AZEVPLAN

Electric Vehicle Infrastructure Deployment Plan

ADOT

What is NEVI?

- The National Electric Vehicle Infrastructure (NEVI) Formula Program is a $5 billion project managed by the Federal Highway Administration (FHWA) to fund a national network of EV Fast Charging stations along interstate highways
- This facilitates long-distance travel by reducing the ‘range anxiety’ of trips

U.S. Department of Transportation

Federal Highway Administration

NEVI and Arizona

- Arizona is eligible for up to $76.5 million in NEVI Formula Program funding across five years
- This federal funding can only be used as directed: the construction of EV fast charging stations along Alternative Fuels Corridors, currently the interstates

Targeted Benefits

- The NEVI program requires that at least 40% of the program's benefits are targeted towards disadvantaged communities, including rural and tribal areas

- Benefits include things like increased tourism, improved air quality and job opportunities in EV charger installation and maintenance

ADOT's Role in NEVI

- ADOT prepared a plan to establish the network of charging stations
- The plan was submitted in August and approved in September
- ADOT will administer implementation of the plan over the next five years
- State funding is **not** being used for the construction or upgrading of charging stations

Implementation Requirements

- Stations must be placed at least every 50 miles and within one mile of the interstate
- Stations must support simultaneous charging on at least four 150 kW DC Fast Chargers with J1772 CCS connectors
- Stations will be privately owned, operated, and maintained
- Build costs are split 80% federal, 20% private

Implementation Requirements, Continued

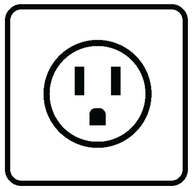
- ADOT is setting the goal of at least 97% reliability at each station
- Stations will not be located on ADOT right-of-way, including rest stops, due to restrictions on business use of these sites

ADOT EV Plan Goals

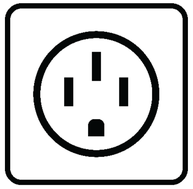
- Build a resilient, equitable, accessible, reliable network
- Reduce ‘range anxiety’ by closing existing network gaps
- Engage stakeholders and the public in all phases
- Identify potential new AFCs during engagement
- Utilize efficient contracting and procurement
- Collect and apply data and metrics to future planning

