US DOE Community Partner Projects:

U.S. Fuels Across America's Highways
-- Michigan to Montana (M2M)

Ted Barnes, P.E.
Gas Technology Institute
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Company Overview

> Independent, not-for-profit established in 1941

> GTI provides solutions to clients in the private sector, federal government, and state government agencies
  — 300+ Active Projects

> Applied collaborative research, development, & demonstration across the energy value chain
  — Supply, Conversion, Delivery, and Utilization
U.S. Office Locations

GTI Office Locations
- Des Plaines, IL (Headquarters)
- Capitol Hill
- Woodland Hills, CA
- Davis, CA
- Houston, TX

Subsidiary Locations
- Chicago, IL
- Oakland, CA
- West Sacramento, CA
- Davis, CA
- San Ramon, CA
- Los Angeles, CA
- Cazenovia, NY
- Austin, TX
Michigan to Montana I-94 Corridor Project (M2M)

- US DOE selected M2M Project to receive $5M with $5M in participant cost share
- M2M alternative fuel corridor - along I-94 from Billings, MT to Port Huron, MI
- Project started July 2017; focus on Electric, Natural Gas, and Propane
- Goals include:
  - Develop team to guide the creation of an alternative fuel corridor
  - Deploy selected stations and vehicles
  - Provide outreach, education, and training to support sustainable alternative fuel markets
Michigan to Montana I-94 Corridor Project (M2M)

- M2M corridor will cover I-94 from Billings, MT to Port Huron, MI
- **Deployment**: 60 trucks and 15 alternative fueling stations committed
- **Planning**: Sustainable alternative fuel corridor model (outreach, training, community-based partnerships)

Existing Fueling Station Map – M2M Corridor (Blue – DCFC, Red – Propane, Green – CNG)
Michigan to Montana I-94 Corridor Project (M2M)

Project Plan

- Provide leadership through community-based partnerships with Clean Cities Coalitions, State DOTs, SEOs, station providers, fleets, and utilities
- Deploy fueling stations (electric vehicle (EV) DC Fast Chargers, CNG, and propane stations) and CNG long-haul trucks
- Identify and fill gaps in alternative fuel station locations
- Leverage and expand on existing Smart Mobility programs in this region
- Provide outreach, education, and training to critical stakeholders
## Michigan to Montana I-94 Corridor Project (M2M)

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<th>Role</th>
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<td><strong>Awardee</strong></td>
<td>Gas Technology Institute (GTI)</td>
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<td><strong>PLANNING TEAM</strong></td>
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<tr>
<td>Clean Cities</td>
<td>Greater Lansing Area Clean Cities, MI</td>
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<td>Coalitions/Member Organizations</td>
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<td>Chicago Area Clean Cities, IL</td>
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<td>Wisconsin Clean Cities, WI</td>
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<td><strong>DEPLOYMENT TEAM</strong></td>
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<td>Private Sector Partners</td>
<td>Infrastructure providers – ZEF Energy (DCFC), Trillium (CNG), Landmark (Propane)</td>
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<td>Public and Private Fleets – Kwik Trip, CTS</td>
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<td><strong>Community-based Stakeholders</strong></td>
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<td>Indiana Dept. of Environmental Management, IN</td>
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<td>Wisconsin Office of Energy Innovation, WI</td>
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<td>City of Minneapolis and City of Saint Paul, MN</td>
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<td>University-based Smart Mobility Programs</td>
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<td>DOTs (Federal, States, Major Municipalities)</td>
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<td>Utilities</td>
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Outreach Plan

- Dedicated website to highlight lessons learned, identify key stakeholders, document best practices and leverage existing US DOE information
- Case studies for specific industries and community partnerships
- Marketing communications strategy to build awareness and visibility for promoting alternative fuel use in the seven-state region
Turning Raw Technology into Practical Solutions

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