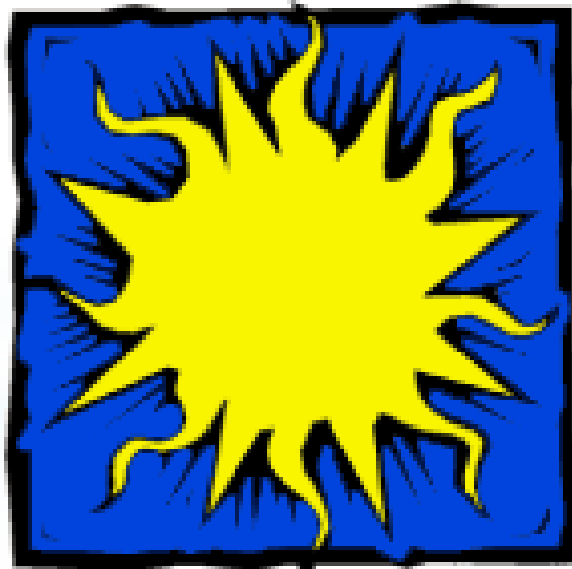


PARTNERS FOR CLEAN AIR 2021 VIRTUAL AWARDS CEREMONY

PARTNERS FOR



C L E A N A I R

Mr. Charles Breitenfeldt, IDEM



Partners for Clean Air (PCA) is a coalition of Northwest Indiana businesses, industries, local governments, community groups, and individuals committed to improving overall air quality and public health through voluntary actions

PARTNERS FOR



CLEAN AIR



History

- *Started in 1998-99
- *Northwestern Indiana Regional Planning Commission
- *US EPA
- *Federal Highway Administration
- *Federal Transit Administration





Focus

Air Quality Action Days

- * AQADs are days when ground level ozone pollution or fine particulate matter could build to unhealthy levels in the outdoor air. Fine particulate matter is known as PM_{2.5} because it refers to microscopic dust, soot, liquid droplets and smoke particles that are 2.5 micrometers wide or smaller.

Levels of Health Concern for AQAD	AQI Value	Ozone (ppb)	PM _{2.5} (µg/m ³)
High Moderate	90-100	67 – 70	30.6 – 35.4
Unhealthy for Sensitive Groups	101-150	71 – 85	35.5 – 55.4
Unhealthy	151-200	86 – 105	55.5 – 150.4
Very Unhealthy	201-300	106 – 200	150.5 – 250.4
Hazardous	301-500	> 200	250.5 – 500.4



Air Quality Action Days

1995 - 20
1996 - 6
1997 - 12
1998 - 9
1999 - 14
2000 - 2
2001 - 12
Ave. - 10.7

2014 - 5
2015 - 3
2016 - 9
2017 - 5
2018 - 7
2019 - 3
2020 - 8
Ave. - 5.7

8 hr. Ozone Ave. (03-05)

Lake - 0.077 ppm
Porter - 0.078 ppm
LaPorte - 0.079 ppm

8 hr. Ozone Ave. (18-20)

Lake - 0.068 ppm
Porter - 0.070 ppm
LaPorte - 0.071 ppm





Clean Air thru Voluntary Actions

- *Avoid refueling your car. If you must, do so only after 7 pm
- *Limit driving during daylight hours
- *If you must drive, avoid excessive idling or jackrabbit starts
- *Avoid drive-thru windows - take your lunch to work
- *Check your tire pressure
- *Delay using gas-powered vehicles or tools
- *When grilling, use clean-burning propane-fueled grills
- *Use low or zero VOC paints and cleaning products
- *Conserve energy by turning off lights
- *Set your air conditioner to 75 degrees or higher



2019 Partners for Clean Air Luncheon



Michigan City's Conference on the Environment



Partners for Clean Air Day at the RailCats



South Shore Clean Cities Clean Air Golf Outing



2020 Valparaiso University Men's Basketball Game



2020 South Shore Clean Cities Annual Conference & Expo



2020 NWI Oilmen Games





Partners for Clean Air Today

- *4 Levels of Membership

- *Gold

- *Silver

- *Bronze

- *Green

- *Many Outreach Events

- *Scholarship

- *Environmental Sponsorships



Bronze Level Members



Silver Level Members



Hammond
Port Authority



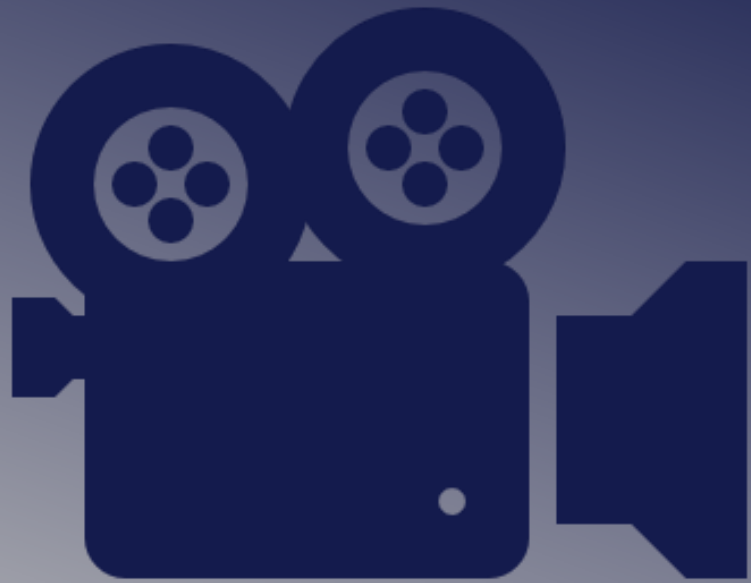
WILCOXTM
ENVIRONMENTAL ENGINEERING

Gold Level Members



Mrs. Lauri Keagle, South Shore Clean Cities





Video: Scholarship Award Winners

Thank You PCA Scholarship Committee

- ❖ Scott Nelson - Wilcox Environmental Engineering
- ❖ Lauri Keagle - South Shore Clean Cities
- ❖ Michael Kuss - Michigan City Sanitary District



Guest Speaker



Shannon Zaret,
US Department of Energy





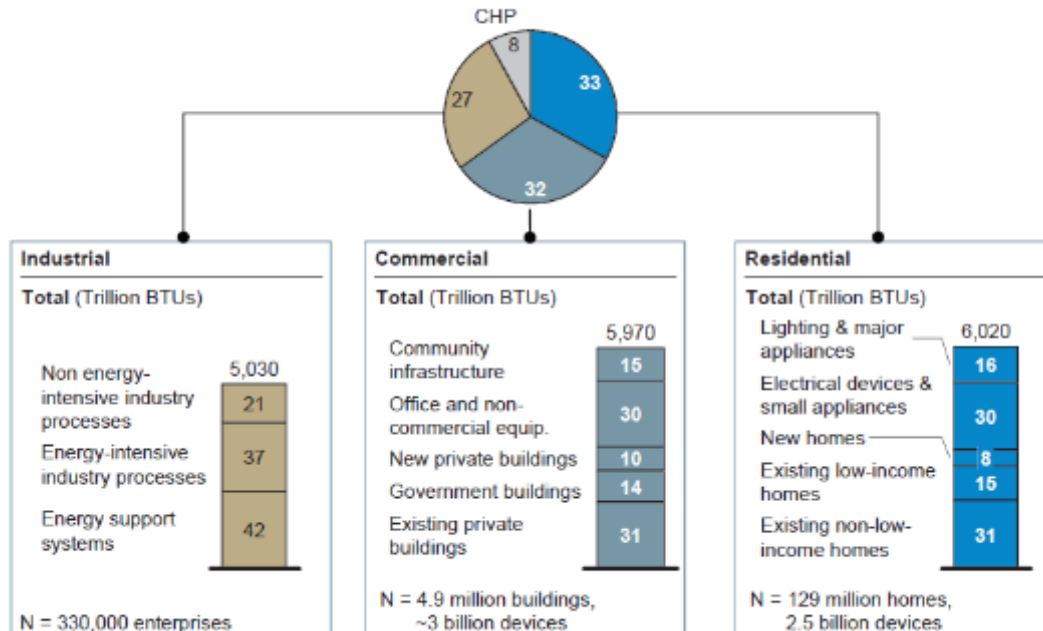
DOE's Better Buildings Program

Shannon Zaret

Office of Energy Efficiency and Renewable Energy

U.S. spends \$600 billion each year to power homes, plants, & buildings

Percent, 100% = 18,410 trillion BTUs of primary energy



Source: EIA AEO 2008. McKinsey analysis

OPPORTUNITIES

- Great opportunities in residential, commercial and industrial sectors
- 20%+ savings average; cost effective
- Other benefits: Jobs, Environment, Competitiveness

CHALLENGES

- Efficiency not integrated into business planning and corporate decision making
- Perceived risk
- Confused by options; lack of unbiased information
- High hurdle rates
- Split incentives /tenant-employee behaviors at odds with efficiency goals
- Not enough/qualified workforce
- Poor understanding of financing options

Market Leadership

Developing Innovative, Replicable Solutions with Market Leaders

- Better Buildings Challenge
- Better Buildings, Better Plants
- Better Buildings Alliance
- Better Buildings Accelerators
- Better Buildings Residential Network
- Strategic Energy Management
- Better Communities Alliance

Innovation and Emerging Technologies

New technologies and new ideas are key to building a stronger economy

- Better Buildings Technology Campaigns
- High-Impact Technology Field Validators
- Better Buildings Technology Research Teams

Better Information

Making Energy Efficient Investments Easier

- Better Buildings Solution Center
- Financing Navigator 2.0
- Home Energy Score
- Improved Data and Consistency Access
- Tools to Assess the Efficiency of Buildings/Homes
- Tools for Energy Management

