



Brent Johnson, PE, LEED AP
Vice President, Clean Transportation

*Zero Emission Vehicle (ZEV)
Considerations for Public Agencies*

North Bay Watershed Association, February 2025

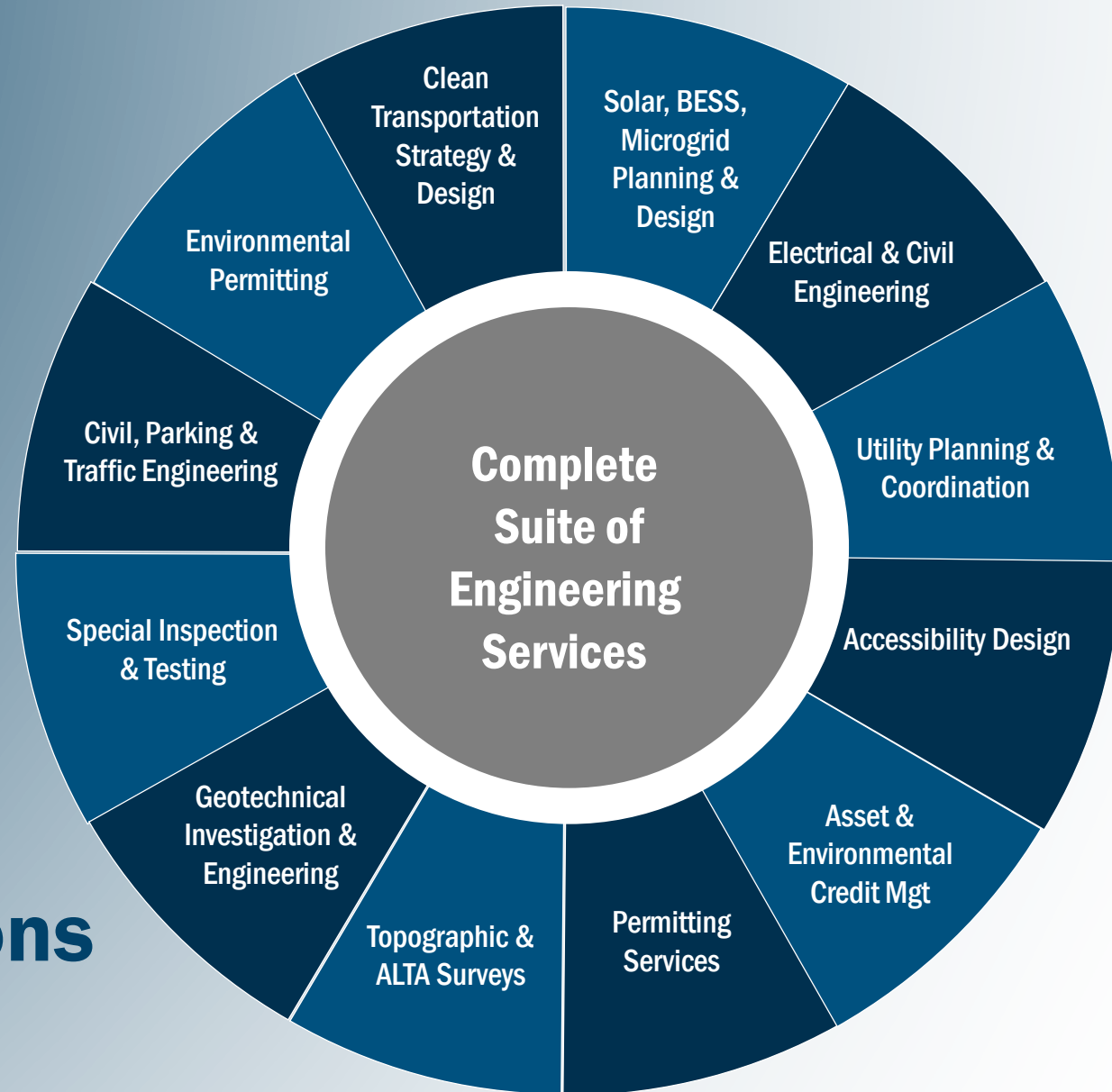
