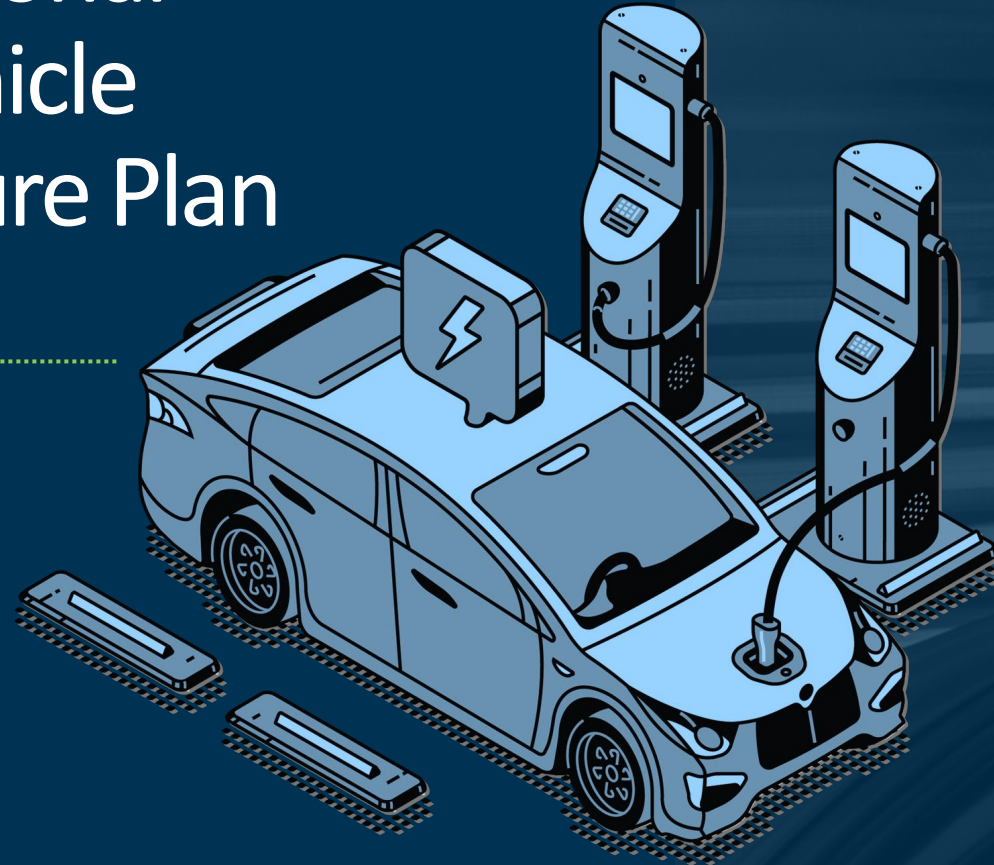


INDOT National Electric Vehicle Infrastructure Plan

**Public In-Person
Meeting**

June 14, 2022



Introductions



- Scott Manning, INDOT
 - Deputy Chief of Staff
- Diane Newton, HNTB
 - National Practice Consultant
- Peter Flynn, HNTB
 - Senior Project Engineer
- Kerri Garvin, Greater Indiana Clean Cities Incorporated
 - Executive Director



Today's Agenda

HNTB



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Background



**NEVI Program
Overview**



**Indiana Plan
Overview**



**Public
Engagement**



Where we are today?



- **2020**
 - INDOT Partners with Purdue to study EVs in Indiana
- **2021**
 - Bipartisan Infrastructure Law Passed
- **2022**
 - February – Initial Federal NEVI Guidance provided
 - March to July – State planning process
 - August 1 – State plans due to FHWA

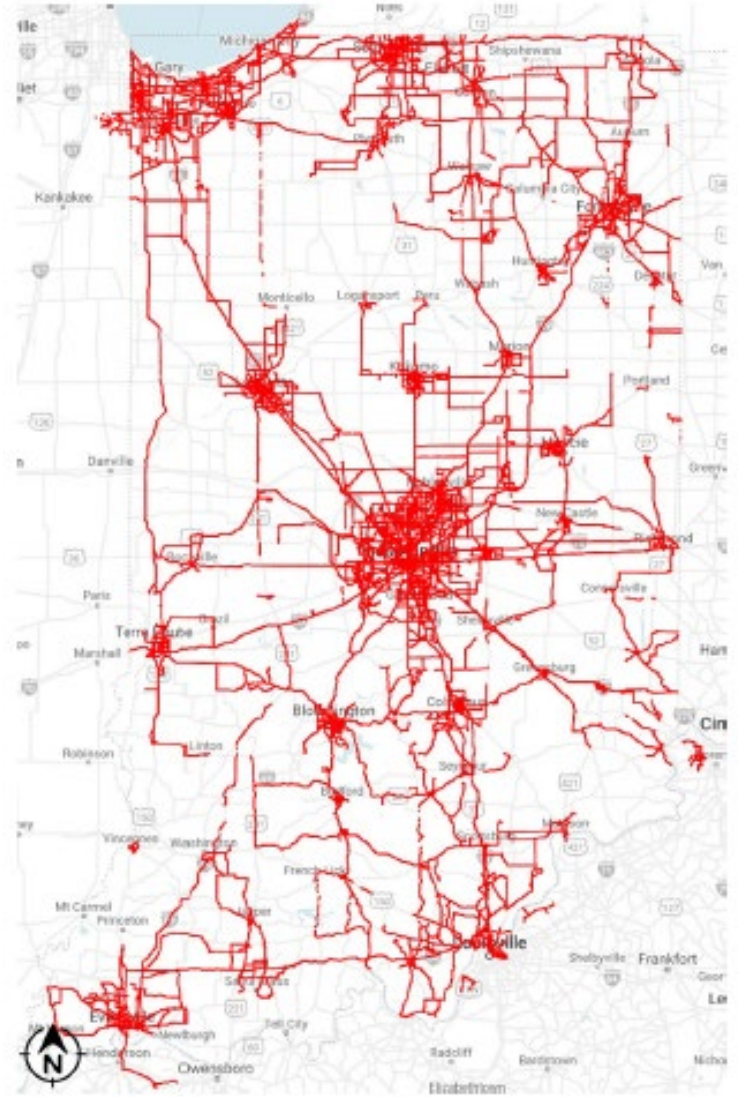


EVs in Indiana



Snapshot - July 12-18, 2021

- 9,814 EV trips
- 64,700 EV vehicle miles traveled
- 18% of EV mileage was on Interstates
- 53% of the EV VMT occurred in just 10 counties.