Workforce Development

Expanding the Workforce

- Better Buildings Workforce Accelerator
- Industrial Energy Management Workforce
- Workforce Guidelines



Results to date

~\$11 Billion saved

~1.8 Quadrillion BTUs saved

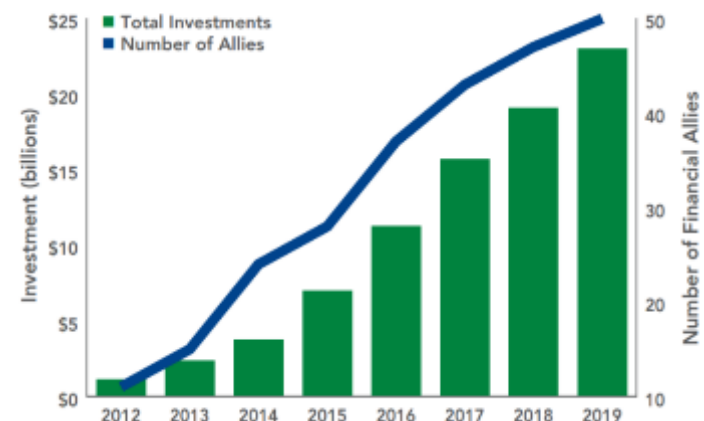
\$23 Billion financing extended

8.5 Billion gallons of water saved

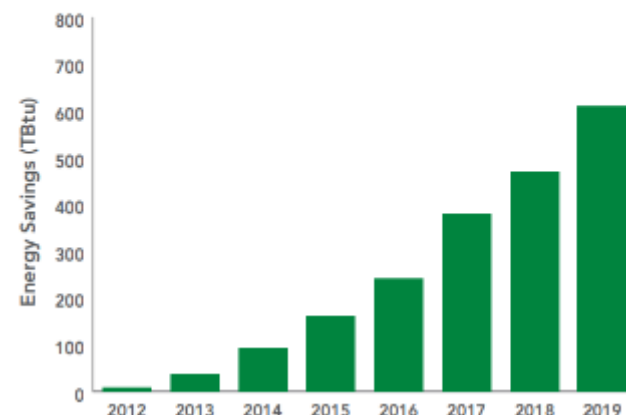
950+ Better Buildings partners

2,800+ solutions published

**Total Investment and
Ally Growth by Year**



**Better Buildings Challenge
Cumulative Energy Savings**



Better Buildings Challenge Partners & Allies



Better Building Partners Are

**FORTUNE
100**

**32 of the
Fortune 100
Companies**

8



**National
Laboratories**



**12 of the
Top 25 U.S.
employers**



**13% of all U.S.
Commercial
Building space**



**24 state
governments**



**88 local
governments**



**12% of the U.S.
Manufacturing
Energy Footprint**

Habits of Successful Organizations

1 Set a goal

2 Data matters

3 Look beyond technology

4 It takes a champion and a team

5 Learn, teach and evolve

Better Buildings Solution Center

More than 2,800 solutions are available publicly in the Better Buildings Solution Center

Showcase Projects:

- Large and small buildings
- All sectors
- Specific building types such as schools, hospitals, hotels, grocery stores, universities, civic centers, libraries, offices and labs

Implementation Models (Playbooks):


- Overcome barriers: finance, data, energy management, staff training, community and customer outreach, partnering with utilities, and more
- Multi-faceted and applicable across sectors

Additional Resources, Toolkits, Case Studies



Hundreds of Partner Playbooks

- Financing or paying for a project
- Engaging employees, occupants, and customers
- Motivating my organization
- Building expertise within my organization
- Using data (or technologies) to track progress
- Getting access to data and information
- Reaching my community
- Identifying or evaluating energy-saving technologies
- Metering/measuring energy use
- Partnering with my utility
- Acquiring expertise outside of my organization



Better Buildings
U.S. DEPARTMENT OF ENERGY

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EXPLORE BY TOPIC | BROWSE SOLUTION TYPES | TOOLKITS | FINANCING NAVIGATOR | RESILIENCE | CHP

SPRINT'S SYSTEMATIC APPROACH TO WASTE MANAGEMENT

Sprint

Sprint (now part of T-Mobile) strives to efficiently manage the resources used in its business operations. By working to procure just what is needed and optimizing how the company disposes of generated waste, Sprint is reducing its environmental footprint while improving the company's bottom line. In late 2019, Sprint [announced expanded sustainability goals](#), including the goal to divert 50% of its operational waste stream (as measured in volume) from the landfill by 2025. This includes waste generated by employees in stores, commercial office buildings, and network facilities where Sprint has operational control of vendor and service selection. As part of the U.S. Department of Energy's [Waste Reduction Pilot](#), Sprint has committed to tracking waste reduction progress along with its [energy performance](#) for the Better Buildings Challenge.

PROCESS	▼
MEASURING SUCCESS	▼
OUTCOMES	▼
PARTNERSHIPS	▼

[DATA CENTER](#) | [OFFICE](#) | [RETAIL](#) | [SPRINT](#) | [OVERLAND PARK](#) | [WASTE REDUCTION/EFFICIENCY](#)

[SOLUTIONS CENTER HOME PAGE](#) | [BETTER BUILDINGS ALLIANCE](#) | [BETTER BUILDINGS CHALLENGE](#) | [PARTNERS](#)


[COMMERCIAL](#) | [WASTE REDUCTION PILOT](#)

ORGANIZATION TYPE
Communications

BARRIER
Sprint's asset types – retail, commercial (including data centers), and network facilities – have differing waste streams and require targeted waste reduction efforts.

SOLUTION
Sprint developed a systematic approach to waste management that provides business units with customized waste diversion solutions, testing the approach with a 4-year pilot program.

OUTCOME
4-year pilot improved recycle rate from 23% to 46%, reduced utility spend by 25%, and resulted in \$1.95 million in savings and avoided costs.



Better Buildings Water Savings Initiative



- **45+ Partners across sectors**
- **10 Goal Achievers**
- **8.5 Billion in cumulative water savings**
- **150+ Proven water saving solutions**

Partners with Greatest Water Savings

Savings Since Baseline Year

Staples*	34%
Poudre School District, CO*	32%
Anthem, Inc.*	27%
University of Nebraska Medical Center	21%
Foundation Communities	20%
DWS	20%
State of North Carolina	14%

**Water goal achiever*

Waste Reduction Pilot



Annually, the U.S. generates **2.7 billion tons** of industrial solid waste and more than **260 million tons** of municipal solid waste.

Why reduce waste?

- Save energy
- Strengthen competitiveness
- Increase sustainability

Waste Reduction Pilot Findings to Date:

- 30+ participants
- Diverted **1.9 million tons** from landfill
- Nearly half of all commercial sector partners have a diversion rate of 50% or more
- Using outreach and education to increase diversion rates and reduce contamination in bins
- Working to recover energy

50001 Ready



50001 Ready recognizes facilities and organizations that have implemented an ISO 50001-based energy management system.

Why 50001 Ready?

- Lower operational costs
- Continual operational improvement
- Improve risk management
- Increase competitiveness in the marketplace



TOOL NOW AVAILABLE: 50001 Ready Navigator

An online tool created to help organizations establish an energy management system.

Plan, identify, prioritize, and implement projects that will improve your facility's energy performance.

Better Buildings Financing Navigator

Why a Navigator?

- Poor market information and education regarding financing solutions
- Dramatic increase in number and complexity of financing options in the market over the last decade
- High upfront project costs

Navigator allows users to...

- Explore basics of the efficiency financing market
- Compare different financing options
- Find financing options for your project
- Connect with Financial Allies

Navigator part of Better Buildings Solution Center



Better Plants Overview



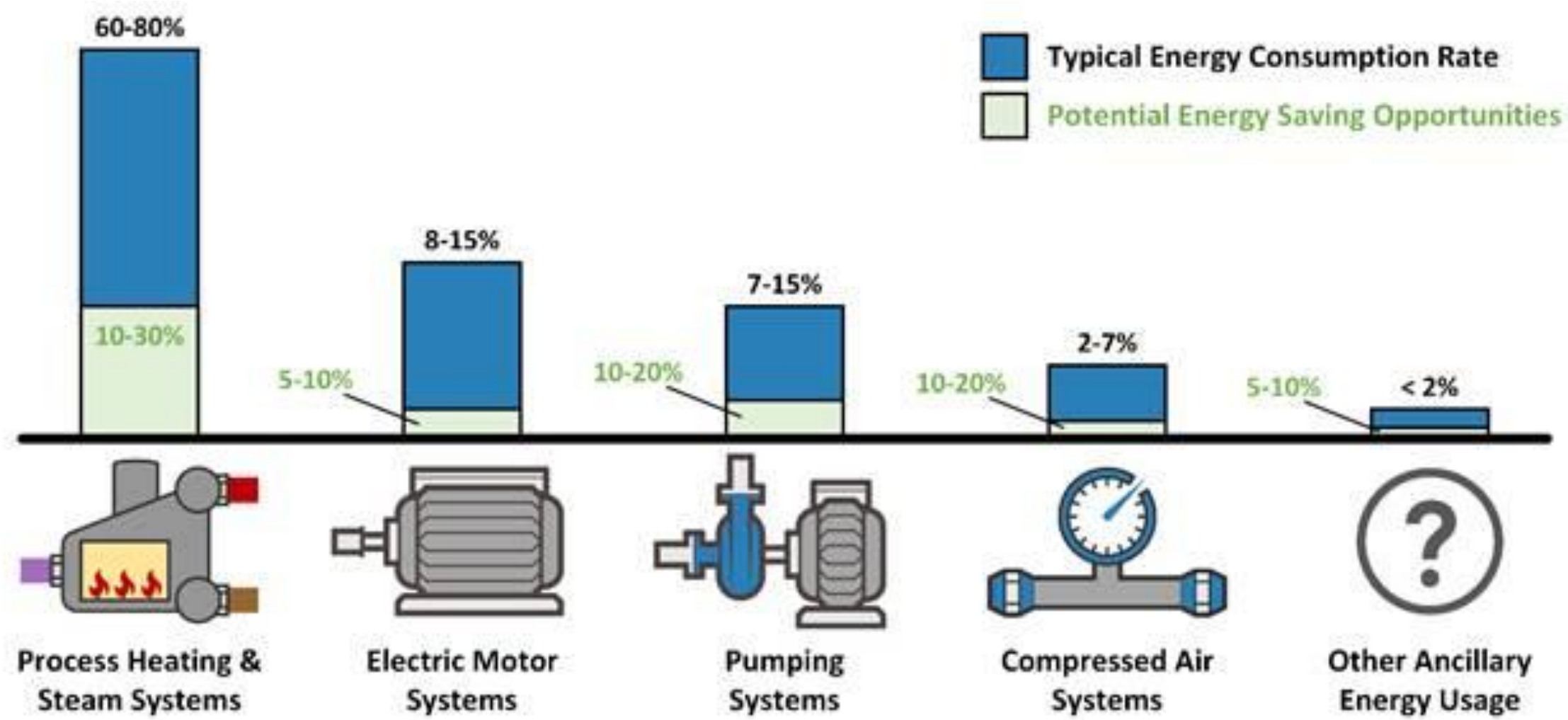
To date, Better Plants partners have cumulatively saved:

