



North Florida Clean Fuels Coalition Meeting January 24, 2023



Welcome and 2022 Recap

Elizabeth DeJesus and Marci Larson

North Florida Clean Fuels Coalition Co-Directors

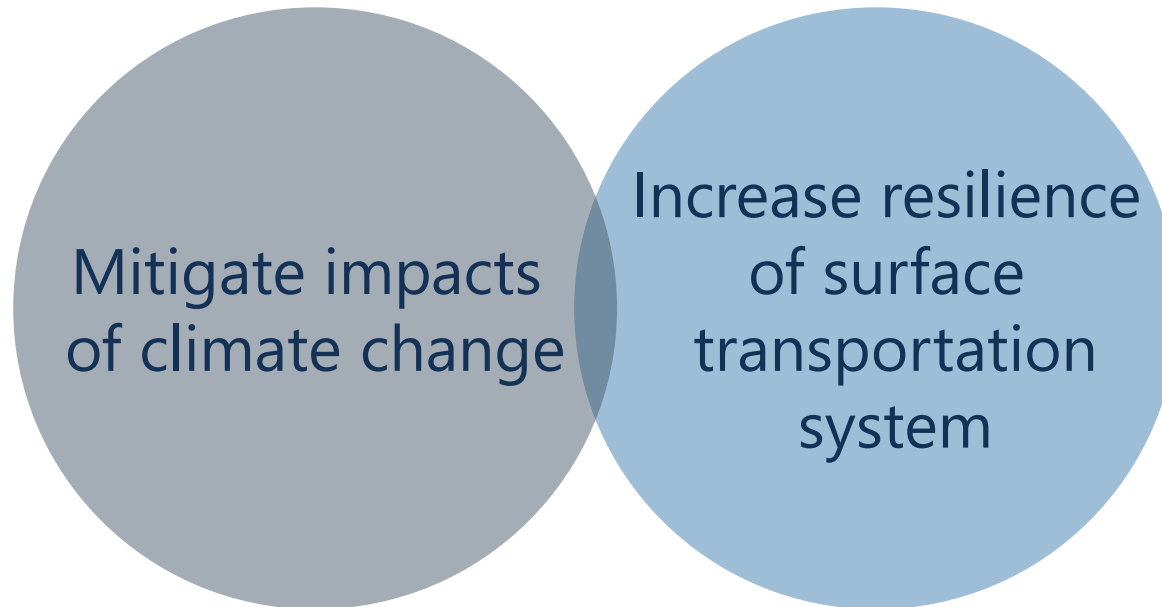
Federal Resources: Clean Fuels and Highway Resilience

Presented by Thomas Everett

RS&H

IIJA (Infrastructure Investment and Jobs Act)

Contains Several Programs Targeted to:



Funding provided via:

- Formula
- Competitive Grants

New IIJA Federal Climate and Resilience Programs:



PROTECT

Promoting Resilient Operations for Transformative, Efficient, and Cost-Saving Transportation



CRP

Carbon Reduction Program



NEVI

National Electric Vehicles Infrastructure Formula Program

PROTECT

- Increase resiliency of surface transportation.
- \$7.3 billion distributed by formula and \$1.4 billion through competitive grants.
- May be used on highways, public transportation, or ports.
- Competitive planning grants communities to assess vulnerabilities and plan transportation improvements and emergency response strategies.

PROTECT

- Example Eligible Activities:
 - Planning Activities
 - Resilience Improvements to roads, bridges, etc.
 - Strengthen and protect evacuation routes
 - At-Risk Coastal Infrastructure activities
- Status
 - States have received their FY 22 and FY 23 apportionments
 - Competitive grant NOFO expected winter/spring of 2023

CRP

- \$6.4 billion over five years, distributed by formula to the States.
- By November 15, 2023, states are required to develop a Carbon Reduction Strategy in consultation with MPOs.
- States and MPOs encouraged to fund projects supporting the State's Carbon Reduction Strategy.
- CRP funding may be used on projects that lower transportation emissions.

