

Fehr & Peers

Accessible, Scalable Public EV Charging Deployment in the Pacific Northwest

Lessons from Vancouver and
Shoreline, WA

Jeff Raker | 06/29/2026
ITE Western district Annual Meeting



Parameters for EV Charging Planning Frameworks

Why? – GHG Implications, Travel Demand/Access

Driven by Climate Plan/Framework + Increase In EV Vehicle Use + Access

Who? – Define Priority Users

Tailored Metrics for Necessity & Convenience Based Charging

Where? – Prioritize Sites

GIS Based Prioritization

Site Level Screening & Utility Readiness

How? – Define Implementation Roles

Enable > Partner > Direct Own/Operate

When? – Phased & Scaled Public Investment

Early-Stage & Community Access
Focused Investment > Manage/Monitor

Critical Not To Be A Replacement for Private Vendors

Why? – Rationale to Establish An EV Charging Strategy

Key Considerations:

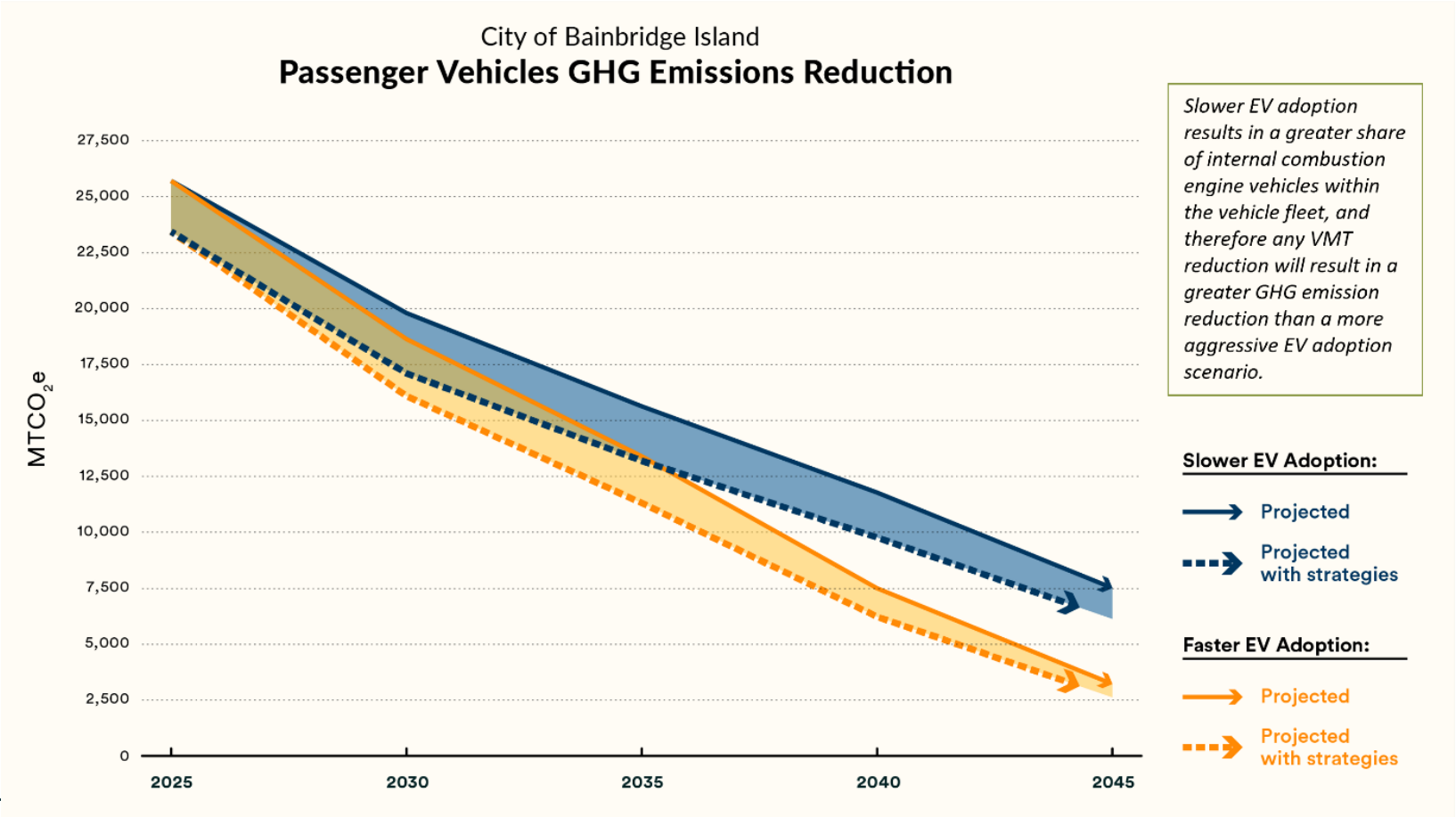
- Transportation is a major GHG source
- Electrification has Co-Benefits
- EV adoption is increasing, but public charging economics remain uncertain
- Most charging occurs at home & many residents cannot charge at home
- Utilities and cities are navigating new roles

