

Alaska Electric Vehicle Infrastructure Implementation Plan

EV Working Group Technical Session: Justice40 Benefits

July 12, 2023

WEB VERSION

Let us know what you think!

This is an interactive presentation! Navigate through the slides and you will be prompted for responses as you move through. Other participants will be able to see your responses, but they will be anonymous (not associated with you).

Background Questions for Data Points

The Alaska Energy Authority is working on its annual update to the Alaska Electric Vehicle Infrastructure Implementation plan. Part of that update includes a section outlining the benefits of electric vehicle charging stations for Justice40 communities. The Justice40 Initiative aims to bring resources to disadvantaged communities most impacted by environmental hazards.



What is the Justice40 (J40) Initiative?

- Created by Biden-Harris Administration
- Aims to benefit communities that are marginalized, underserved, overburdened
- Goal that 40% of program benefits go to these communities
- Focused on investments related to clean energy, energy efficiency, remediation of legacy pollution, and more
- More info: <https://www.transportation.gov/equity-Justice40>

What is your zip code?

8 responses

99504

99708

99516

99686

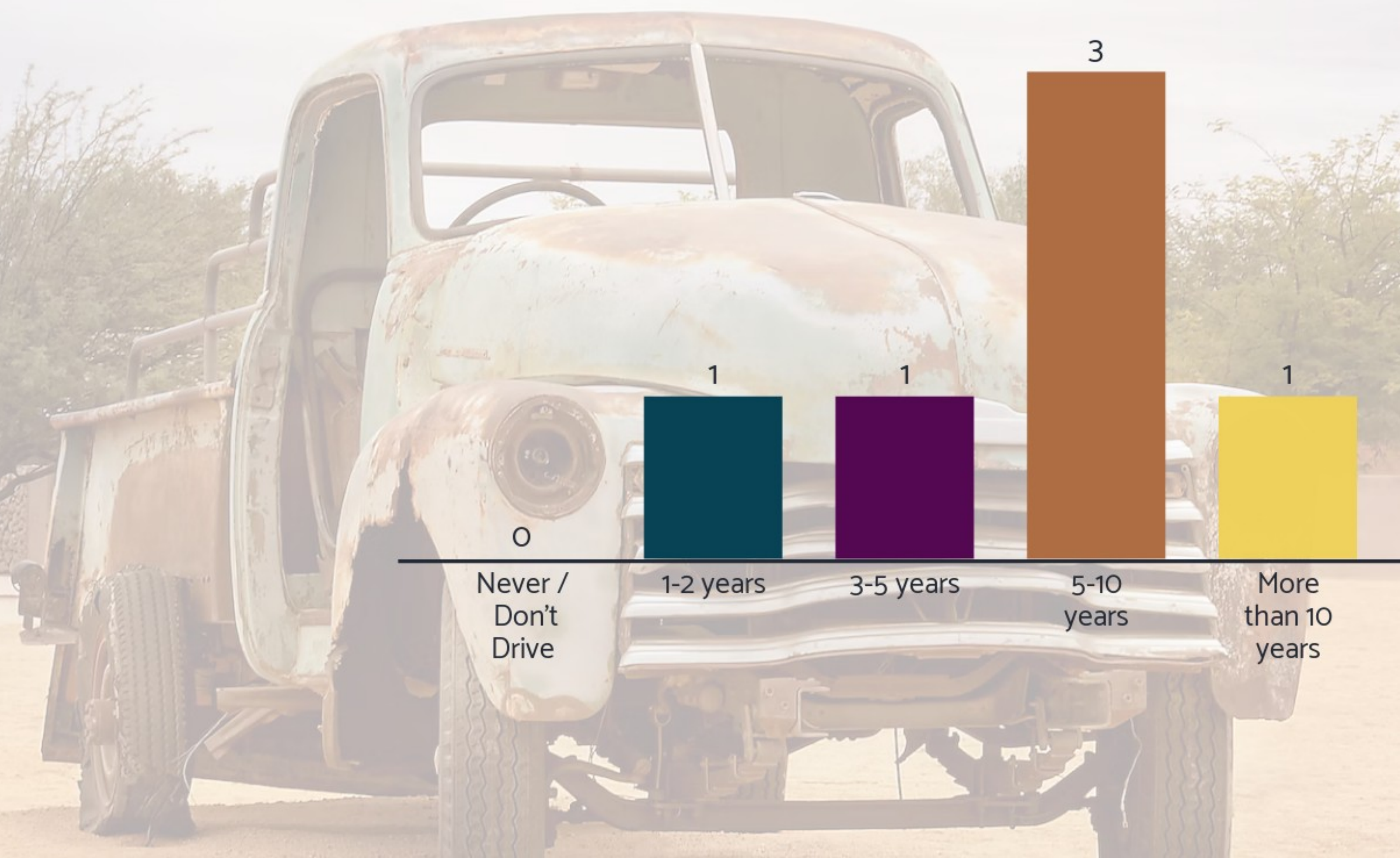
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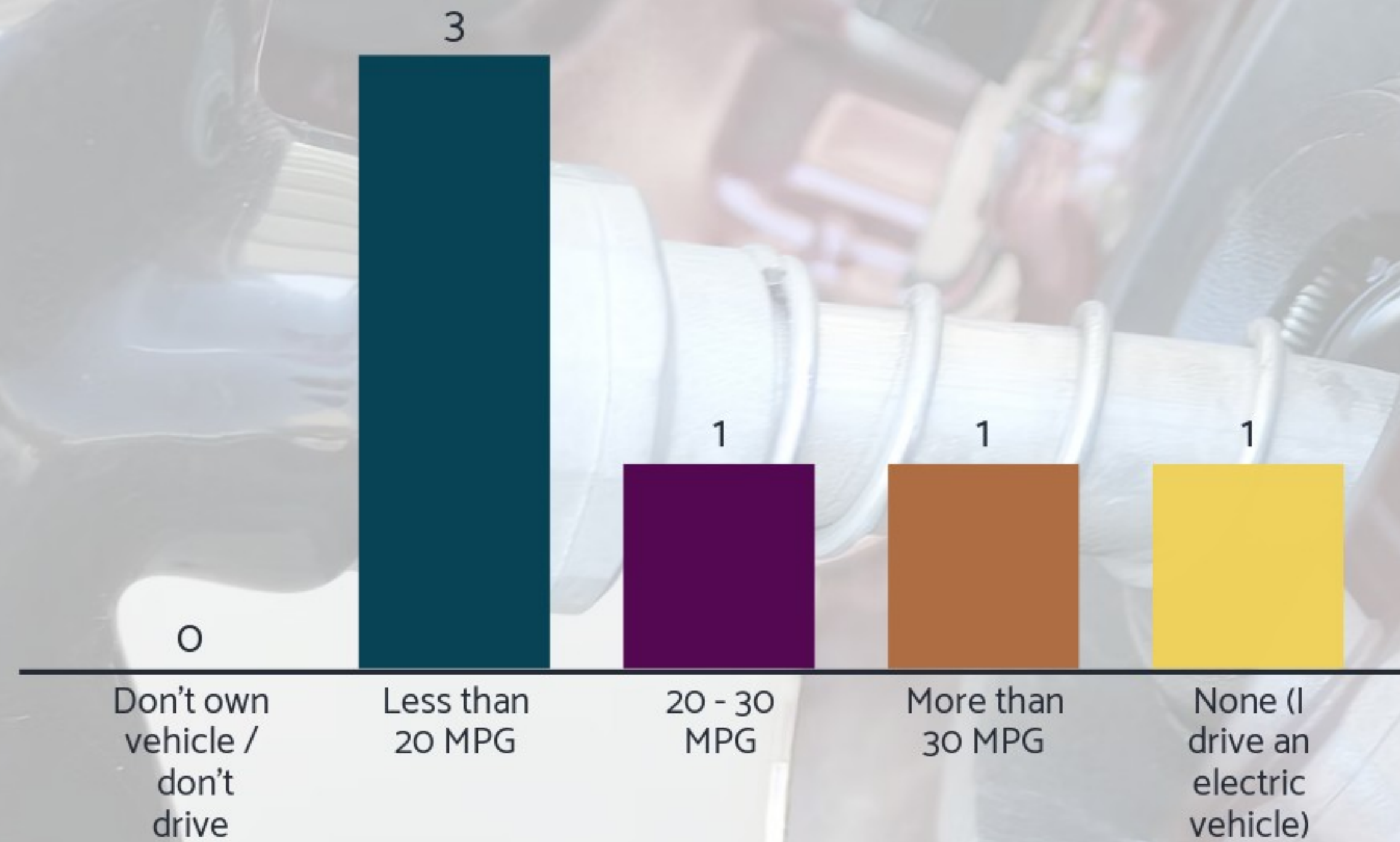
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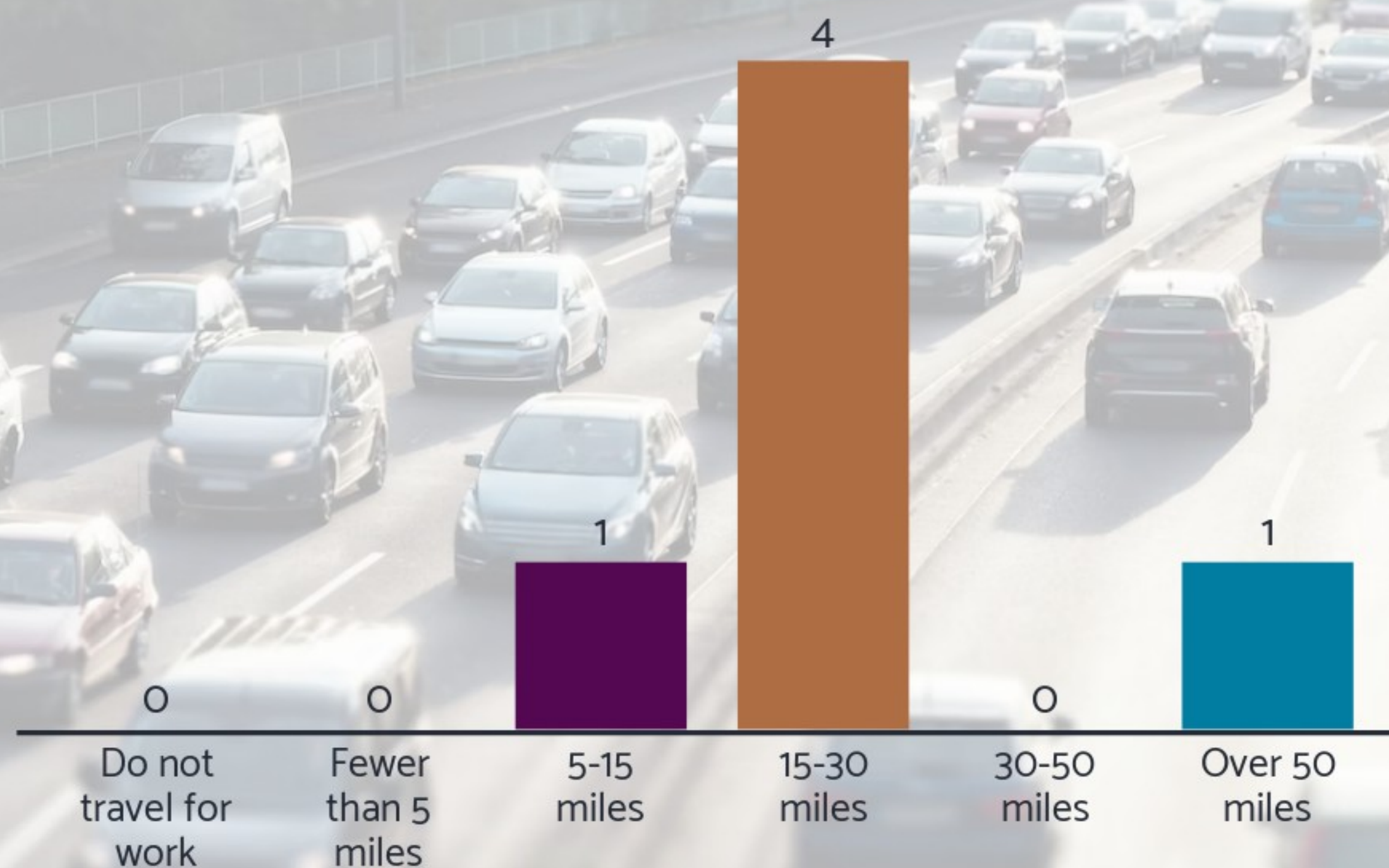
When do you expect to purchase or replace your primary vehicle?



