Municipal Best Practices
Reducing Transportation Energy Use

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NYSERDA
Examples at Work
Examples at Work: TDM
Examples at Work: Traffic Signals
Examples at Work: Complete Streets
Electric Vehicle
Best Practices
Why Should Munis Care?

- Promoting EVs is a great way to make a city more energy efficient and cleaner
- Building codes allow for, but don’t encourage, EVSE
- Comprehensive plans probably don’t mention EVs or EVSE
- Most zoning and parking ordinances are silent on EVSE
- Allowable settings for EVSE may not be well considered
What Can Munis Do?

- Provide incentives for EV drivers (reduced parking fees, installations of public EVSE)
- City-wide or regional plans to identify prime locations for EVSE
- Building code, permitting, or zoning/parking ordinance updates to promote EVs
- Site design guidance for public and private parking facilities
- Signage standardization
Incentives for Drivers

• Preferred or reduced price parking for EV drivers – example: Sacramento

• Line-jumping for parking permits for EVs – example: MNRRR stations

• EV charging stations at public parking lots (possibly free to use for a period, like Rochester)
Municipal Fleets

• Incorporating EVs into municipal fleets can be difficult
  • Limited selection on state contract (but getting better)
  • Need to train drivers on use, plugging in

• Example of success: New York City
Planning Under Way

• New York City and Albany have each undertaken major EV planning efforts
  – NYC has extensive plans for EVs and has new initiative to update building codes to install up to 10,000 EVSE in NYC by 2020
  – Albany crafted a city-wide EV plan that identifies key spots around city for EVSE
Building & Electrical Code Options

• Building codes can be used to
  o Require a set amount of wiring for EVSE in specific types of buildings
    ▪ Vancouver requires 20% of parking spaces in multi-family homes to be wired for EVSE, requires space in electrical room for electrical expansion to service 100% EVs
  o Require accessibility of EVSE
    ▪ Sunnyvale, CA requires at least one EVSE per installation be wheelchair-accessible

• Electrical codes can be used to
  o Reserve space for EV circuits
  o Streamline permitting and inspections
    o Oregon sets rules for what permits and inspections are required for EVSE
Zoning Options

• Zoning ordinance best practices include:
  o Define what types of EVSE are allowable and appropriate in each land use type
  o Request developers install EVSE or wiring with new developments or significant renovations
  o Establish design criteria for EVSE installations
  o Provide density bonuses for EVSE installations

• Different levels of requirements/requests may be appropriate for different communities
Parking Options

• Parking ordinances can help municipalities to:
  o Enable towing or fines for parking in EV-only spaces
  o Require minimum amounts of EVSE for large lots
    o Hawaii requires all parking lots over 100 spaces to have at least one EVSE near the building entrance
Permitting Options

- A wide range of permitting policies have been implemented, including:
  - Online permitting and/or standardized forms specific to EVSE
  - Low-cost EVSE permits
  - Labeling EVSE as minor work
  - Same-day inspections
  - Inclusion of electric service worksheet to confirm that electric service is sufficient

- Permitting guide available from NYSERDA
Permitting – Costs Can Vary

### Residential Lessons Learned

- Permit timeliness has not been a problem
- Majority are over-the-counter
- Permit fees vary significantly - $7.50 to $500.00

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Permitting – Costs Can Vary

### Commercial Lessons Learned
- **Commercial permits range $14 to $821**

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Siting & Design Options

• Inclusion of siting and design standards in zoning ordinances or traffic manuals can help avoid costly, unsafe EVSE installations.

• Best practice guides are available at [www.northeastevs.org](http://www.northeastevs.org) and [www.sustainabletransportationstrategies.com](http://www.sustainabletransportationstrategies.com)
Siting & Design Factors to Consider

- Cost of Installation
  - Length of cable run from electrical panel
  - Pavement
- Convenience for PEV drivers
- ADA Compliance
- Impacts on Pedestrians and Traffic Flow
- Protection from Traffic and Plows
- Optics of Potentially Empty Parking Spaces
Signage Options

- MUTCD-approved signage is now available
- Wayfinding signs – similar to gas stations, but may need more in parking lots
- Signage should be distinct from other uses
- Signage design guide available from NYSERDA
How to Implement

• Tools can be phased in or made optional at first before becoming mandatory
  o Consider pilot phases for new rules
• Rules should be enforceable and not cause undue local burdens
• As with other similar processes, consult with local stakeholders
Ways to Work with NYSERDA

• Cleaner, Greener Communities
  • $5,000 per municipality to update permitting and zoning ordinances

• Future EVSE Incentives
  • Purchasing collaborative
  • Incentives for municipalities

• Demonstration Projects
  • Opportunities to study new technologies, policies
Sources to Support Munis
Thank you!

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