Common Municipal EV Charging Challenges



Role of Transportation Electrification in Achieving Climate Action Targets

Understand uncertainty associated with Electric Vehicle (EV) adoption rates



Co-Benefits to GHG Reduction

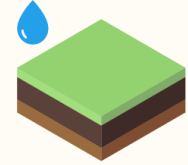
Transportation electrification has co-benefits that extend beyond reducing VMT and GHG emissions



Improving public health by reducing toxic air contaminants and increasing physical activity



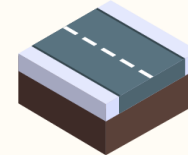
Reducing fuel use and costs



Reducing on-road pollution and improving ecosystem health through better water and soil quality



Reducing congestion and improving comfort for all road users

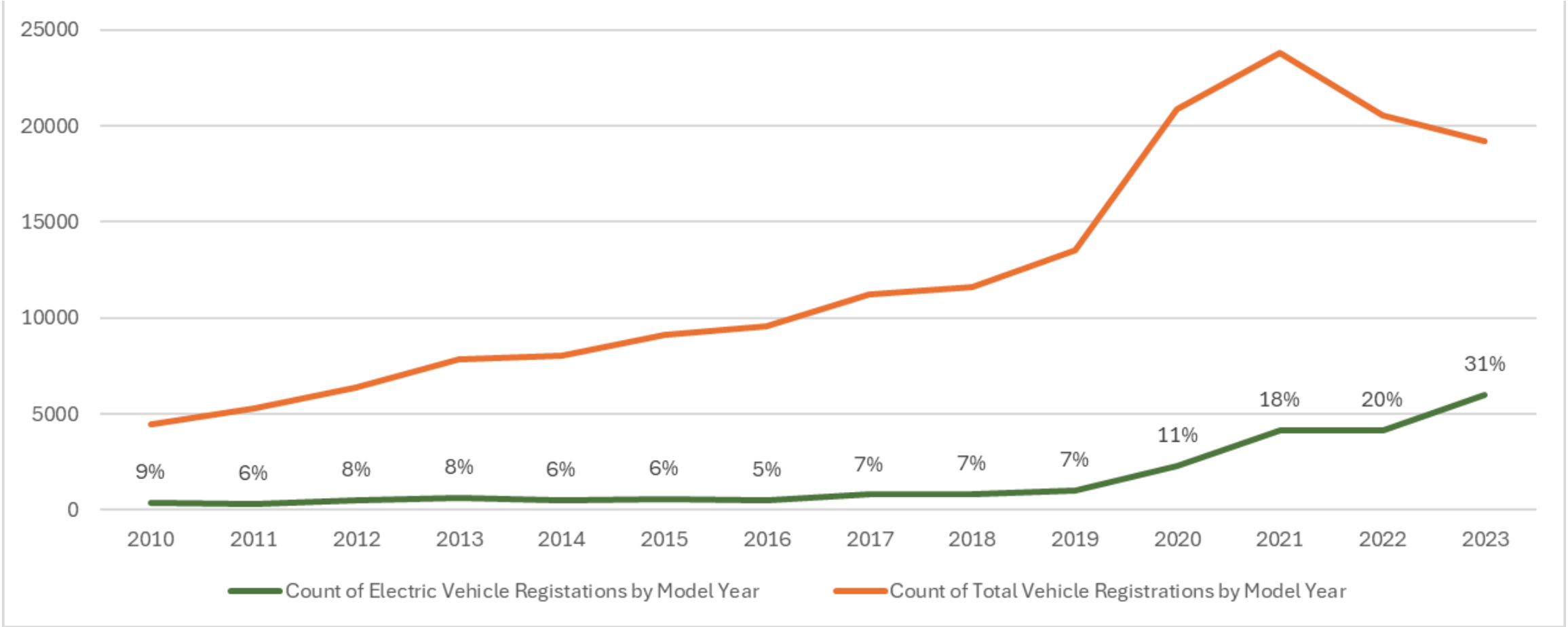


Reducing wear and tear on city roadways and associated maintenance requirements and costs



Improving safety for vulnerable road users like pedestrians and cyclists

Vancouver – EV Registrations by Model Year



Meeting Demand & Addressing Community Access

In-Home Preference

Over **80%** of EV owners prefer to charge at-home

Uneven Access

Upper income households are **over 5 times** as likely to own an EV compared to lower income households