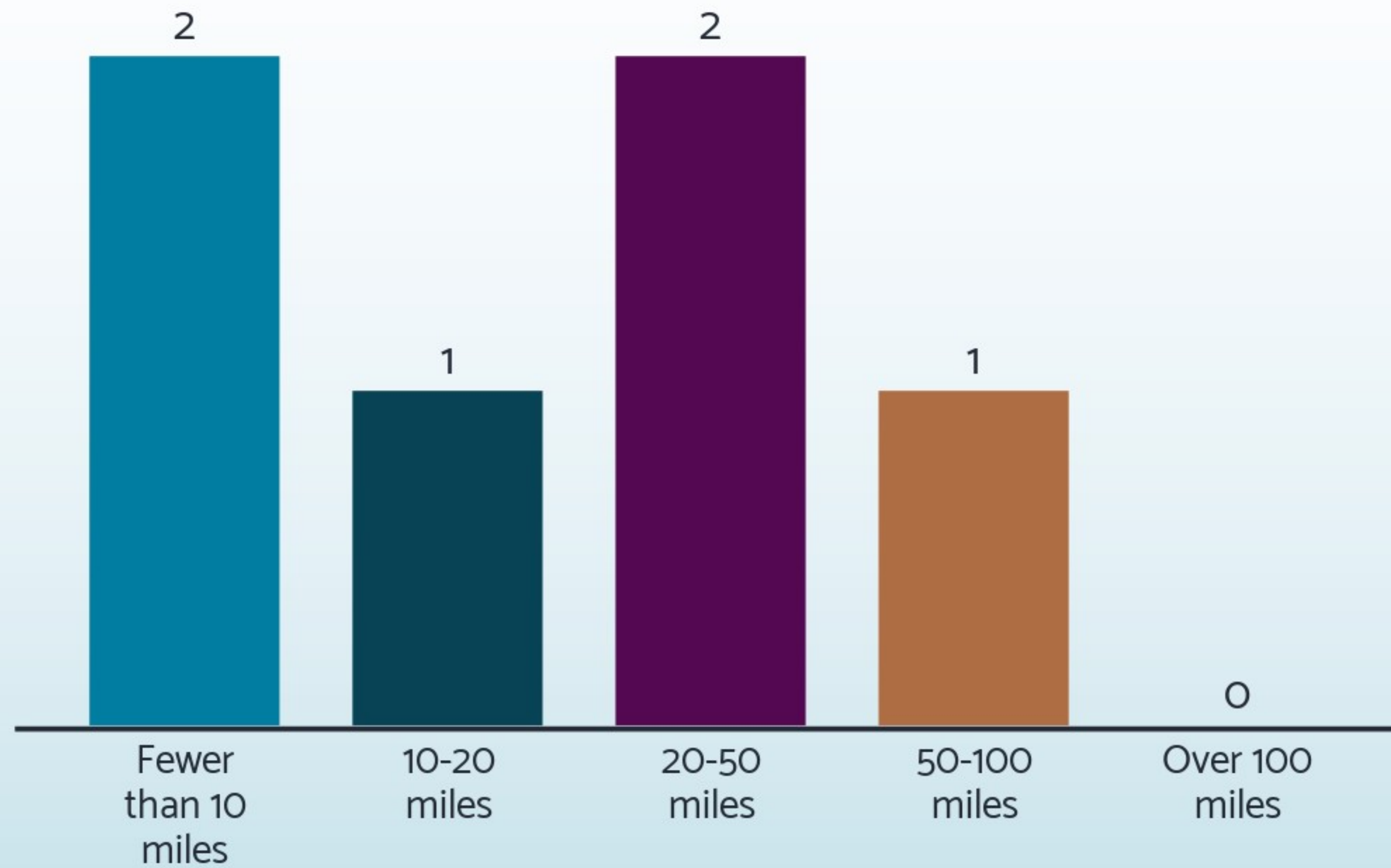
How many miles per gallon (MPG) does your primary vehicle get in the summer?



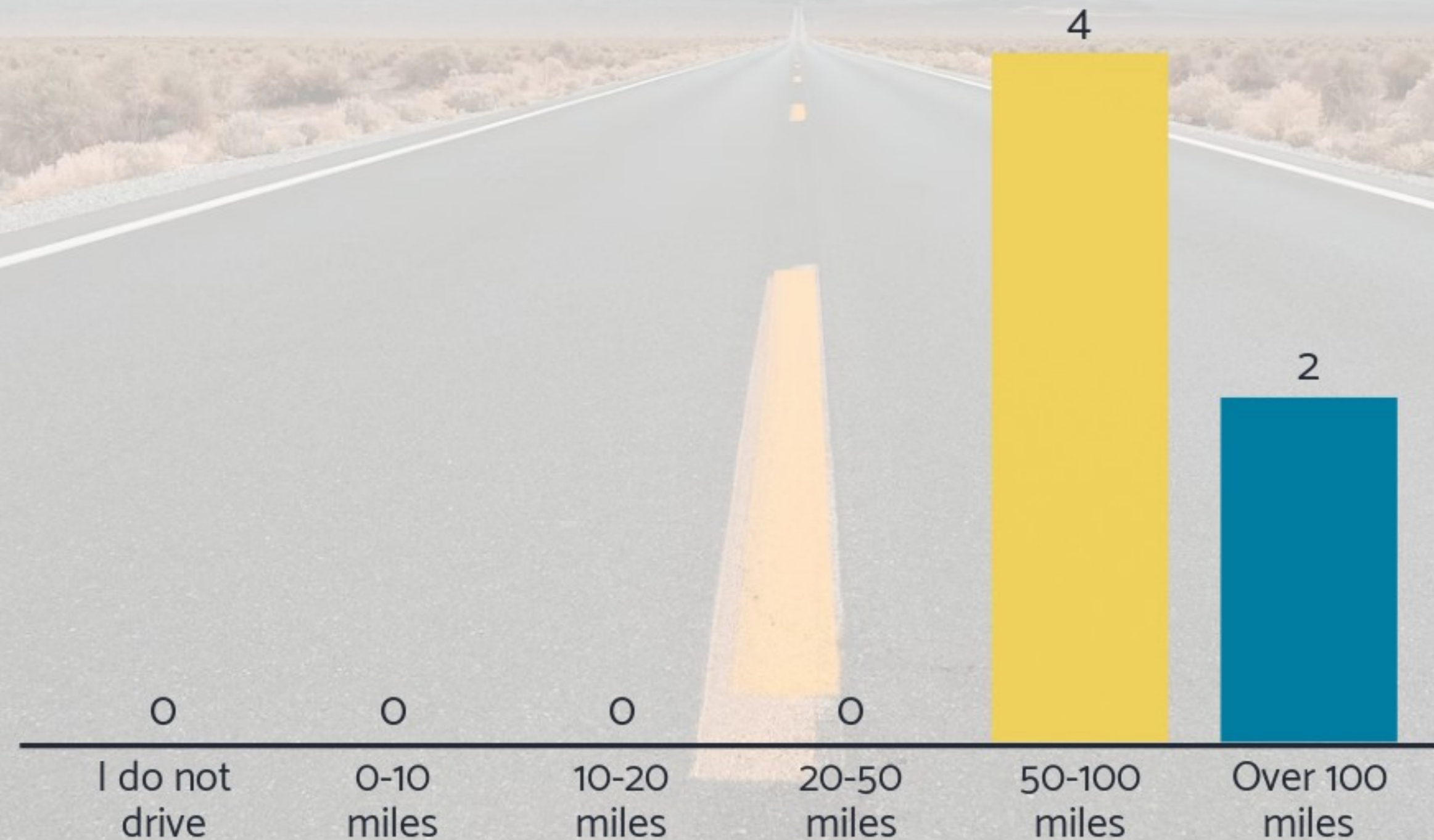
How far do you travel for work (daily, roundtrip)?



