



# North Central Indiana Air Quality and Clean Diesel Programs Update

PARTNERS FOR



CLEAN AIR

**Shawn Seals**

Senior Environmental Manager

*Office of Air Quality*

Indiana Department of

Environmental Management

April 25, 2018



# Presentation Summary

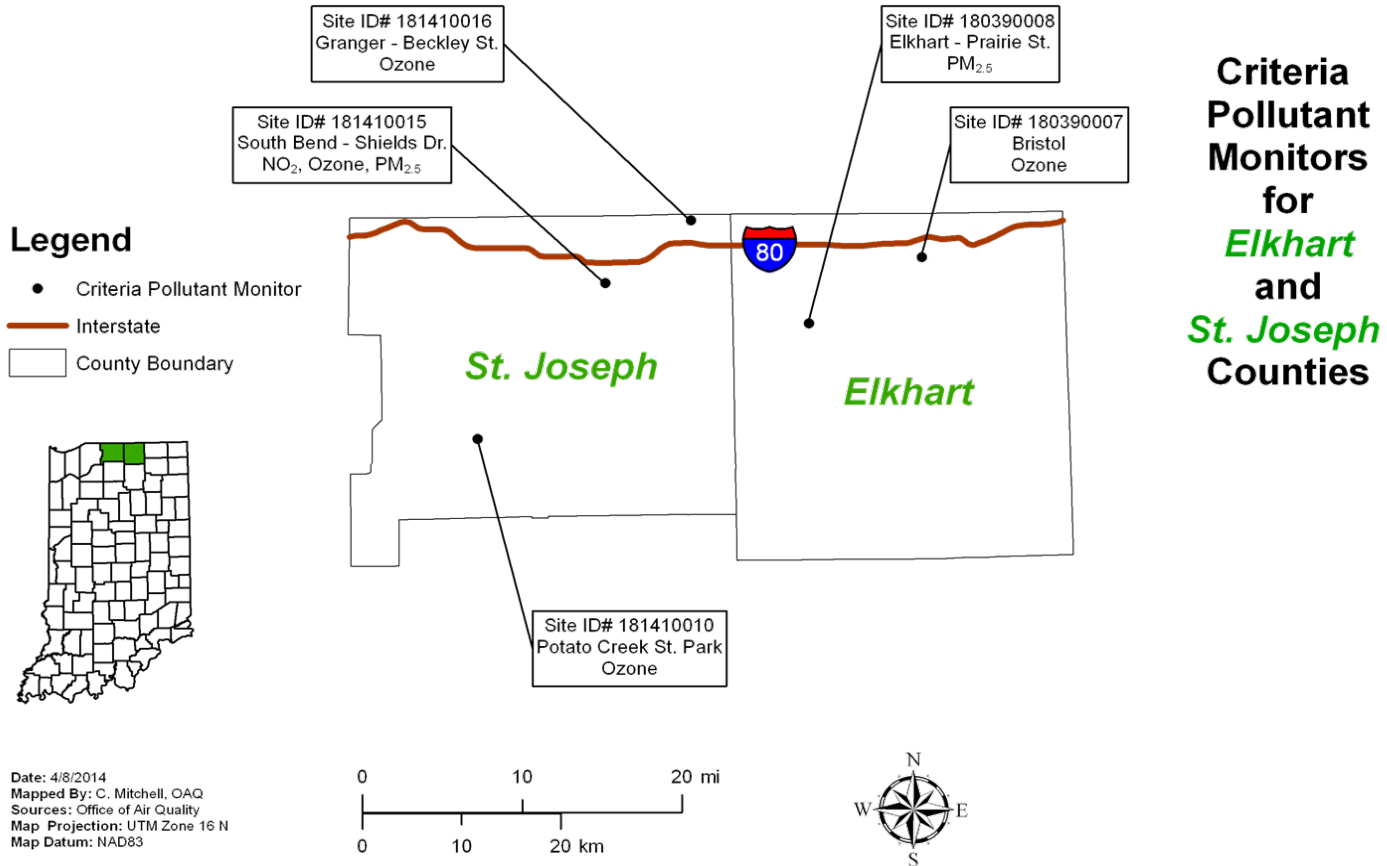
- Geographic area
- Long-term PM2.5 air quality and emission trends
- Long-term ozone air quality and emission trends
- Current schedule for ongoing National Ambient Air Quality Standards (NAAQS) review
- 8-hour ozone area designations
- Indiana Volkswagen Mitigation Trust Program



