



Infrastructure Investment and Jobs Act & Inflation Reduction Act

An Employer Perspective

Presented by: Brian O'Donnell

AITECH

ELECTRIC COMPANY

- Headquarters: Portage, MI
- Satellite Shop: Ft. Wayne, IN
- 300+ Employees

Industry Sectors

Power Distribution

Security and Card Access Systems

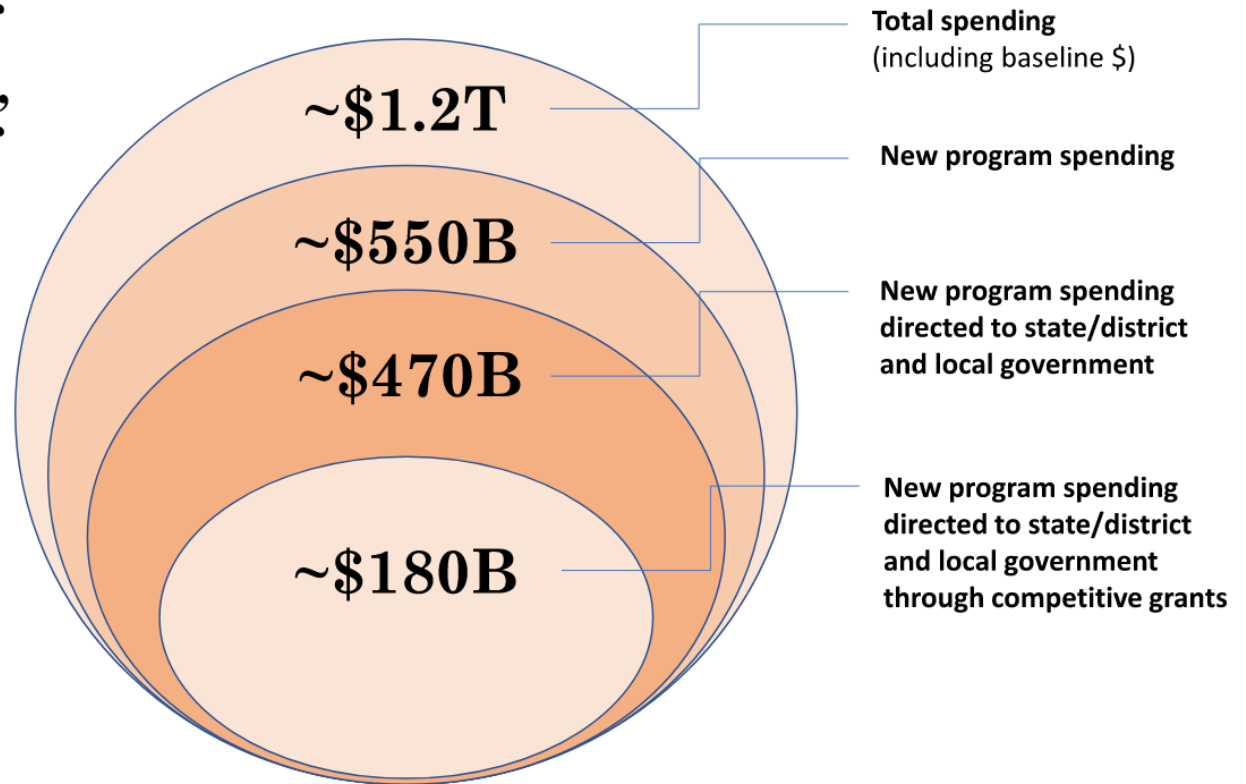
Temperature Control Systems

Voice Data Video Networks

Fire Alarm Systems

Infrastructure Investment and Jobs Act

BIL includes \$550 billion of new spending, \$180 billion of which is competitive