- **\$8.2 Billion**
- **1.7 Quadrillion BTUs**

Today:

- **230+** partners
- **3,200** facilities
- **12%** of U.S. Manufacturing Energy Footprint

Opportunities in the Manufacturing, Industrial & Utility Sector



Technical Assistance through Better Plants

Technical Account Managers

Tools and Resources

- Diagnostic Equipment Program
- MEASUR Tool Suite

Supply Chain Initiative

In-Plant Trainings

- 120+ In-Plants since 2011;
Identified more than \$40M in
energy savings



In-Plant Training Topics:

- | | |
|-------------------|------------------------------|
| • Pumping Systems | • Industrial Refrigeration |
| • Fans | • Water/Wastewater Treatment |
| • Compressed Air | • Water Efficiency |
| • Motors | • Energy Treasure Hunt |
| • Processed Heat | |

The Sustainable Wastewater Infrastructure of the Future (SWIFt) Initiative



- The U.S. Department of Energy (DOE) Sustainable Wastewater of the Future (SWIFt) Initiative works with water utilities to accelerate a pathway toward sustainable infrastructure.

Why Reducing Energy in Wastewater Treatment Facilities Is Important

**30 billion
kWh/yr ¹**

Energy consumed by U.S.
municipal wastewater
treatment systems

\$2 billion
Annual electric costs ²

=

25-40%
Of treatment plant's
annual operating
budget ³

5x more

Energy is consumed
by wastewater facilities
than is needed for
treatment ⁴

20% increase

In energy use expected in
the coming decades due
to more stringent water
quality standards and
population growth ⁵

¹EPRI and Water Research Foundation. *Electricity Use and Management in the Municipal Water Supply and Wastewater Industries*.

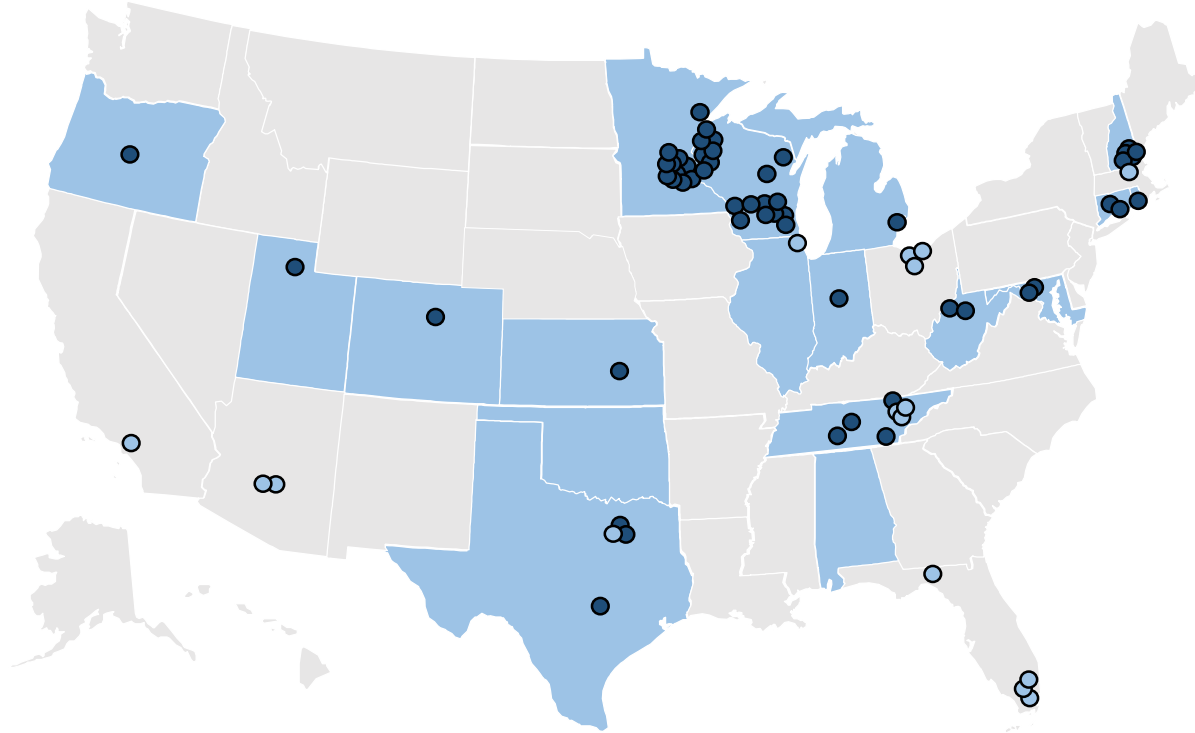
² Assumes \$0.07/kWh average electric costs

³ New York State Energy Research and Development Authority 2008. *Statewide Assessment of Energy Use by the Municipal Water and Wastewater Sector: Final Report*.

⁴ NACWA, WEF, and WERF. *Towards Energy Neutrality at WRRFs – Results and Findings of Recent Research*.

⁵ Ibid. Page ix.

SWIFt Phase 1



- **4 billion gallons of wastewater** – treated daily by SWIFt Facility Partners (~12% of wastewater treated by publicly owned wastewater treatment facilities)
- **25 million people** – served by SWIFt Facility Partners (8% of nation's population)

- SWIFt 1.0 was a three-year partnership (2016-2019) that engaged 70 wastewater treatment facilities to accelerate the adoption of innovative and best-practice approaches in data management, technologies, and financing for infrastructure improvement.
- SWIFt Partners sought to improve the energy efficiency of their participating wastewater treatment facilities by at **least 30%** and integrate at least one resource recovery measure.

Wastewater Energy Management Toolkit



Data Management

The **Energy Data Management Manual** provides clear, step-by-step guidance to track energy performance and compares publicly available energy data management tools.

Measure Planning

The **Measures Checklist** includes no-and low-cost energy savings options and identifies 23 high impact innovative energy conservation and resource recovery measures. The **Measure Planning Workbook** is an automated tool that can help facilities decide whether and how to implement one of the 23 measures.

Project Financing

The **Financing Matrix** highlights available financing and funding programs and mechanisms for the wastewater sector.

The **Energy Savings Performance Contracting Guide** helps decision makers consider this option for wastewater infrastructure improvements.

Plan Development

The **Infrastructure Improvement Plan Template** outlines topics a facility may consider including in their own plan. Several example plans are also available.

SWIFt 1.0 Results

1,987 kWh/MG

Average energy intensity
for all reporting facilities

2.5%

Average energy intensity
(kWh/MG) reduction over
baseline by all reporting facilities

130,446,219

Cumulative kWh saved
by all reporting facilities

6.9%

Total energy reduction
over baseline by all
reporting facilities

Based on SWIFt partner data 2016-2019

SWIFt Partner Infrastructure Improvement Plans

USDOE SWIFt Accelerator
Miami-Dade Water & Sewer IIP

Low- and No-Cost

The Low- and No-Cost Measures List as part of the SWIFt workbooks includes many other opportunities at MDWASD Wastewater Treatment Plants. Any of these measures not already detailed in previous sections are listed:

Installation

- Timers and occupancy sensors for lights
- Programmable thermostats
- Energy-efficient belts

Assessment

- Optimize ventilation based on requirements
- Evaluate electric utility rate structure

Operation

- Optimize pump/blower HP sizing
- Turn off equipment when not in use
- Adjust system operations when there is a change in wastewater load
- Eliminate leaks in inert gas and compressed air lines/valves