# Geographic Area



# Geographic Area





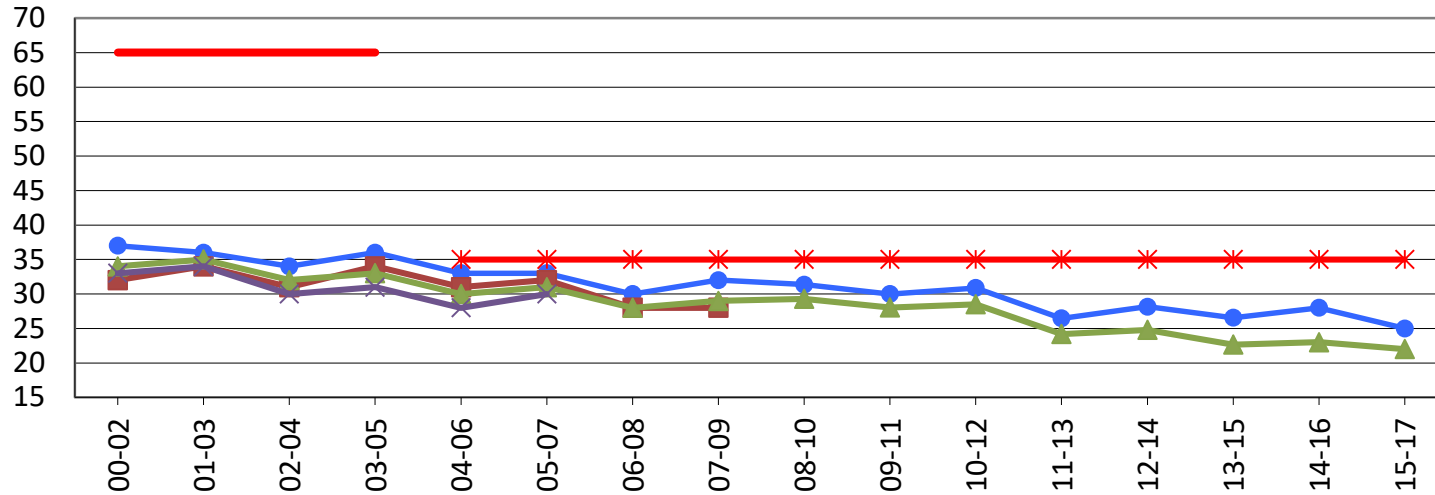
# Long-Term Air Quality Trends



# PM<sub>2.5</sub>

## PM<sub>2.5</sub> 24-Hour Design Values Trend Chart North Central Indiana

Micrograms per Cubic Meter ( $\mu\text{g}/\text{m}^3$ )



● Elkhart-Elkhart - Pierre Moran/Prairie St

■ St. Joe-South Bend - Nuner Sch

▲ St. Joe-South Bend - Angela & Eddy/Shields Dr

✕ St. Joe-South Bend - LaSalle HS

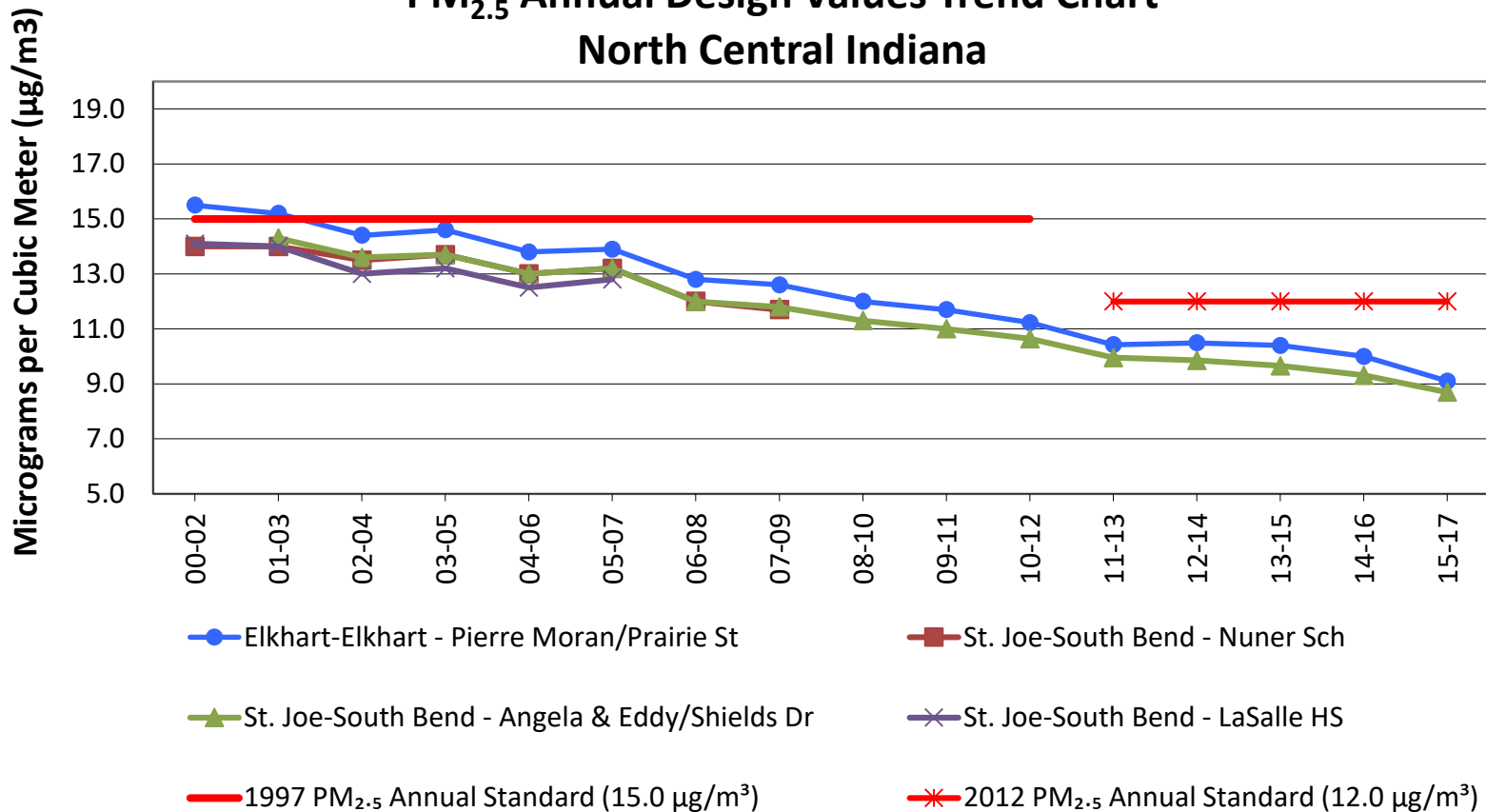
— 1997 PM<sub>2.5</sub> 24-Hour Standard (65.0  $\mu\text{g}/\text{m}^3$ )