How far do you travel for basic goods and services (weekly average)?



How many miles do you estimate you drive per week?





Discussion Questions

How would increased use of EVs benefit your community?

5 responses

Increase air quality

decreased air pollution, especially in winter with idling vehicles; quieter streets and roads

Less air pollution

more money for household necessities outside of gas

Would not benefit; not practical in winter ; batteries will not charge.

How would the installation of EV chargers benefit your community?

14 responses



How would you measure benefits from EV use and EV charger installation?

6 responses

community cost savings by analyzing the amount of EV charging vs potential fuel spent if that EV were an ICE

air pollution levels, especially in winter

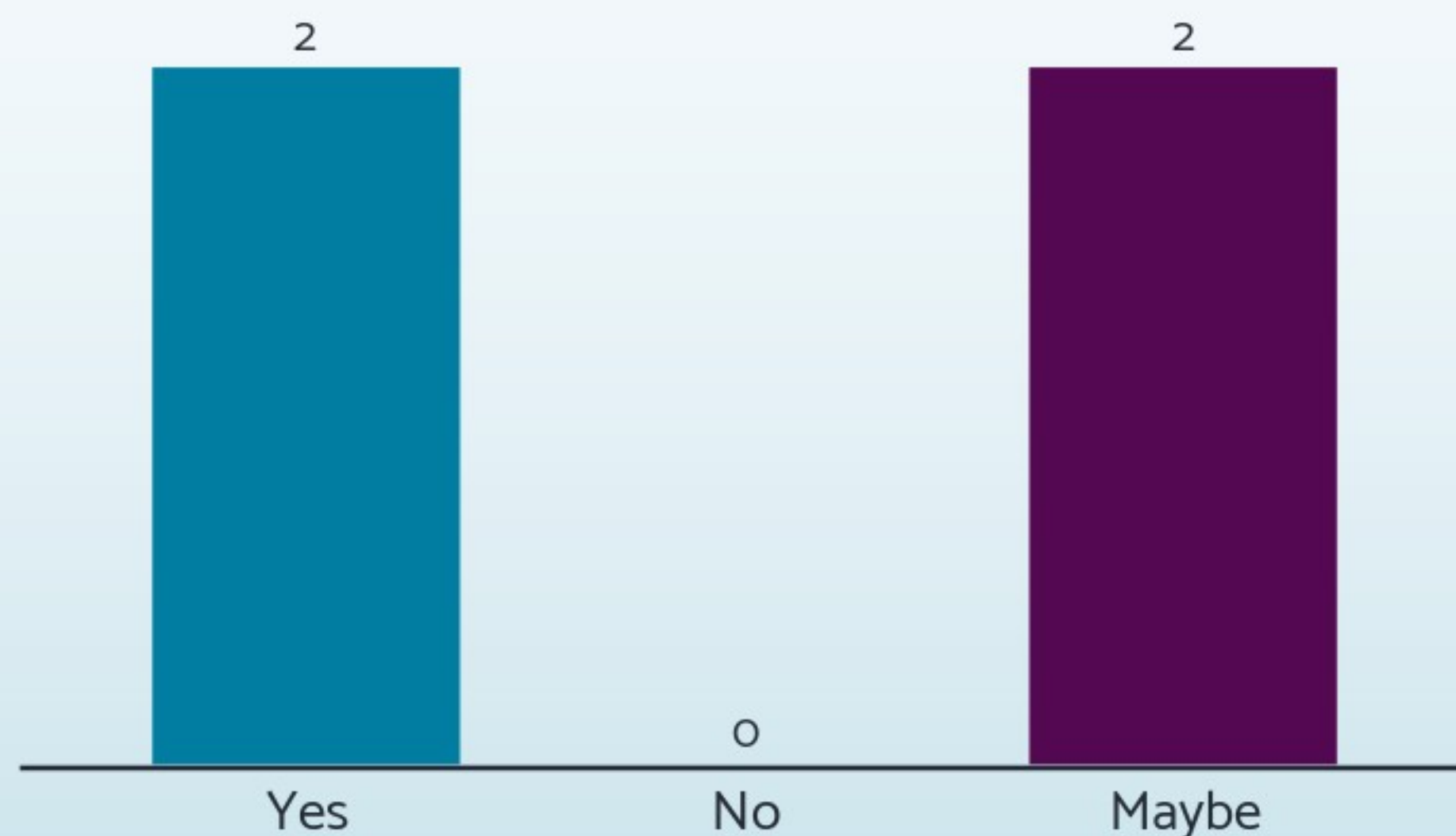
Maybe the amount of vehicles registrations and total miles driven each year

comparison and change over time of Anchorage gas tax receipts and utility usage info in given ZIP code

Not practice

ambient noise levels during peak commute times

Would a charging station in YOUR community make you more likely to purchase an EV?



Would charging stations in DISTANT communities make you more likely to purchase an EV?



What EV-related goals would you set for your community?