It is estimated that Low- No-Cost measures can save MDWASD approximately 1% off total energy consumption: Savings are calculated as:

$$= 202,689,040 \frac{\text{kWh}}{\text{yr}} \times 0.01 \text{ energy efficiency gain}$$

$$= 2,026,890 \frac{\text{kWh}}{\text{yr}}$$

Associated cost savings are calculated as:

$$= 2,026,890 \frac{\text{kWh}}{\text{yr}} \times 0.06 \frac{\$}{\text{kWh}}$$

$$= 121,613 \frac{\$}{\text{yr}}$$

USDOE SWIFt Accelerator
Miami-Dade Water & Sewer IIP

MDWASD BASELINE RECORDING AND CONSUMPTION TRACKING

Facility Name:	MDWASD		
Facility State:	FL		
Current Reporting Years:	2017-2018		
Base Year:	2016		
Primary Energy Consumed (kWh):	Baseline Year	2017	2018
Electricity	137,886,800	131,904,356	129,338,079
Natural gas	22,765,387	9,830,217	4,385,464
Distillate or Light Fuel Oil (#1, 2, & 4)	8,228,634	29,308,741	25,177,753
Residual or Heavy Fuel Oil (# 5, 6, Navy Special & Bunker C)			
Coal			
Coke			
Blast Furnace Gas			
Wood Waste			
Biogas	33,807,916	25,718,786	26,108,986
Other Liquid (please specify)			
Other Solid (please specify)			
Flow	303	312	288
Total Primary Energy Consumed, (kWh):	202,689,040	196,762,100	185,010,570
Weather/Production/Other Normalizing related Adjustment for Baseline Primary Energy, (+/- kWh):			
Adjusted Baseline of Primary Energy (kWh):	202,689,040		
Total Energy Savings since Baseline Year (kWh) (Intensity):		11,679,830	7,911,935
Total Energy Savings since Baseline Year (%) (Intensity):		5.60%	4.10%
Total Energy Cost Savings since Baseline Year (\$) (Intensity):		\$ 700,790	\$ 474,716

SWIFt 2.0 - Track Breakdown

SWIFt Toolkit Training

- For facilities interested in prioritizing energy savings and introducing the building blocks of energy management into their operations
- Designed to provide a deep dive into the resources that support best practices and innovative approaches successfully used by wastewater facilities to establish and implement energy management and planning
- Partner facilities voluntarily commit to achieving 5% short-term, 25% long-term cumulative energy savings

SWIFt Energy Recovery Accelerator (SWIFter)

- Facilities that are ready to adopt more advanced energy technologies can join the SWIFt Energy Recovery (SWIFter) Accelerator
- Designed to provide customized technical assistance on energy and related data management, energy efficiency improvements, advanced technology integration, and project financing
- Partner facilities voluntarily commit to issuing a Request for Proposals to implement at least one next generation infrastructure improvement project

Additional Questions?

Please Contact Us



Follow us on Twitter
@BetterBldgsDOE



Better Buildings Solution Center
<https://betterbuildingssolutioncenter.energy.gov/>



General Inquiries
stateandlocal@ee.doe.gov



Program Support
ksanderson@retechadvisors.com

SWIFt Phase 2 kicked off in summer 2020 and is currently welcoming interested state, regional, and local agency and facility partners.

For more information, contact:



Shannon Zaret

U.S. Department of Energy

shannon.zaret@ee.doe.gov

Keynote Speaker



Bruno L. Pigott,
IDEM Commissioner





State Level Priorities and Legislation

in a Changing Environmental and Social Landscape

Bruno Pigott

Commissioner

Indiana Department of
Environmental Management



Art needs to be socialized, and you need a lot of context to understand that, and that doesn't mean having read a few art history books.

Peter M. Brant

Industrialist, Art Collector, Magazine Publisher



Wright of Derby, A Philosopher Giving a Lecture at the Orrery, 1765



How Do We Understand This Painting

- Title: A Philosopher Lecturing on the Orrery
- By Joseph Wright of Derby
- 1766
- Example of Neoclassical Painting
- Color
- Lighting
- Clarity of form
- Realism
- Strong drawing as rational, morally Austerity, sobriety.



How can anyone understand the importance of this painting without understanding the times?

- An Orrery is a mechanical model of the solar system.
- The light given off is from a lamp placed in the middle to represent the sun.
- This painting was created during the age of the enlightenment.
- The enlightenment themes were of reason, rational questioning, and science.
- Was preceded by the Scientific Revolution and the three books of Newton's Principia which deals not just with gravity, but also with the masses of planets and movement of planets.
- During this time philosophers such as Voltaire and Rousseau held that everything could be rationally demystified.
- Locke wrote the "Essay Concerning Human Understanding"
- Christians sought to reposition their faith along rational lines.
- Is it any surprise that the artist would pick the Orrery at this time in history?
- Don't we gain a better understanding of the art from our knowledge of the time period?



**Like Art, Environmental Issues Today Are
Shaped by Our Times.**

**SIGNS^{OF THE}
TIMES**



**PLEASE OBSERVE
SOCIAL DISTANCING
AND MAINTAIN A
MINIMUM OF SIX
(6) FEET BETWEEN
COWORKERS AND
OTHER
INDIVIDUALS**

Out of Office

Teleworking
except for 2nd Tues
of pay period 20



Search or type a command





















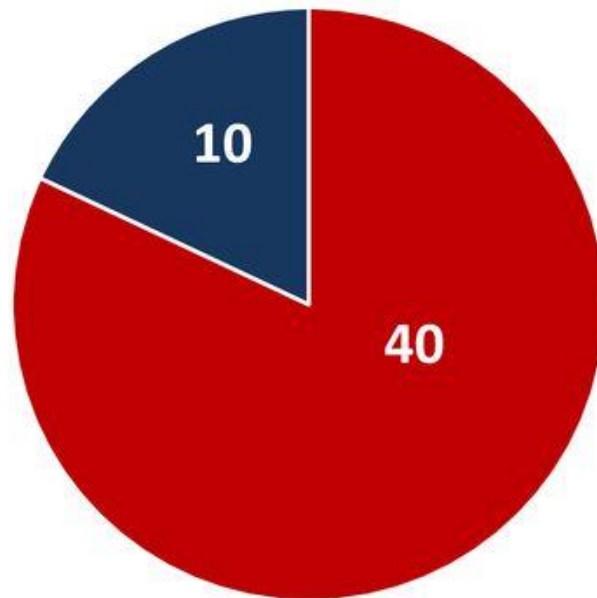


Indiana General Assembly



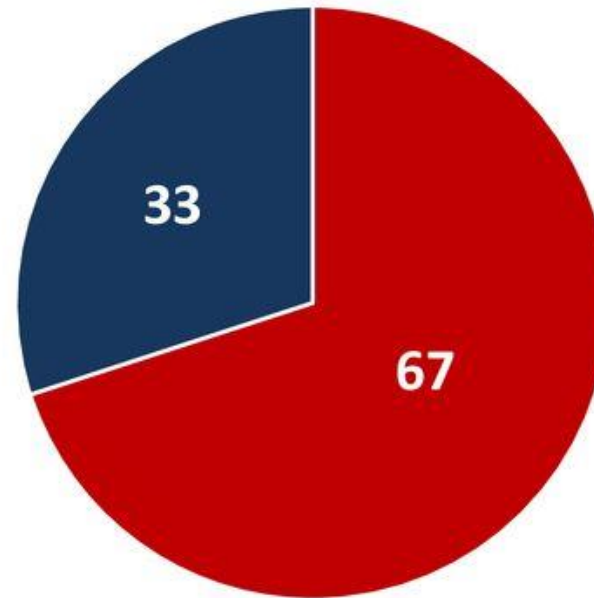
Republicans super majorities in both House and Senate

Indiana Senate: 50



■ Republican ■ Democrat

Indiana House: 100



■ Republican ■ Democrat

IHAconnect.org



How Has Covid Affected IDEM?

- 95% of employees worked from home.
- IDEM continued to Issue permits in a timely manner.
- IDEM inspections of drinking and wastewater facilities were a priority.
- IDEM did not issue blanket waivers from environmental rules.
- Where facilities had difficulty meeting specific requirements, IDEM handled them on a case-by-case basis.



How Has the Governor Reacted to George Floyd Protests?

- Governor Holcomb:

We now stand at an inflection point, and we have an opportunity to acknowledge those past wrongs, learn from our history and admit where we've come up short of our ideals. Then, we must get about doing what we've done whenever we face a challenge: Make historic progress together.

How Has the Governor Reacted to George Floyd Protests?

- Governor Hired Indiana's first-ever Chief Equity, Inclusion and Opportunity Officer.
- A member of the Governor's Cabinet.
- Focus on improving equity, inclusion and opportunity across all state government operations
- Develop agency plans to tactically remove barriers to equity.
- Karrah Herring





Equity, Inclusion, Environmental Justice at IDEM

- IDEM will be working with Kerrah Herring on equity and inclusion issues at IDEM.
- I conducted listening sessions with IDEM employees of color.
- IDEM has worked to update its EJ Maps.
- IDEM has asked IU to review its map and provide input.
- IDEM is working on environmental justice policy with Governor's Office.



How Did Recent Elections Affect State Environmental Issues?

- Air:
 - John Kerry, Gina McCarthy, Janet McCabe
 - ACE Rule
 - Keystone XL pipeline
 - Paris Climate Accord
 - IDEM will need to hire staff in Air to help with climate issues.



How Did Recent Elections Affect State Environmental Issues?

- Water:
 - Trump Administration revised the Waters of the United States definition.
 - Implications on Wetlands Issues.
 - State Regulated Wetlands.

Waters of the United States

The definition of WOTUS has been debated for years at all levels of government.





Waters of the US: Indiana Impact

- Trump Administration has revised the Waters of the United States definition.
- The definition is more narrow than past iterations.
- Many streams and wetlands are not under federal protection under the new definition.
- IDEM cannot regulate these waters under the 401 program.



Why It Matters Here

- Impacts to wetlands considered Waters of the US require a federal 404 permit from the U. S. Army Corps of Engineers and a State Water Quality Certification.
- Whether IDEM needs to issue a 401 WQC hinges upon the whether the Corps has jurisdiction.
- Currently impacts to wetlands that are not Federally Protected are protected by Indiana's State wetland law.



Waters of the US and State Legislation

- **SB 389 introduced and passed in the Senate proposes to repeal Indiana's State Regulated Wetland Law in its entirety.**
- **The House of Representatives are Considering an Amended Version of SB 389.**



Example wetland
in Indiana –
Adjacent
(jurisdictional) or
Abutting
(isolated)?