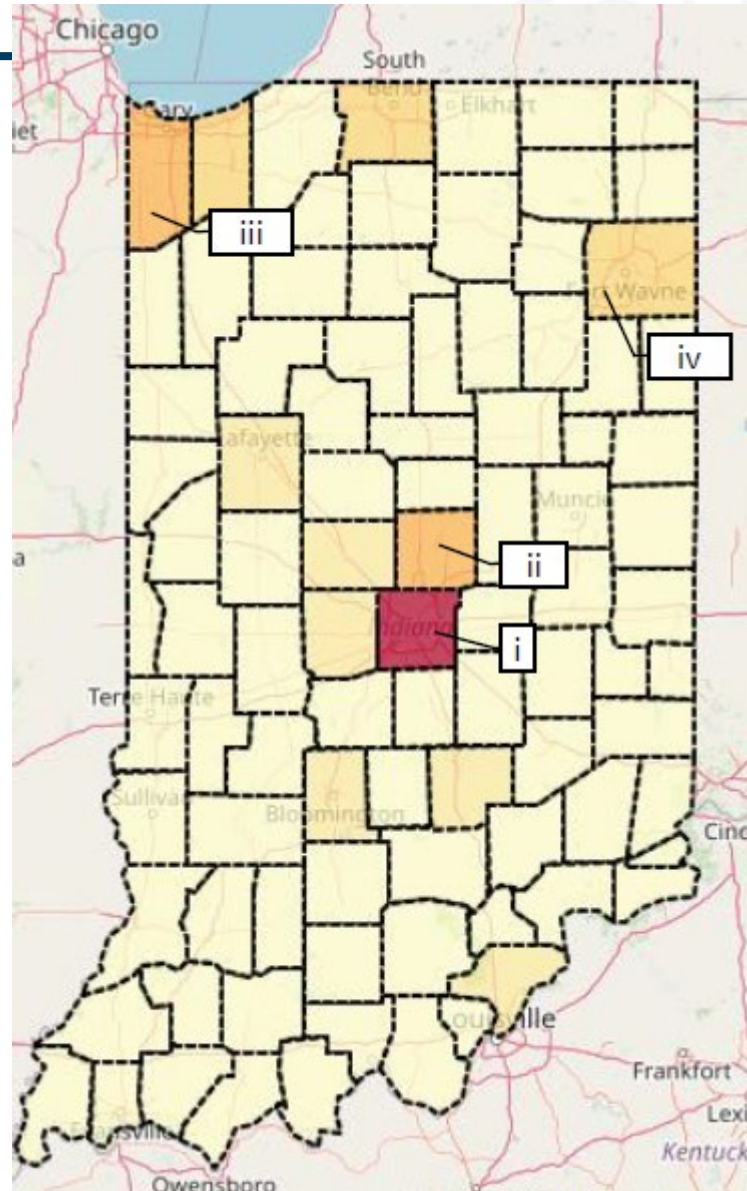


— EV Trails

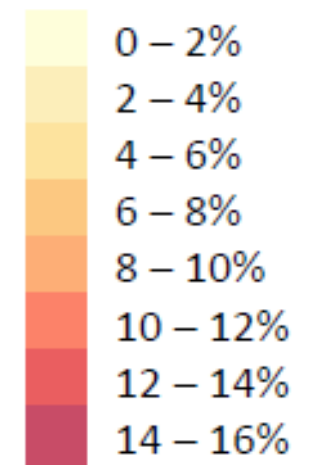
**Desai, J., Mathew, J.K., Li, H. and Bullock, D.M. (2021) Analysis of Electric and Hybrid Vehicle Usage in Proximity to Charging Infrastructure in Indiana. *Journal of Transportation Technologies*, 11, 577-596. <https://doi.org/10.4236/jtts.2021.114036>