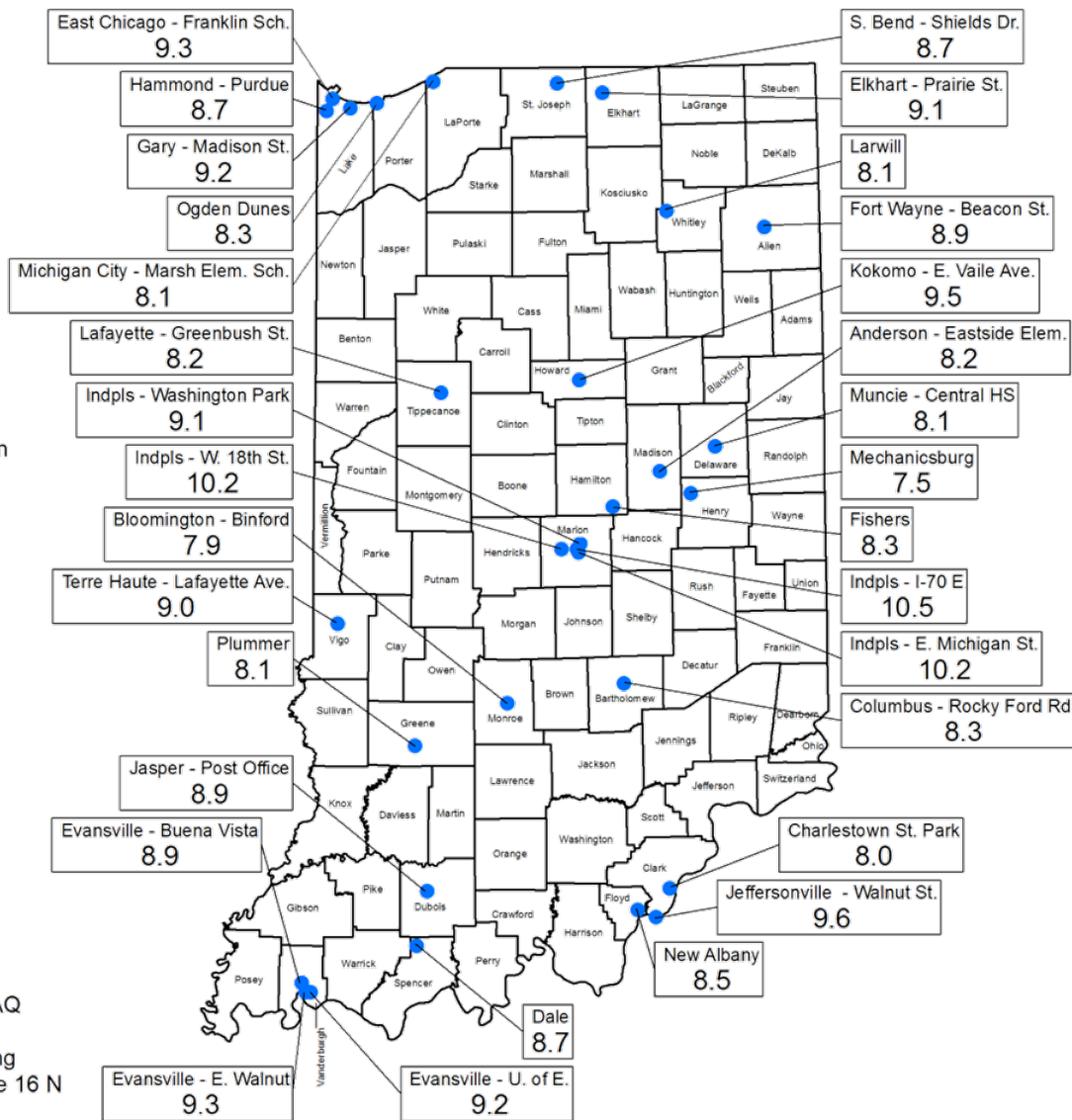
✱ 2006 PM<sub>2.5</sub> 24-Hour Standard (35.0  $\mu\text{g}/\text{m}^3$ )



# PM<sub>2.5</sub>

## PM<sub>2.5</sub> Annual Design Values Trend Chart North Central Indiana



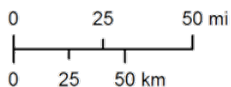


### PM<sub>2.5</sub> Annual Design Values 2015 - 2017

Standard set at 12.0 µg/m<sup>3</sup>

### Legend

● PM<sub>2.5</sub> monitor with design value less than or equal to the standard.