Why Should the State Also Protect wetlands ?

- Both state and federal wetland have the same function.
- The fundamental value of a wetland is not determined by its proximity to navigable water.
- The economic benefits of wetlands are not limited to artificial boundaries and legal demarcations.





Wetland Benefits

Wetlands, regardless of their location, provide the same important functions and values:

- **Protection of drinking water.** The majority of drinking water systems in Indiana obtain their water from the ground. Wetlands replenish and filter groundwater, ensuring an adequate supply of high-quality drinking water. One calculation for wetland recharging groundwater was that, if 80 percent of swamp was drained, available ground water would be reduced by an estimated 45 percent.
- **Protection against flooding.** Wetlands absorb and store snowmelt and seasonal rain. Preserving and restoring wetlands, together with other water retention, provides the level of flood protection otherwise provided by expensive dredging operations and levees.
- **Improved water quality in streams.** Wetlands slow the flow of water, allow sediments to settle to the wetland floor, and ensure pollutants do not enter our lakes and rivers.
- **Preserved critical and wildlife habitat.** Waterfowl depend on these wetlands for breeding, amphibians prefer these fishless waters, and trout rely on them to supply cold summer stream flow.

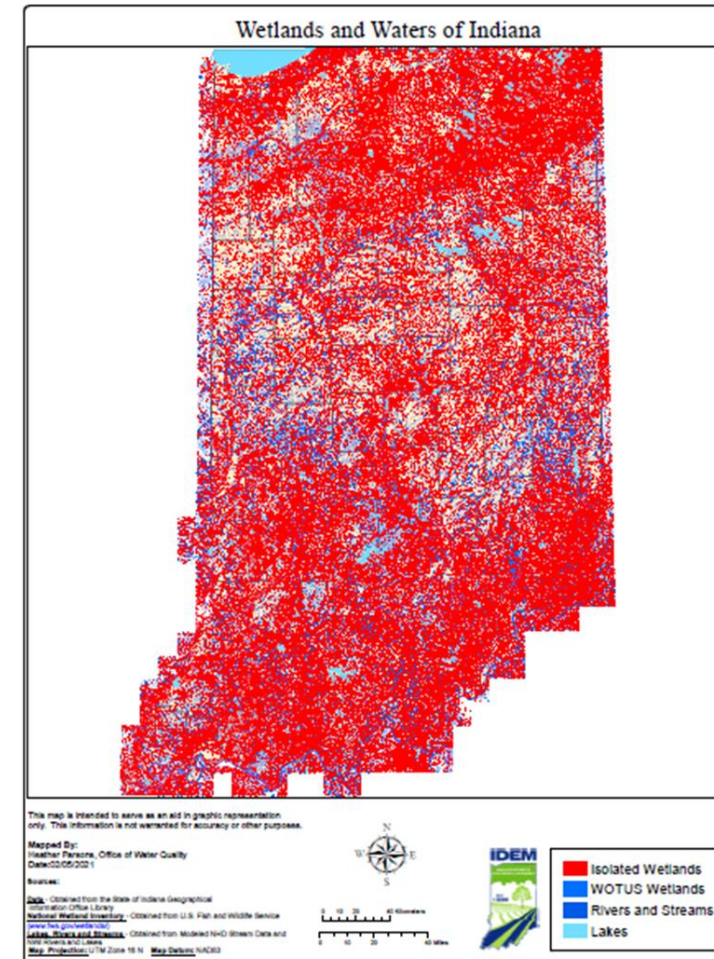
What Happens When Wetlands are Filled?

- With wetland loss, water enters streams at a faster rate causing erosion, flooding and:
 - \$ Property damage to homes and crops.
 - \$ Damage to bridges and culverts.



Surely, all the “important” wetlands are Federally Protected?

- Estimates of Indiana’s remaining wetlands indicate around 80% are State Protected Wetlands.





Implications of a Senate Bill 389

To avoid unintended consequences, a thoughtful reevaluation of the State Regulated Wetlands Law is preferred. Such an evaluation allows for opportunities to:

- Appropriately protect wetlands that provide much needed water storage and filtration and critical habitat.
- Review and correct implementation challenges.
- Provide regulatory consistency.
- Retain regulatory control.



Emerging Contaminants

- EPA has identified over 7,000 potential chemical and microbial drinking water contaminants.
- EPA has established regulations for more than 90 of them.
- EPA conducts extensive research as part of its decision process for determining which contaminants to regulate.



Emerging Contaminants: PFAS

- PFAS are a group of thousands of unregulated, man made chemicals.
- PFAS chemicals are found in hundreds of products, including Teflon pans, fast food wrappers, and dental floss.
- PFOA and PFOS are the most extensively produced and studied of these chemicals. They are persistent in the environment and body.
- Since they are persistent, they have earned the moniker: forever chemicals



Emerging Contaminants: PFAS

- EPA does not currently have any drinking water standards for PFAS chemicals.
- EPA did establish 'health advisory levels' for PFOA and PFOS of 70 parts per trillion.
- Health advisories are non-enforceable and non-regulatory.



Emerging Contaminants: PFAS

- The US Agency for Toxic Substances and Disease Registry (ATSDR) publishes Toxicological Profiles about a toxic substance including a Minimal Risk Level (MRL).
- The MRL is an estimate of the amount of chemical a person can eat, drink, or breath each day without a detectable risk to health.
- MRLs are screening levels. Exceeding the MRL does NOT mean people will be sick from those exposures.



PFAS and IDEM

- EPA included 6 PFAS compounds in the national third Unregulated Contaminant Monitoring Rule (UCMR 3) sampling requirements.
- 103 large Public Water Systems of greater than 10,000 users sampled for PFAS between 2013 and 2015.
- IDEM plans to conduct additional PFAS monitoring at Community Water Systems.



PFAS and IDEM

- IDEM will sample systems in three phases based on population served.
 - Phase 1. 123 systems serving between 3,300 and 10,000.
 - Phase 2. 570 systems serving less than 3,300.
 - Phase 3. 85 systems serving greater than 10,000.
- IDEM will collect samples from both raw and finished water.
- IDEM will collect over 3,000 samples in this effort.



PFAS and the Ohio River

- As part of its effort to understand potential emerging contaminants, the Ohio River Valley Sanitation Commission (ORSANCO) partnered with USEPA in 2009 and 2010 to screen 158 compounds in 22 locations along the Ohio River.
- The study included 13 Perflourinated (PFAS) Compounds.



PFAS and the Ohio River

- ORSANCO has authorized the completion of an Ohio river PFAS Sampling Survey.
- ORSANCO is partnering with USEPA on the analytical component of the survey.
- ORSANCO is partnering with USGS to use a sample collection method that has been developed for sampling.
- MRL for PFOA is 11 parts per trillion. For PFOS it is 8 parts per trillion.



PFAS and the Ohio River

- ORSANCO's survey will characterize PFAS ambient conditions for the entire 951-mile Ohio River.
- It will characterize ambient PFAS concentrations at 20 locations on the river.
- Locations were selected using a probabilistic approach. ORSANCO is partnering with USEPA on the analytical component of the survey.
- ORSANCO is partnering with USGS to use a sample collection method that has been developed for sampling.



Thank You

Bruno Pigott

Commissioner

Indiana Department of

Environmental Management

317-232-8611

bpigott@idem.in.gov

Mr. Michael Kuss, Michigan City Sanitary District



Business Award Recipient

NIPSCO 

NIPSCO EV Charging Partnership for “Project Plug In”

Kevin Kirkham

April 30, 2021



NIPSCO PROFILE

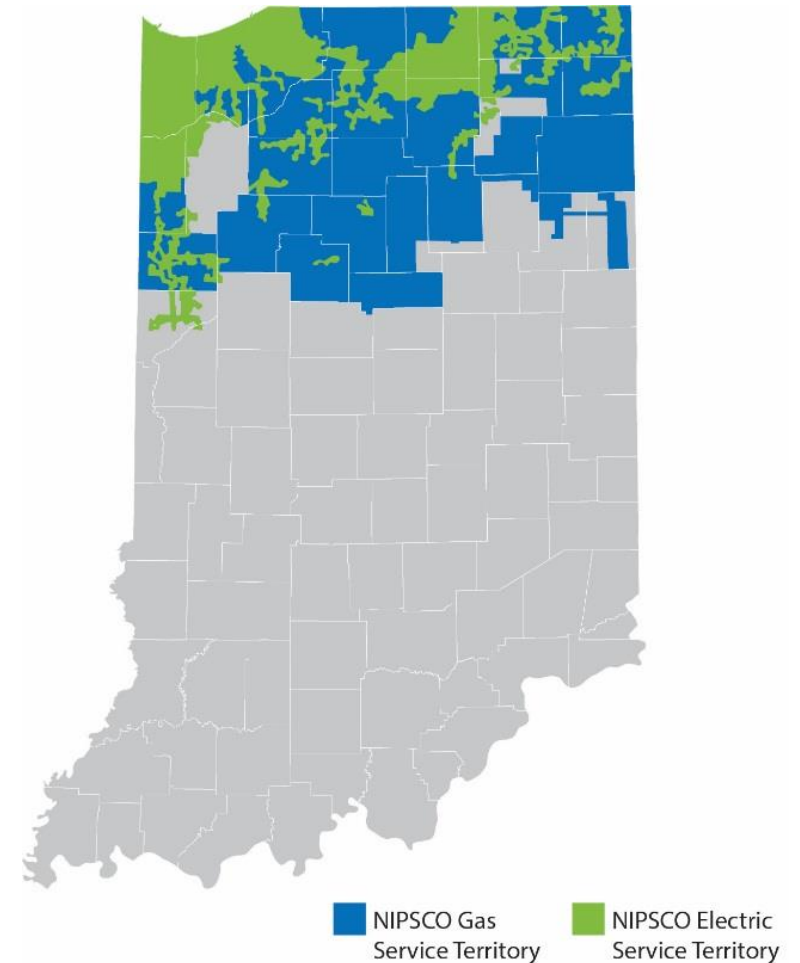
Working to Become Indiana's Premier Utility