EV Charging Basics

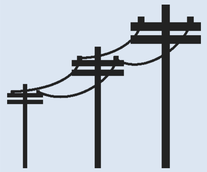
Charging Speeds



Level 1: Good for charging overnight and on weekends

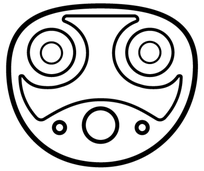


Level 2: Good for charging while at work or activities

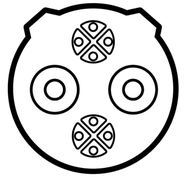


Level 3: Good for charging during a meal or short break

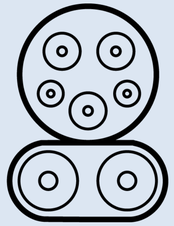
Connectors



Tesla: Proproprietary connector for Tesla EVs only



CHAdeMO: Used in US by some Nissans and Mitsubishis

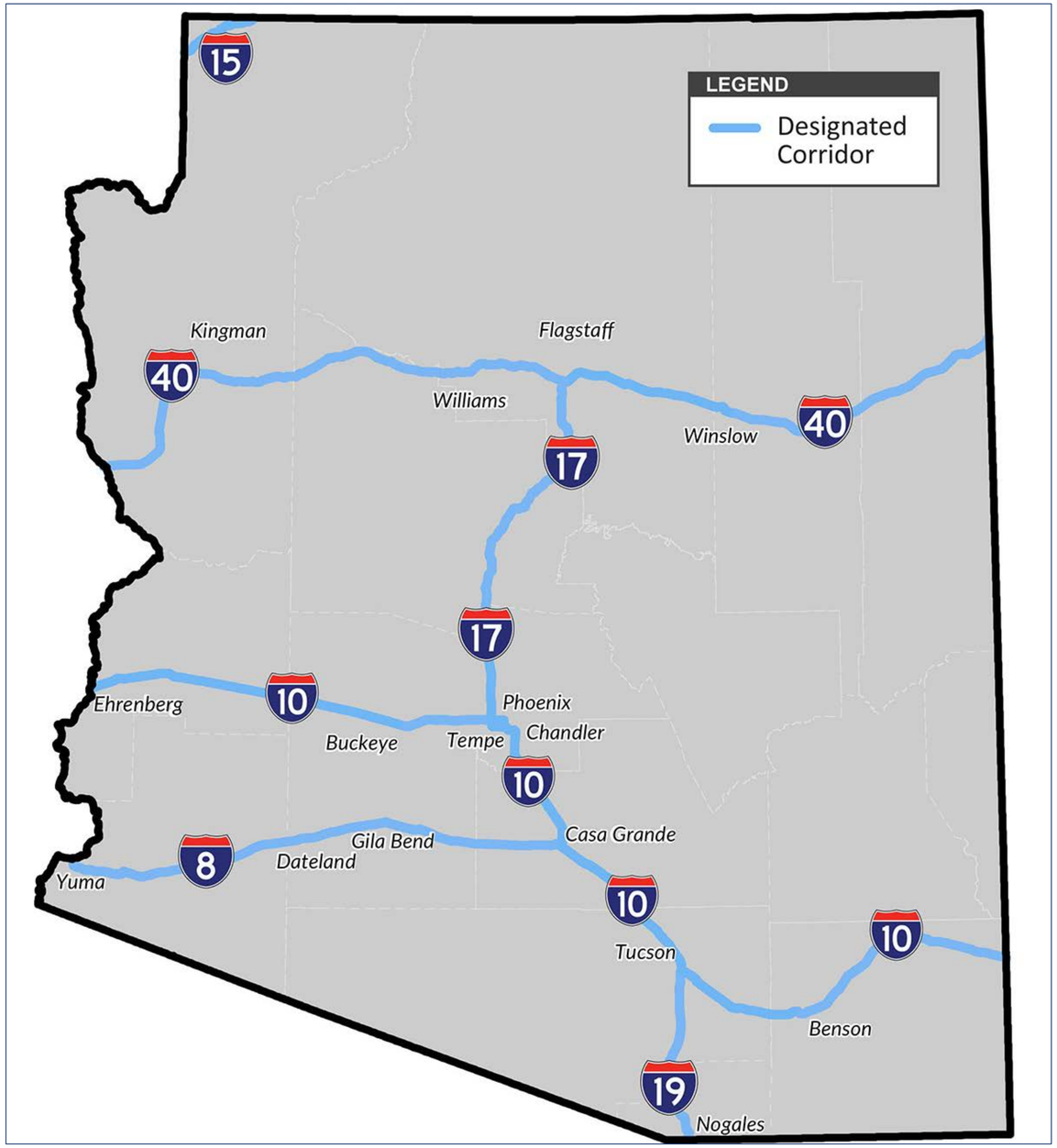


J1772 CCS: North American standard for most EV brands

For best compatibility and travel suitability,
NEVI uses Level 3 charging with CCS connectors

Alternative Fuel Corridors

- Alternative Fuel Corridors (AFCs) are the designated highway corridors for EV charging infrastructure
- NEVI charging stations must be placed along AFCs
- Currently, Arizona's AFCs are the interstate highways
- ADOT is seeking public input for choosing state highways to nominate as potential new AFCs