### Notes:

- Posted data are in units of micrograms per cubic meter (µg/m<sup>3</sup>)

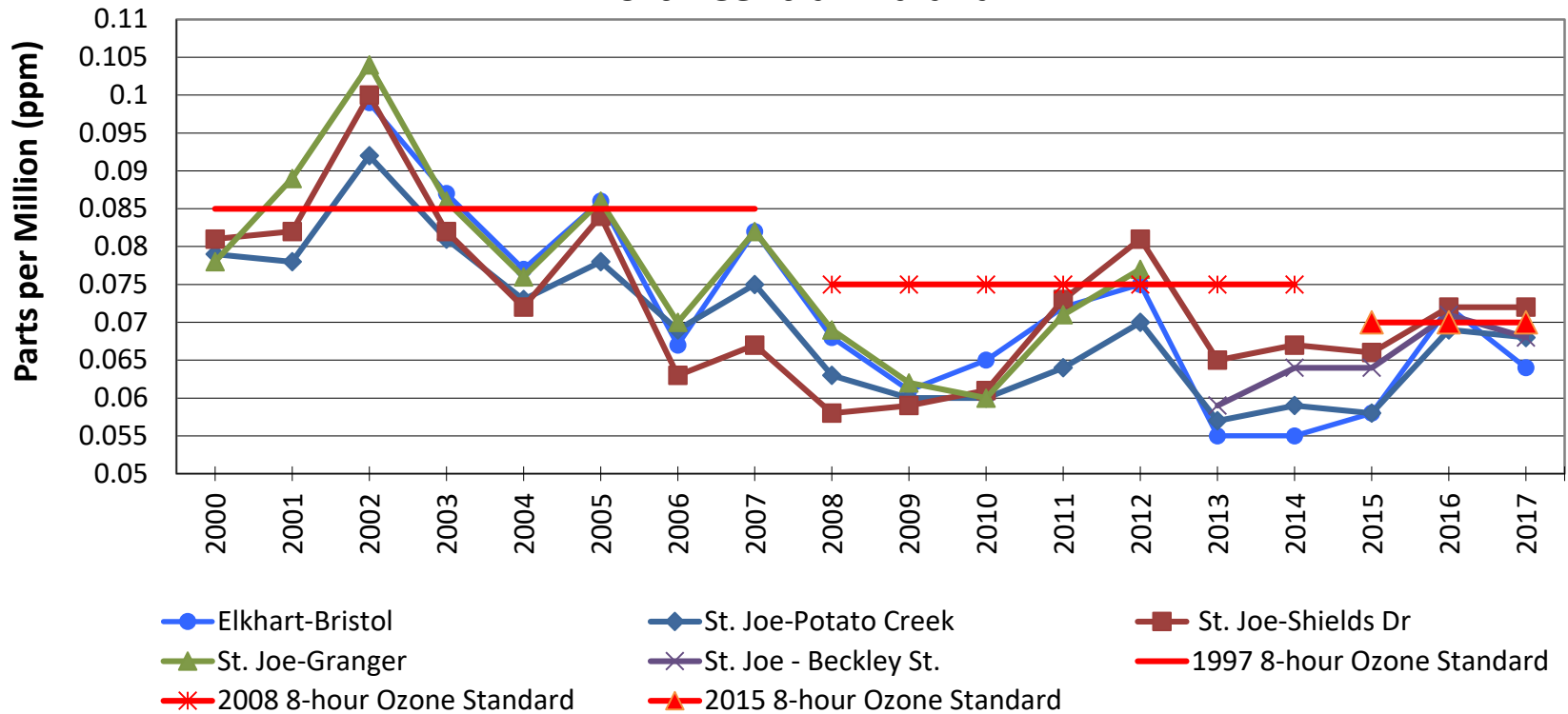
Mapped By: C. Mitchell, OAQ  
Date: 04/11/2018  
Source: IDEM, Air Monitoring  
Map Projection: UTM Zone 16 N  
Map Datum: NAD83





