

NJTPA Climate Change Planning Activities

COG & MPO Transportation & Climate Initiative Convening

Delaware Valley Regional Planning Commission

June 24, 2019



Jeff Perlman, Director, Environmental & Sustainability
North Jersey Transportation Planning Authority

NJTPA Region

Bergen

Essex

Hudson

Hunterdon

Jersey City

Middlesex

Monmouth

Morris

Newark

Ocean

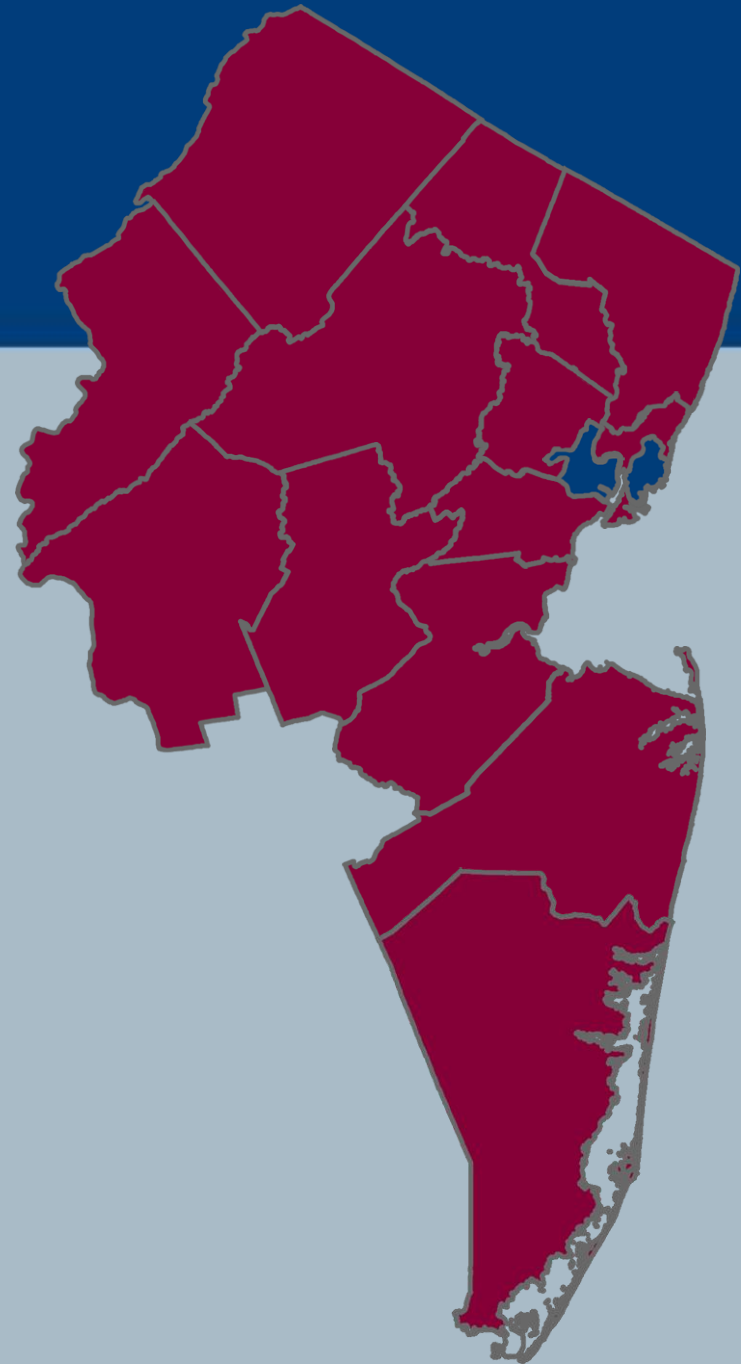
Passaic

Somerset

Sussex

Union

Warren



North Jersey Transportation Planning Authority

The Metropolitan Planning Organization for Northern New Jersey



STANDING COMMITTEES

Planning & Economic Development Committee

Project Prioritization Committee

Freight Initiatives Committee

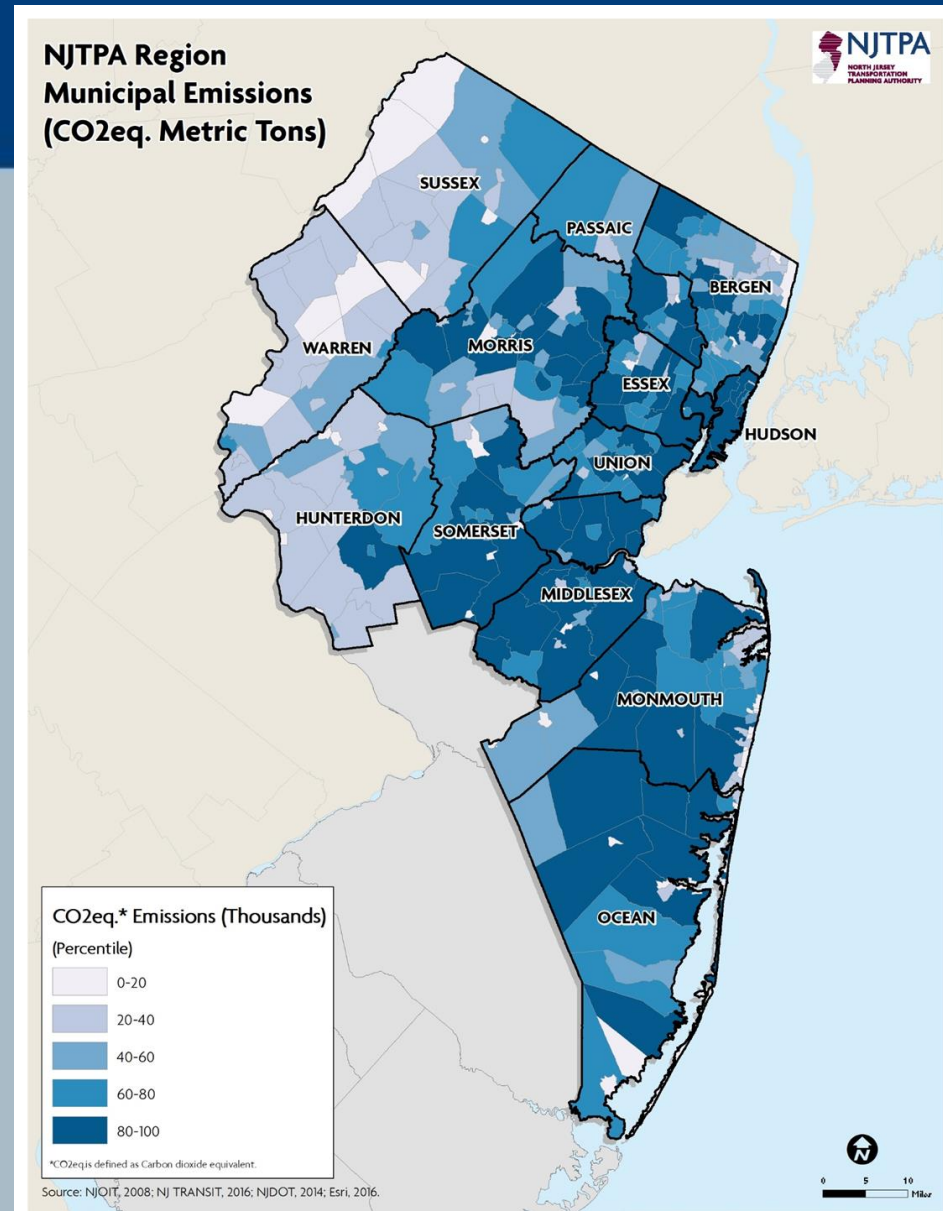
Regional Transportation Advisory Committee