Electric

- 460,000 Electric Customers in 20 Counties
- 3,400 MW Generating Capacity
 - 7 Electric Generating Facilities (2 Coal, 1 Natural Gas, 2 Hydro, 2 Wind)
 - 500 MW of New Wind Energy (Rosewater and Jordan Creek Wind online in Dec. 2020)
- 12,800 Miles of Transmission and Distribution
 - Interconnect with 5 Major Utilities (3 MISO; 2 PJM)
 - Serves 2 Network Customers and Other Independent Power Producers
- Electric Rates Below National Average

Natural Gas

- 820,000 Natural Gas Customers; 32 Counties
- Lowest Delivered Cost Provider in Indiana
- 17,000 Miles of Transmission and Distribution Line/Main
- Interconnections with Seven Major Interstate Pipelines
- Two On-System Storage Facilities

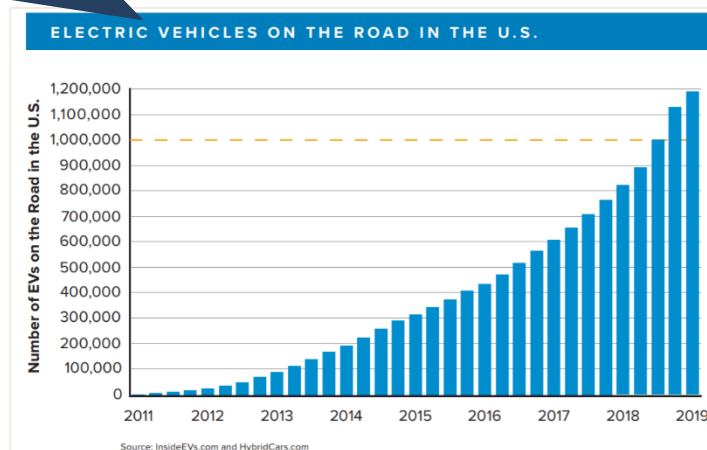


2,900
Employees

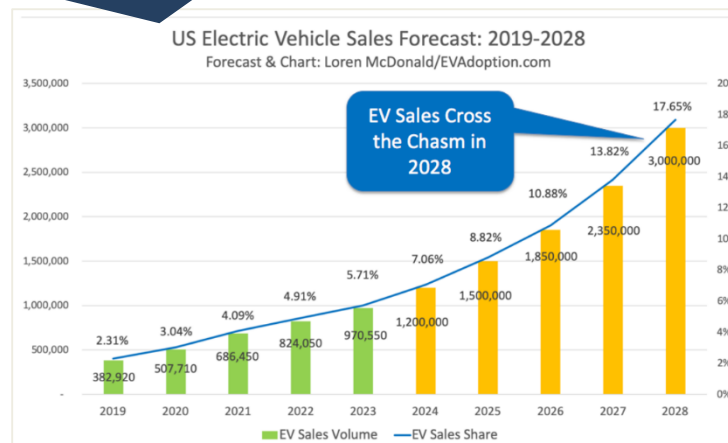
Merrillville, Ind.
Headquarters

Adoption of Electric Vehicles has shown consistent, sustained growth across the country; however, implementing EV charging infrastructure remains a challenge

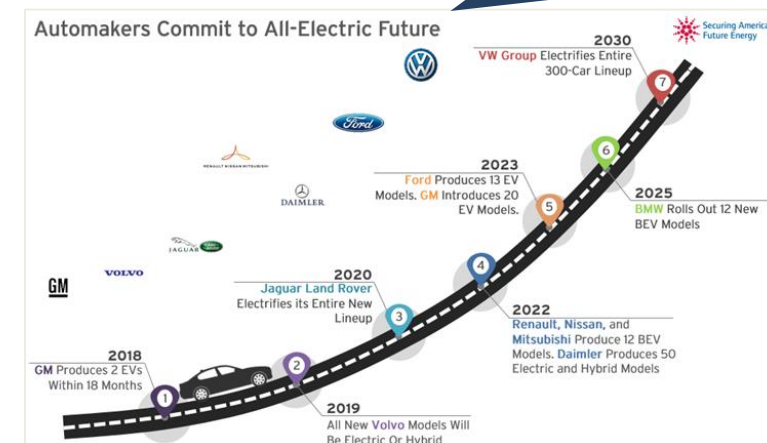
EV sales were 2% of all auto sales in 2019¹



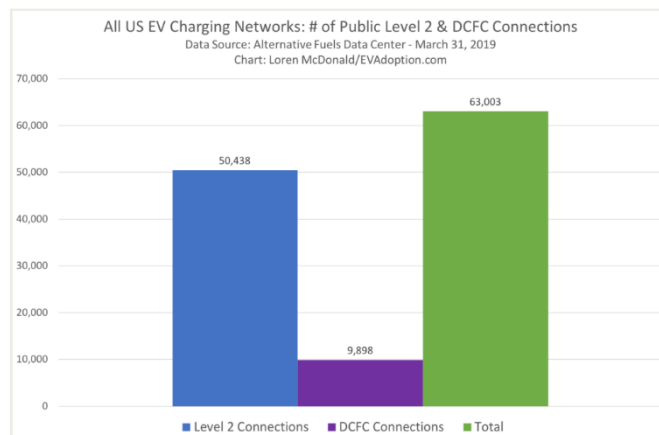
EV sales forecast is expected to continue to grow over next decade²



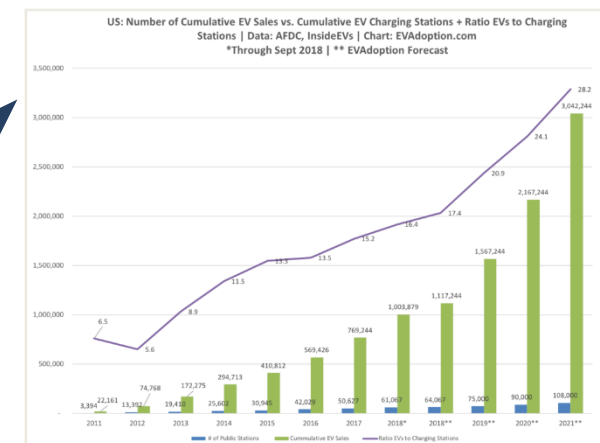
OEMs forecast big expansion in EV models³



DC fast charging stations make up only 16% of all charging stations in the USA⁴



The growth of EVs is significantly outpacing the growth of EV charging stations⁴

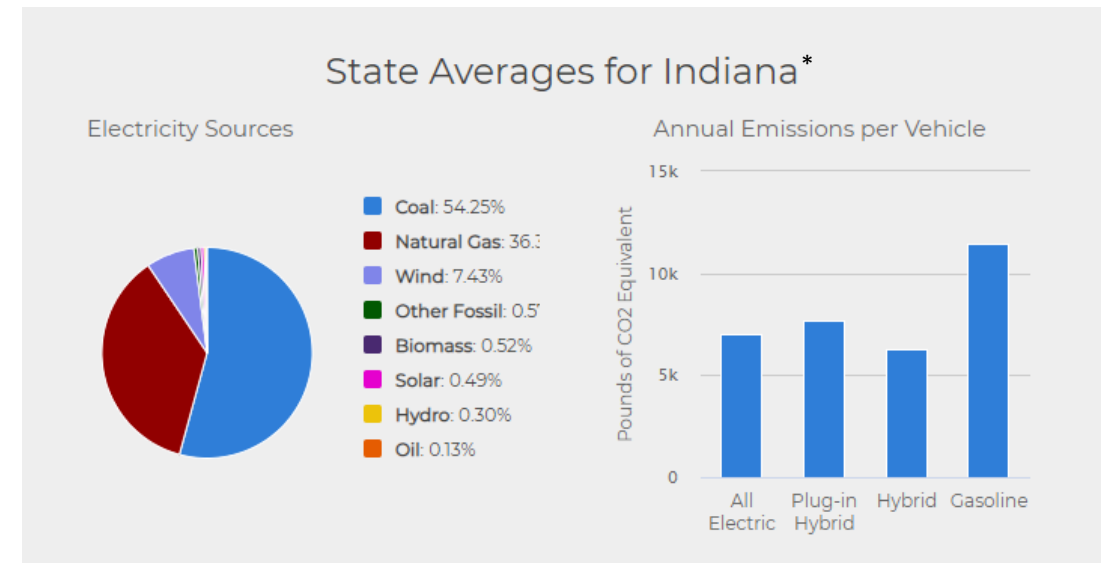


NIPSCO EV Charging Station Grant Project Update

NIPSCO partnered with South Shore Clean Cities with **“Project Plug In”**

- Adding \$500 matching funds for eligible applicants
- The 24 L2 stations are located in 18 communities:

- Crown Pt
- Gary
- Lake Station
- Michigan City
- Whiting
- Hammond
- Portage
- Burns Harbor
- Highland
- Merrillville
- Munster
- Culver
- Elkhart
- Goshen
- Mishawaka
- Plymouth
- South Bend
- Warsaw



* Source: US DOE

Thank You!