# Ozone

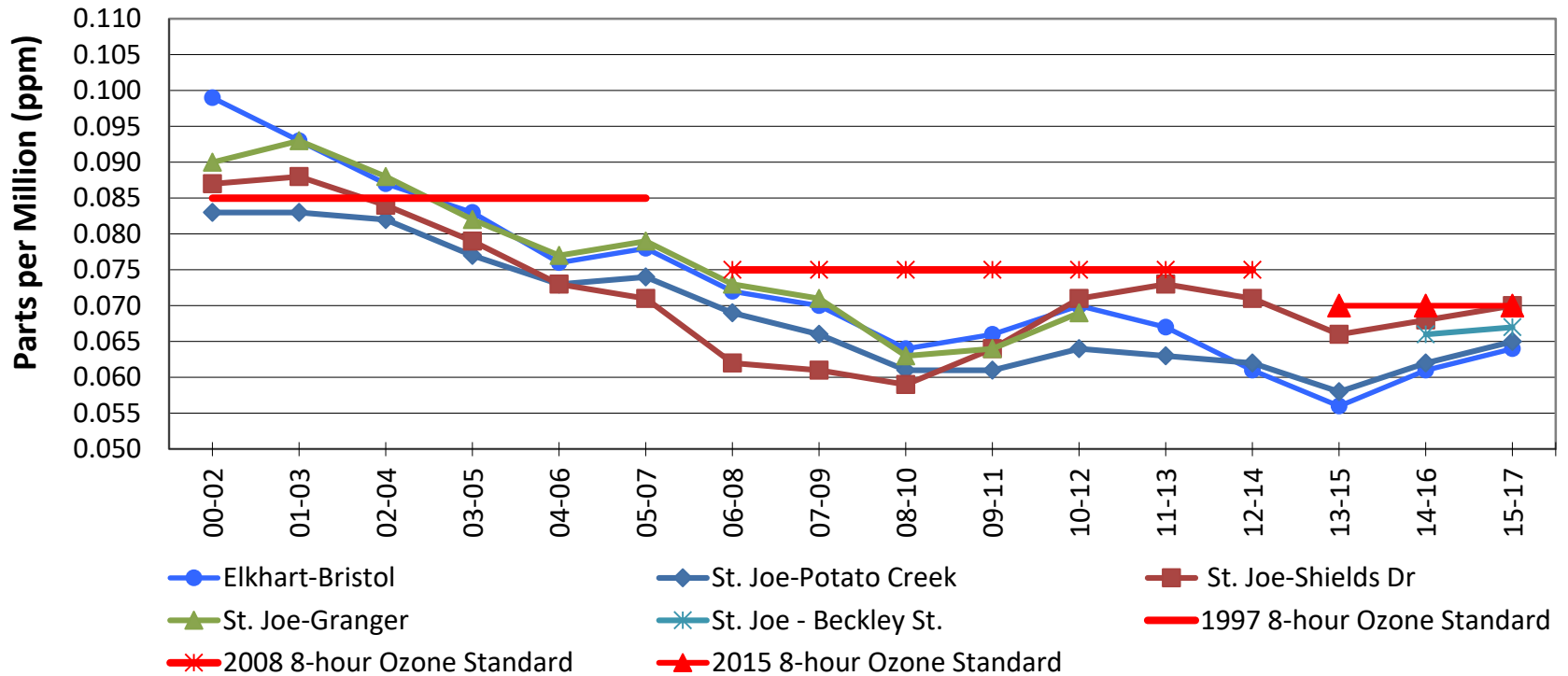
## Ozone 4<sup>th</sup> - High Values Trend Chart North Central Indiana





# Ozone

## Ozone Design Values Trend Chart North Central Indiana



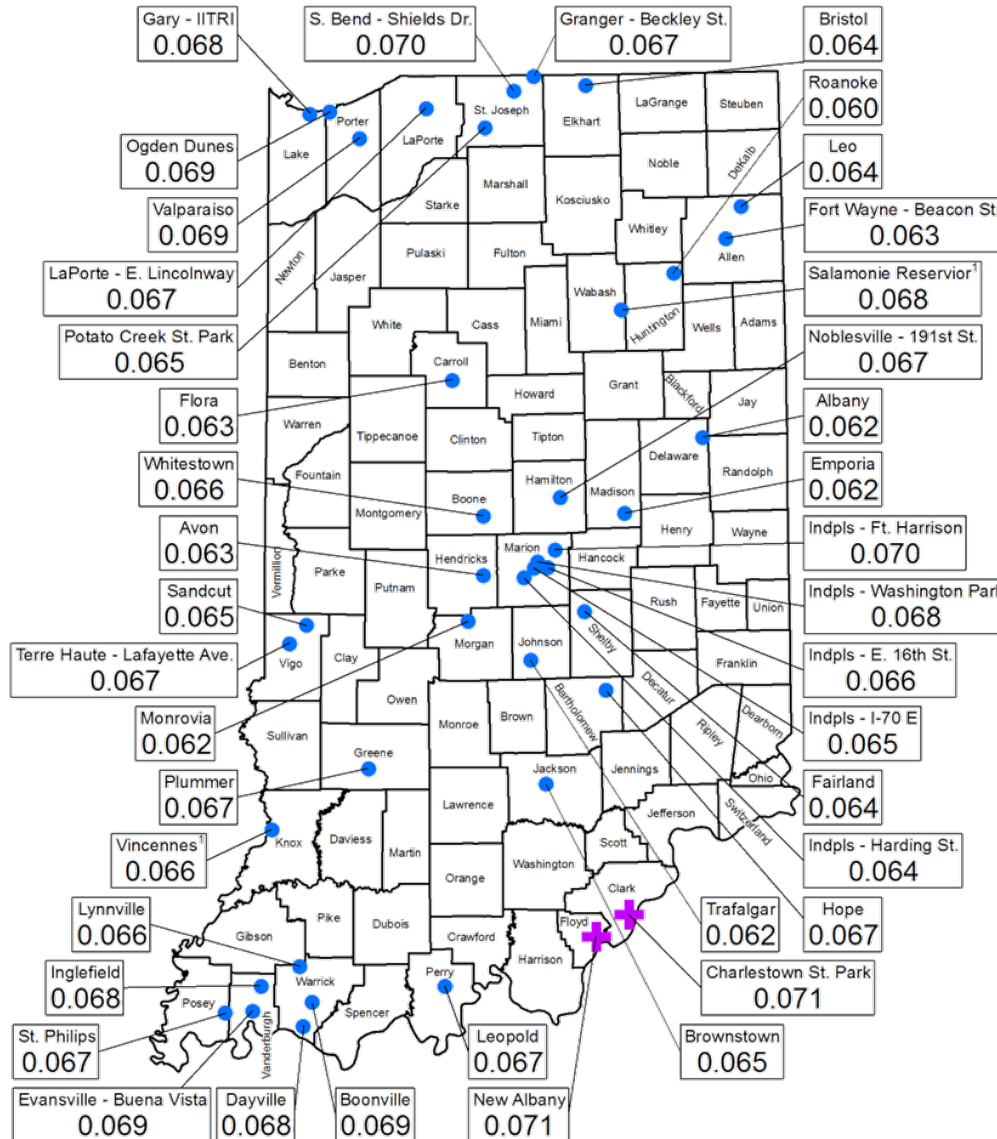
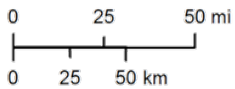