EVs in Indiana



Percent of EV Miles by County

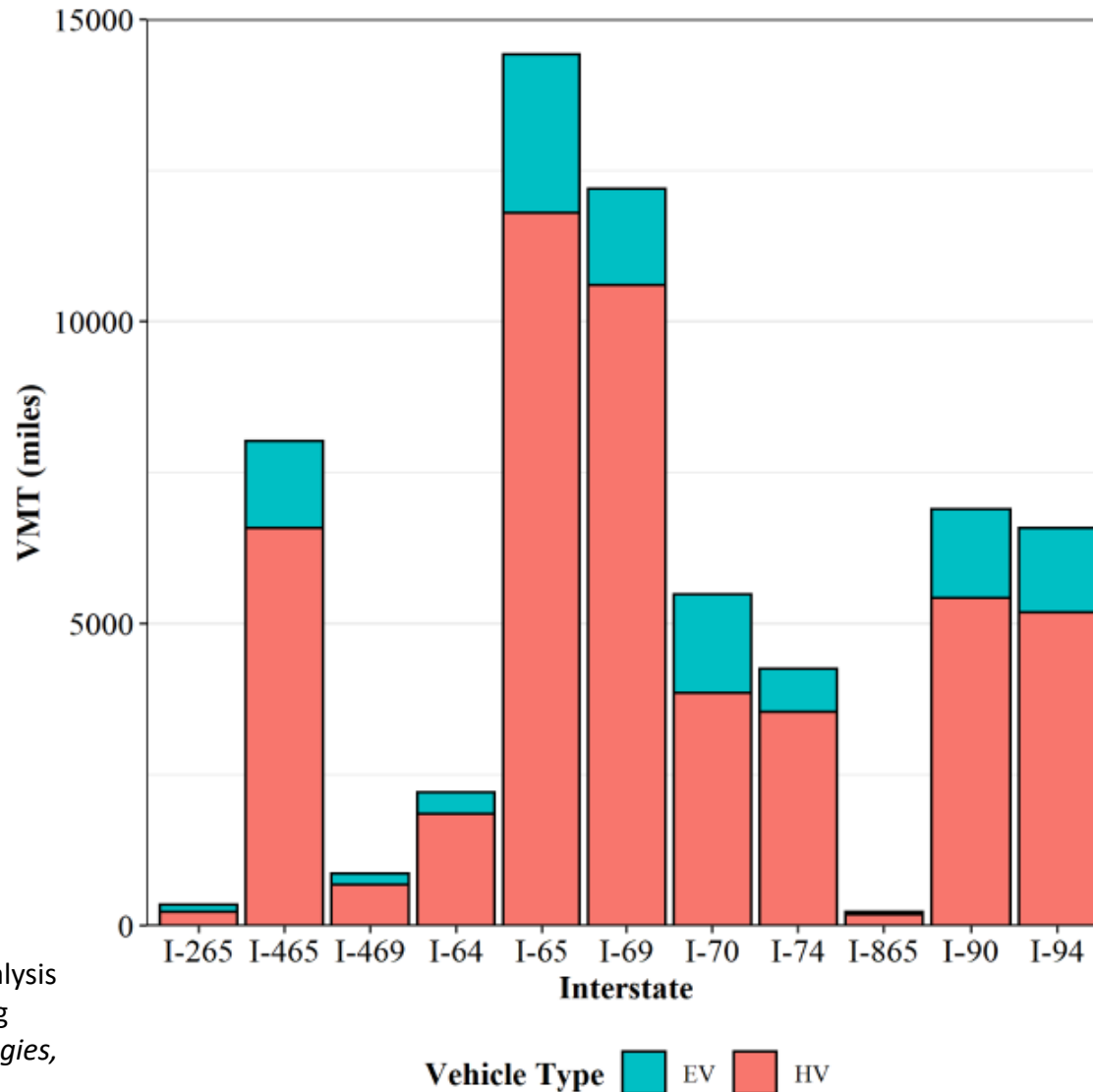


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EVs in Indiana



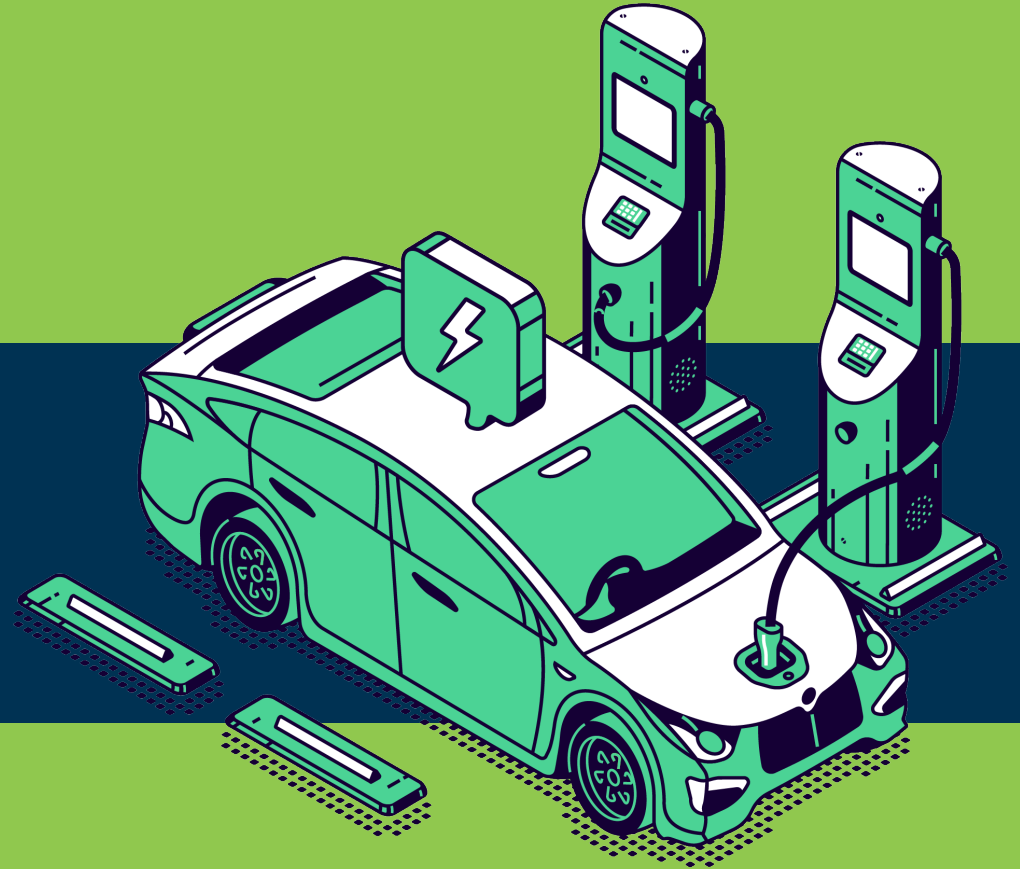
EV and HV Miles by Interstate



**Desai, J., Mathew, J.K., Li, H. and Bullock, D.M. (2021) Analysis of Electric and Hybrid Vehicle Usage in Proximity to Charging Infrastructure in Indiana. *Journal of Transportation Technologies*, 11, 577-596. <https://doi.org/10.4236/jtts.2021.114036>



NEVI Program Overview



NEVI Program Overview



- Source: 2021 Bipartisan Infrastructure Law (BIL)
- Goal: create nationwide network of 500,000 EV chargers by 2030
 - *Initial funding is directed to **Alternative Fuel Corridors (AFC)***
 - *Establish minimum standards for EV chargers within 180 days of enactment*
 - *Compliance with the Justice40 Initiative*
- Funding:
 - \$7.5B (\$5B formula, \$2.5B discretionary) over 5 years
 - Indiana = \$99,605,738
- Schedule:
 - Round 6 AFC nominations due May 13, 2022
 - State plans due August 1, 2022
 - Federal Highway Administration (FHWA) approves by September 30, 2022

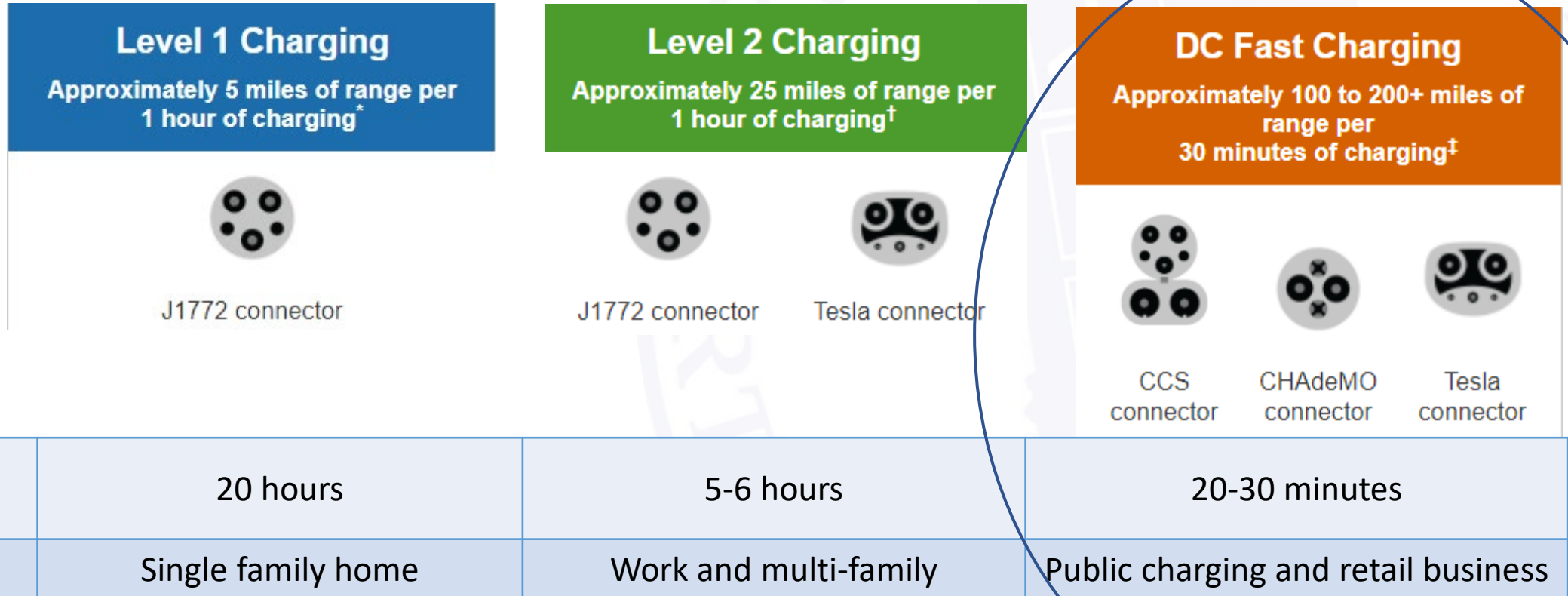


NEVI – Key Requirements

- EV charging infrastructure must be located every 50 miles along State's interstate highway system, within 1 mile of the Interstate
- EV charging infrastructure must include at least four 150KW Direct Current (DC) Fast Chargers
- Rest areas are not eligible locations
- States are allowed to contract with private entities for installation, operations and maintenance