NV|5

February 2025

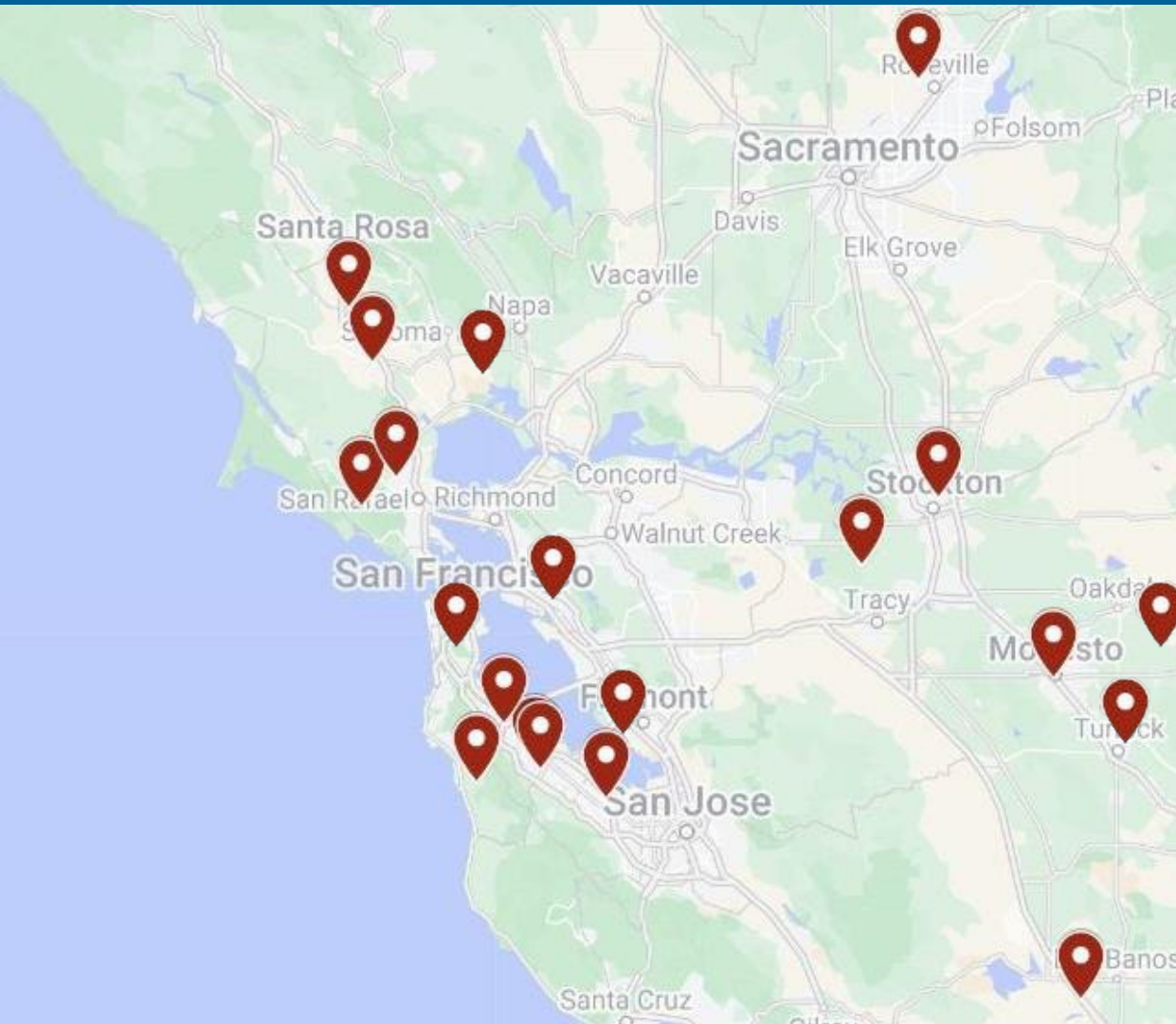
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- 70+ Year History
- 100+ Offices Worldwide
- 20 Offices in CA
- 5,000 Employees