Existing Stations

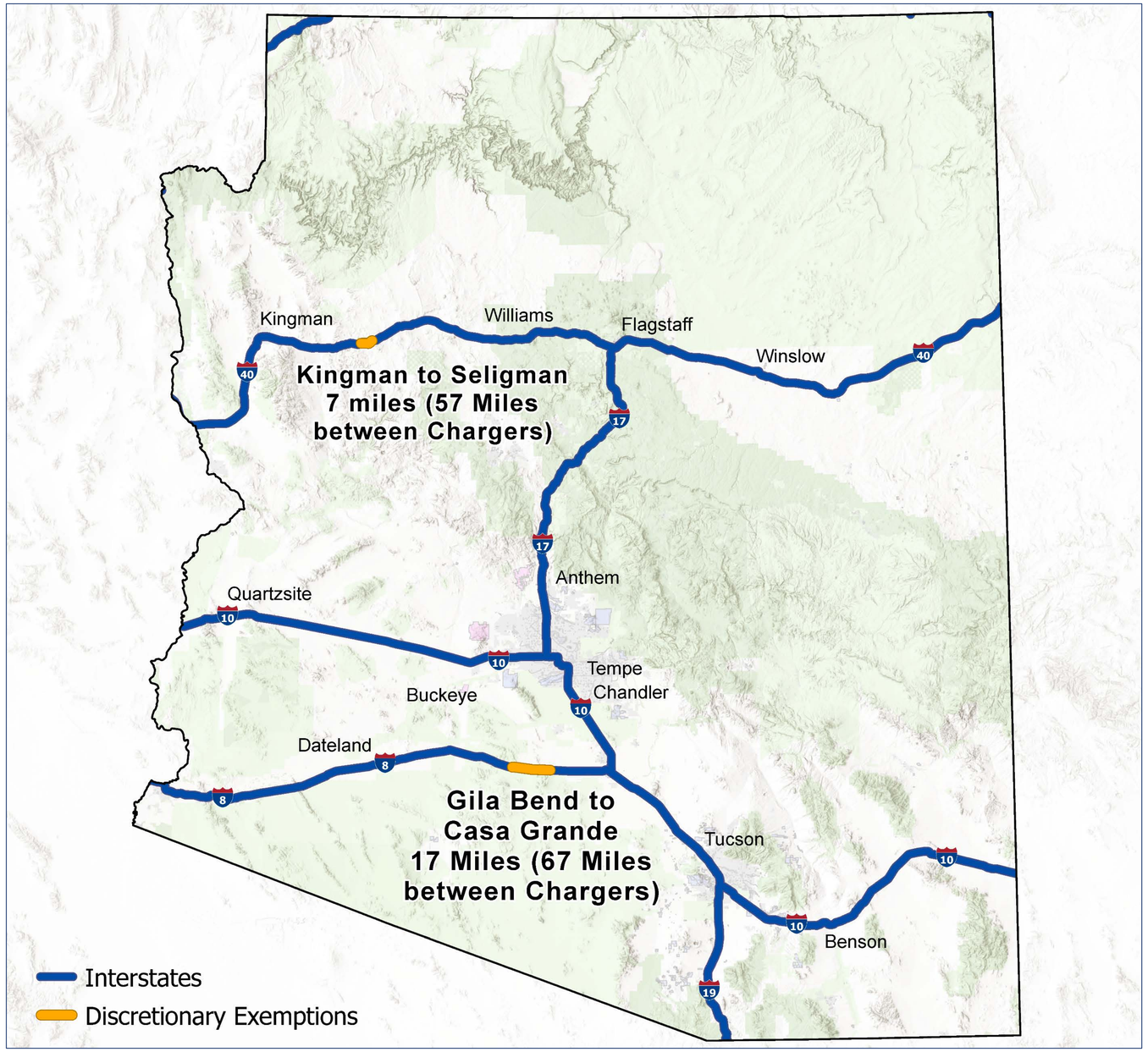
- This map shows existing stations that meet NEVI requirements
- The numbers printed in between each station is the distance in miles in between; the goal is to reduce gaps to 50 miles or less

NEVI Station Sites

- This map shows proposed approximate station sites to address the gaps in the existing network
- White icons would be new stations
- Yellow icons are existing EV charging stations that could be upgraded

Needed Exemptions

- This map shows the two locations where ADOT was granted exemptions from the 50-mile station gap goal
- These areas lacked an interchange with appropriate infrastructure and amenities for locating a station



