standard set at 0.075 ppm was not established until 2010 and is not shown on this graph.



# SO<sub>2</sub> Designations

U.S. EPA anticipates initially designating areas based on 2008-2010 monitoring data.

Designation	Criteria
Nonattainment	Monitoring data or modeling results shows a violation of the standard
Attainment	Both monitoring data and modeling results showing no violation of the standard
Unclassifiable	All other areas

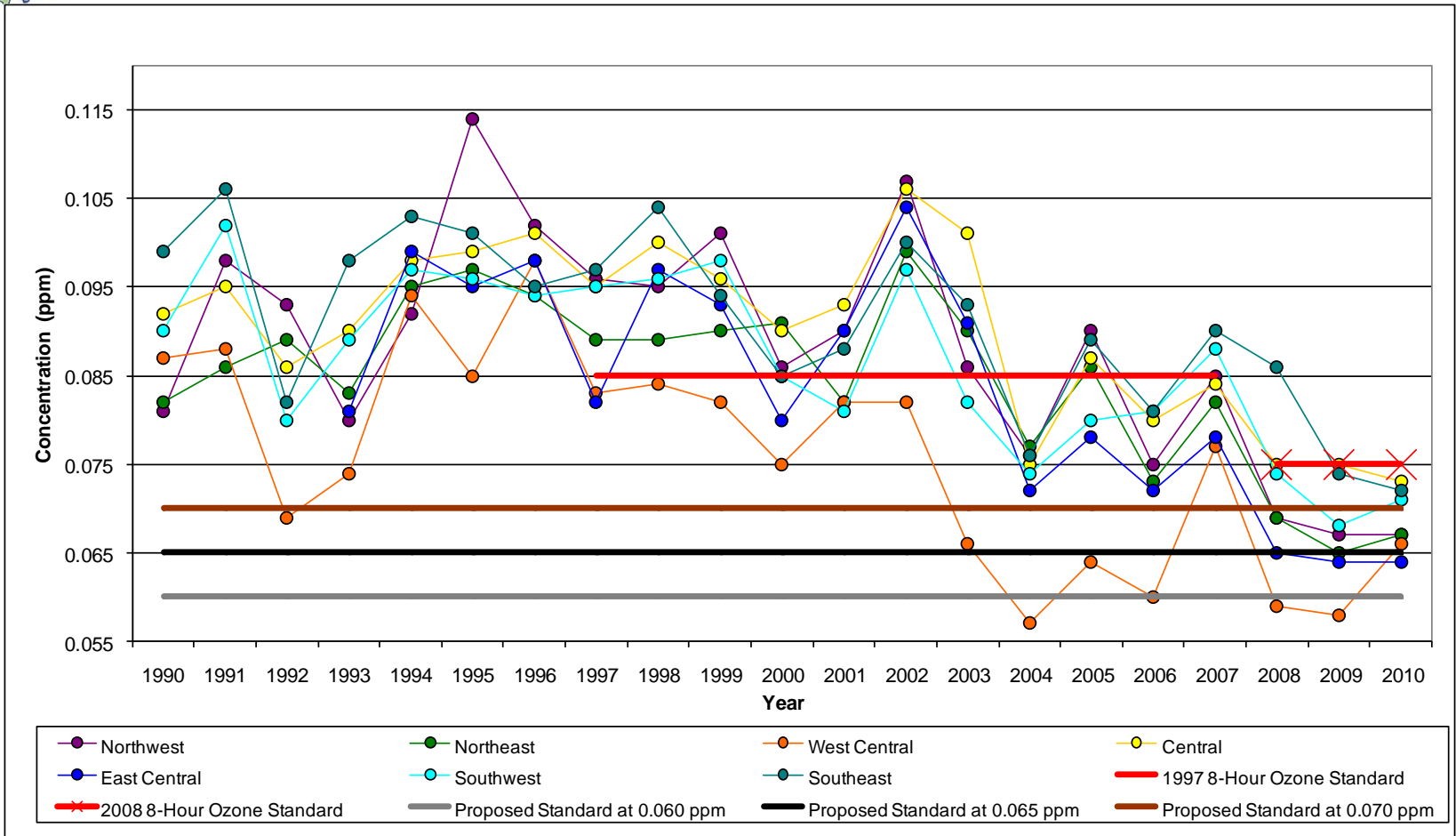


## SO<sub>2</sub> SIP Development Process

- IDEM prefers a single SIP development process to meet all obligations since both maintenance SIP and attainment SIP require modeling and rulemaking.
  - Addresses all obligations.
  - Conserve resources.
  - Ensure timely SIP submittals.
  - Eliminate confusion associated with rulemaking for emission limitations or controls.
  - Reduce the burden of additional monitoring.