Ozone 8-Hour Design Values 2015 - 2017

Standard set at 0.070 ppm

Legend

- Ozone monitor with design value less than or equal to the standard.
- + Ozone monitor with design value over the standard.



**Notes:**  
 - Posted data are in units of parts per million (ppm).  
<sup>1</sup> Monitors owned and operated by the U.S. Environmental Protection Agency (U.S. EPA).

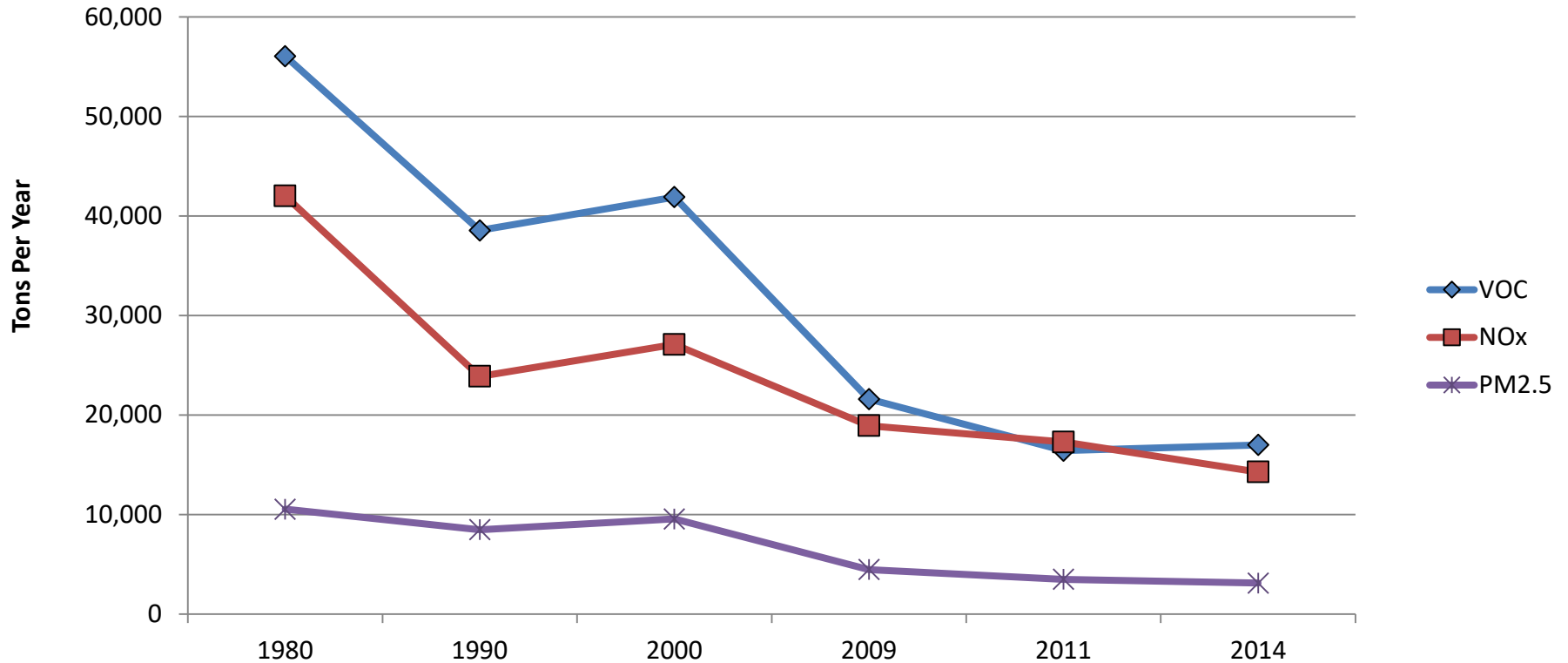
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# Long-Term Emission Trends



# Emission Trends – Elkhart and St. Joseph Counties



Emissions based on U.S. EPA's Air Pollutant Emissions Trends Data.