NJTPA Climate Change-Related Activities

- Greenhouse Gas Emissions Inventory in the on-road transportation sector
- Alternate fuel vehicle and electric vehicle research and local technical support
- Non-SOV and Travel Demand Management funding of the New Jersey Transportation Management Associations

On-road Greenhouse Gas Emissions

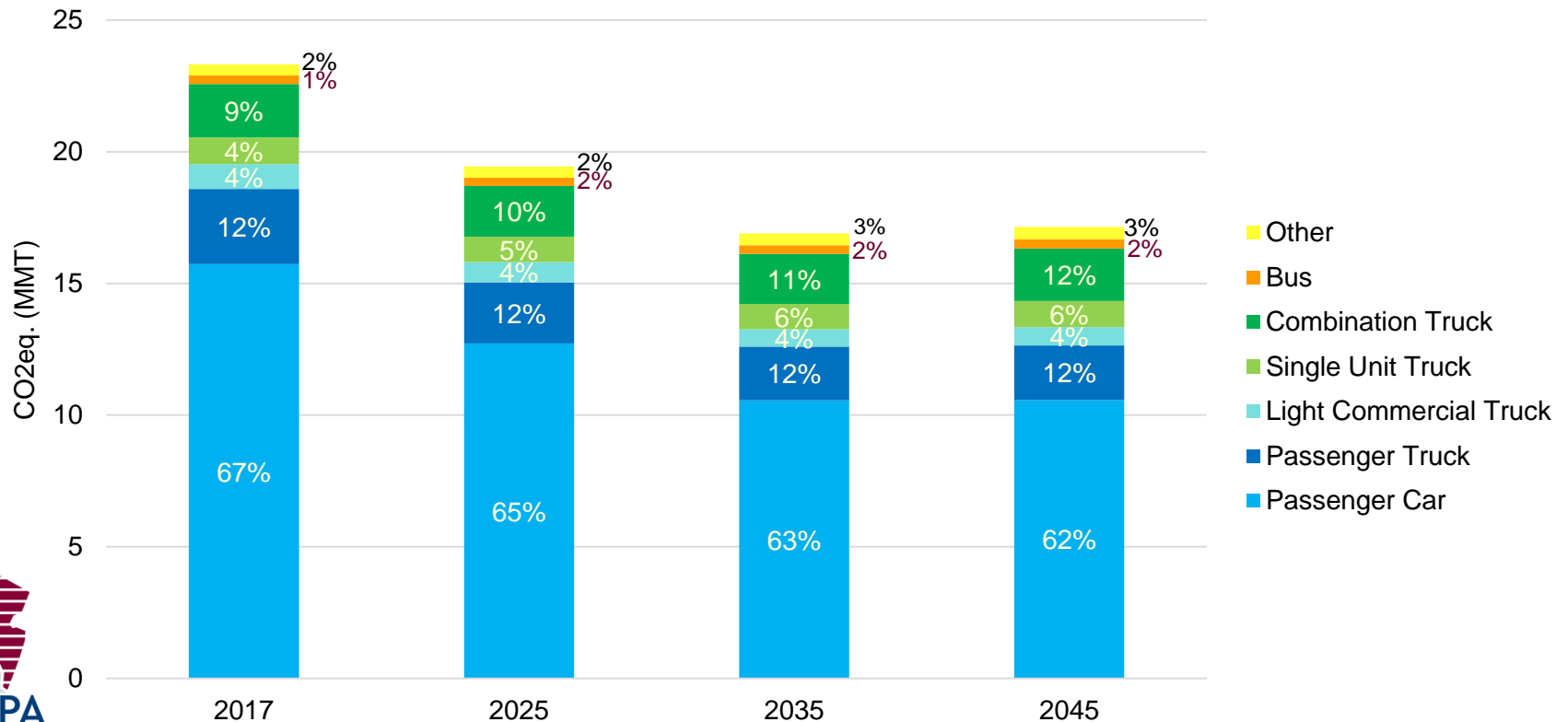
- Activity-based emissions (travel demand model)
- Used MOVES EPA model to estimate emissions
- Emissions are estimated at the TAZ level