CRP

- Example Eligible Activities:
 - Traffic monitoring, management, and control facility or program
 - Construction, planning, and design of trail facilities
 - Advanced transportation and congestion management technologies
 - ITS deployment and installation of vehicle-to-infrastructure communications equipment
 - Project that supports deployment of alternative fuel vehicles, including–
 - acquisition, installation, or operation of publicly accessible EV charging infrastructure or hydrogen, natural gas, or propane vehicle fueling infrastructure
 - purchase or lease of zero-emission construction equipment and vehicles
 - diesel engine retrofits

NEVI

- Funding to States for electric vehicle charging infrastructure network
- \$5 billion over five years distributed to States by formula
- Initial focus on designated Alternative Fuel Corridors
- Once the national network goals are met, funding may be used on any public road / publicly accessible location
- Each State must have an Electric Vehicle Infrastructure Deployment Plan

NEVI

- Limited to projects directly related publicly accessible EV charging
- Example Eligible Activities:
 - Acquisition/installation of EV charging infrastructure
 - Operating assistance for costs allocable to operating and maintaining EV charging infrastructure acquired or installed under the program (for up to 5 years)
 - Acquisition or installation of traffic control devices to provide directional information to EV charging infrastructure acquired, installed, or operated under the program, and on-premises signs providing information about such infrastructure
 - Mapping and analysis activities to evaluate current and future demand
 - Data sharing about EV charging infrastructure
- Status
 - States have received their FY 22 and FY 23 apportionments
 - No guidance on competitive grants yet

Sample of Other Federal Climate and Resilience Programs:

IJA and IRA

DOT

Charging and Fueling Infrastructure Grants

FTA Low or No-emission Buses

FTA Grants for Buses and Facilities

Electric or Low Emitting Ferries

Reduction of Truck Emissions at Ports

EPA

Clean Heavy-duty Vehicles

Clean School Bus

DOE

Battery Material Processing

Li-Ion Battery Recycling Prize Competition

Energy Efficiency and Conservation Grants

Clean Hydrogen Hubs

Treasury (Tax Credits)

Clean hydrogen Production

Biodiesel and Renewable Diesel

Alternative Fuels

2nd Generation Biofuel Alternatives

Thank You

Questions?