# NAAQS Reviews/Updates

	Ozone	Lead	Primary NO <sub>2</sub>	Primary SO <sub>2</sub>	Secondary NO <sub>2</sub> , SO <sub>2</sub> , PM <sup>1</sup>	PM <sup>2</sup>	CO
Last Review Completed Final Rule Signed	Oct 2015	Sep 2016	Jan 2010	Jun 2010	Mar 2012	Dec 2012	Aug 2011
Recent or Upcoming Major Milestone(s) <sup>3</sup>	TBD <sup>4</sup>	TBD <sup>4</sup>	<u>April 2018</u> Final	<u>Summer 2017</u> <u>Draft PA and</u> <u>REA</u>  <u>May 2018</u> Proposal  <u>January 2019</u> Final	<u>May 2017</u> CASAC review of 1 <sup>st</sup> Draft ISA  <u>Summer 2018</u> 2 <sup>nd</sup> Draft ISA REA Planning Document	<u>Dec 2016</u> Final IRP  <u>Spring/Summer 2018</u> <u>2017/2018</u> 1 <sup>st</sup> Draft ISA and REA Planning Document	TBD <sup>4</sup>

- 1 Combined secondary (ecological effects only) review of NO<sub>2</sub>, SO<sub>2</sub>, and PM.
- 2 Combined primary and secondary (non-ecological effects) review of PM.
- 3 IRP – Integrated Review Plan; ISA – Integrated Science Assessment;  
REA – Risk and Exposure Assessment; PA – Policy Assessment.
- 4 TBD = To Be Determined.



# Anticipated NAAQS Implementation Milestones

Pollutant	Final NAAQS Date	Designations Effective	Infrastructure SIP Due	Attainment Plans Due	Attainment Date
Ozone (2008)	Mar 2008	Jul 2012	Mar 2011	Mid 2015-2016	Mid 2015-2032
Ozone (2015)	Oct 2015	Dec 2017	Oct 2018	Dec 2020-2021	2020-2037
Lead (2008)	Oct 2008	Dec 2010-2011	Oct 2011	Jun 2012-2013	Dec 2015-2019
Primary NO2 (2010)	Jan 2010	Feb 2012	Jan 2013	N/A	N/A
Primary SO2 (2010)	Jun 2010	Oct 2013, Sep 2016 (+2 Rounds)	Jun 2013	Apr 2015, Mar 2018 (2019, 2022)	Oct 2018, Sep 2021 (2023, 2026)
PM2.5 (2006)	Oct 2006	Dec 2009	Oct 2009	Dec 2014	Dec 2015 (Mod) Dec 2019 (Ser)
PM2.5 (2012)	Dec 2012	Apr 2015	Dec 2015	Oct 2016 (Mod)	Dec 2021 (Mod) Dec 2025 (Ser)



# 8-hour Ozone Area Designations

- On October 1, 2015, U.S. EPA promulgated a rule to revise and strengthen the 8-hour ozone standard to 0.070 parts per million (ppm).
- U.S. EPA intended to promulgate final designations for all areas of the country under the 2015 8-hour standard by no later than October 1, 2017. Federal actions delayed the federal review process, resulting in two rounds of designations.
- On November 6, 2017, U.S. EPA designated 74 of Indiana's 92 counties as "attainment/unclassifiable."





# 8-hour Ozone Area Designations

- On December 20, 2017, U.S. EPA issued proposed air quality designations for all remaining areas of the state.
  - In this action, U.S. EPA intends to issue “nonattainment” designations for Clark, Floyd, Lake, and Porter counties and Lawrenceburg Township in Dearborn County and designate all remaining areas of the state not previously designated, including Elkhart and St. Joseph counties, as “attainment/unclassifiable.”
- On February 16, 2018, Indiana informed U.S. EPA, through the “120-day” notification/response process, that it disagrees with the agency’s intended “nonattainment” designations for Lake and Porter counties and Lawrenceburg Township in Dearborn County.
  - Indiana is recommending that Lake and Porter counties be designated as “attainment” and Lawrenceburg Township be designated “unclassifiable” under the standard.
- U.S. EPA plans to issue final designations in spring 2018.



# Indiana Volkswagen Mitigation Trust Program



# Indiana Volkswagen Mitigation Trust Program Financials

- Funds from the Environmental Mitigation Trust were allocated based on the number of affected Volkswagen diesel vehicles in each state.
- Indiana's portion of the \$2.9 billion for the Environmental Mitigation Trust Program is nearly \$41 million.
- These funds can be used for eligible NOx emissions reducing projects for no less than 3 years and no more than 10 years.



# Indiana Volkswagen Mitigation Trust Program

- On October 4, 2017, Governor Holcomb named IDEM as the Beneficiary to represent Indiana, and an 11-member Advisory Committee to engage with the lead agency throughout the process.
- IDEM's Office of Air Quality published the web portal for the Indiana Volkswagen Mitigation Trust Program, which includes:
  - The opportunity to sign up for automated email updates when changes or additions take place on the site.
  - Clear information on eligible project types as specified in the final Trust filed with the U.S. Court.
  - Background information on the Volkswagen settlement, consent decree, and the mitigation trust.
  - A Beneficiary Mitigation Plan draft framework document to serve as the starting point for final submittal.