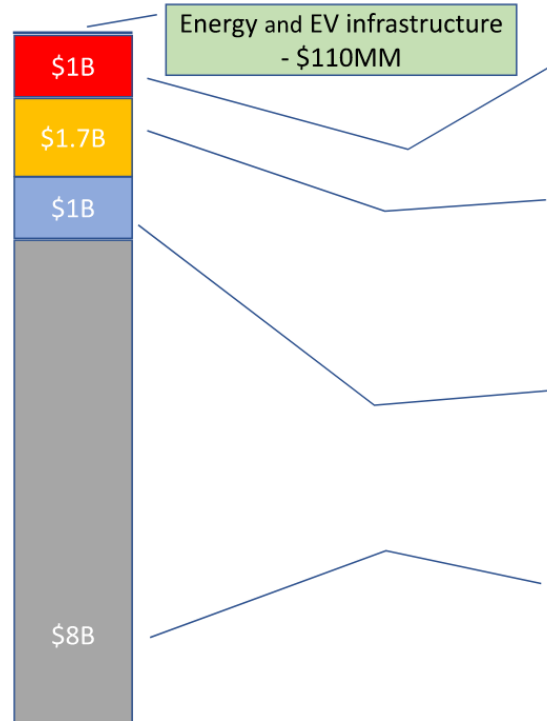
Infrastructure Investment and Jobs Act

BIL Asset Class Breakdown

Roads/Bridges	\$104 billion	20% increase to highways and bridges to help fix the damn roads
Rail	\$66 billion	Mostly competitive. Amtrak, NE Corridor, and Intercity Rail
Broadband	\$62 billion	NTIA has largest program. Focused on deployment to high-cost and underserved communities.
Transit/Ferries	\$45 billion	Mostly competitive plan-based. Focus on sustainability, maintenance, and innovation.
Water	\$53 billion	Mostly formula. 5x increase in drinking water, 2x increase in clean water. LSL replacement.
Power	\$49 billion	Mostly competitive. \$9.5B for clean hydrogen and \$9B to strengthen the grid.
Resiliency	\$25 billion	Funding to counter cyberattacks and implement safety programs.
Remediation	\$22 billion	Mostly competitive. Focus on superfund remediation and brownfield grants.
Airports/Ports	\$22 billion	Mostly formula.
Electric vehicles	\$18 billion	First national investment in EV infrastructure. Zero/low emission bus/ferry fleets.
Safety	\$5 billion	All competitive. Implement “Vision Zero” to prevent transportation fatalities.

Michigan Formula

Michigan will receive more than ~\$11 billion in formula



Transit

- Build transit strategy that increases accessibility for underserved populations, adopts user-focused design, delivers on key outcomes
- Develop expected timeline for net zero strategy, considering repercussions on fleet electrification costs and need for infrastructure

Broadband

- Robust plan submissions required for NTIA to release BEAD funding
- States must build broadband office capacity, build location-level map, prepare to challenge federal maps to maximize drawdown
- Plan to close the digital divide

Water

- Prioritize lead pipe replacement, emphasis on disadvantaged communities

Roads, highways & bridges

- 20% increase, 5-years dedicated funding enabling long-term planning
- Opportunity to incorporate multi-modal approach
- Opportunities for economic development impact projects
- Emphasis on embedding core priorities of equity, sustainability and resilience into capital portfolio planning

NEVI Funding Formula

- USDOT and USDOE allocate 5 Billion over Five Years for National EV Charging Network. Funding made possible by the IIJA.
- Michigan will receive 110 Million allocated for EV Charging Network
- NEVI Funding Formula requires placement of DCFC Units along approved Alternative Energy Fuel Corridors.
- After all required locations are constructed per NEVI Funding Formula. The remaining balance of funds can be used in locations outside of the approved Alternative Energy Fuel Corridors.
- Up to 80% of the project cost covered by Federal Grants