Regional Greenhouse Gas Emissions

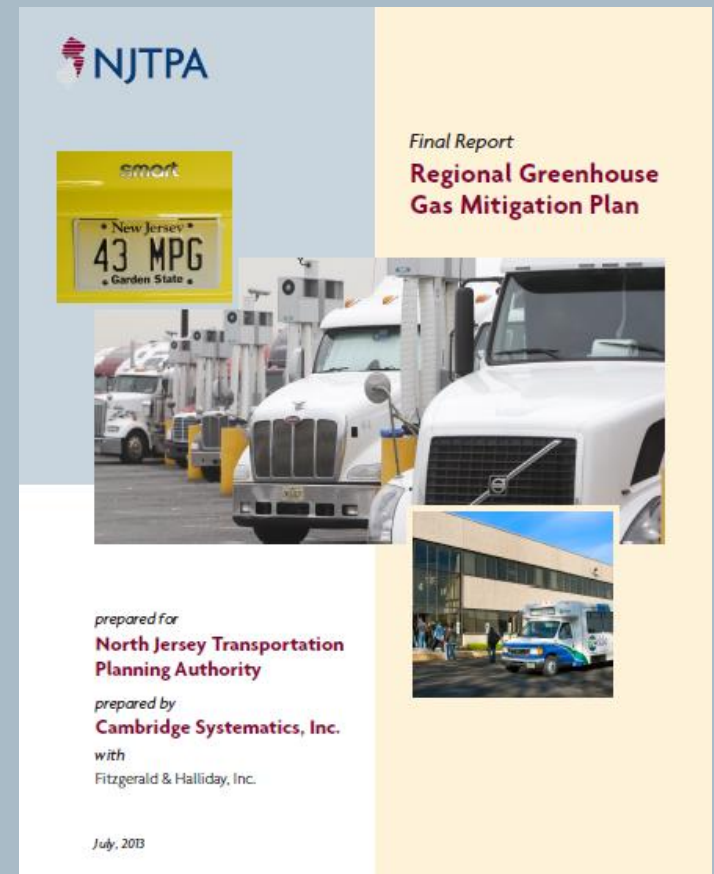
Emissions Dropping in the NJTPA Region but not enough to meet climate goals ...

Figure 2: Emission Reductions by Vehicle Type (2017-2045)



Regional Greenhouse Gas Mitigation Plan

- Estimated on-road GHG emissions through 2050
- Identified and evaluated strategies for reducing GHG
 - Place-type
 - Strategy bundles

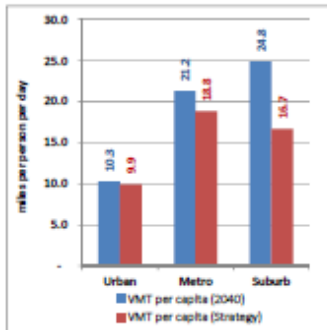


Regional Greenhouse Gas Mitigation Plan

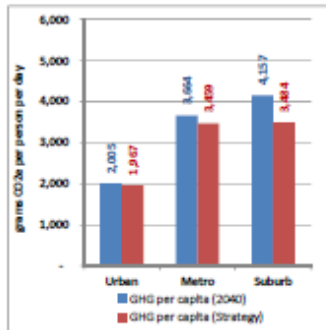
Transit Oriented Development

Indicator results by place type

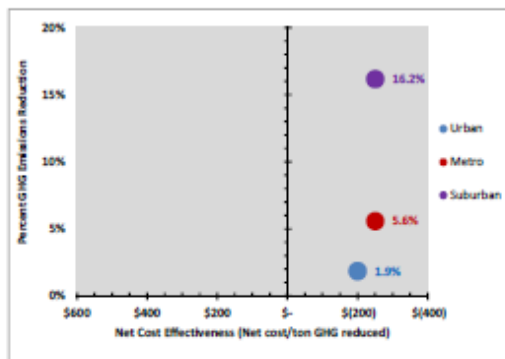
VMT per capita [2040]



Emissions per capita [2040]



Strategy cost-effectiveness by place type



The above figure presents the strategy maximum potential GHG emissions reduction through 2040 and the net cost effectiveness of strategy implementation for an example municipality by place type. The GHG reduction represents the percent reduction from all on-road mobile source GHG emissions.