Network Gaps

80% of EV owners feel that public charging infrastructure is inadequate

Increasing Demand

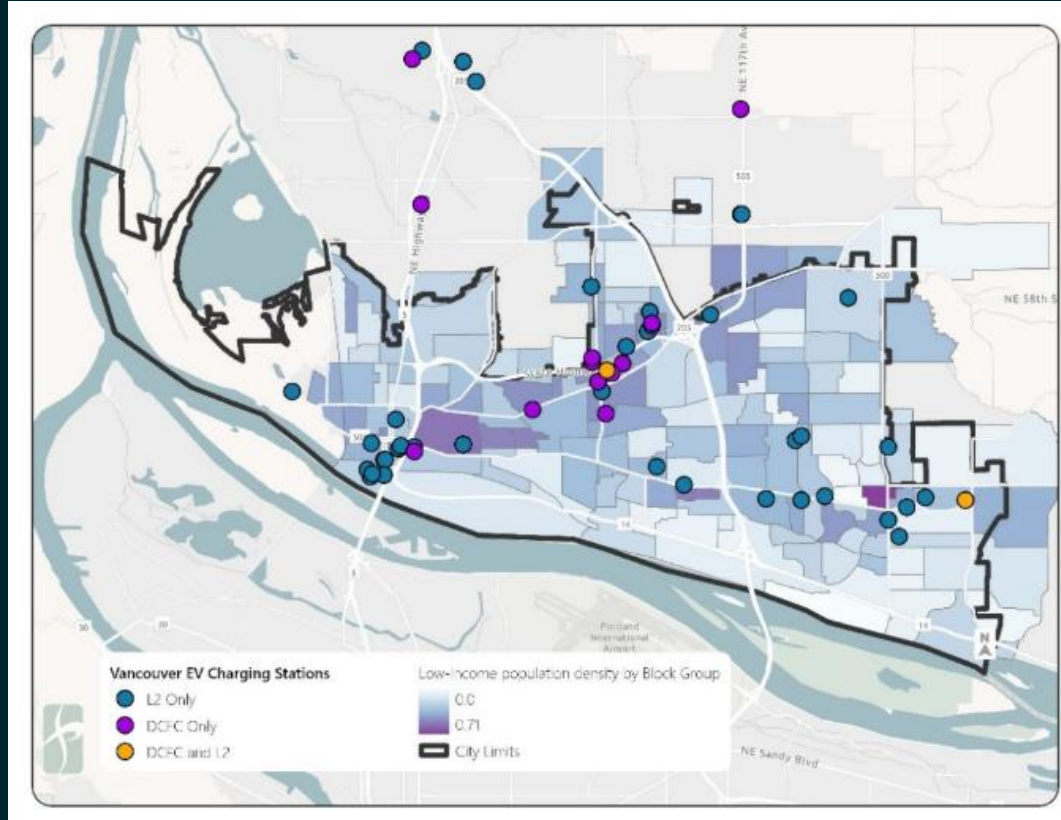
20% of new vehicle registrations in WA were electric in late 2024