Figure 16: FY 2022 Michigan Infrastructure Deployments/Upgrades

Alternative Fuel Corridors

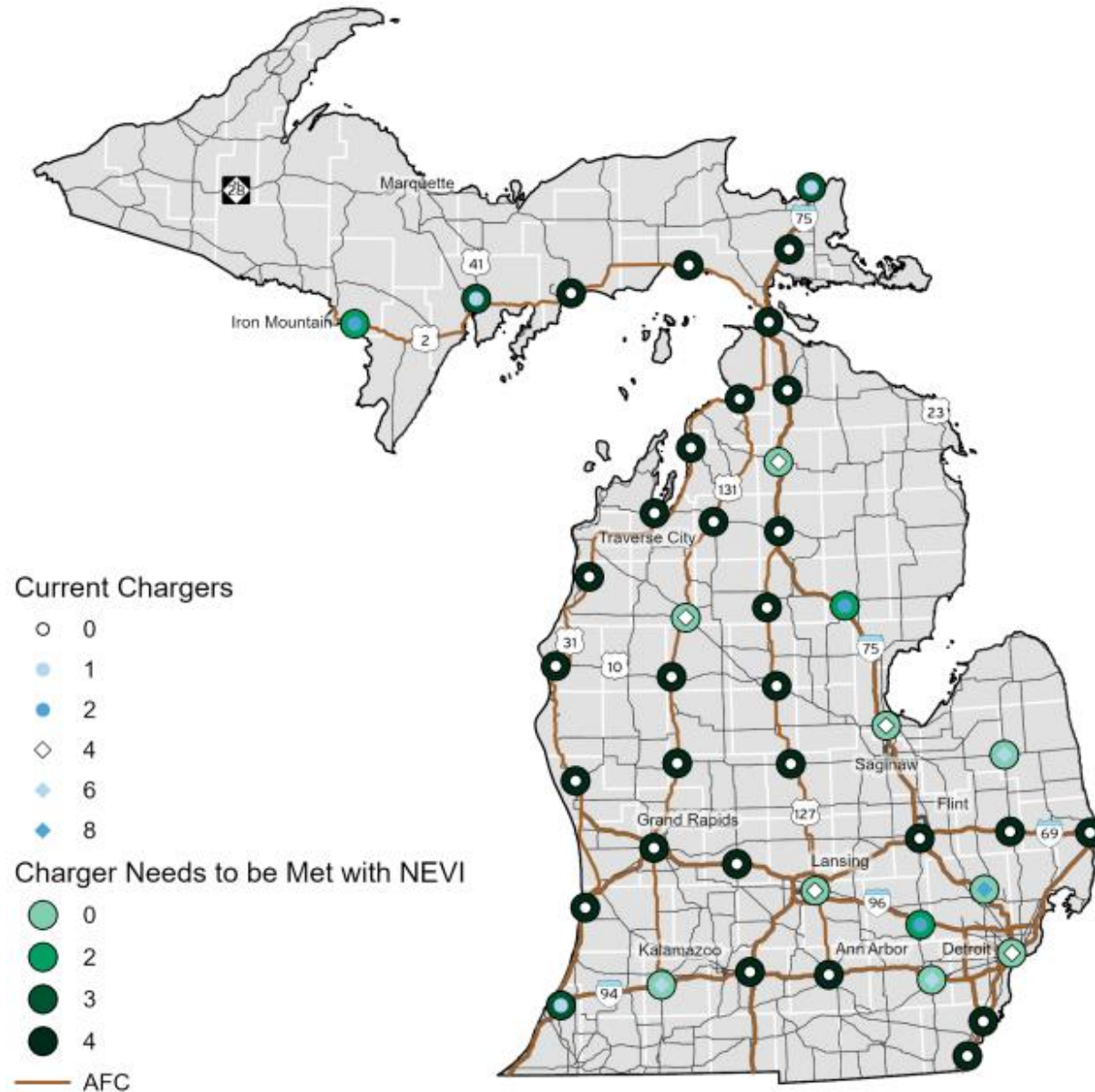
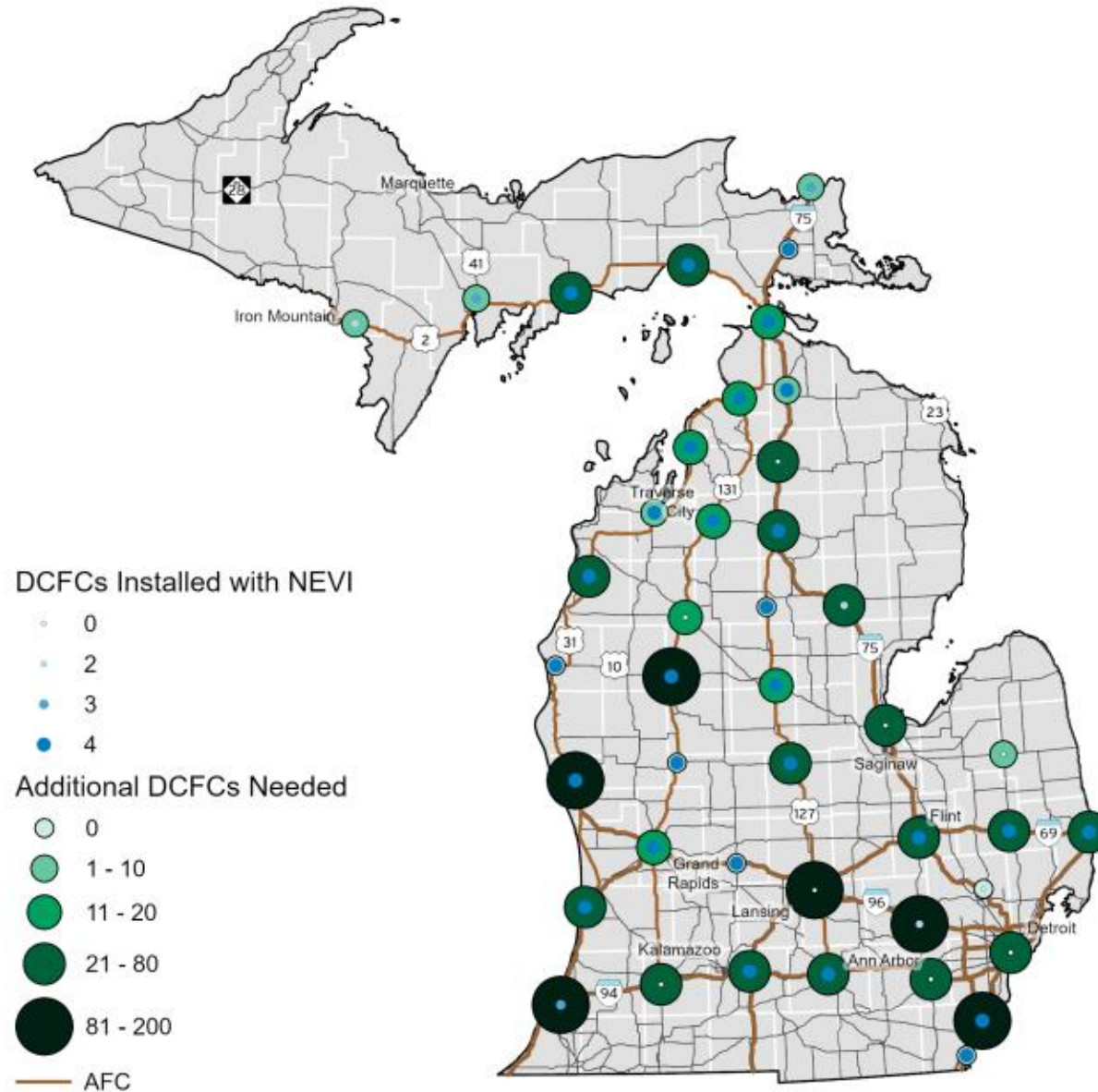