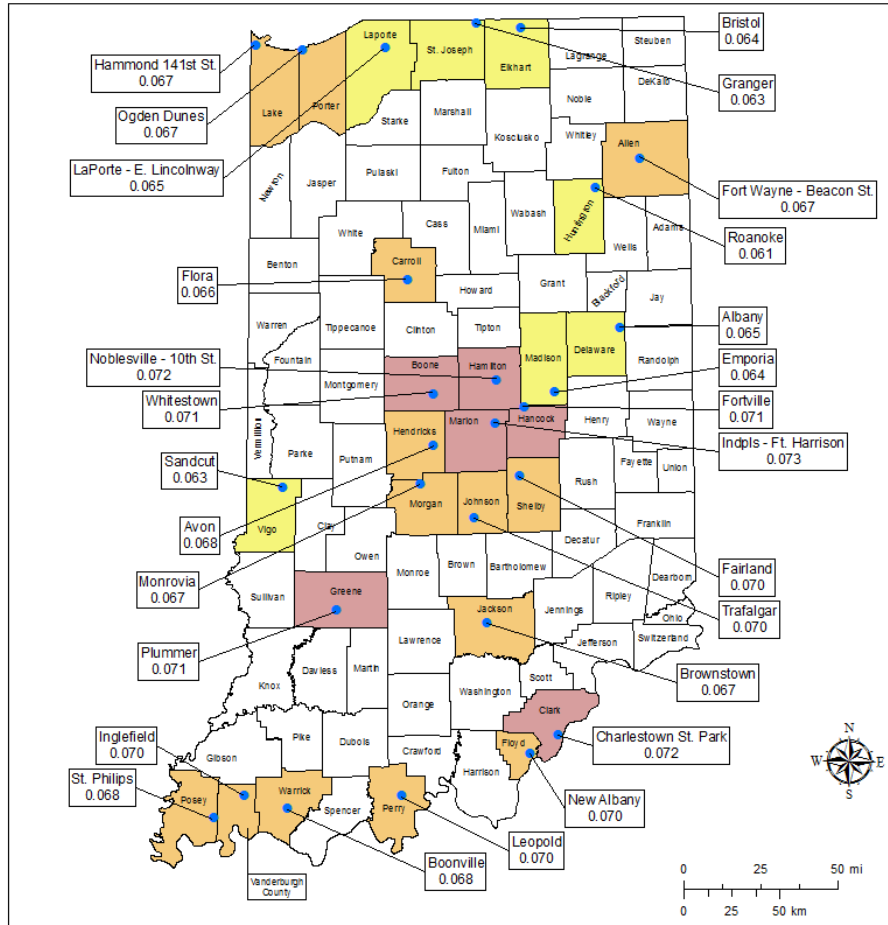


# 8-Hour Ozone Trends 1990-2009





### 8-hour Ozone Design Values (Controlling Sites Only) 2008 - 2010 Data as of October 4, 2010



**Legend**

This map is intended to serve as an aid in graphic representation only. This information is not warranted for accuracy or other purposes.

Mapped By: S. Raymond, OAQ Date: 10/4/2010

Sources: Non-Orthophotography Data Obtained from the State of Indiana Geographical Information Office and Office of Air Quality.

Map Projection: UTM Zone 16 N Map Datum: NAD83

**Values posted are in units of Parts Per Million (ppm)**

- Ozone Monitor
- County With No Ozone Monitor
- County With Ozone Monitor Less Than Or Equal To 0.065 ppm
- County With Ozone Monitor Greater Than Or Equal To 0.066 ppm and Less Than Or Equal To 0.070 ppm
- County With Ozone Monitor Greater Than Or Equal To 0.071 ppm



## Rule Development To Support Future Air Quality Improvement

- Stage 1 vapor recovery (statewide) (LSA#07-353)-Effective
- Consumer and commercial products (LSA#07-351)-Final Adopted 9/10
- Architectural and Industrial Maintenance (AIM) Coatings (LSA#06-604)-Final Adopted 9/10
- Outdoor hydronic heaters (LSA#05-332)-Proposed 9/10
- Automobile refinishing operations (LSA#06-603)-Effective
- Clean Air Transport Rules I & II
- MACT standards for various stationary sources
- Fuel, engine, and fuel economy standards



## Contact Information

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