3 responses

Place chargers near community hubs ie
grocery stores etc

Available charging

25% adoption by 2030

How to ensure disadvantaged communities benefit from the program

as documented in the Alaska Electric Vehicle Infrastructure Implementation Plan

Proposed Justice40 Benefits

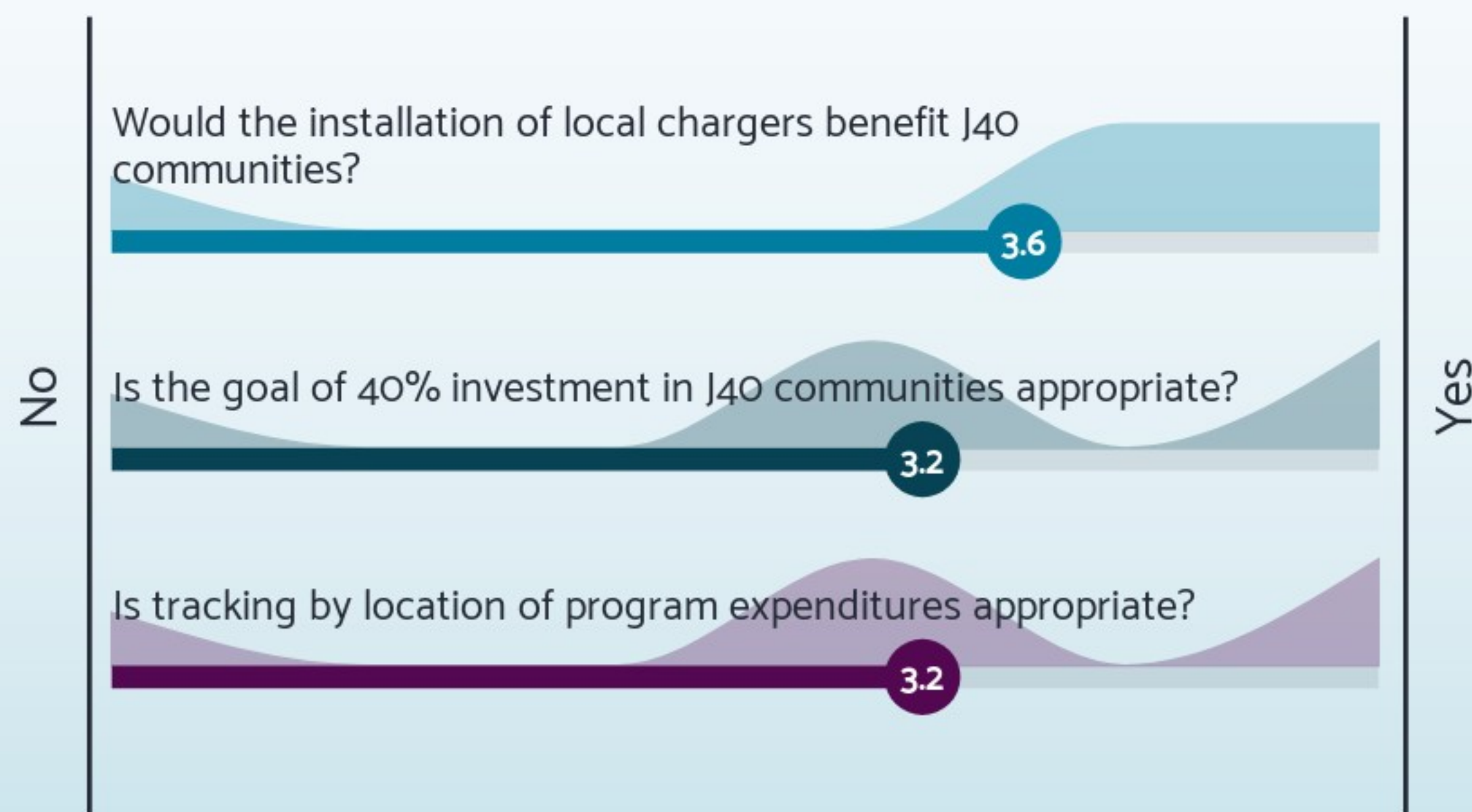
The following slides present the current draft Justice40 benefits in Alaska's Electric Vehicle Infrastructure Implementation 2023 plan update. Please review these draft benefits and let us know what you think.

Improve clean transportation access through the installation of local chargers

- **Metric:** Increase # of charging stations in J40 areas
- **Baseline:** # of EV charging stations prior to RFA Awards
- **Goals:** At least 40% of cost of investment of new charging stations is within J40 boundaries
- **Data/Analysis:** Track expenditures of program and ID the costs for locations within J40 boundaries
- **Community Validation:** Engagement during today's session & future outreach events in J40 communities



PROPOSED BENEFIT: Improve access to clean transportation through installation of local chargers