Who? – Define Use Cases and How to Measure

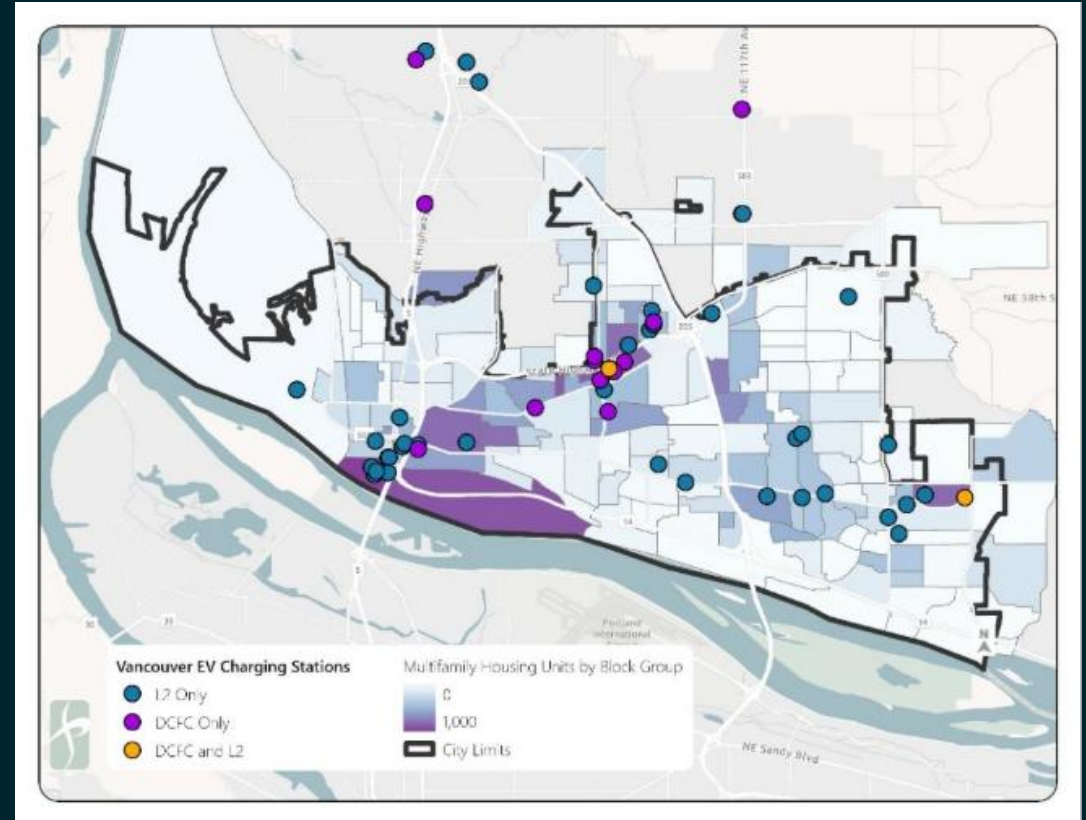
Priority Focus	Description	Example Metrics
Necessity Charging + EV Carshare	Those who may not have charging available at-home or who face the most barriers to EV adoption	-EV ownership per capita -Multifamily housing units -Demographic metrics
Convenience Charging	Those who are looking for more reliable public charging to address “range anxiety”	-Land use growth -Existing DC Charging network
Visitor + Ridehail	Visitors to the community who may have the most miles-per trip and may generate a large percentage of VMT	-Proximity to retail locations -Ridehail demand -Proximity to major freeways