EV Charging Infrastructure



Source: [Alternative Fuels Data Center: Developing Infrastructure to Charge Electric Vehicles \(energy.gov\)](https://www.energy.gov/alternative-fuels-data-center)



Plan Overview



Chapter	Title
1	Introduction
2	State Agency Coordination
3	Public Engagement
4	Plan Vision and Goals
5	Contracting
6	Existing and Future Condition Analysis
7	EV Charging Infrastructure Deployment
8	Implementation
9	Civil Rights
10	Equity Considerations
11	Labor and Workforce Considerations
12	Cybersecurity
13	Program Evaluation
14	Discretionary Exceptions



Review existing research

Purdue SPR 4509: *A Strategic Assessment of Needs and Opportunities for Wider Adoption of EVs in Indiana*

Journal of Transportation Technologies: *Analysis of Electric and Hybrid Vehicle Usage in Proximity to Charging Infrastructure in Indiana*

Stakeholder engagement

Request for information

Virtual event(s)

Online survey

In-person meetings

One-on-one meetings (as requested)

Plan development

Map existing research to relevant sections

Identify gaps

Stakeholder engagement results to drive content development

Map existing and planned locations

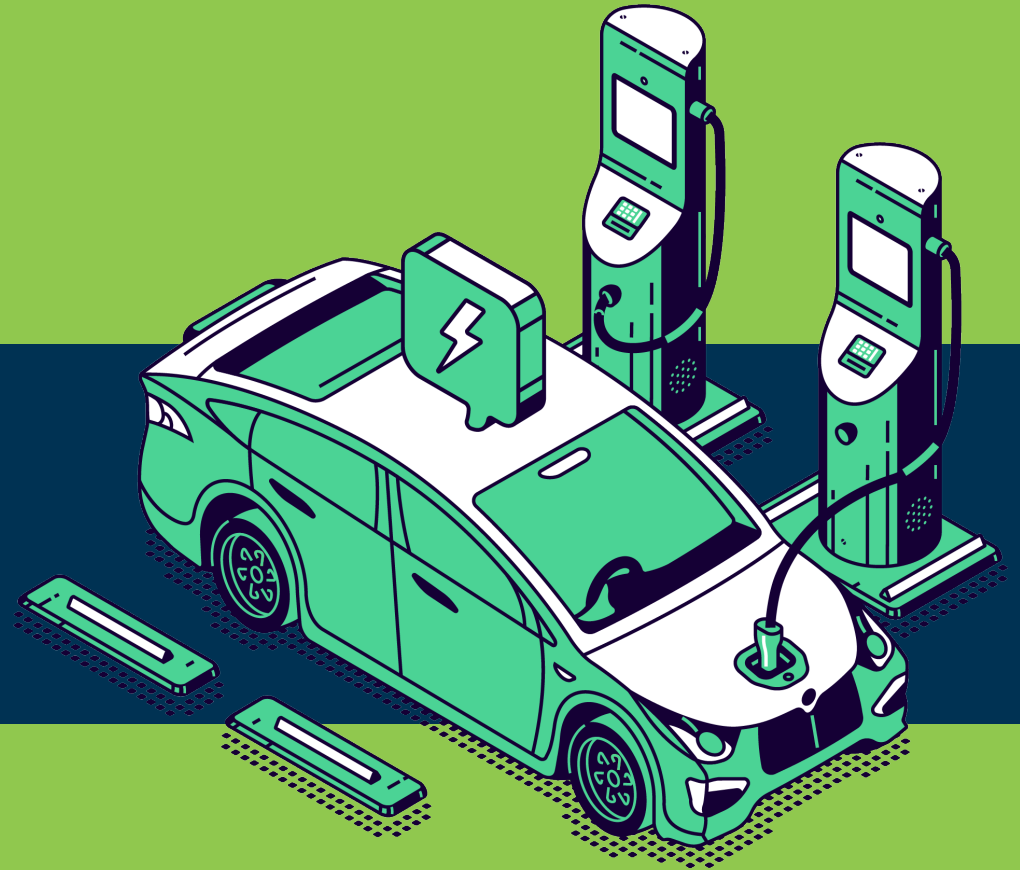
Workshop with INDOT to finalize plan content

FAQs

- Have preliminary locations been selected?
- What is the RFP process and timing?
- What are INDOT roles and responsibilities?
- What is the difference between the formula and discretionary NEVI program?
- Is the grid ready for this infrastructure?
- Does this relate to the Volkswagen settlement funds?



Indiana EV Plan Overview



INDOT NEVI Vision and Priorities



- Vision:
 - Collaboratively plan, build, and maintain safe and innovative EV infrastructure that enhances quality of life, drives economic growth, and facilitates the movement of people and goods
- Priorities:
 - Resolve 50-mile gaps on alternative fuel corridors
 - Provide service in high demand areas, exceeding requirements when warranted
 - Provide service in disadvantaged communities and rural areas
 - Leverage existing access to utility service



INDOT NEVI Goals and Outcomes



- Deliver great service. *Collaborate and communicate with internal and external stakeholders regarding EV infrastructure deployment.*
- Enhance Indiana's economic competitiveness and quality of life. *Eliminate range anxiety for EV travel.*
- Execute a 20-year road and bridge plan. *Deliver the EV plan to provide a robust, reliable and sustainable charging network.*
- Develop INDOT's 21st century workforce. *Enable the private sector to ensure continued operation of EV charging infrastructure funded by NEVI and reduce the need for future public funding.*



Performance Measures

Performance Measure	Target
Percent of Alternative Fuel Corridors miles that are within 50 miles of a charging station	100%
Percent of Indiana's population that is within X miles of a charging station	100%
Number of sites implemented	TBD
Number of ports implemented	TBD
Percent of time at least one port is available at all sites	TBD

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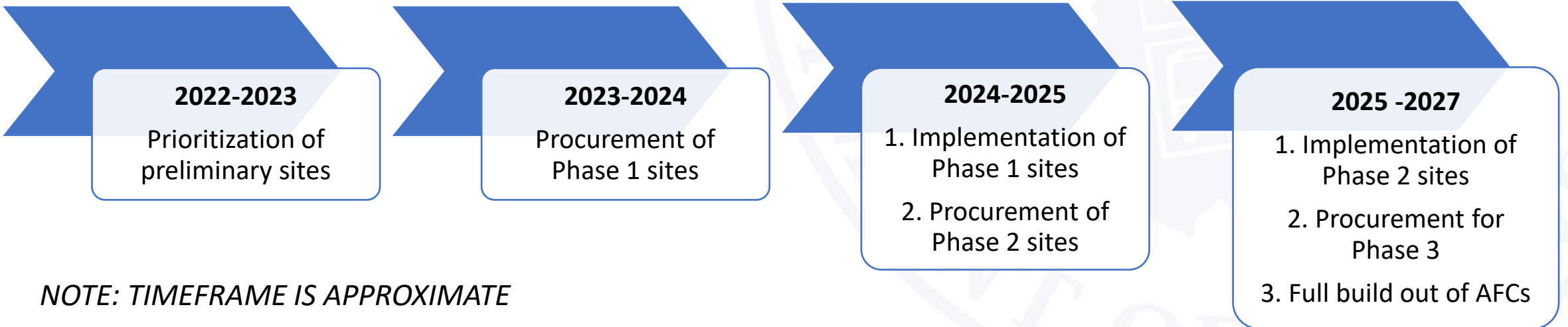
Contracting Overview

