Transportation Electrification Infrastructure Needs Analysis

Charger density heat maps:
Disadvantaged communities (additional)
Direct current fast charger

June 2021
Disadvantaged communities (additional): Direct current fast charger

Business as usual | Rapid recovery | Slow recovery
2020 - 2035

What “additional” means: heat maps labeled “additional” for this use case are the additional DCFC chargers required when factoring the needs of disadvantaged communities into the Urban/Rural model heat maps.

In other words, each Urban/Rural heat map was modeled without factoring in the needs of disadvantaged communities. The separate “additional” maps represent the additional number of chargers that Urban and Rural areas would need to accommodate the needs of disadvantaged communities.

See an example of this on the next page.
Example heat maps

In this example, we have three modeled heat maps:
1. Urban/Rural DCFC Business as usual 2035
2. Disadvantaged Communities DCFC BAU 2035
3. Disadvantaged Communities DCFC BAU 2035 (additional)

Map 1 is modeled on the DCFC needs of the general population, without considering the additional needs of the disadvantaged communities that live there.

Map 2 looks specifically at the DCFC needs of disadvantaged communities in those same places. This is an independent model from the Urban/Rural one.

Map 3 represents the gap or difference between the DCFC needs of Map 1 and Map 2. Map 3 is the additional number of chargers need to adequately meet the needs of disadvantaged communities.
Disadvantaged communities (additional): DCFC
Scenario: Business as usual
Year: 2020
Disadvantaged communities (additional): DCFC
Scenario: Business as usual
Year: 2025
Disadvantaged communities (additional): DCFC

Scenario: Business as usual
Year: 2030
Disadvantaged communities (additional): DCFC

Scenario: Business as usual
Year: 2035
Disadvantaged communities (additional): DCFC

Scenario: Rapid recovery
Year: 2020
Disadvantaged communities (additional): DCFC

Scenario: Rapid recovery
Year: 2025
Disadvantaged communities (additional): DCFC

Scenario: Rapid recovery
Year: 2030
Scenario: Rapid recovery
Year: 2035

Disadvantaged communities (additional): DCFC
Disadvantaged communities (additional): DCFC
Scenario: Slow recovery
Year: 2020
Disadvantaged communities (additional): DCFC

Scenario: Slow recovery
Year: 2025
Disadvantaged communities (additional): DCFC

Scenario: Slow recovery
Year: 2030
Disadvantaged communities (additional): DCFC

Scenario: Slow recovery
Year: 2035