Where? – Existing Charger Usage & Access

Limited Income Community Access



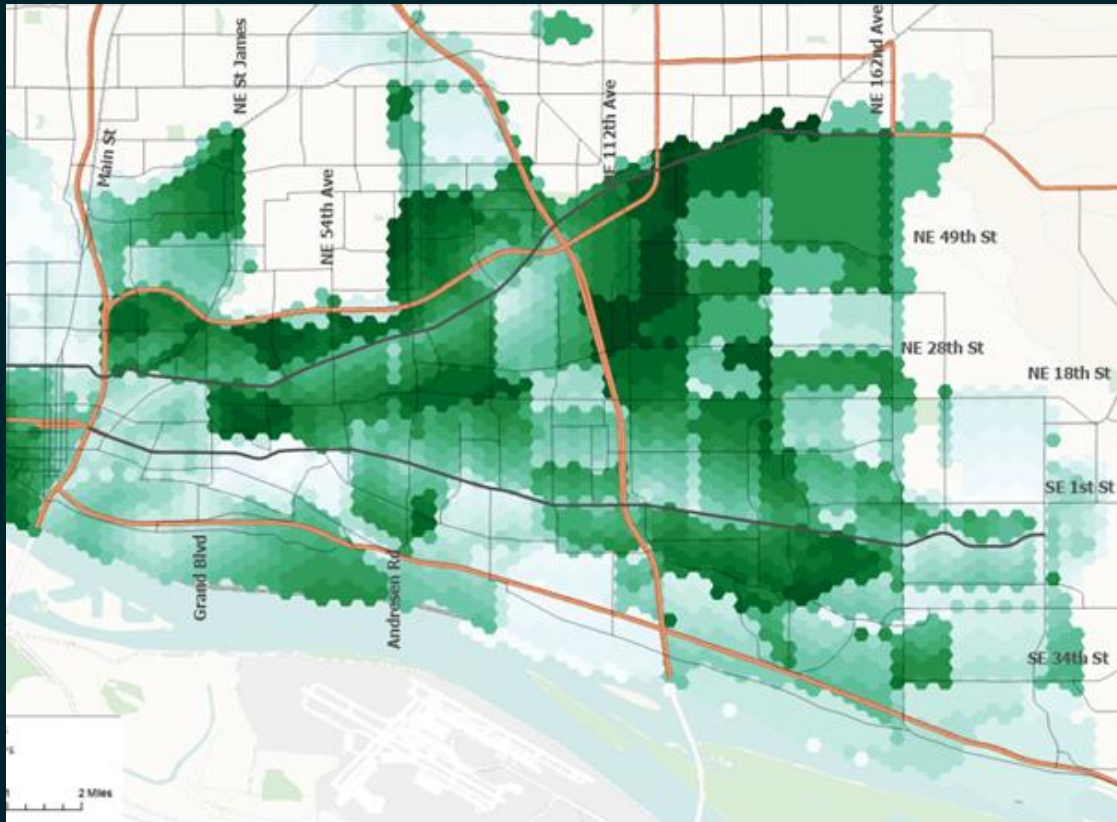
Multifamily Resident Access



Where? – Balance Utilization & Community Access

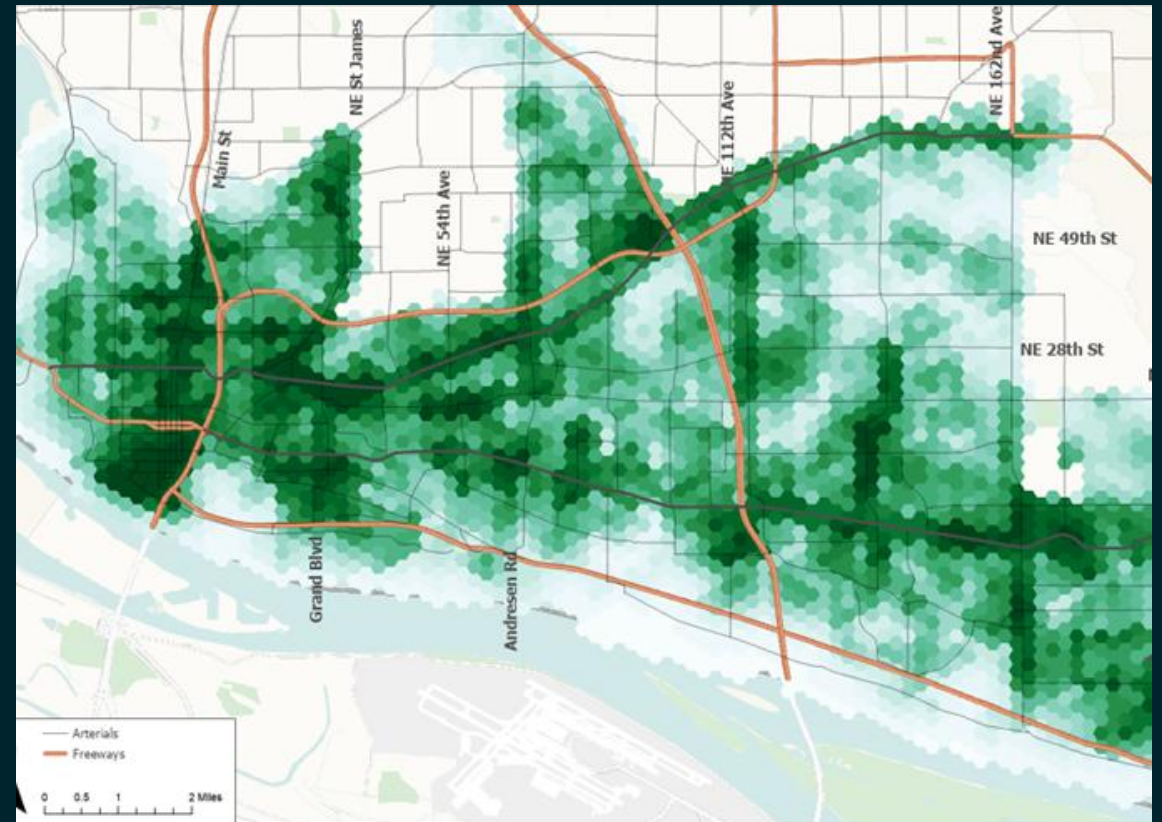
Necessity Charging

Prioritize underserved residents & MF housing



Convenience Charging