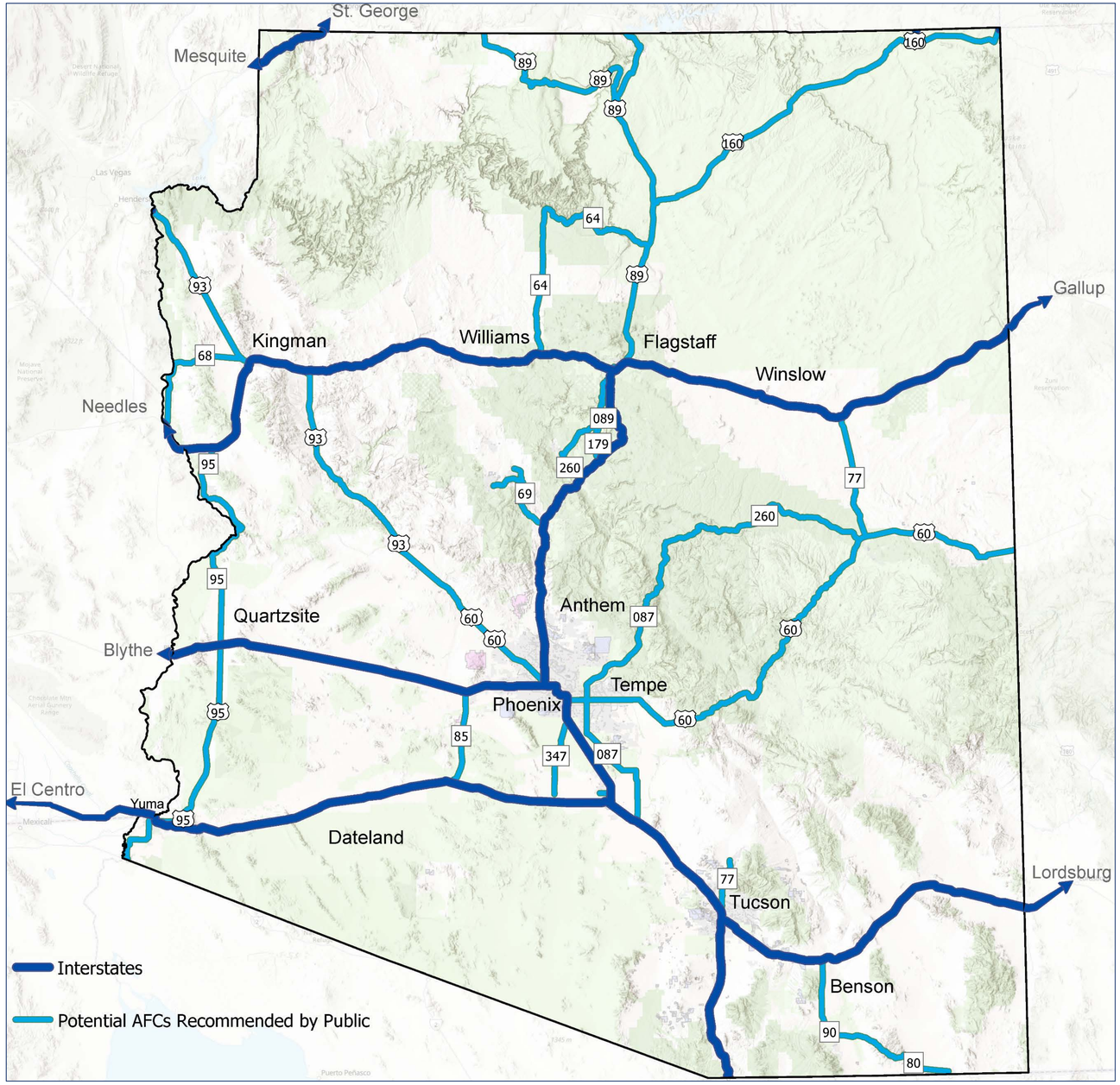
Complete Map

- This combines the previous maps into one
- This also shows the new distances between stations (the black numbers)
- In most cases, ADOT's plan exceeds requirements by leaving smaller gaps than the 50-mile gap goal

New AFC Eligibility

Eligibility for potential new AFCs:

- Must be part of the National Highway System (includes many State Routes and more)
- Should improve state and national connectivity, providing better routes to more places
- Should meet further criteria currently being established by ADOT with the help of public input in this round of outreach



Common Public Suggestions for New AFCs

- **US 60 –** Phoenix to Wickenburg and Globe, Show Low to NM
- **SR 64 –** I-40 to Grand Canyon National Park
- **SR 68 –** US 93 to Bullhead City
- **SR 69 –** I-17 to Prescott
- **SR 77 –** SR 260 to I-40, Tucson to Pinal County
- **SR 80 –** Bisbee to Douglas
- **SR 85 –** I-8 to I-10
- **SR 87 –** Phoenix to Payson
- **SR 89/89A –** SR 69/169 to north end of route
- **US 89 –** Flagstaff to UT
- **SR 90 –** I-10 to Bisbee
- **US 93 –** Wickenberg to I-40, Kingman to Hoover Dam
- **US 95/SR 95 –** San Luis to Bullhead City
- **US 160 –** US 89 to Four Corners
- **SR 179 –** I-17 to Sedona
- **SR 260 –** Payson to Show Low, Camp Verde to Sedona
- **SR 287 –** Casa Grande to I-10
- **SR 347 –** Maricopa to I-10

Project Milestones

2022

- **October and November** – Second round of public outreach
- **November 30** – Refine implementation strategy

2023 and Beyond

- Upgrade existing stations
- Begin work on new stations
- Nominate new AFCs
- Annual plan updates

We Want to Hear From You!

Visit our website to review the plan, sign up for email updates, watch recordings of previous events, and to share your feedback in a number of ways, **including our latest public input survey**!

azdot.gov/EVPlan

Take our brief Self ID questionnaire to help ADOT better understand how successful our outreach efforts are at reaching all Arizonans.

azdot.gov/EVopenhouse-SelfID