■ Strategy:

- Competitive procurement process
- Incremental release of RFPs
- Multiple sites in each release

■ Assumptions:

- 20% match - leverage private sector contributions
- INDOT will not operate or maintain
- 5-year minimum O&M



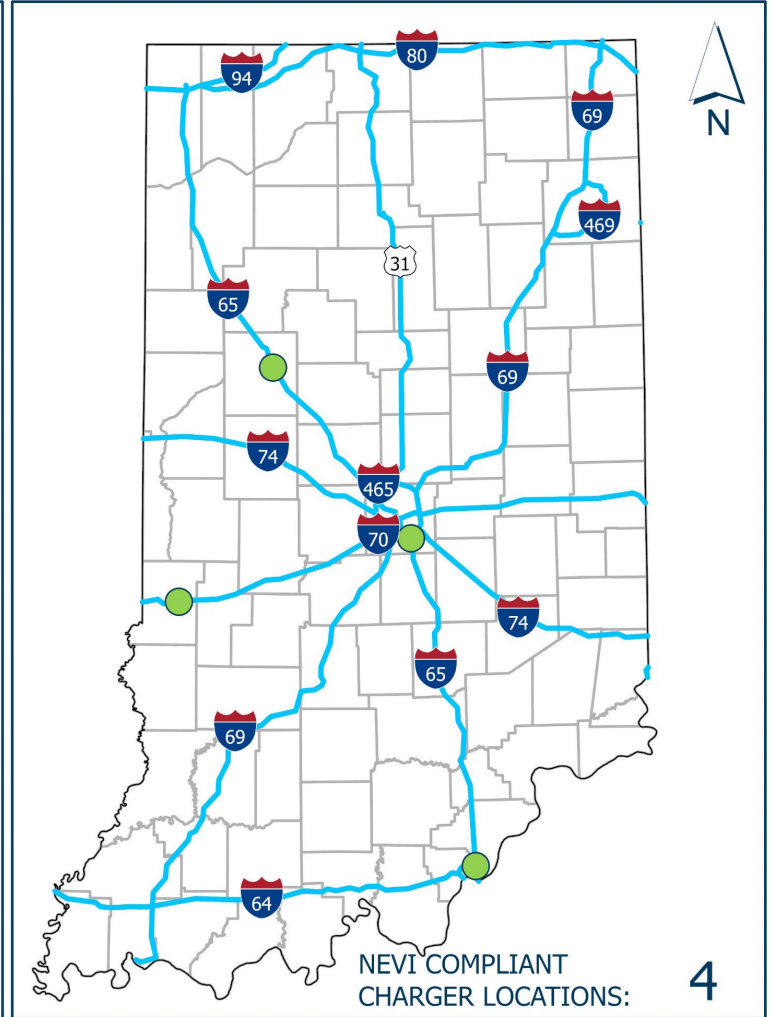
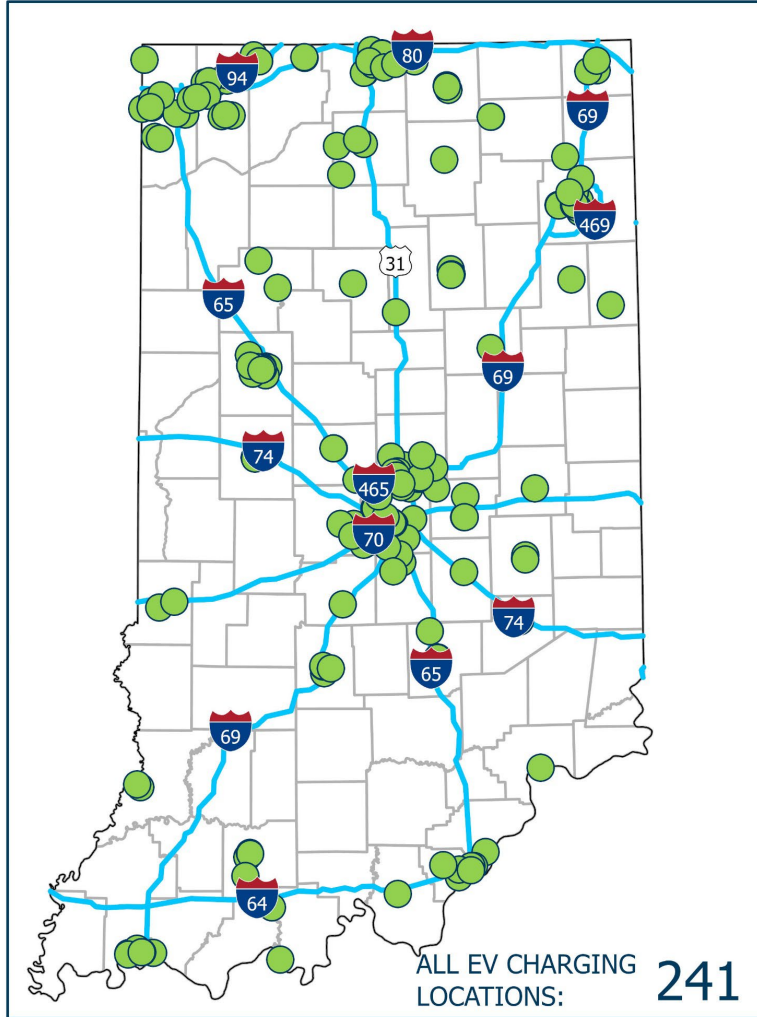
Indiana Alternative Fuel Corridors