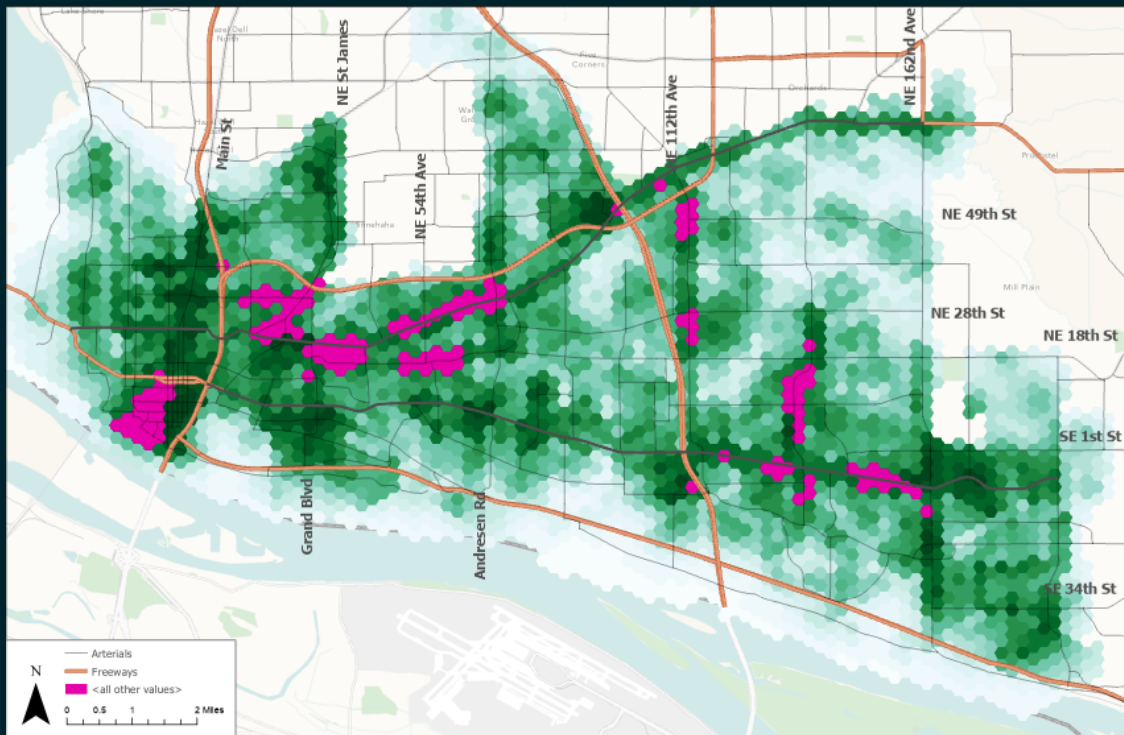
Prioritizes utilization and network confidence



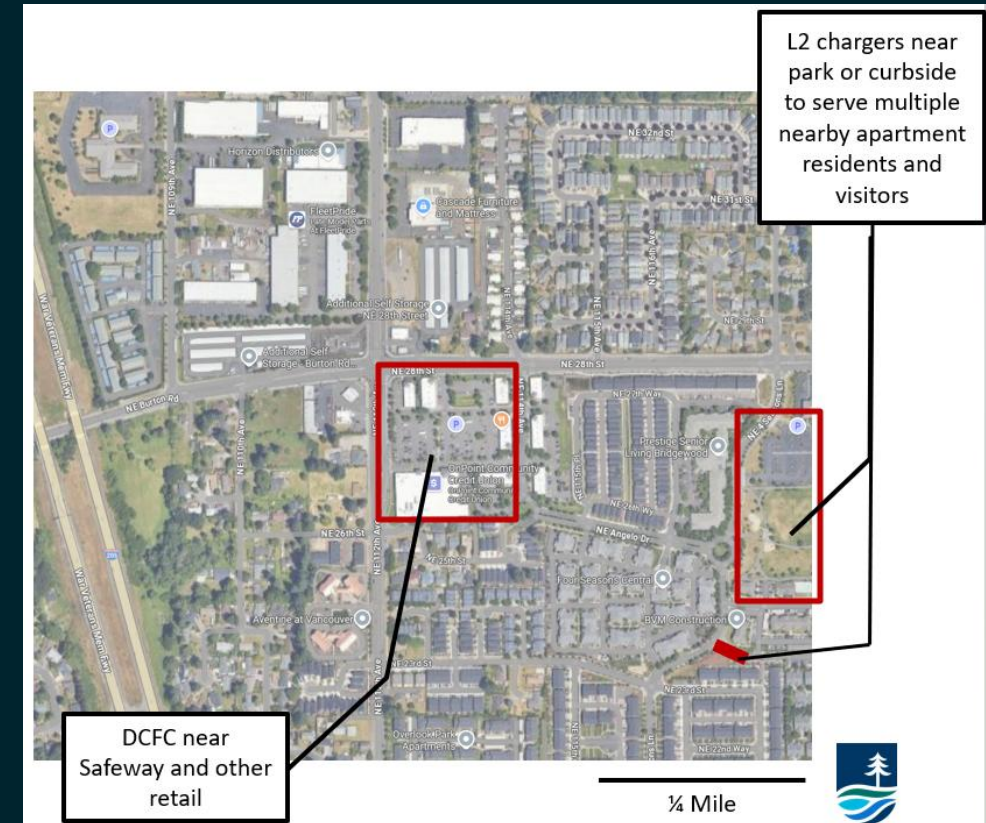
Where? – From Heat Map to Real Sites

Overlap of Necessity & Convenience

Highest Priority Investment Areas



Site Level Feasibility & L2 vs. DCFC



How? – What Can Cities Control?



What can cities control?