Integrated Full-Service Clean Transportation Solutions



Clean Transportation Projects in NorCal



Select EV Planning & Design Projects

- City of Petaluma
- City of Santa Rosa
- City of San Rafael
- Private Fleet in Napa County
- Ironhouse Sanitary
- Tamalpais Union High School District
- Ava Community Energy
- SFPUC
- San Mateo Union High School District
- San Mateo County
- Santa Clara County

ZEV Considerations

- California's ZEV regulations
- Transition Planning
- Charging Infrastructure
- Utility Coordination
- Funding
- Procurements

CA ZEV Regulations on Public Agencies

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CARB Rule	Equipment	Who
Advanced Clean Fleets	Class 2B-8 Vehicles	Fleet Operators
Advanced Clean Trucks	Class 2B-8 Vehicles	Dealers
Advanced Clean Cars II	Light Duty Passenger	Dealers
In-Use Off-Road Diesel-Fueled Fleets	Off-Road Diesel Vehicles >25 HP	Fleet Operators
Small Off-Road Engines (SORES)	Landscape Equip, Small Generators	Manufacturers, Dealers
Zero-Emission Forklifts	Forklifts	Fleet Operators
Off-Hwy Recreational Vehicles (OHRVs)	Side-by-sides, ATVs, UTVs	Manufacturers, Dealers

Transition Planning

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- ✓ Accurate fleet inventory with operational data
- ✓ Align with ACF and your retirement/procurement rules
- ✓ Establish power & charger needs based on operational data and dwell time
- ✓ Utility coordination early
- ✓ Research vehicles, chargers, and charging software
- ✓ Establish an infrastructure plan & delivery method with an experienced partner
- ✓ Capital plan for vehicle and infrastructure transition
- ✓ Develop a plan that sets you up to pursue funding
- ✓ Consider resiliency needs for electric fleets



Charging Infrastructure

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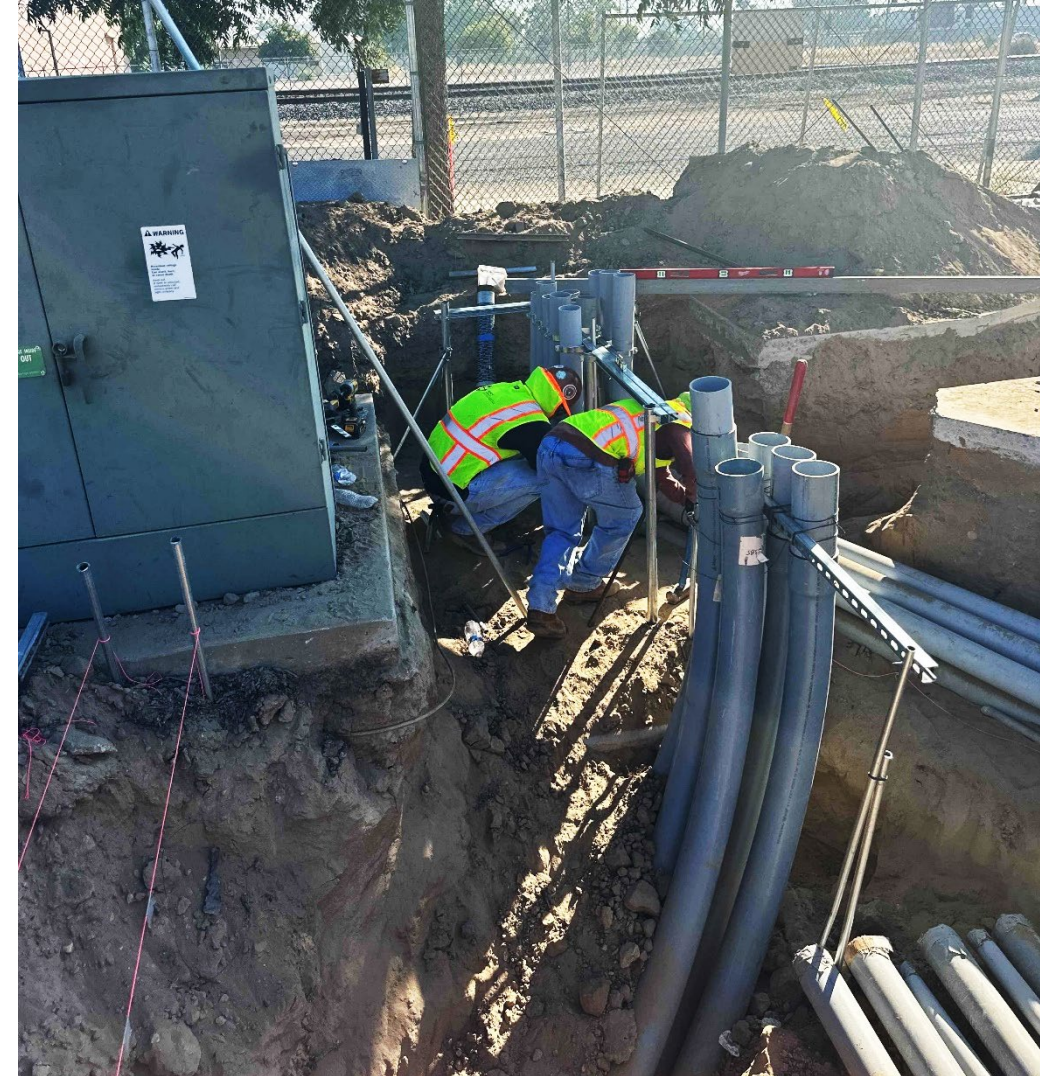