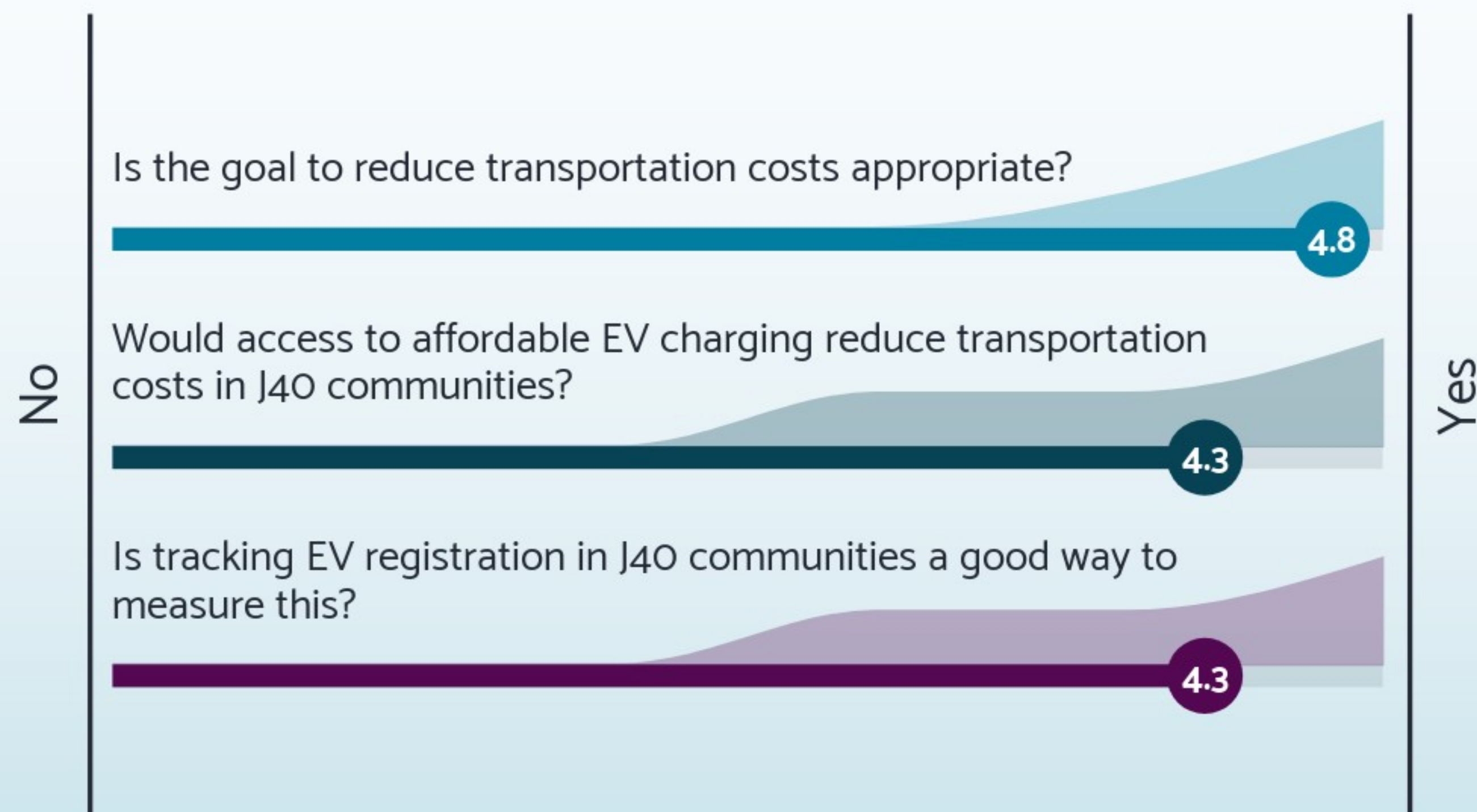


Decrease transportation energy cost burden by enabling reliable access to affordable charging

- **Metric:** Transportation energy cost burden
- **Baseline:** 2020 US Census Data; 2021 EV registration data
- **Goals:** Reduce the transportation energy cost burden in J40 communities
- **Data/Analysis:** Use EV registration data to revise cost burden by census tract, J40 overlay
- **Community Validation:** Engagement during today's session & future outreach events in J40 communities



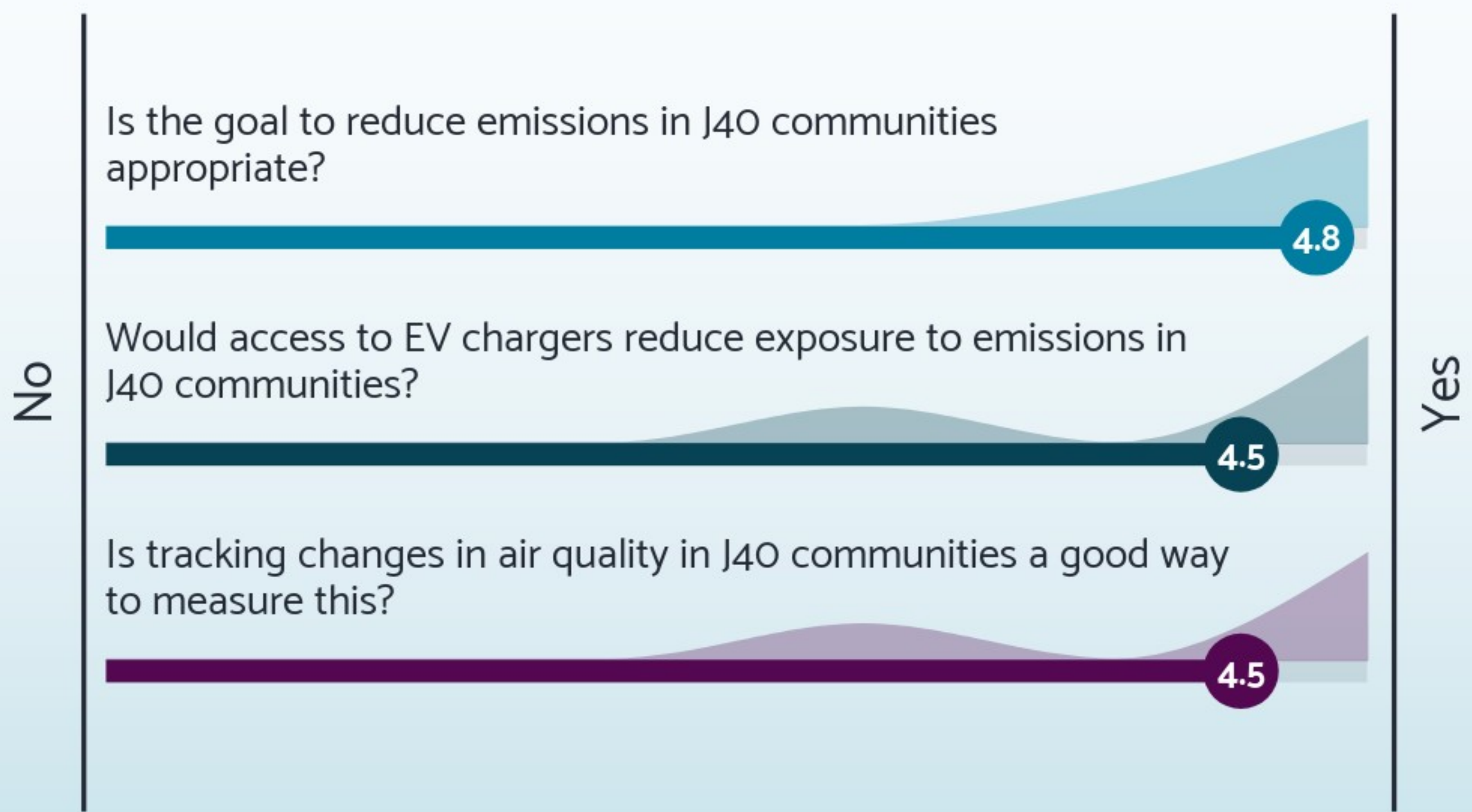
PROPOSED BENEFIT: Decrease transportation costs through access to affordable EV charging



Reduce environmental exposures to transportation emissions

- **Metric:** Reduction in harmful environmental exposure
- **Baseline:** Emissions and air quality models from state and regional planning agencies; 2021 EV registrations
- **Goals:** Reduce PM2.5 and CO2 emissions
- **Data/Analysis:** Use model to determine change and apply cost of impacts to determine benefit; new EV registrations by zip code
- **Community Validation:** Engagement during today's session & future outreach events in J40 communities