Figure 17: Additional DCFC Needs

Alternative Fuel Corridors Freight



7.2.3 EV Freight Considerations

Inflation Reduction Act

- **SEC. 13404. ALTERNATIVE FUEL REFUELING PROPERTY CREDIT.**
 - EV Car Charging Equipment
 - Residential and Commercial Grants available
 - Various Funding Amounts established by Bill Requirements, up to \$100,000 for applicable commercial locations.
- **PART 5—INVESTMENT IN CLEAN ENERGY MANUFACTURING AND ENERGY SECURITY**
 - **SEC. 13501. EXTENSION OF THE ADVANCED ENERGY PROJECT CREDIT.**
 - Massive Battery Plant Construction

Battery Plant Construction-Mega Sites

FORD

Marshall, MI

- Estimated Project Investment \$3.5 Billion Dollars

GM

Lansing, MI

- Estimated Project Investment \$2.5 Billion Dollars

LG Chem

Holland, MI

- Estimated Project Investment \$1.7 Billion Dollars

Gotion

Big Rapids, MI

- Estimated Project Investment \$2.4 Billion Dollars



Help build the automotive mobility and electrification industry in Michigan: Great careers for YOU!

- Assemblers and Fabricators
- Computer Occupations
- Electrical Engineering Technologists
- Electrical Technicians
- Engineers: Electrical and Information Security
- Information Security Analysts
- Maintenance and Repair workers
- Software Developers

Michigan's EV Academy

Electric Vehicle

EVITP™

Infrastructure Training Program

- Service-level assessments and upgrade implementation
- Integration of electric vehicle infrastructure with distributed generation
- Understanding Internet Protocol (IP) networking of charging stations
- National Electrical Code (NEC) standards and requirements
- National Fire Protection Association (NFPA) 70E and OSHA regulations
- National Electrical Installation Standards (NEIS) for electric vehicle equipment
- Automobile manufacturer's charging performance integrity specifications
- EV battery types, specifications, and charging characteristics
- Utility interconnect policies and requirements
- Utility grid stress precautions including demand response integration technologies
- Role of electrical storage devices as charging intermediaries
- Installing, commissioning, and maintaining electric storage devices
- Charging station fundamentals including brand/model-specific installation instructions for:
 - Level 1: 120 VAC 15 amps
 - Level 2: 120-240 VAC 60 amps
 - Level 3: 480 VAC 125 amps or 600 VDC 550 amps

Community Support

Must Backfill Journey Level Workers with Apprentice Electricians

OSHA 10/30

CPR/First Aid

Asbestos Training

Job Site Safety Training

Basic Hand and Electric Tools

Certificate Programs

Construction Math

National
Governor's
Association
IIJA Site

NGA Infrastructure Resource Pages

**CHIPS AND
SCIENCE ACT
Resources**

**Inflation
Reduction Act
Infrastructure
Resources**

**Infrastructure
Workforce**

**Electric
Vehicles**

**Broadband
Resources**

**Infrastructure
Insights**

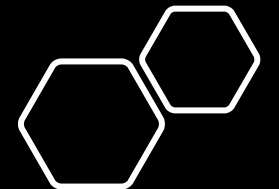
Example Scenarios

Career or Occupation	Individual's Employment Status	Sector	Education Partner/Training Provider	Funding Sources (links and descriptions below)	Relevant State Agencies
+ DOT Engineer	College Student	State Government	State University	504(e) funds; Title IV funds; SLFRF funds	Transportation
- Project Manager	College Student	State Government	State University	504(e) funds; Title IV funds; SLFRF funds	Transportation

Additional Information States/territories looking to recruit college students into project manager positions in a state department of transportation can access funds authorized by the FAST Act, Higher Education Act, and American Rescue Plan Act to support higher education at a public institution.

Infrastructure Workforce Resource Mapping Tool

- The Mapping Tool presents several prospective pathways into critical infrastructure careers and identifies funding opportunities that can be tapped to support training for individuals to enter those careers.



References

- <https://www.whitehouse.gov/briefing-room/statements-releases/2022/08/15/by-the-numbers-the-inflation-reduction-act/>
- <https://www.whitehouse.gov/wp-content/uploads/2022/12/Inflation-Reduction-Act-Guidebook.pdf>
- <https://www.michigan.gov/egle/-/media/Project/Websites/egle/Documents/Programs/MMD/Energy/NEVI/MI-Plan-for-EV-Infrastructure-Deployment.pdf>
- <https://evitp.org/>
- https://www.whitehouse.gov/cleanenergy/?utm_source=cleanenergy.gov
- <https://www.irs.gov/credits-and-deductions-under-the-inflation-reduction-act-of-2022>
- <https://www.michigan.gov/leo/bureaus-agencies/wd/industry-business/mobility/electric-vehicle-jobs-academy>
- <https://www.michigan.gov/leo/bureaus-agencies/wd/industry-business/mobility/electric-vehicle-jobs-academy>
- <https://www.nga.org/infrastructure-workforce-resources/>

Thank You

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