Infrastructure Investment and Jobs Act & Inflation Reduction Act

An Employer Perspective

Presented by: Brian O’Donnell
HI-TECH

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.

- ~$1.2T: Total spending (including baseline $)
- ~$550B: New program spending directed to state/district and local government
- ~$470B: New program spending directed to state/district and local government through competitive grants
- ~$180B: New program spending directed to state/district and local government through competitive grants
## BIL Asset Class Breakdown

<table>
<thead>
<tr>
<th>Category</th>
<th>Funding</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roads/Bridges</td>
<td>$104 b</td>
<td>20% increase to highways and bridges to help fix the damn roads</td>
</tr>
<tr>
<td>Rail</td>
<td>$66 b</td>
<td>Mostly competitive. Amtrak, NE Corridor, and Intercity Rail</td>
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<tr>
<td>Broadband</td>
<td>$62 b</td>
<td>NTIA has largest program. Focused on deployment to high-cost and underserved communities.</td>
</tr>
<tr>
<td>Transit/Ferries</td>
<td>$45 b</td>
<td>Mostly competitive plan-based. Focus on sustainability, maintenance, and innovation.</td>
</tr>
<tr>
<td>Water</td>
<td>$53 b</td>
<td>Mostly formula. 5x increase in drinking water, 2x increase in clean water. LSL replacement.</td>
</tr>
<tr>
<td>Power</td>
<td>$49 b</td>
<td>Mostly competitive. $9.5B for clean hydrogen and $9B to strengthen the grid.</td>
</tr>
<tr>
<td>Resiliency</td>
<td>$25 b</td>
<td>Funding to counter cyberattacks and implement safety programs.</td>
</tr>
<tr>
<td>Remediation</td>
<td>$22 b</td>
<td>Mostly competitive. Focus on superfund remediation and brownfield grants.</td>
</tr>
<tr>
<td>Airports/Ports</td>
<td>$22 b</td>
<td>Mostly formula.</td>
</tr>
<tr>
<td>Electric vehicles</td>
<td>$18 b</td>
<td>First national investment in EV infrastructure. Zero/low emission bus/ferry fleets.</td>
</tr>
<tr>
<td>Safety</td>
<td>$5 b</td>
<td>All competitive. Implement “Vision Zero” to prevent transportation fatalities.</td>
</tr>
</tbody>
</table>
Michigan will receive more than ~$11 billion in formula

Energy and EV infrastructure - $110MM

$1B

$1.7B

$1B

$8B

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
Alternative Fuel Corridors
Alternative Fuel Corridors Freight
• 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
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
NGA Infrastructure Resource Pages

- CHIPS AND SCIENCE ACT Resources
- Inflation Reduction Act Infrastructure Resources
- Infrastructure Workforce
- Electric Vehicles
- Broadband Resources
- Infrastructure Insights

National Governor’s Association IIJA Site
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://evitp.org/
- https://www.whitehouse.gov/cleanenergy/?utm_source=cleanenergy.gov
- 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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