PROPOSED BENEFIT: Reduce exposure to transportation emissions

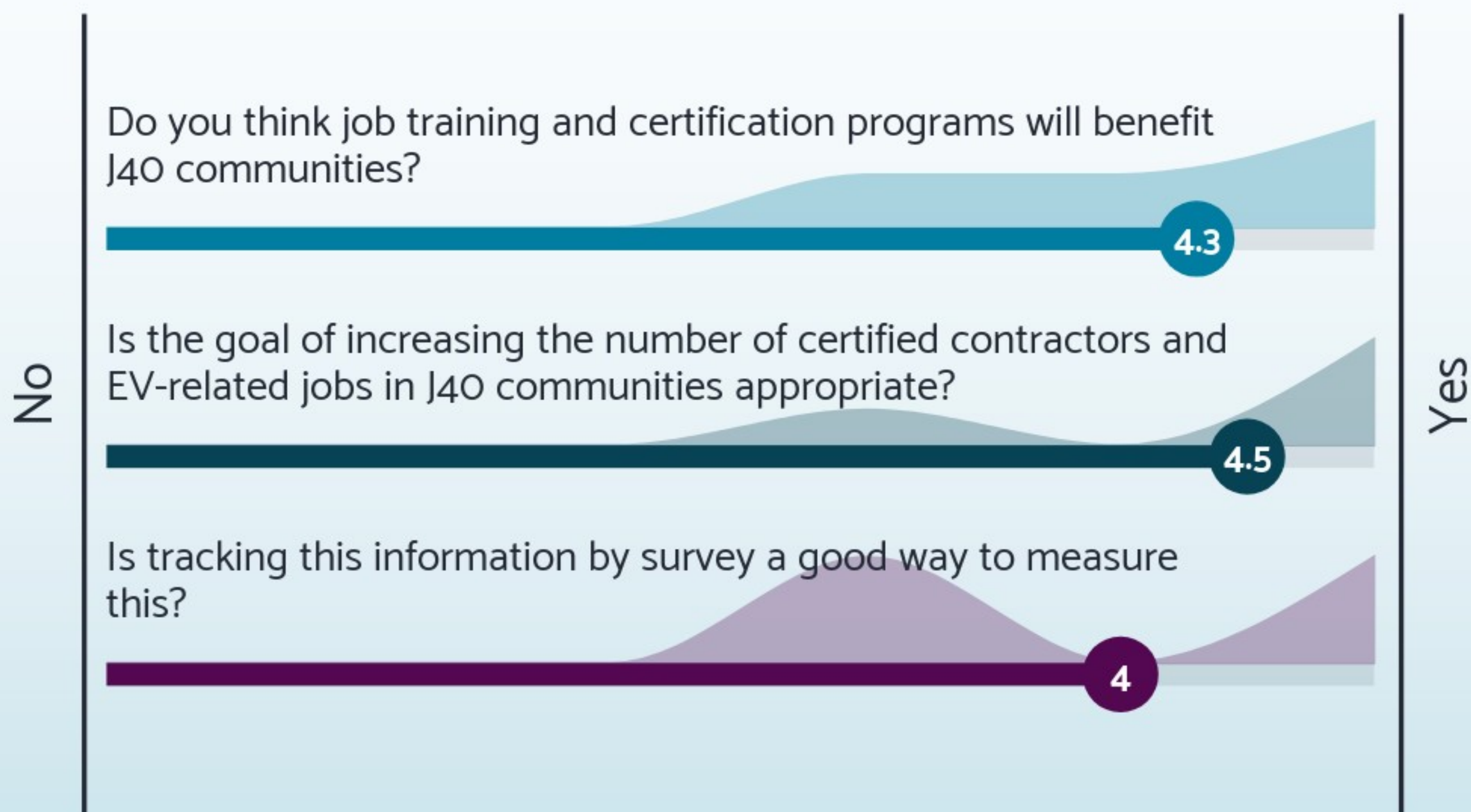




Increase the clean energy job pipeline, job training, and enterprise creation in disadvantaged communities

- **Metric:** Number of new clean energy and related jobs
- **Baseline:** Number of EVITP-certified contractors, and number of electricians, contractors, and engineers working on EV infrastructure in 2022
- **Goals:** Increase EVITP-certified contractors by 5 in 5 years; increase number of electricians, contractors, and engineers working on EV infrastructure
- **Data/Analysis:** EVITP registrations, survey of contracted entities for NEVI program, zip code of employees
- **Community Validation:** Engagement during today's session & future outreach events in J40 communities