Note: The maximum potential GHG emissions reduction from TOD shows the potential impact within a transit oriented development (defined as all development within 1/2 mile of a transit station).

- Smart Growth Incentives
- Complete Streets
- Transportation Demand Management Programs
- Electric Vehicle Readiness and Implementation
- Arterial System Management and Related Strategies
- Freight-Related Strategies

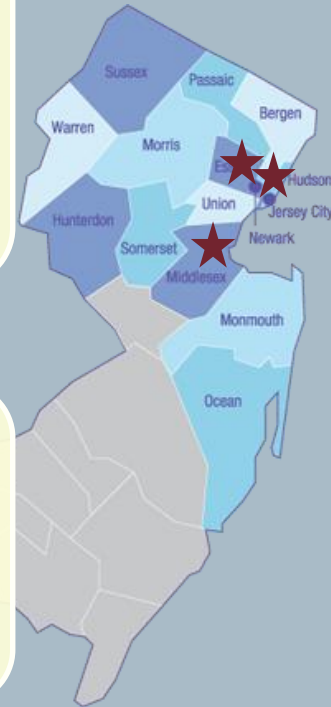
Interagency Collaboration on AFV Infrastructure Project

AFV Readiness Plans

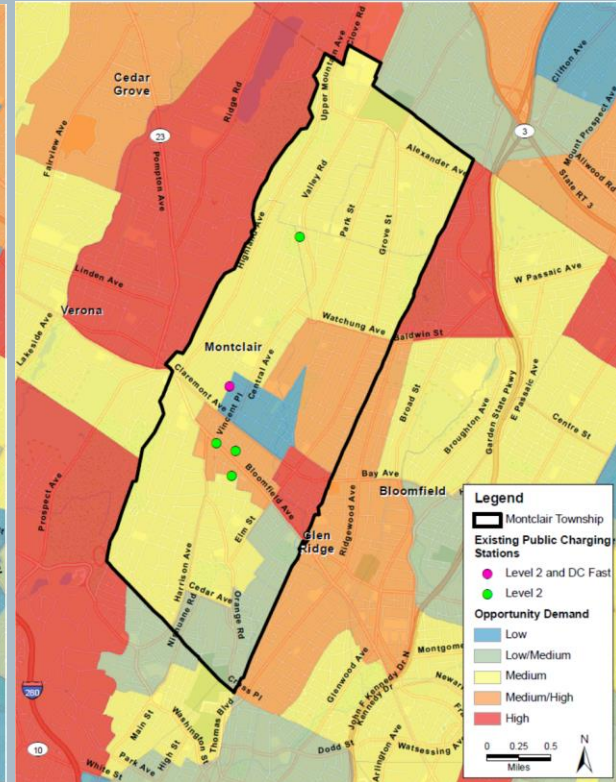
