

EV Inspection and Permitting Subgroup

****Draft Updated March 26, 2012****

Lead: Austina Casey, District of Columbia Department of Transportation

EV Workgroup Goal: Create a framework for rapid deployment of electric vehicles in the Metropolitan Washington Region.

Subgroup Objective: To develop recommendations for streamlining inspection and permitting of residential and commercial EV charging stations.

Members:

- Steve Rosenstock, Edison Electric Institute
- John Morrill, Arlington County
- Ira Feintuch, Car Charging Group, Inc
- Cassie Powers, Georgetown Climate Center
- Austina Casey, DDOT
- Brian Moorhouse, PEPCO Holdings
- Andy Flavin, Dominion
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Deadline for Final Recommendations: April 25, 2012

Resource Website

<https://ncrportal.mwcog.org/sites/surveys/EVP/>

Timeline

1. Review/Add/Modify (Feb 29 + on-going)
2. Prioritize Issues (by March 29)
3. Develop criteria for Recommendations (by March 29)
4. Review draft staff recommendations/add/modify (ongoing)
5. Present Draft Recommendations (by March 29)
6. Present Final Recommendations (by April 25)

**** DRAFT RECOMMENDATIONS ****

Issues Identified, Key Considerations and Preliminary Staff Recommendation

Priority 1 – high

Priority 2 – medium

Priority 3 - low

1. **Issue: Ensure that government requirements aren't an obstacle to expeditious charging installations.**

Recommendation 1a: Develop rapid (online and in-person) permitting application process with same day to 2-3 business day turnaround times for public and private charging installations. **Priority Level: 1**

Recommendation 1b: Develop guidance and a checklist for installers of non-governmental entities seeking permitting for on-street public charging. **Priority Level: 3**

Recommendation 1c: Develop guidance and checklist for installers of governmental entities seeking permitting for on-street public charging. **Priority Level: 2**

Resource(s):

[Charging Station Installation Handbook for Electrical Contractors and Inspectors](#), Advanced Energy

2. **Issue: Public stations may require a longer inspection time due to potential construction considerations.**

Recommendation 2a: Develop streamlined inspection process with a 2-3 business day turnaround time for public, non-construction and private (residential) charging installations. **Priority Level: 1**

3. **Issue: Home owners wishing to install EVSE will with an electrician/permit/inspection.**

Recommendation 3a: Develop a streamline process, waiving certain requirements (such as producing plans and drawings) for simple residential installations. **Priority Level: 1**

Recommendation 3b: Update/enhance building codes and fast-track approval to encourage multi-unit dwellings retrofitting. **Priority Level: 2**

Resource(s):

[Mecklenburg County, NC Code Enforcement: 14 Years of Change](#), Mecklenburg County Code Enforcement
[EV Chargers in Multifamily Buildings](#), ChargePoint California Demonstration Project

4. **Issue: Code differences in residential and commercial charging**

Recommendation 4a: Develop a consistent set of permitting & inspection procedures and checklists for entities seeking permitting based on 3 main EV charging scenarios:

- a. Level 1 (120V, 15 Amps, single phase): Residential charging (Same process as with any other 120 Volt outlet installations in residential dwellings.)
- b. Level 2 (208/240V, 30 Amps, single phase): Residential and commercial charging
- c. Level 3/DC Fast Charge (480V, 90 Amps, 3-phase): Commercial, parking garages and lots charging

Priority Level: 1

Resource(s):

[Charging Station Installation Handbook for Electrical Contractors and Inspectors](#), Advanced Energy
[Mecklenburg County, NC Code Enforcement: 14 Years of Change](#)

5. **Issue: Costly permitting fees**

Recommendation 5a: Develop a onetime fee according to the 3 main EV charging installations scenarios (See Recommendation 4a). The fee should include all applicable fees combined for the permit and inspection processes.

Priority Level: 1

6. **Issue: Location of on-street public charging infrastructure becoming a public nuisance, disturbing the integrity of historical properties, etc.**

Recommendation 6a: Communities/neighborhoods and business improvement districts to develop EV infrastructure design plans that “blend in” with the surrounding area. The plans should address location and design criteria, as well as ancillary safety issues (retractable cords, lighting, signage, ADA accessibility, etc).

Priority Level: 2

Resource(s):

[2010 ADA Standards for Accessible Design](#), Department of Justice
[Electric Vehicle Infrastructure: A Guide for Local Governments in Washington State](#), State of Washington
Department of Commerce
[Lessons Learned - EV Project: Accessibility at Public EV Charging Stations](#), ECotality
[EV Charging For Persons with Disabilities](#), Sustainable Transportation Strategies

7. **Issue: Coordination with local utility**

Recommendation 7a: All new electrical permit applications to include a field noting a provision for EV charging, voltage and amperage.

Priority Level: 1

Recommendation 7b: Government permitting and inspections office provides location and all relevant EV charging information to the local utility.

Priority Level: 1

Issues Referred to Other Subgroups

Outreach and Communication:

1. **Issue: EV infrastructure and technology is new to installers and inspectors.**

Recommendation 1a: Provide education and training on charging installation and inspection.

Priority Level: 1

2. **Issue: Public interest may weaken if the process of establishing infrastructure takes too long.**

Recommendation 2a: Establish an outreach program and training early on to gain public interest and anticipation.

Priority Level: 2

3. **Issue: Single family home and multi-dwelling unit (MDU) charging**

Recommendation 3a: Provide targeted outreach and resources (including training) on EV charging station installations requirements to encourage homeowners to install in residential units.

Priority Level: 2

Recommendation 3b: Provide targeted outreach and resources (including training) to established dwelling groups to facilitate the expansion of EV installations in MDUs; e.g. multi-unit property managers and homeowner/condo associations.

Priority Level: 2

Resource(s):

[Electric Vehicle Charging Stations: An Overview for Property Owners](#), Boston Transportation Department

Business Case for EVs:

1. **Issue: Expansion of EV development in the region.**

Recommendation 1a: Provide charging and parking incentives.

Priority Level: 2