# Eligible Mitigation Projects

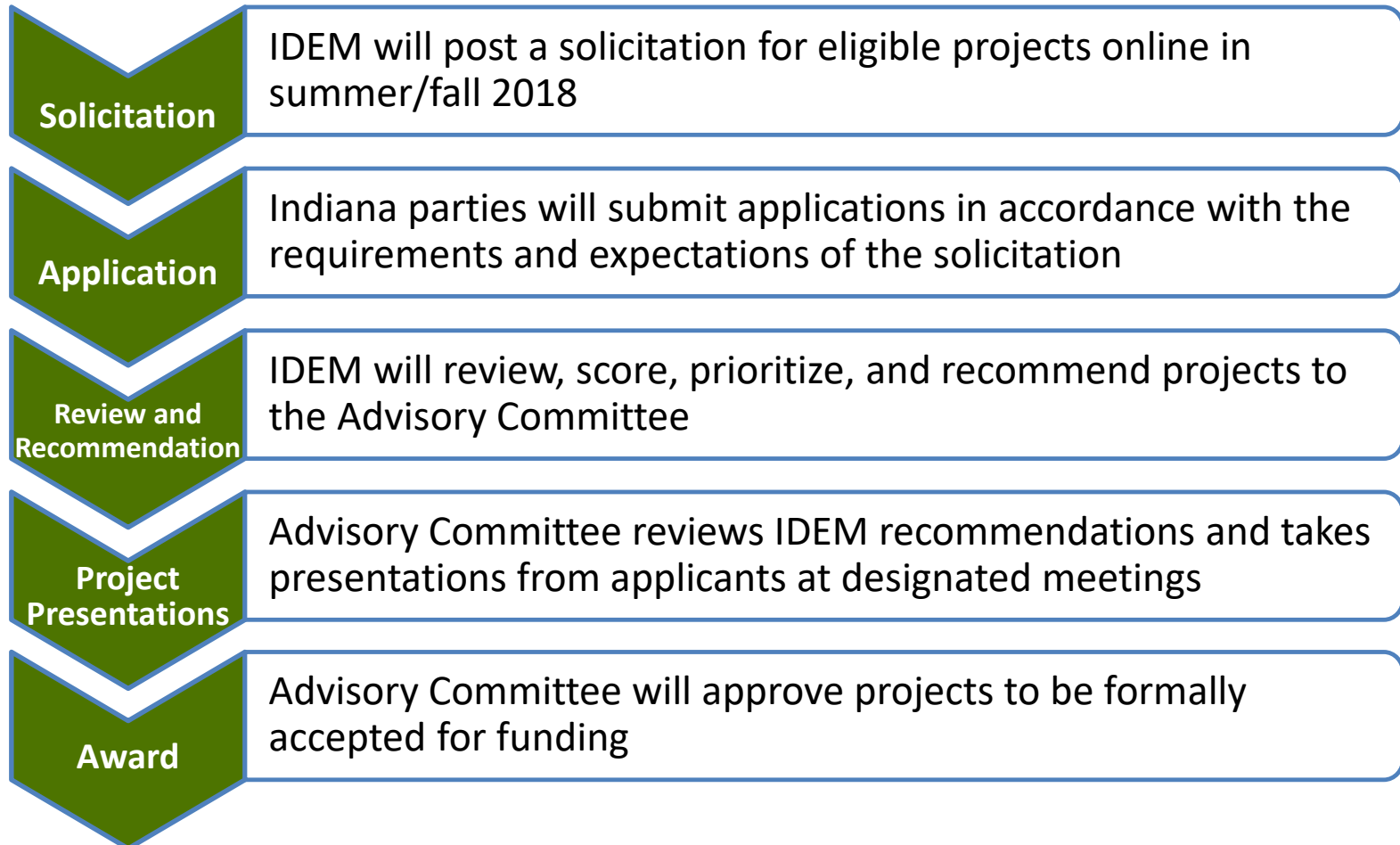
According to the Consent Decree and Mitigation Trust, eligible projects are:

- Class 8 local freight and port drayage trucks.
- Class 4-8 school/shuttle/transit buses.
- Freight switcher locomotives.
- Ferries/tugboats.
- Ocean and lake going vessels shorepower.
- Class 4-7 local trucks.
- Airport ground support equipment.
- Forklifts and cargo handling equipment at ports.
- Light duty zero emission electric vehicle supply equipment (up to 15% of allocation).
- Diesel Emission Reduction Act (DERA) option.
  - Option to use trust funds for actions not specifically listed but otherwise eligible under DERA.
  - Projects funded under the DERA option will be required to meet the DERA cost share requirements.

**Note:** Public and private entities are both eligible for funding from the Indiana Volkswagen Mitigation Trust Program.



# Project Application, Prioritization and Selection Process





# Questions and Contact Information



## Shawn Seals

DieselWise Indiana Administrator

IDEM – Office of Air Quality

Phone: (317) 233-0425

Email: [SSeals@idem.IN.gov](mailto:SSeals@idem.IN.gov)

Web: [www.idem.IN.gov/airquality/2561.htm](http://www.idem.IN.gov/airquality/2561.htm)