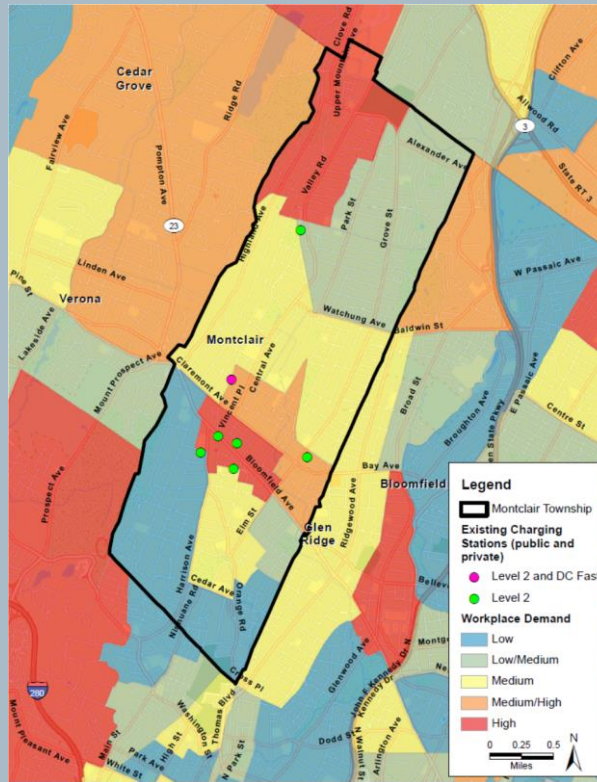
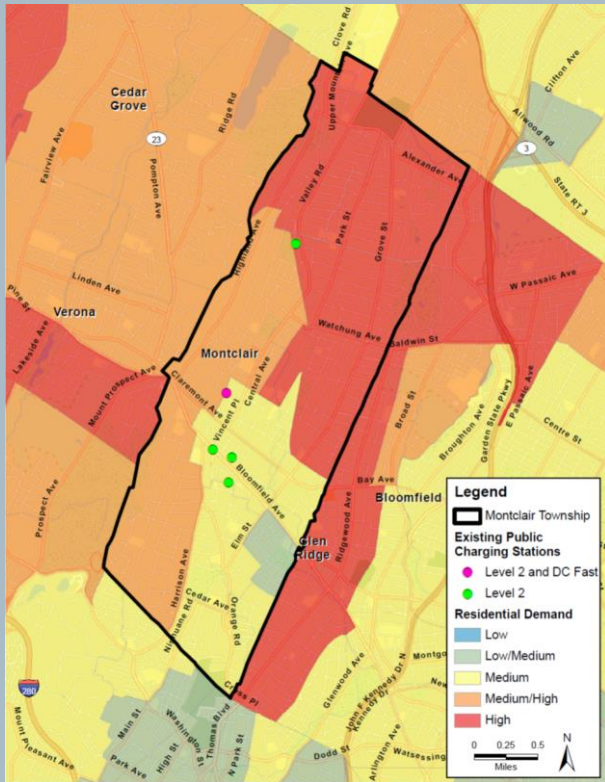
- **Three pilot communities (Montclair, Woodbridge, and Secaucus)**
- **Goal: Increase use of plug-in electric vehicles (PEVs) and natural gas vehicles (NGVs)**
- **Assess ownership demand and infrastructure needs**
- **Recommend regulatory and policy changes**

Guidebook

- **All municipalities in New Jersey**
- **Goal: Provide guidance for communities looking to increase use of a variety of AFVs**
- **Describe benefits and drawbacks**
- **Offer recommendations and identify resources**



