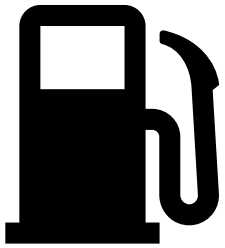
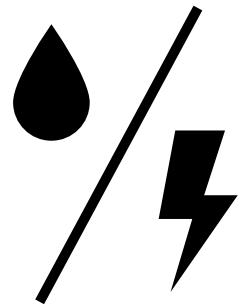
Commission Vehicles

Planning for the future.





HYBRID

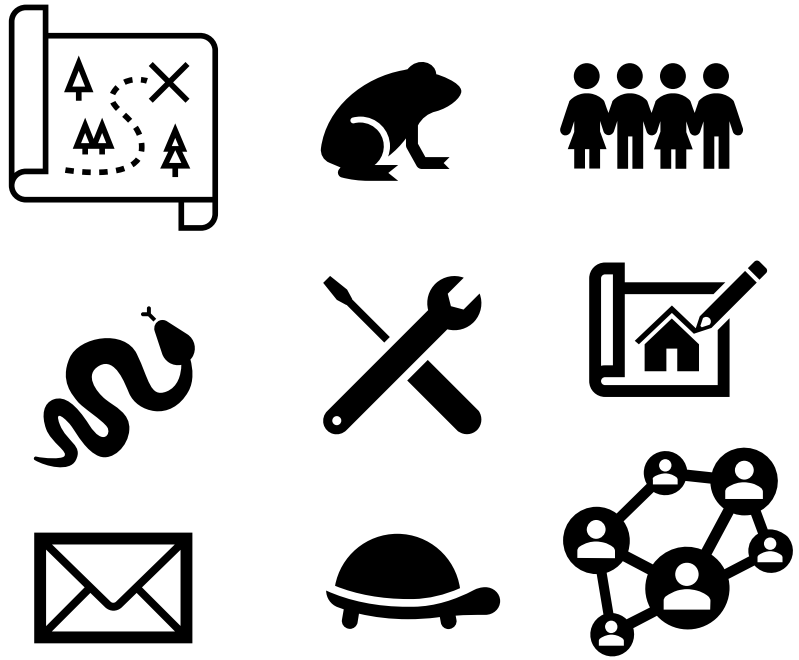
The Commission currently has 5 late model gasoline engine vehicles:

- Dodge Dakota Pickup
- Ford Ranger Pickup
- Toyota Prius
- Jeep Wrangler (2 door)
- Jeep Wrangler (4door)

The Commission is not part of the State Vehicle Fleet.

What the vehicles are used for:

- Field Work – Science & Regulatory Programs
- Facility Maintenance
- In-Person Meetings
- Mail pickup/supply pickup
- Outreach



FY23 Recommendations

- Sell Toyota Prius
- Purchase 2 new field vehicles (SUVs or Pickups) for use by Science and Regulatory Programs staff

Electric Vehicle (EV) or HYBRID

Points to consider:

- Installation of Charging Station at the Commission.
- How are all Electric Vehicles going to be charging?
- Location of Charging Stations while in the Field.
- What level Charging Station is needed or available?
- How long will it take to charge when in the field?
- What if staff need to take an Electric Vehicle home?
- What's available on State Contract?
- Vehicle ground clearance for Field Use.
- What if State Contract doesn't meet the Commission's needs?

Installation of Charging Station at the Commission.

Pros:

- Great for the Environment.
- Grants are available to offset a small portion of the cost.
- Included in the Commission's FY22 Budget.
- Provides service to the visiting public.

Cons:

- Daily responsibility for charging Commission vehicles
- Consequences if vehicles aren't fully charged
- Monitoring and establishing priorities for use of Charging Station (Commission or public vehicles)
- Payment structure/mechanism