Policy

Partnerships

Strategic Investment

Education & Incentives

Early-Market Leadership

How? – Staffing & Other Implications

Dedicated City Staffing

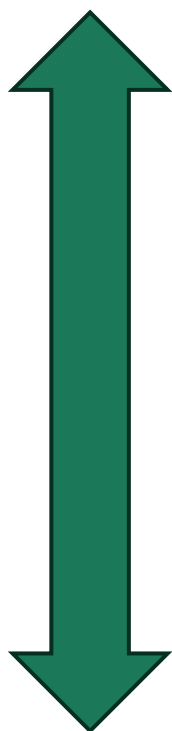
- Project Management
- Business Partnerships
- Vendor Management
- Grant Acquisition & Administration

Deployment Program

- Phased Public Investment
- Community Access-Driven Deployment
- Strategic Partnerships
- Operational Check-Ins with City Departments & Partner Utilities

How? - EVSE Operating Models(Case Studies)

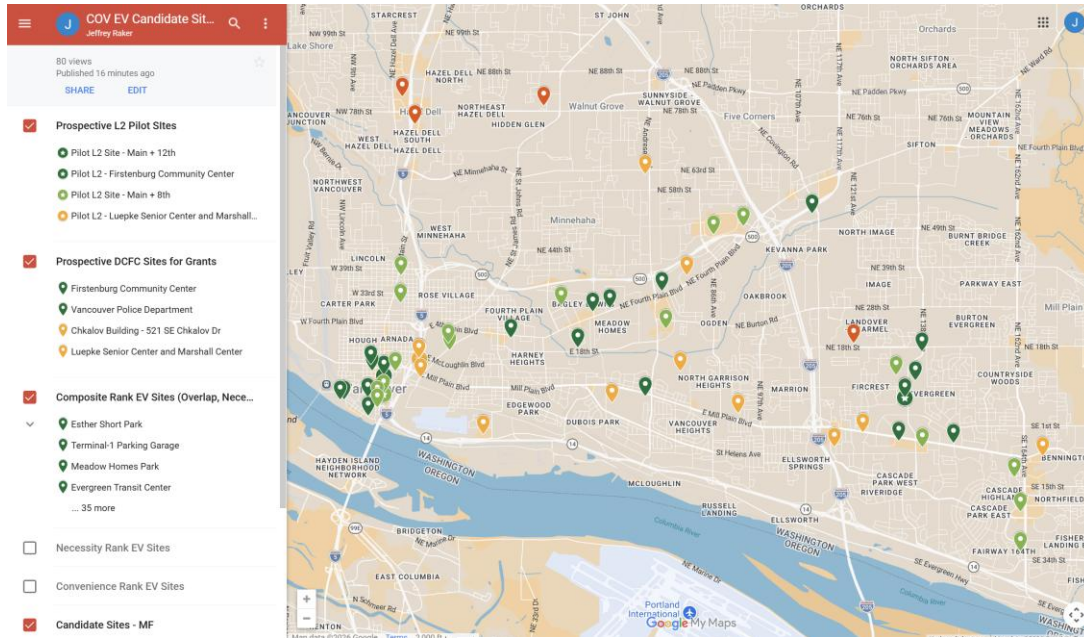
More Direct



More Indirect

City Role	Example	Lessons Learned
Owns/Operates EVSE on Public Property or ROW	City of Sacramento (Public Works department) Los Angeles (LADWP) City of Seattle (via Seattle City Lights, public utility)	•City control over pricing and siting (both free, equity considerations) • Integration with city parking programs, EV fleet
Owns EVSE on Public Property or ROW but partners with Agencies for operation/maintenance	City of Boston (Public ownership at city assets; private maintenance – Flo)	•City control over pricing/siting •Increased EVSE at key sites •Public/private partnership role to fill gaps
Licenses/Leases a public facility (such as the ROW) but is not in charge of ownership/operations	City of Boston (License the PROW) City of Portland (License the PROW) City of Seattle (PROW pilot program * PROW: Public Right Of Way)	•Reduced cost to the City •Varying control over siting and operation/fees (Option to keep full control, or use permit app.)
City enables more private development of EV charging infrastructure through codes, parking regulation, permitting updates, etc.	Atlanta, GA (Required EVSE parking, permits to companies for public EVSE) California, state-wide (Expedited permit process, cities such as Riverside introducing EVSE parking requirements)	•Regulations can vary in success and role (i.e. parking, permitting, code requirements, etc) •Incentives reduce cost barriers, but aren't long-term sustainable

How? – Transition to Private Investment



Parties Involved

- City
- EV charging companies
- Utility provider
- Property owners
- Community-based organizations

Different levels of city intervention could also play out across time

Step Model:

Increasing access
to charging

EV market
expansion

Better ROI on
public charging;
improved
business case

Private-sector
uptake and
operation of
public charging

Case Studies

Shared Planning Framework, Different Implementation Contexts

City of Shoreline

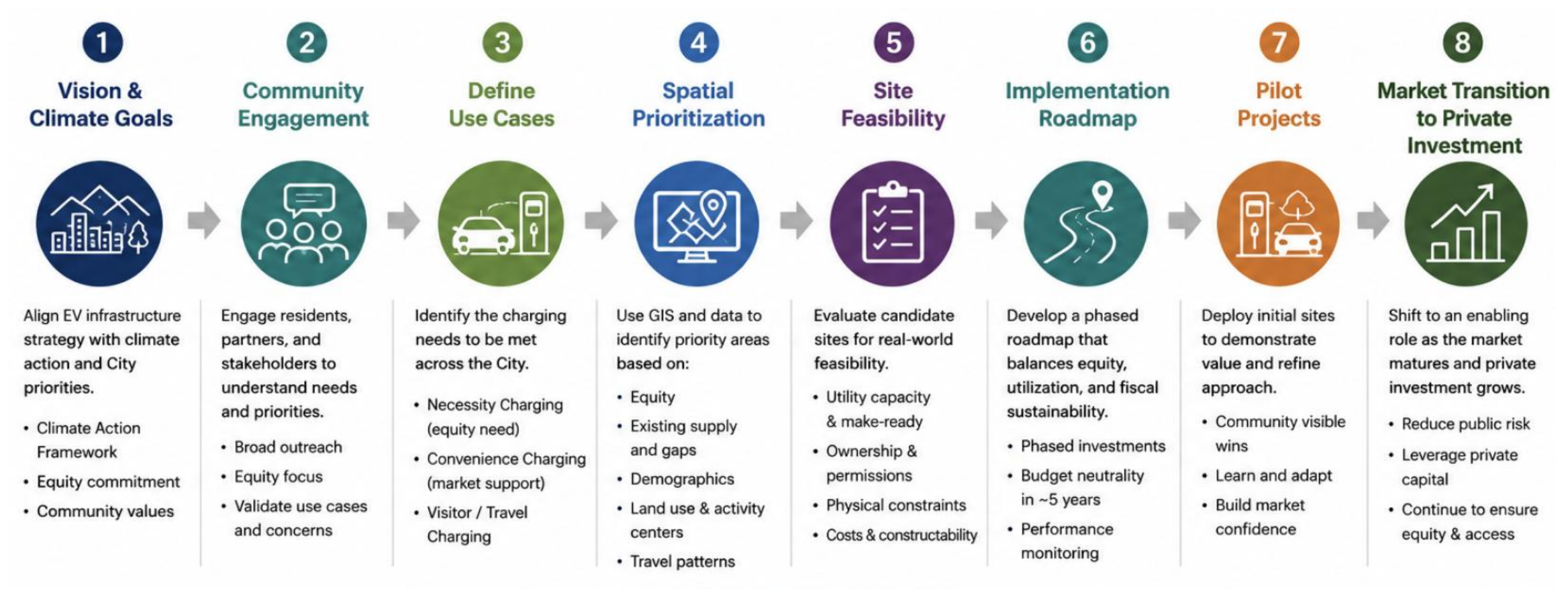
- Driven by Climate Action Plan & TMP
- DCFC Public Charging Study
- Alignment with Shared Use Mobility Hub Strategy
- Site Prioritization
- Implementation Recommendations

City of Vancouver

- Driven by Climate Action Framework
- Citywide Electric Vehicle Infrastructure Strategy
- Implementation Roadmap
- Staffing Model
- Budget Neutral 5-Year Pilot Network Build Out
- Charging + Non-Charging Strategies

Framework for Public EV Charging Deployment

Building An Accessible, Scalable, & Durable EV Charging Network



Key Lessons Learned

- Enhancing access requires intentional engagement & public investment
- Recognize EV charging as part of broader TE strategy
- Determine City Roles & Start Utility/Partner Coordination Early
- Dedicated & Sustained Staffing/Resource Matters
- Context for Public EV Charging Deployment
 - Address the “why” and the “who”
 - Then the “where” and the “how”
- Beyond Chargers: Supporting or Enabling Strategies Matter



Thank you!

Questions?

Jeff Raker

Fehr & Peers

j.raker@fehrandpeers.com

Discussion & Questions

- **Where should local governments draw the line between enabling the market and directly investing in public charging infrastructure?**
- **If resources are limited, should communities prioritize charger utilization or community access? How should that balance evolve over time?**
- **Beyond installing chargers, what is the single most important action local governments can take to accelerate transportation electrification?**