Demand for Electric Vehicles at the Local Level



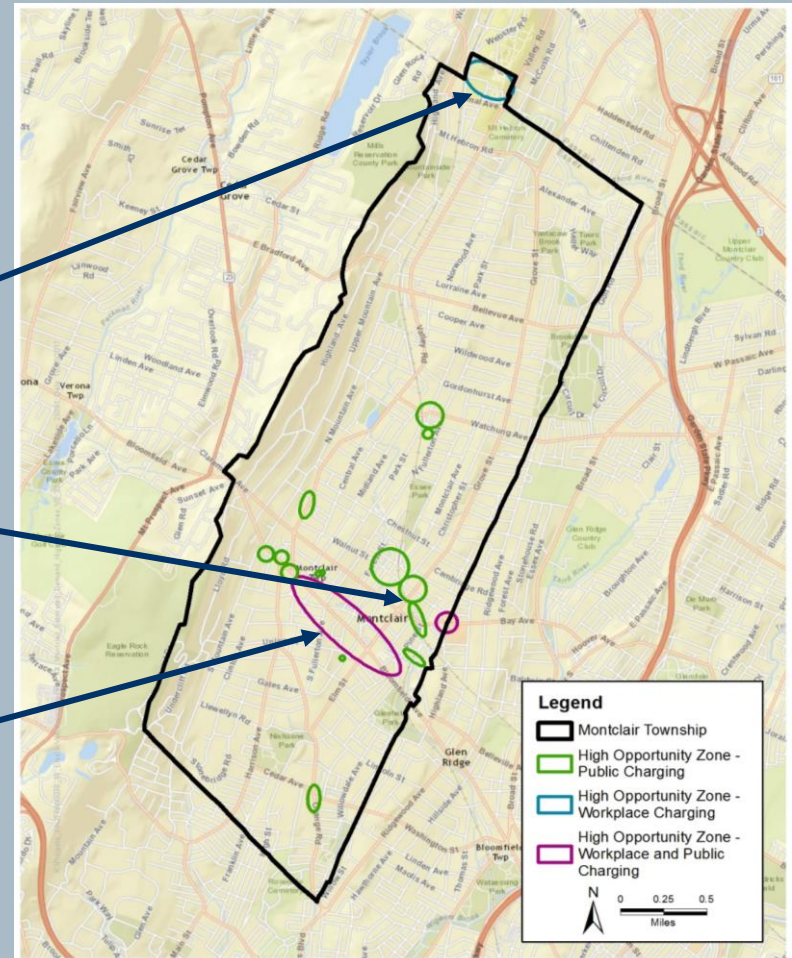
Priority Locations for Non-Residential Charging

- Overlaid Heat Maps with Land Use and Zoning data
- Identified locations with the highest demand for charging infrastructure