- ✓ Vehicle:Port ratios (typically $> 1:1$), based on operational needs
- ✓ ROM All-in Costs
(Can vary widely based on site, scale of project, etc)
 - ✓ L2 (AC Charging), \$25k/port
 - ✓ L3 (DC Charging), \$50-100k+/port
- ✓ Typically requires a new or upgraded service for more than a few L2 ports
- ✓ Plan trunk infrastructure for future phasing
- ✓ Charge management software
- ✓ Automated load management software

Utility Coordination

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- ✓ As early as possible
- ✓ Make-Ready Programs (PG&E)
 - ✓ EV Fleet (will supply 5-year transition)
 - ✓ Rule 29
 - ✓ Fleet Advisory
- ✓ Separate metering to access EV Tariff
- ✓ Make-Ready participation often includes limits on power availability at certain times of day
- ✓ We advise public agencies to expect 18 - 24 month process for new service
- ✓ PG&E approval of switchgear required





Ford

Ford T350 Van 2WD Battery Electric Vehicle

68 kWh
89 kWh

Battery Electric

Class 2b

Incentive Amount

\$7,500

Type **New**

Charger rebates

You may be eligible for rebates up to 50% of the cost of the EV charger based your location and the power output of the charger:

- Up to 50 kW, can receive up to \$15,000
- Between 50.1-150 kW, can receive up to \$25,000
- Above 150.1 kW, can receive up to \$42,000

You can select from a variety of EV charger options from our approved vendor list.

Infrastructure incentives

A municipal fleet with a mix of Class 3-8 vehicles and equipment can receive up to \$4,000 per vehicle in incentives, up to 25 vehicles.