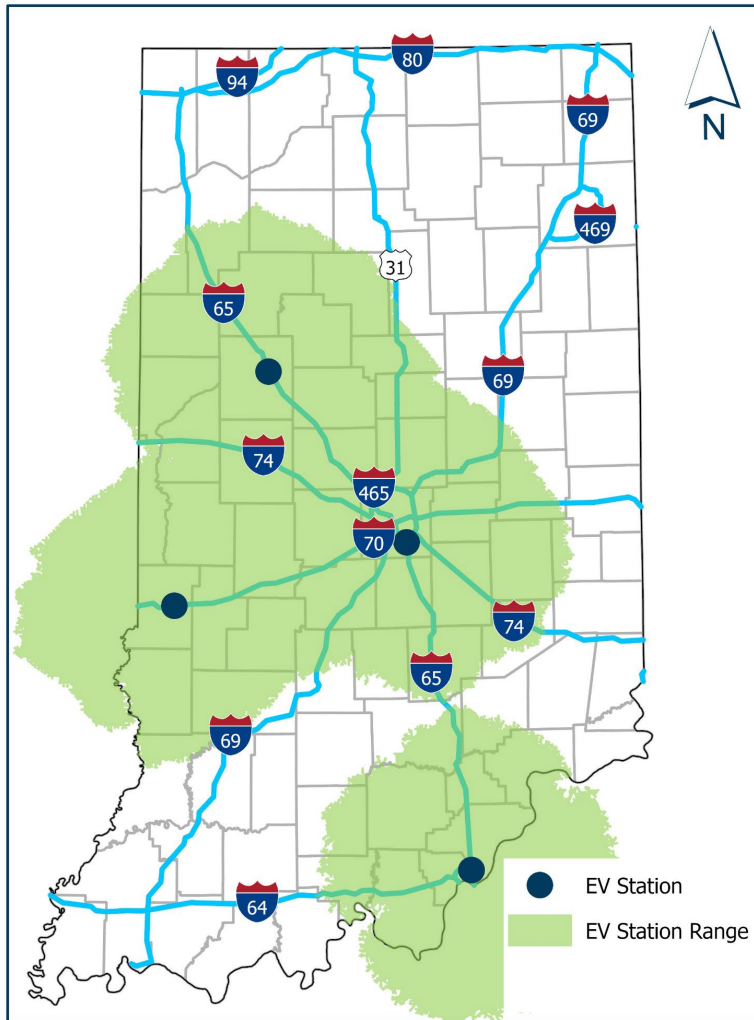
- Designated AFCs:
 - All interstates
 - US 31
- Round 6 nominations:
 - I-469
 - I-265



Existing Charging Infrastructure



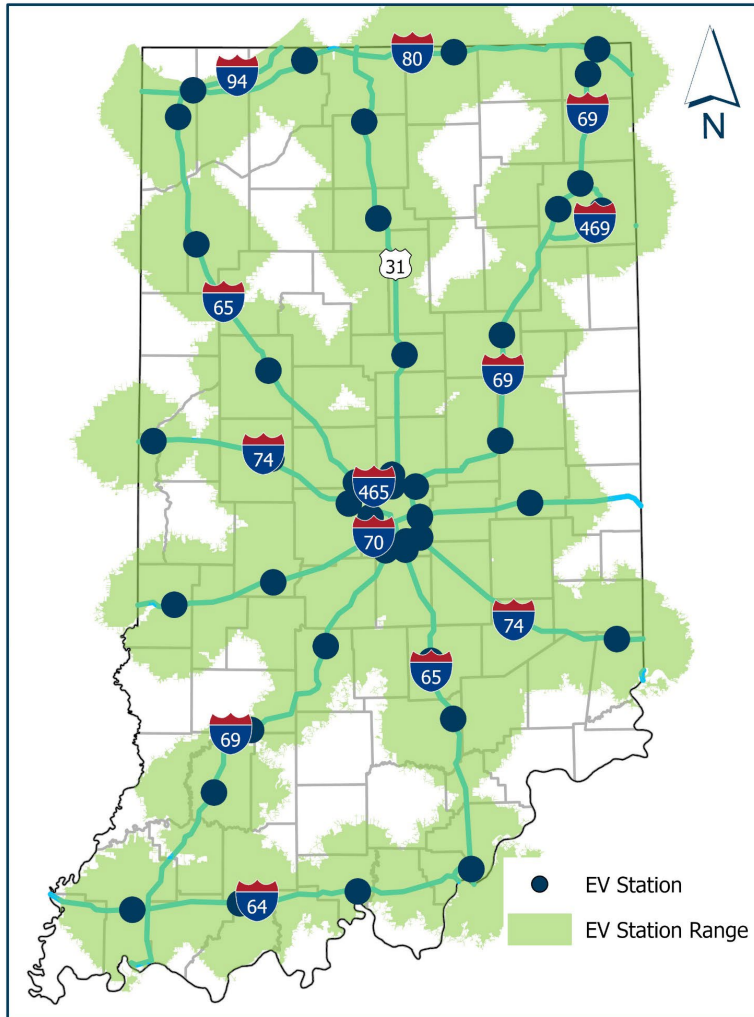
Existing Charging Infrastructure - NEVI



- Four EV charging stations
- Most existing charging locations exceed the NEVI requirements for power and number of chargers
- Charging locations exceed the spacing required to meet the NEVI requirements
- None of the existing or proposed AFC's have sufficient charging location coverage to demonstrate a complete corridor EV corridor.



Preliminary Charging Infrastructure

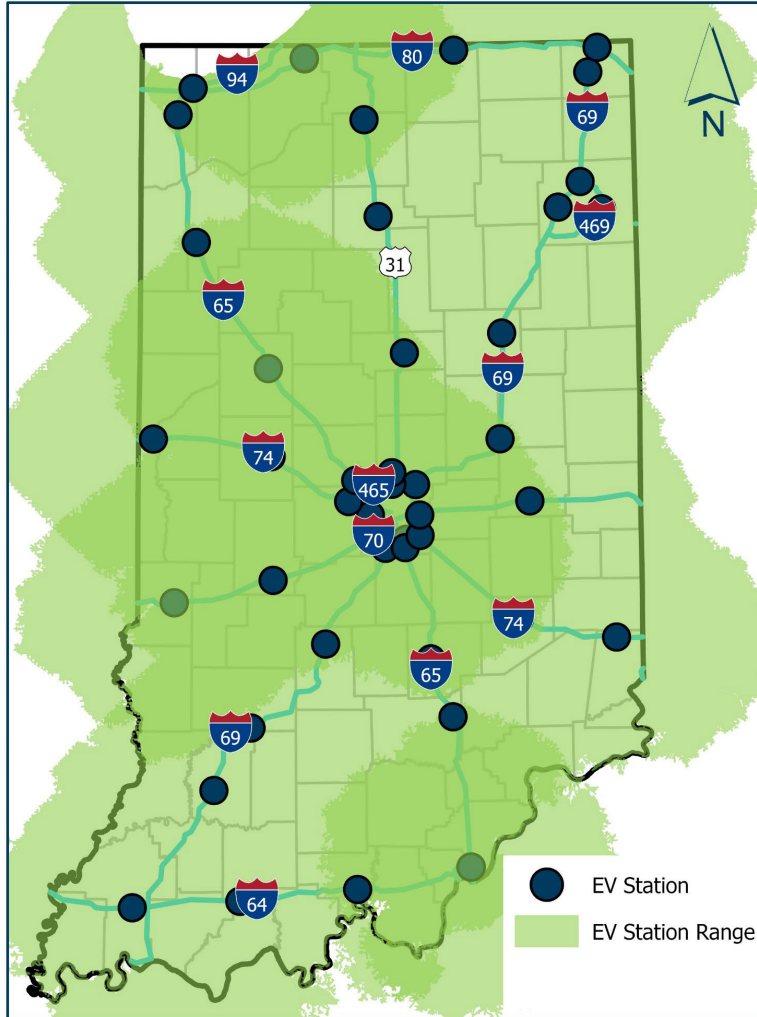


- Preliminary charging locations are shown in blue with light green service areas
- Service area shapes represent a 25-mile range
- Overlapping service areas along the EV corridors demonstrate the AFC meets the NEVI criteria
- 44 Preliminary EV charging locations