Montclair State University

Mountainside Hospital

Montclair Center



NJTPA Electric Vehicle Resources

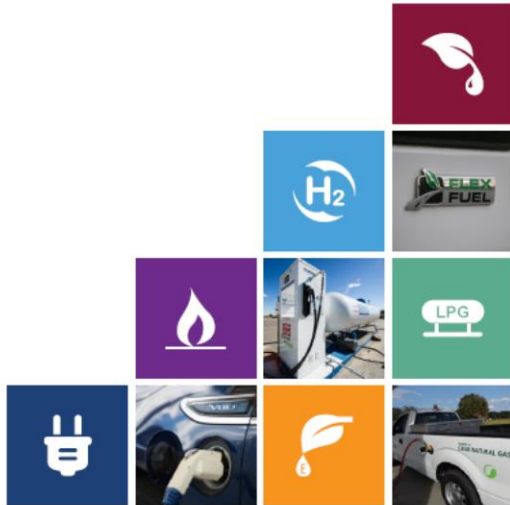


Montclair Township



Alternative Fuel Vehicle


Readiness Plan



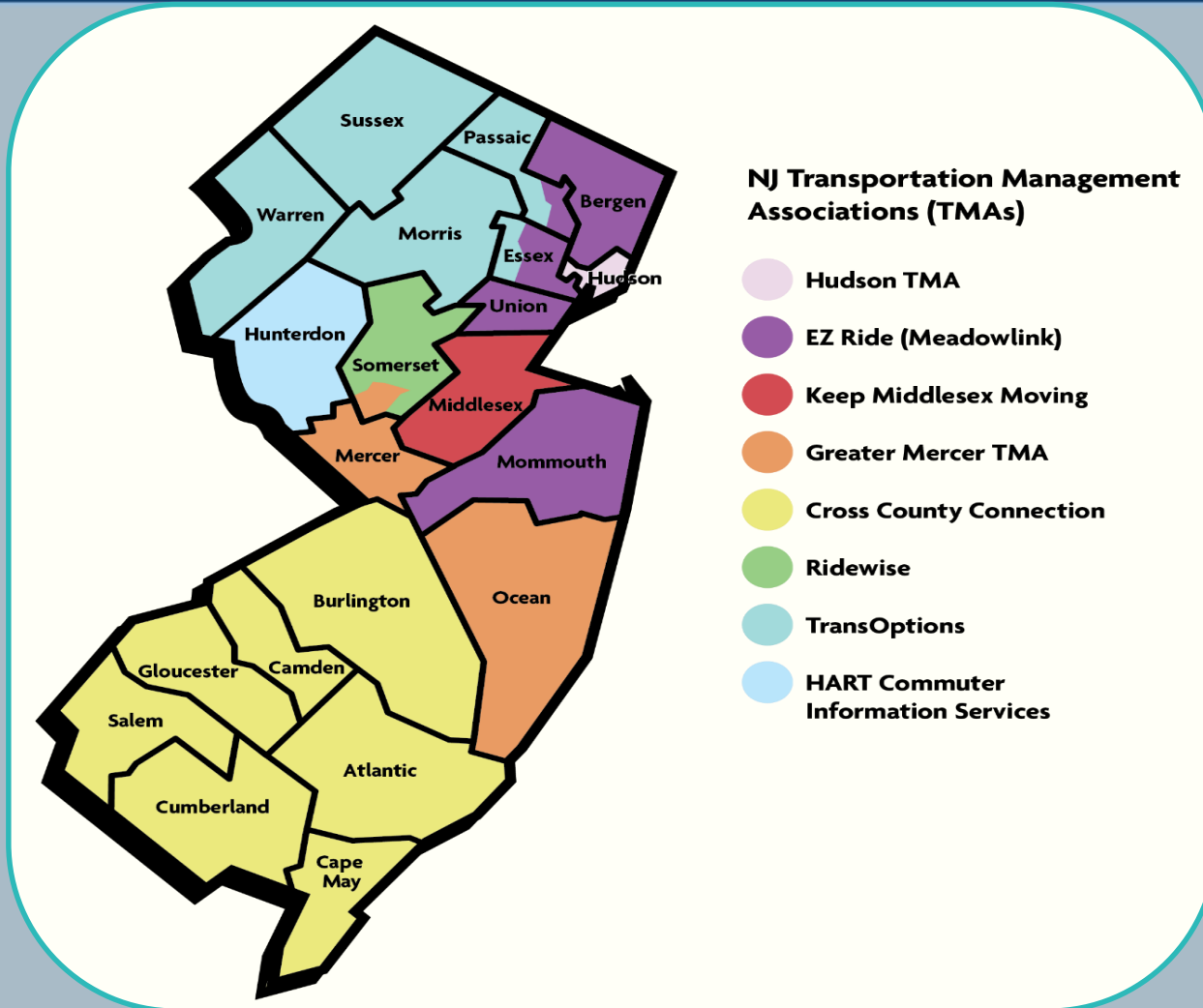
Alternative Fuel Vehicle Readiness

A Guidebook for Municipalities

DRAFT December 2017



Transportation Management Associations



NJTPA-Funded Work Program

- Rideshare matching
- Emergency ride home
- Trip planning
- Shuttle services
- Anti-idling
- Electric and Alternative fuel vehicles
- Non-motorized transportation education



How MPOs and Cogs Can Assist

- Conduct research and fund studies
- Maintain regional GHG inventories using a standard methodology
- Technical assistance to local governments around planning and policy development
- Manage pass-through programs and/or solicit for projects that may be compatible with the TCI Invest program

Thank You

Jeffrey Perlman PP, AICP

Director, Environmental and Sustainability Planning

Defining the Vision. Shaping the Future.



NJTPA

**NORTH JERSEY
TRANSPORTATION
PLANNING AUTHORITY**

One Newark Center, 17th Floor
Newark, NJ 07102
(973) 639-8400
www.njtpa.org



Find us on
Facebook!

follow us on

twitter 



Find Us On
Instagram

You
Tube

SUBSCRIBE
TO OUR CHANNEL