



# EV Charging on Public Right of Way

Private Provisioning of Charging  
Equipment on Parking Strips in  
Portland's "Streetcar" Neighborhoods



# EV Charging from Parking Strips

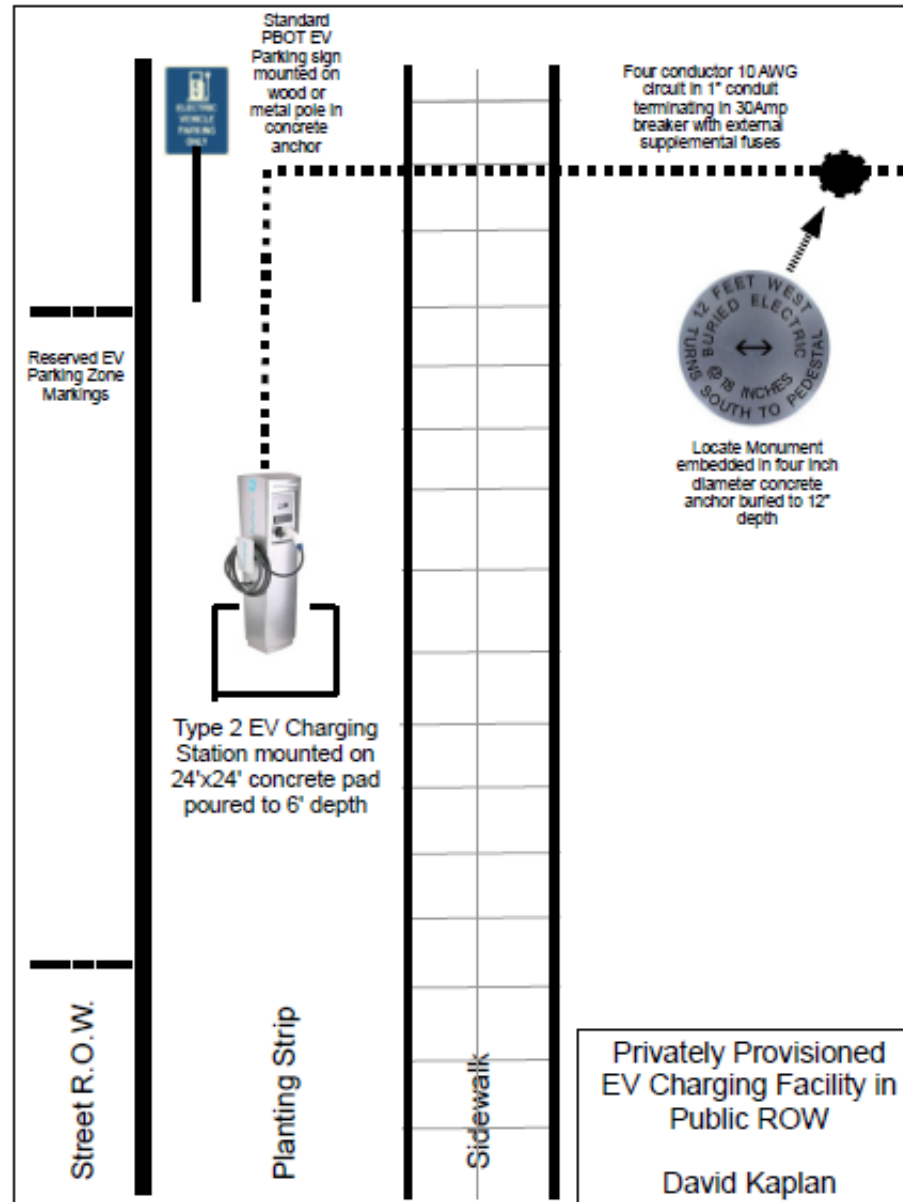
*Half of Portland households do not have access to a private driveway or garage for EV charging*

- Parking Policy Considerations
- City Code Compliance Issues
- Economic Validation
- Cost Recovery Challenges
- Alternative Solutions
  - “Pay to Play” chargers in commercial lots
  - Utility provided solutions
  - Burn oil until the last dinosaur is gone



## City Policy Issues

- Private provisioning **IS ALLOWED** under current City ordinances.
- Individuals **CAN** request restricted EV parking at equipped parking spaces.
- EV Parking **AND** access to charging must be unrestricted and ***provided at no charge*** (*City utility franchise codes*).
- Pedestals considered “standard design” by PBOT; Allowed in historic districts.





# Cost Estimates

Charging Station	\$1,199
Electrician Labor	\$1,440
Materials	\$ 800
Permits	\$ 200
Street Marking and Sign	\$ 250
State Tax Credit	<u>(\$ 750)</u>
Total	\$3,139

*Break-even for Fuel Cost (charging station only) is 38,000 miles*

*Sources: Alex Berajos, P.B.O.T.*

*Amazon.com*

*Brad Newby, Journeyman Electrician*

*Environmental Protection Agency*

*Oregon Department of Revenue*



## Issues and Constraints

- Can not control or restrict access to parking or power. Inconsiderate neighbor or visitor could dominate space.
- Investment tied to property. May not be desired in a property sale.
- Property owner must maintain locate records for buried facilities.



## Alternative Solution Proposed by Portland General Electric

- P.G.E. proposes that utility provisions equipment and power to curbside charger.
- Homeowner leases equipment (\$40/month).
- ALL users pay for power using credit card.
- Homeowner reimbursed a portion of visitor fees collected.
- Issue is currently being evaluated by Oregon P.U.C. - discussions began in 2012.

*Source: Rick Durst; Portland General Electric*