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Preliminary Charging Infrastructure



- With all preliminary charging locations shown, nearly the entire state of Indiana will be within 50-miles of a DCFC charging location
- 98% of Indiana residents will be within 35-miles of a DCFC location

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Disadvantaged and Rural Communities



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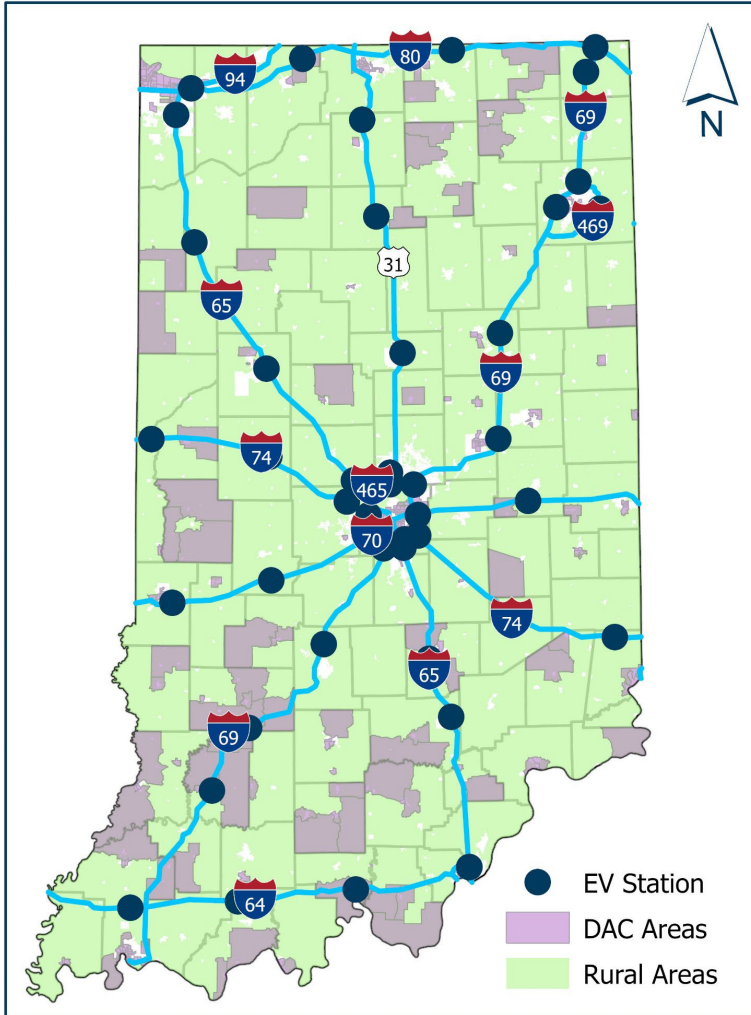


- Justice 40 Initiative (January 2021)
 - At least 40 percent of the overall benefits of certain Federal investments flow to disadvantaged communities (DACs).
 - NEVI is a Justice40 covered program
- USDOT DAC Definition*
 - Transportation access
 - Environmental
 - Resilience
 - Equity
- Approximately 59% of Indiana residents live in a DAC area

*<https://www.transportation.gov/equity-Justice40>



Preliminary Charging Infrastructure

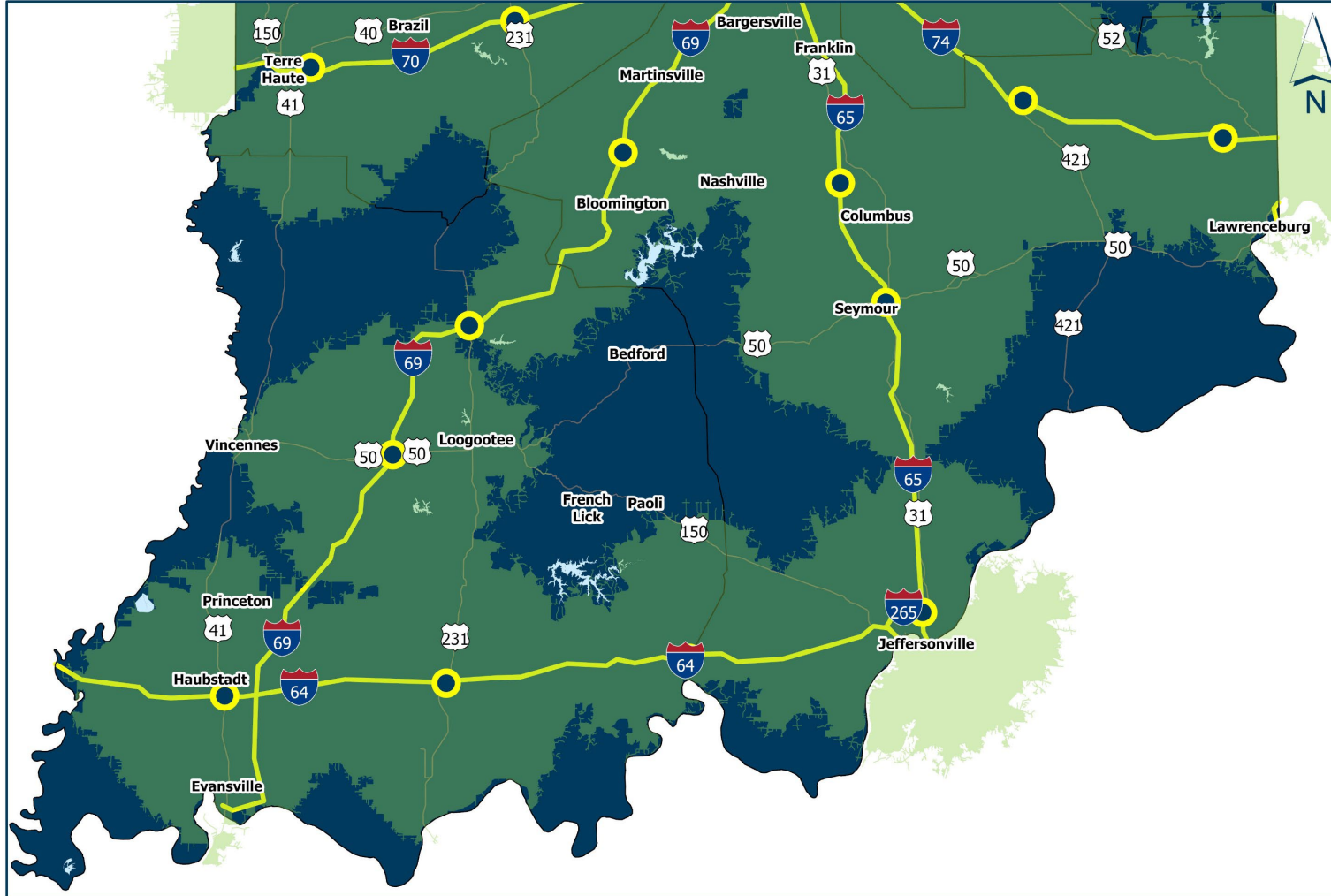


- 100% of the preliminary sites are in or within 15-miles of at least one DAC area
- 62% the preliminary sites are in or within 5 miles of DAC area
- <https://www.anl.gov/es/electric-vehicle-charging-equity-considerations>