Industrial Award Recipient



PORTS OF INDIANA

In June 2019, Ports of Indiana become the first state-wide Green Marine certified port for environmental sustainability efforts



Municipal Award Recipient



Porter County
Sheriff's Department

July 2020, Porter County Sheriff's Department
added 11 new hybrid squad cars to its fleet



Mark Siminski Bicycle Award Recipient



Mitch Barloga





CHICAGO

L. MICHIGAN

Longitude



Michigan City

New Carlisle 38

[illegible]

~~well~~ 30

Hobart

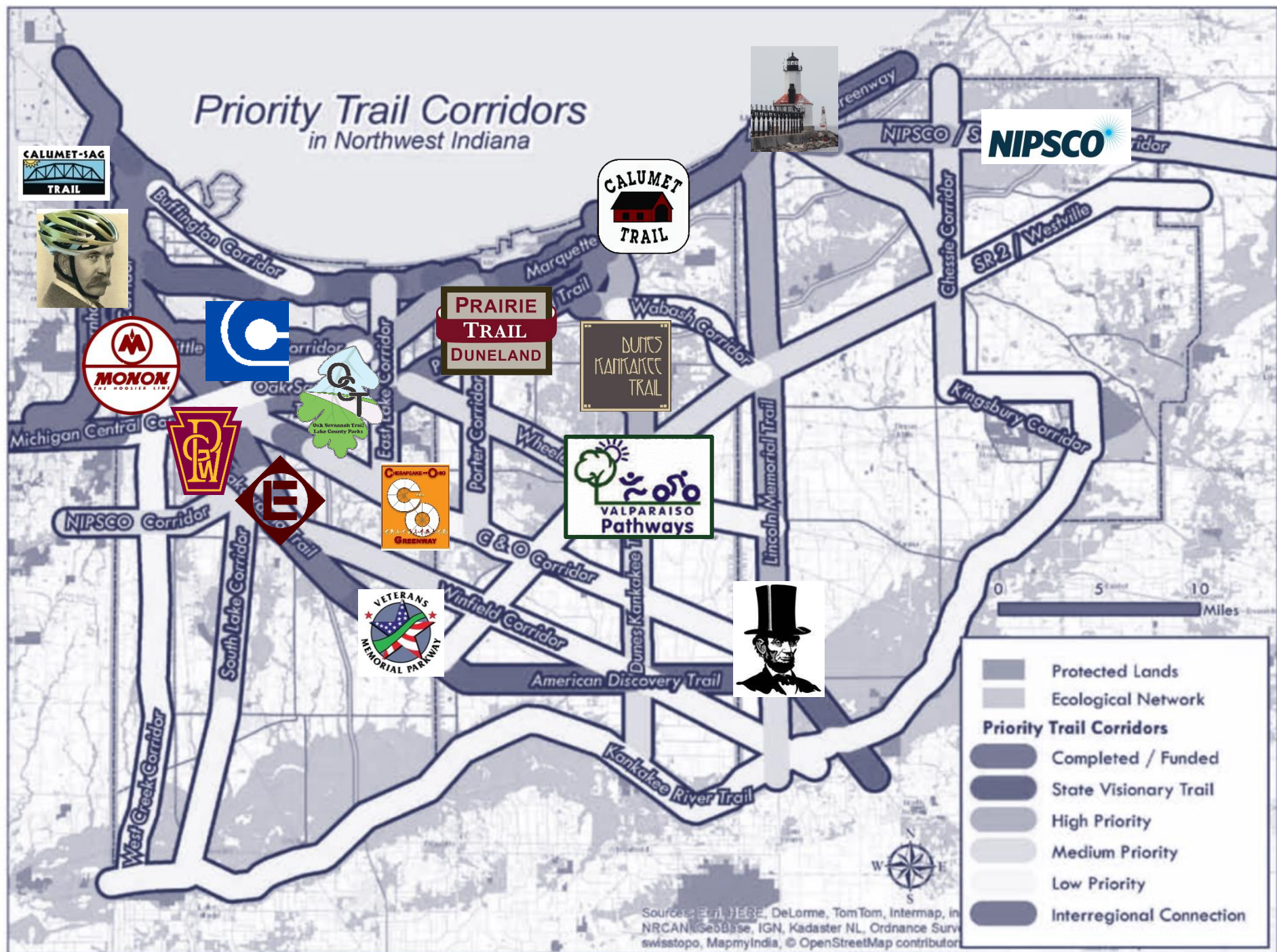
Valparaiso

P O R T E R

STARK E

North Judson

Ora 32







































Wolf Lake Boat House
Thomas M. McDermott,
City of Hammond



APRIL 9, 2014

**Hammond
Port Authority**



BOARD MEMBERS
Dennis Hendricks - Chairman
Scott Kahan - Vice Chairman
Diane Karamich - Secretary/Treasurer
Thomas E. Kahan - Member
Thomas Poplinski - Member
William A. Karamich - Director
Mark Karamich - Executive Director
Kevin C. Smith - Secretary & Treasurer

Consulting Engineer:

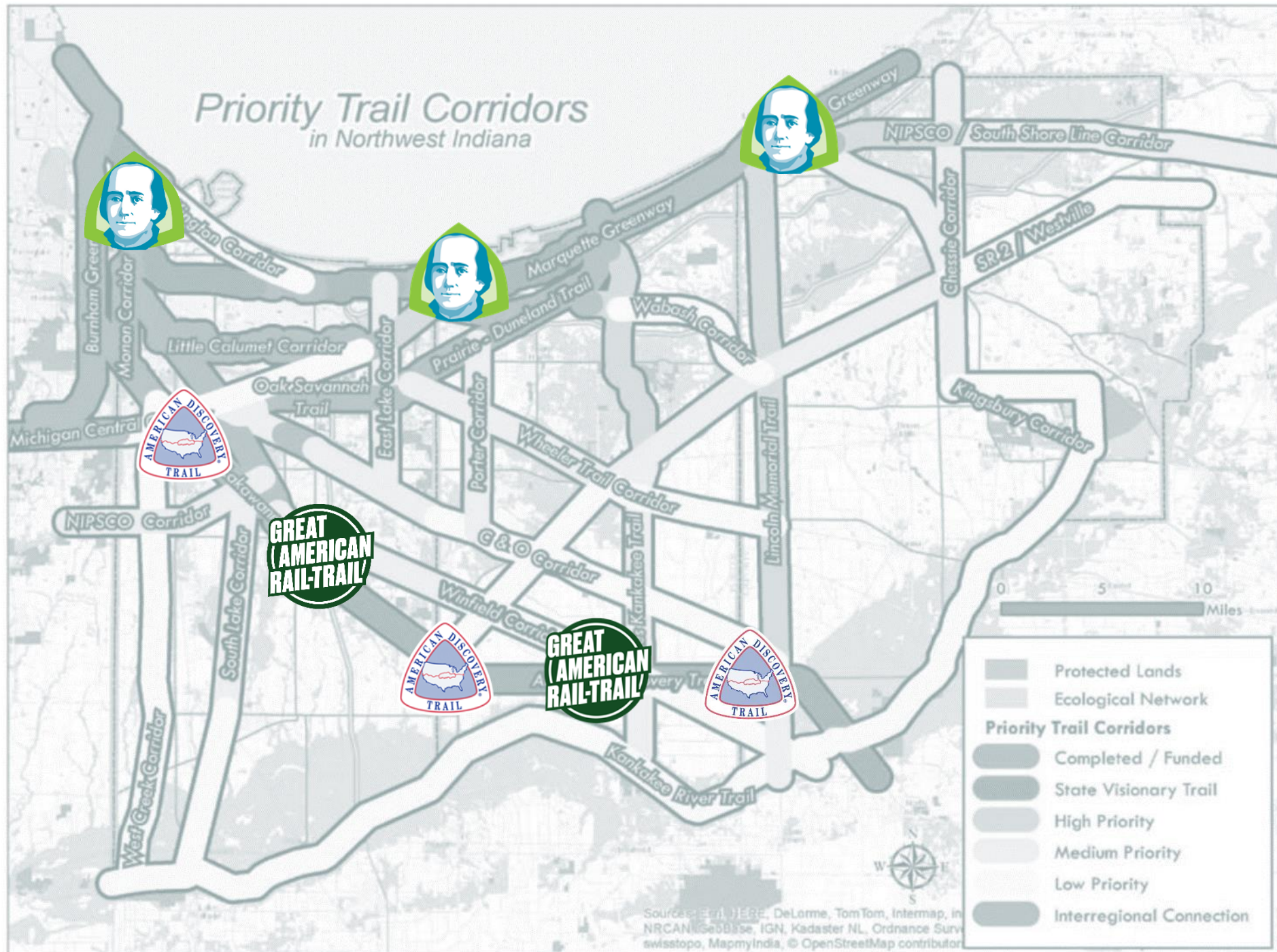


FINANCED BY: Northwest Indiana
RDA
Regional Development Authority





Priority Trail Corridors in Northwest Indiana



THE MARQUETTE GREENWAY PROPOSED ROUTE

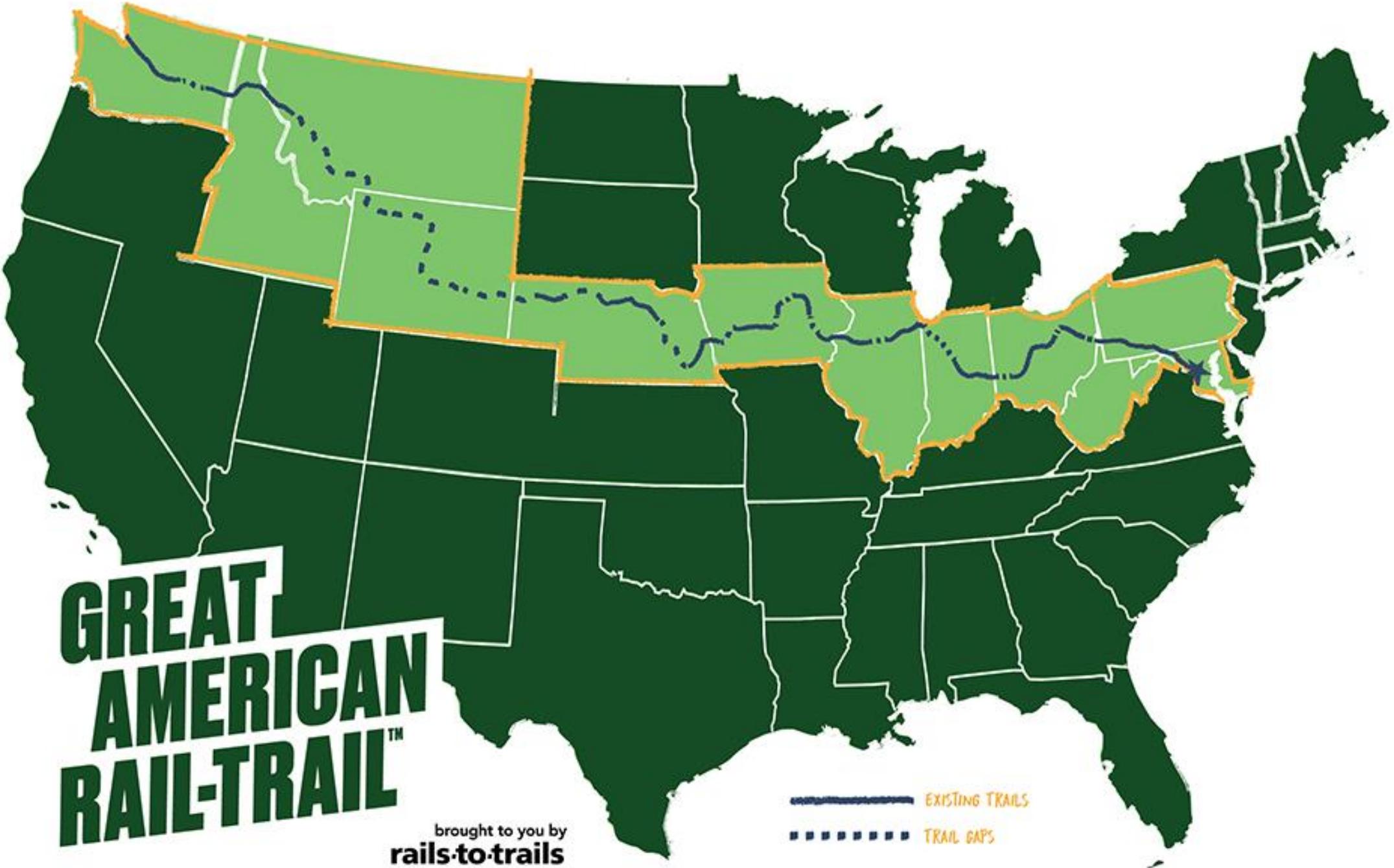


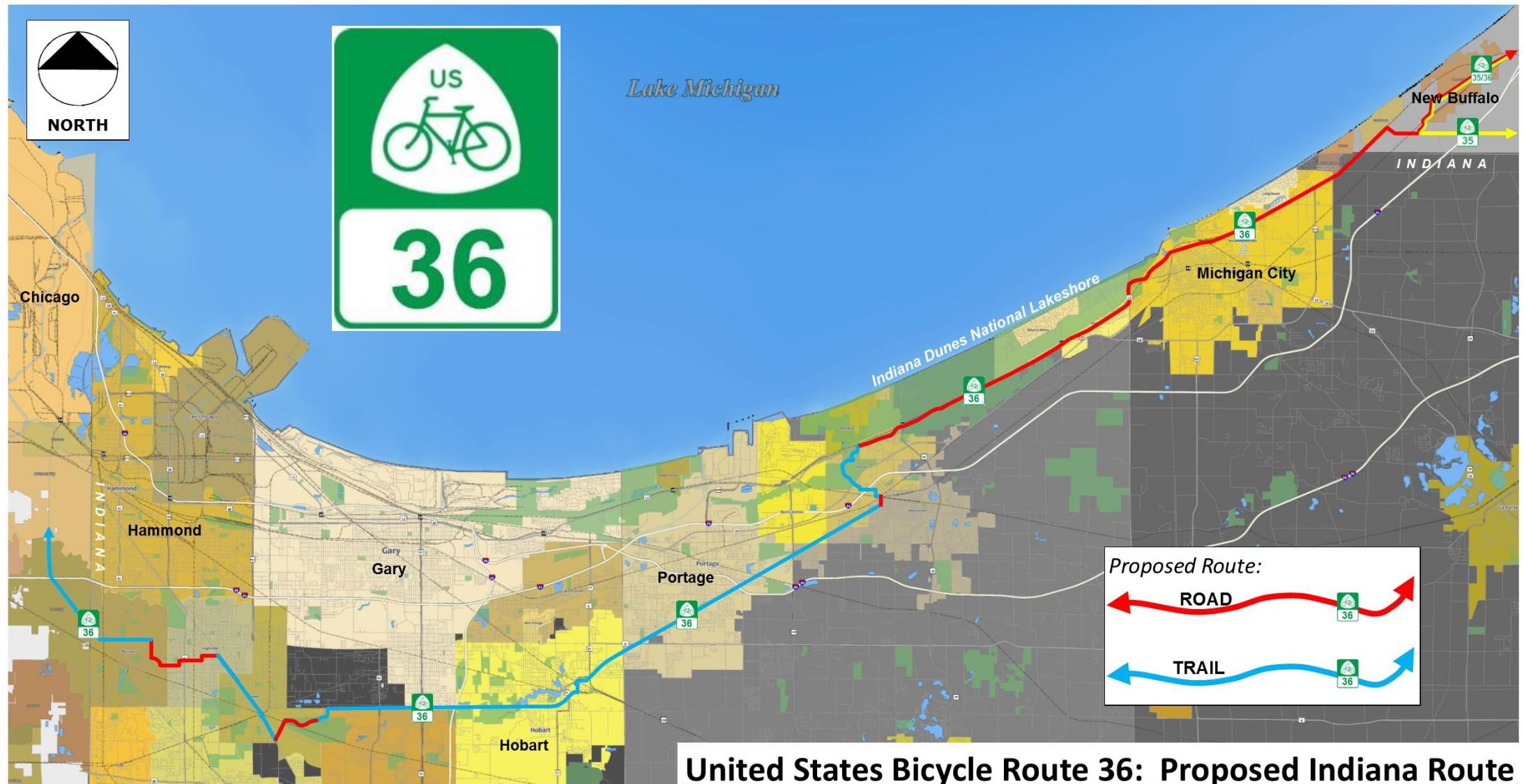


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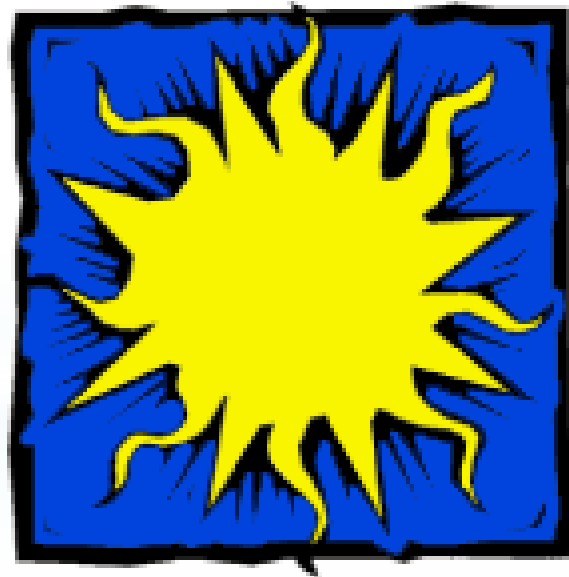
**NORTHWESTERN
INDIANA
REGIONAL
PLANNING
COMMISSION**





Question?

PARTNERS FOR



CLEAN AIR

For more Information on Partners for Clean Air

Partners for Clean Air website:
www.in.gov/idem/PartnersForCleanAir

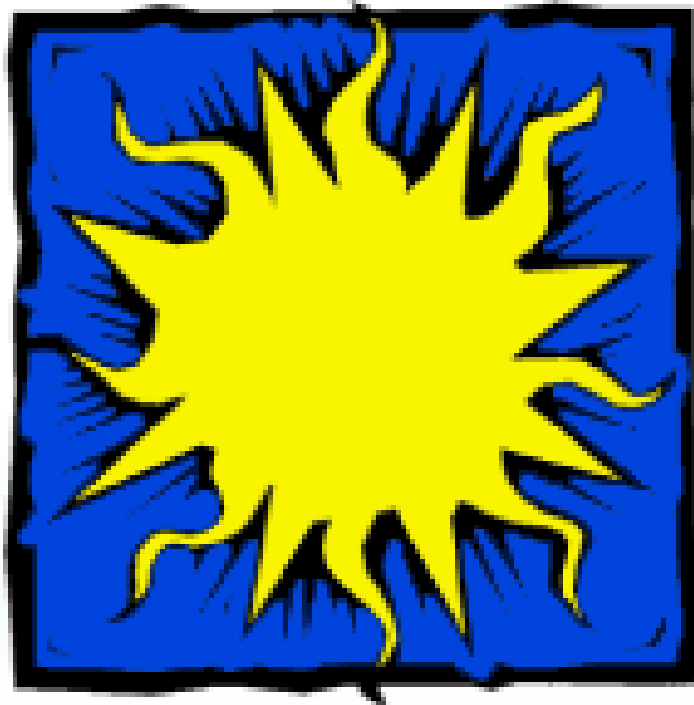
or

Contact Charles Breitenfeldt at
219-250-0119



Thank You for Coming!!

PARTNERS FOR



CLEAN AIR