Off-site Public Charging Stations

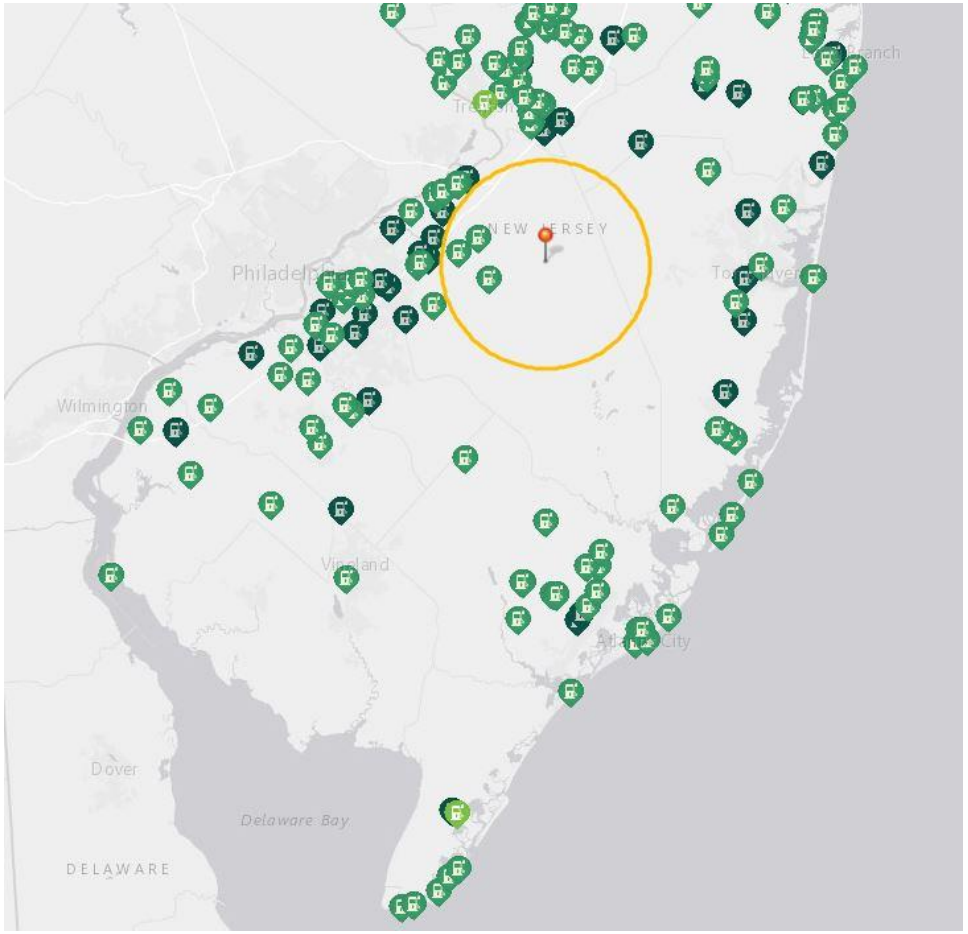
Charging Levels:

- **Level 1:** These charging stations provide charging through 120 volt (V) AC dedicated circuit breakers. Based on battery type and vehicle, Level 1 charging adds about 2 to 5 miles of range to a plug-in electric vehicle (PEV) per hour.

- **Level 2:** These charging stations provide charging through 240V or 208V AC dedicated circuits of 20 to 100 amps, depending on the charging station requirements. Based on the battery type, charger configuration, and circuit capacity, Level 2 charging adds about 10 to 20 miles of range to a PEV per hour of charging time.

- **DC Fast Charging:** These charging stations provide charging through a 480V or 208V AC dedicated circuit. DCFC enable rapid charging and is often located along heavy traffic corridors and at public charging locations Based on battery type and vehicle, DCFC can add about 60-80 miles of range to a PEV in 20 minutes of charging time.

https://nj.gov/dep/drivegreen/dg-charging.html



https://njdep.maps.arcgis.com/apps/webappviewer/index.html?id=e41aa50dd8cd45faba8641b6be6097b1

Can staff take an Electric Vehicle home?

Staff often need take Commission vehicles home in the evening in order to go directly to site inspections or field work the next morning

- The Commission cannot pay to install a charging station at an employee’s residence.
- The Commission cannot assume the liability of any possible electrical issues stemming from use of a charging outlet at an employee’s residence.

What's available on State Contract and it's ground clearance for Field use.

Electric Vehicles:

2022 Nissan Leaf
Ground Clearance: 5 inches

2022 Chevrolet Bolt
Ground Clearance: 5 inches

2021 Ford Mustang Mach E
Ground Clearance: 5 inches

HYBRIDS:

2022 Ford Escape SE Hybrid
Ground Clearance: 7.3 inches

2021 Toyota Highlander Hybrid
Ground Clearance: 8 inches

What if State Contract doesn't meet the Commission's needs?

- Survey the Staff
- Create an RFQ (Request for Quote) that includes the specific needs of a future Commission Vehicle.

2022 Jeep Sahara 4xe
Ground Clearance: 9.7 inches