\$4,000
per vehicle



\$4,000
per vehicle



\$3,000
per vehicle

Business EV rate plans

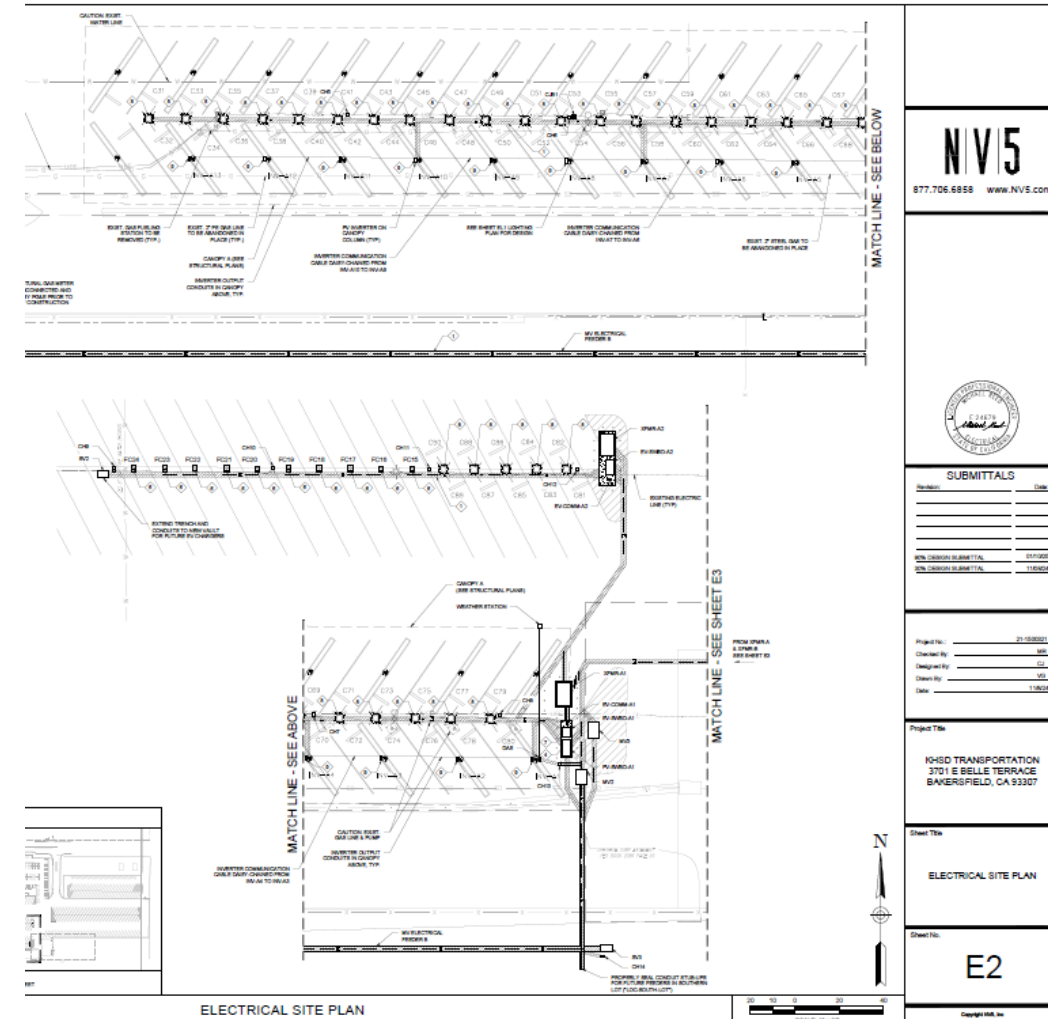
PG&E offers two energy rates plans for businesses with EV charging, which help fleets save up to 40% on the cost of fuel. [Learn more here](#).

- ✓ Utility make-ready programs (EV Fleet, Rule 29, Fleet Assistance)
- ✓ CCA programs
- ✓ California Air Resources Board (CARB)
 - ✓ *Local Air Board (e.g. Carl Moyer)*
 - ✓ *California HVIP (Hybrid & Zero-Emission Voucher Incentive Program)*
 - ✓ *Innovative Small e-Fleet*
 - ✓ *Clean Off-Road Equipment Vouchers (CORE)*
- ✓ California Energy Commission (CEC)
 - ✓ *CALeVIP (public accessible)*
 - ✓ *Communities in Charge (public/workers)*
 - ✓ *Other Competitive Grants*
- ✓ Federal Elective/Direct Pay Options on Chargers & Vehicles

Procurements

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- ✓ Determine project delivery method early (e.g. design-build, design-bid-build, charging-as-a-service)
- ✓ Leverage cooperative agreements
- ✓ EVSE not just a construction project, includes software and service agreements with operating cost implications
- ✓ Seek pathways to expedite switchgear procurement (utility & switchgear typically critical path)
- ✓ Some vehicle dealers are on cooperative purchasing agreements and can be a good resource for grant/incentive details



Thank you!

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Brent.Johnson@NV5.com

415.851.9076

San Rafael, CA

<https://www.nv5.com/services/clean-energy/>