PROPOSED BENEFIT: Increase jobs and business opportunities related to EVs

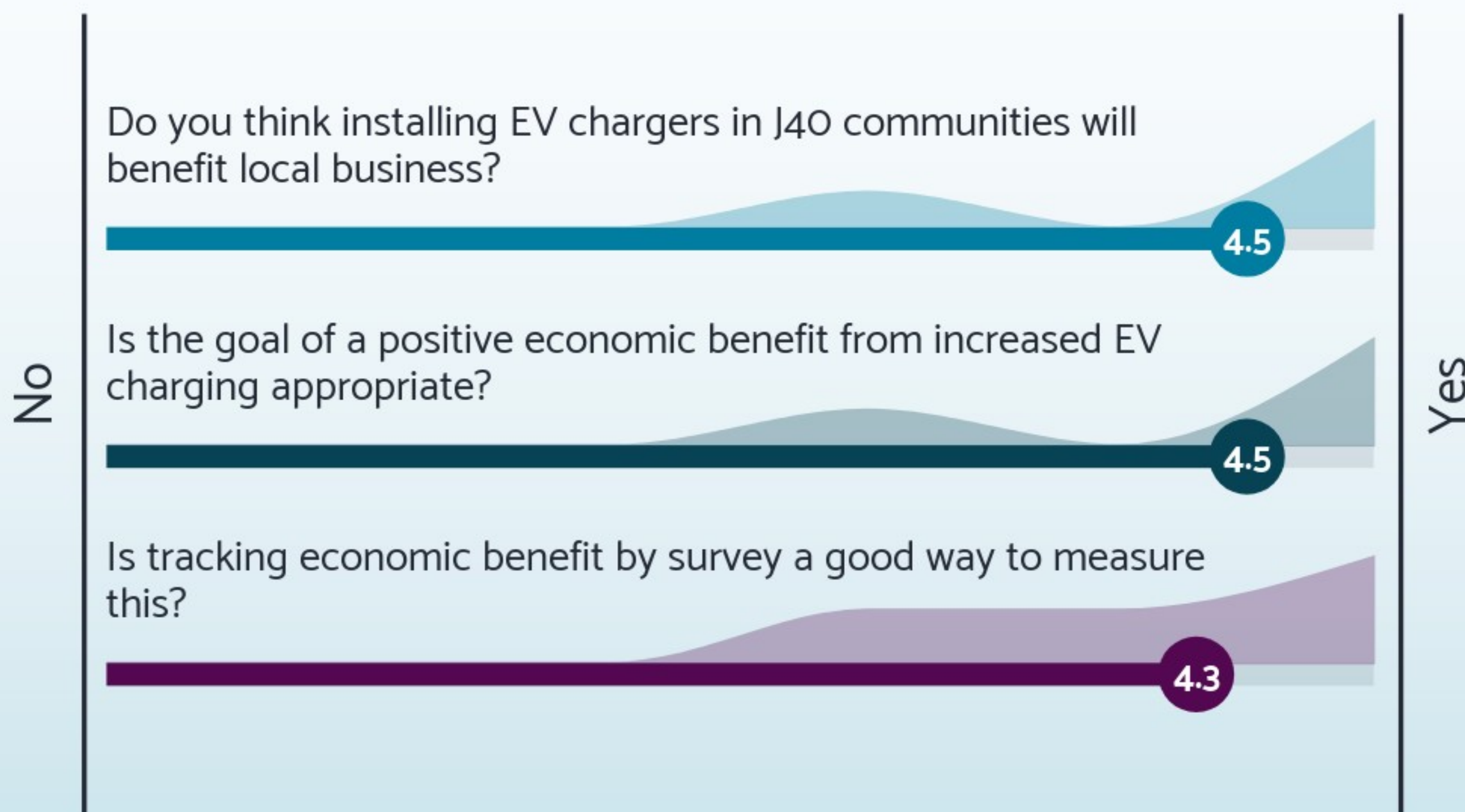




Positive economic impacts to business owners

- **Metric:** Indirect impacts of increased business of retail/site sales while patrons charge
- **Baseline:** With no NEVI creditable sites, there is no existing indirect impact currently
- **Goals:** Show a positive benefit at all sites commissioned through NEVI funding
- **Data/Analysis:** Voluntary sharing of economic benefits by site hosts; survey results
- **Community Validation:** Engagement during today's session & future outreach events in J40 communities

PROPOSED BENEFIT: Increase in local business while patrons charge EVs

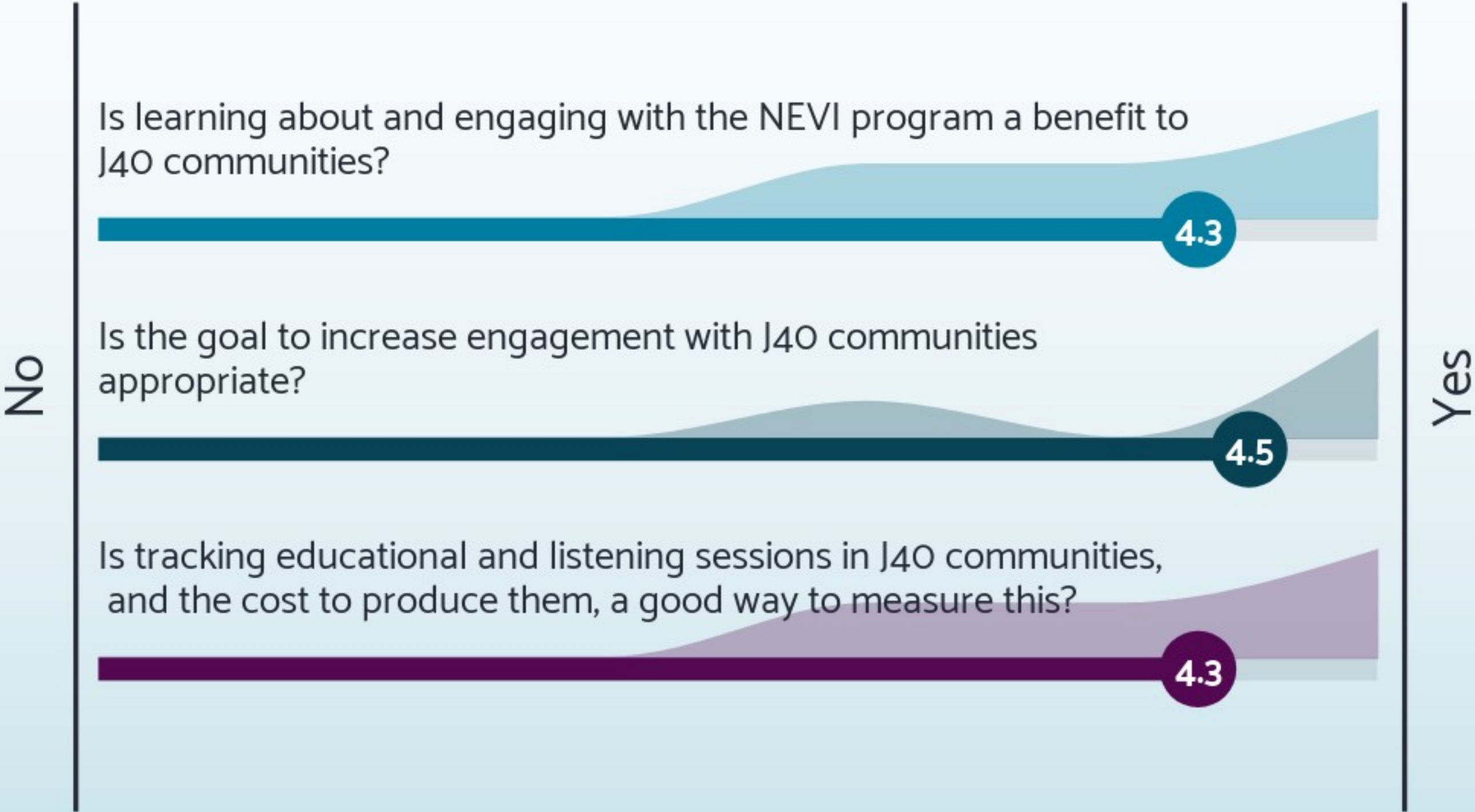


Knowledge-sharing and program awareness

- **Metric:** Community opportunities for engagement about the program
- **Baseline:** Pre-2022 engagements
- **Goals:** Increase engagement with J40 communities
- **Data/Analysis:** Number of educational and listening sessions, labor costs to produce
- **Community Validation:** Engagement during today's session & future outreach events in J40 communities



PROPOSED BENEFIT: Knowledge-sharing and program awareness



Thank you!

Learn more about electric vehicles, read the draft plan, and sign up for our newsletter at
<https://www.akenergyauthority.org/What-We-Do/Renewable-Energy-and-Energy-Efficiency-Programs/Electric-Vehicles>