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Regional View of Preliminary Infrastructure



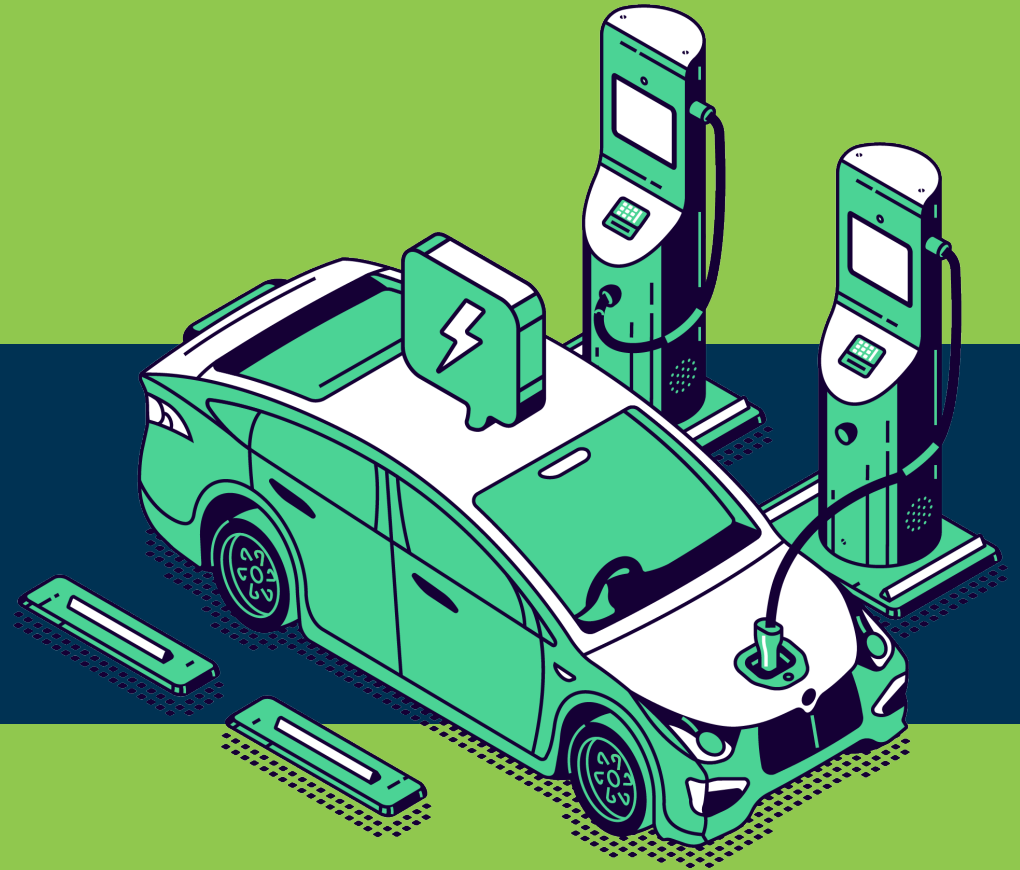
- 25-mile service area
- AFC's in Vincennes and Seymour Districts
- 13 preliminary sites are in this region

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Q & A #1



Public Engagement



- Gain insight: into market motivations that drive investment and activity into EV charging.
- Gauge the level of interest: in funding opportunities, participation, and engagement with other federal funding sources.
- Identify key planning considerations: for EV charging buildout.
- Identify gaps: gauging which communities are likely to be underserved, as outlined by the Justice40 Initiative.
- Assess readiness: where are we at today and where do we need to go to successfully implement EV charging programs.
- Define success: Gain insight into metrics and performance monitoring techniques.
- Clarity on INDOT's role: how can we support implementation?
- Identify unknowns: determine other considerations INDOT should be aware of.

Who are the stakeholders?

HNTB



- General Public:
 - Community-based organizations
 - Grassroots EV chapters
 - Underserved/underrepresented communities
- Government:
 - State agencies
 - General Assembly
 - Metropolitan planning organizations
 - Municipal and county governments
 - Public transit organizations
 - EV Product Commission
 - 21st Century Energy Task Force
 - REV Midwest member states
- Labor Organizations
- Private Sector:
 - Charging providers
 - Original equipment manufacturers
 - Infrastructure and energy alternatives
- Consumer- and Investor-Owned Utilities
- Freight and Logistics
- Academia



Activities to Date

HNTB



- Request for Information (closed April 29)
- Virtual open house May 11
 - Slides: https://www.in.gov/indot/files/INDOT-NEVI-Virtual-Open-House_Final_V2.pdf
 - Recording: <https://register.gotowebinar.com/recording/166089350942842380>
- Public Survey (closed May 27):
 - Over 2,000 responses received
- Utility questionnaire (INDOT and OED) responses due June 8
- INDOT On the DOT podcast Episode 29:
<https://soundcloud.com/indotpod/may-2022>



Preliminary Public Survey Results



- Primary barrier to EV adoption:
 - Availability of charging stations
- Key amenities sought at EV charging stations:
 - 24-hour access
 - Safety
 - Lighting
 - Restrooms
- Prioritizing AFCs:
 - Addressing gaps in the existing charging network
 - Total traffic volumes
 - EV traffic volumes
 - Increasing EV charging in rural Indiana



A woman with glasses and a patterned shirt stands in a meeting room, gesturing towards a group of people seated in front of her. The room has large windows overlooking a city building. The text on the right side of the image provides details about upcoming opportunities.

Upcoming Opportunities

- In-person meetings by region:
 - Northern Indiana – 6/2/22
 - Time: 3-5 p.m. ET
 - Location: Plymouth, IN
 - Central Indiana – 6/9/22
 - Time: 3-5 p.m. ET
 - Location: Indianapolis, IN
 - Southern Indiana – 6/14/22
 - Time: 3-5 p.m. ET
 - Location: Seymour, IN
- Request one-on-one meeting with INDOT
- **COMING SOON:** Comment on INDOT NEVI Program Webpage

Resources



- Indiana resources:
 - Indiana NEVI Program Web page: <https://www.in.gov/indot/current-programs/innovative-programs/electric-vehicle-charging-infrastructure-network/>
 - Email: evchargingRFI@indot.in.gov
 - INDOT Plan will be posted on August 1, 2022 for public comment
 - *Comments received will inform future updates to the plan*
- Federal Resources:
 - NEVI Guidance to States - https://www.fhwa.dot.gov/environment/alternative_fuel_corridors/nominations/90d_nevi_formula_program_guidance.pdf
 - NEVI Formula Program - <https://www.fhwa.dot.gov/legsregs/directives/notices/n4510863.cfm>



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Q & A#2