RS&H



Local Implementation

Jeff Sheffield

Executive Director, North Florida TPO



2023 NORTH FLORIDA CLEAN FUELS COALITION KICKOFF

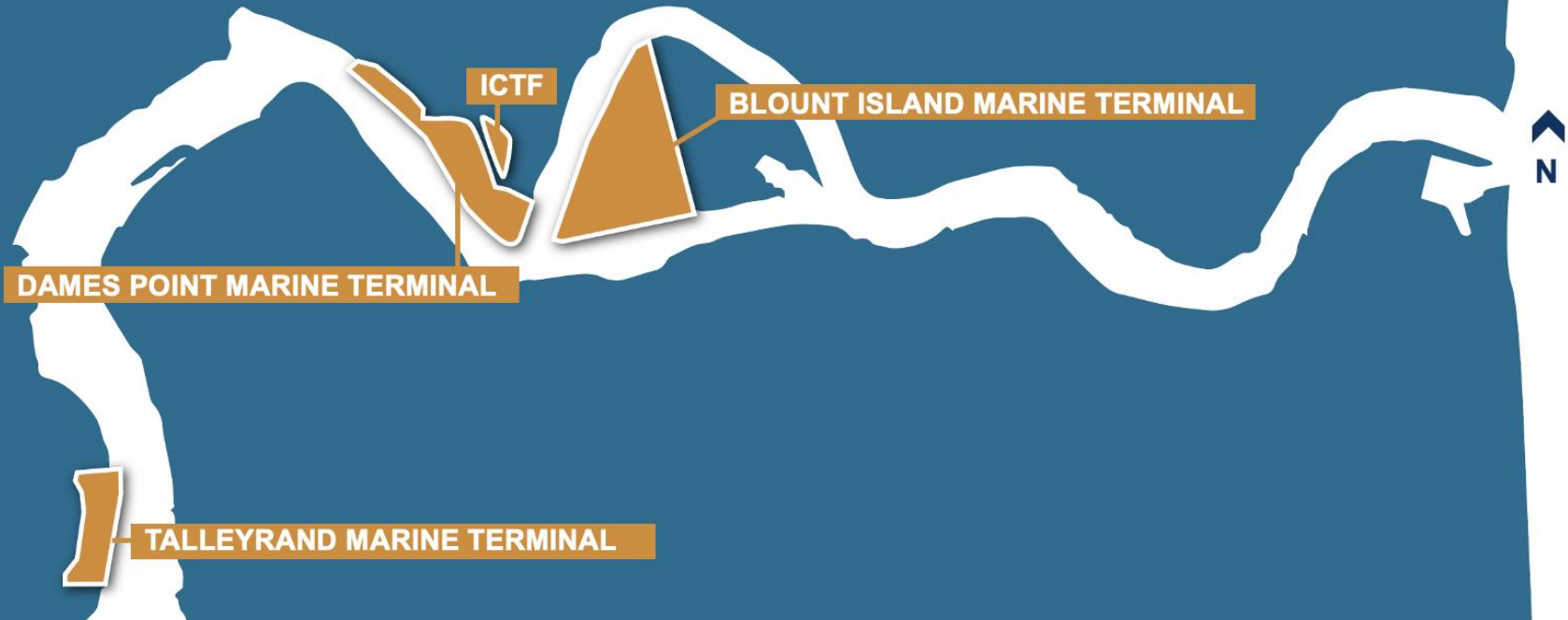
JANUARY 2023

JAXPORT OVERVIEW

STRATEGIC LOCATION



TERMINAL LOCATIONS





BLOUNT ISLAND MARINE TERMINAL



DAMES POINT MARINE TERMINAL



TALLEYRAND MARINE TERMINAL



CARGO DIVERSITY





CHICAGO

DETROIT

MEMPHIS

NASHVILLE

ATLANTA

JACKSONVILLE

ORLANDO

MIAMI

 Florida East Coast Railway





RAIL CONNECTIONS



THE BEGINNING





WORLD LEADER IN LIQUEFIED NATURAL GAS (LNG)



INTERMODAL CONTAINER TRANSFER FACILITY (ICTF)





BERTH ELECTRIFICATION & ELECTRIC SHIP TO SHORE CRANES



JAXPORT

LNG BUNKERING

THE PRESENT

JAXPORT CONTAINER TERMINAL (JCT) MODERNIZATION PROJECT BLOUNT ISLAND MARINE TERMINAL



SSA Jacksonville
A Carrix Enterprise



THE FUTURE





JAXPORT EXPRESS



PROJECT INITIATION: MUTLI-TENANT DRIVEN PURSUIT TO DECARBONIZE MARITIME & LOGISTICS OPERATIONS

PROJECT MAGNITUDE: JAXPORT EXPRESS WILL BE A FLAGSHIP PROJECT FOR THE EAST COAST

MAJOR PROJECT COMPONENTS

- **UPSIZING TO 300 ELECTRIC REEFER PLUG CAPACITY**
- **CARGO HANDLING EQUIPMENT DEPLOYMENT**
 - **SIX TIER 4 HYBRID-ELECTRIC RTGS;**
 - **SEVEN TIER 4 TOP PICKS;**
 - **SIXTEEN ZE HIGH-CAPACITY FORKLIFTS;**
 - **TEN ZE YARD TRACTORS/HOSTLERS;**
 - **FIFTEEN DC FAST CHARGING STATIONS AND MAKE-READY STUB-OUTS; AND**
 - **DEVELOPMENT OF PORT AND MARITIME ELECTRIFICATION PLAN (PMEP)**

PROJECT COST: \$47,036,000/ \$23.5M PIDP GRANT





STRATEGIC INFRASTRUCTURE DEVELOPMENT

TENANT COORDINATION

- CONTAINER TERMINALS
- AUTO PROCESSING
- VESSEL REQUIREMENTS & CAPABILITIES
- TENANT PLANS FOR DECARBONIZATION

UTILITY PLANNING

- RELIABILITY-ORIENTED DESIGN FOR ELECTRIFICATION
- MICROGRID DEVELOPMENT

JUSTIN RYAN

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Alternative Fuels, Vehicles and Infrastructure Master Plan

Ben Moore

Sustainability Leader, RS&H



Master Plan Surveys

PublicInput.com/cfplanofficials

PublicInput.com/cfplanindustry



EV Education Challenges and Strategies

M. Victoria Pennington
Marketing & Public Affairs

Survey conducted 4/13 – 6/30/22

Promoted via social media, Facebook advertising and e-newsletters

<https://publicinput.com/NFLEVsurvey>



PARTICIPANTS

1,177

RESPONSES

13,713

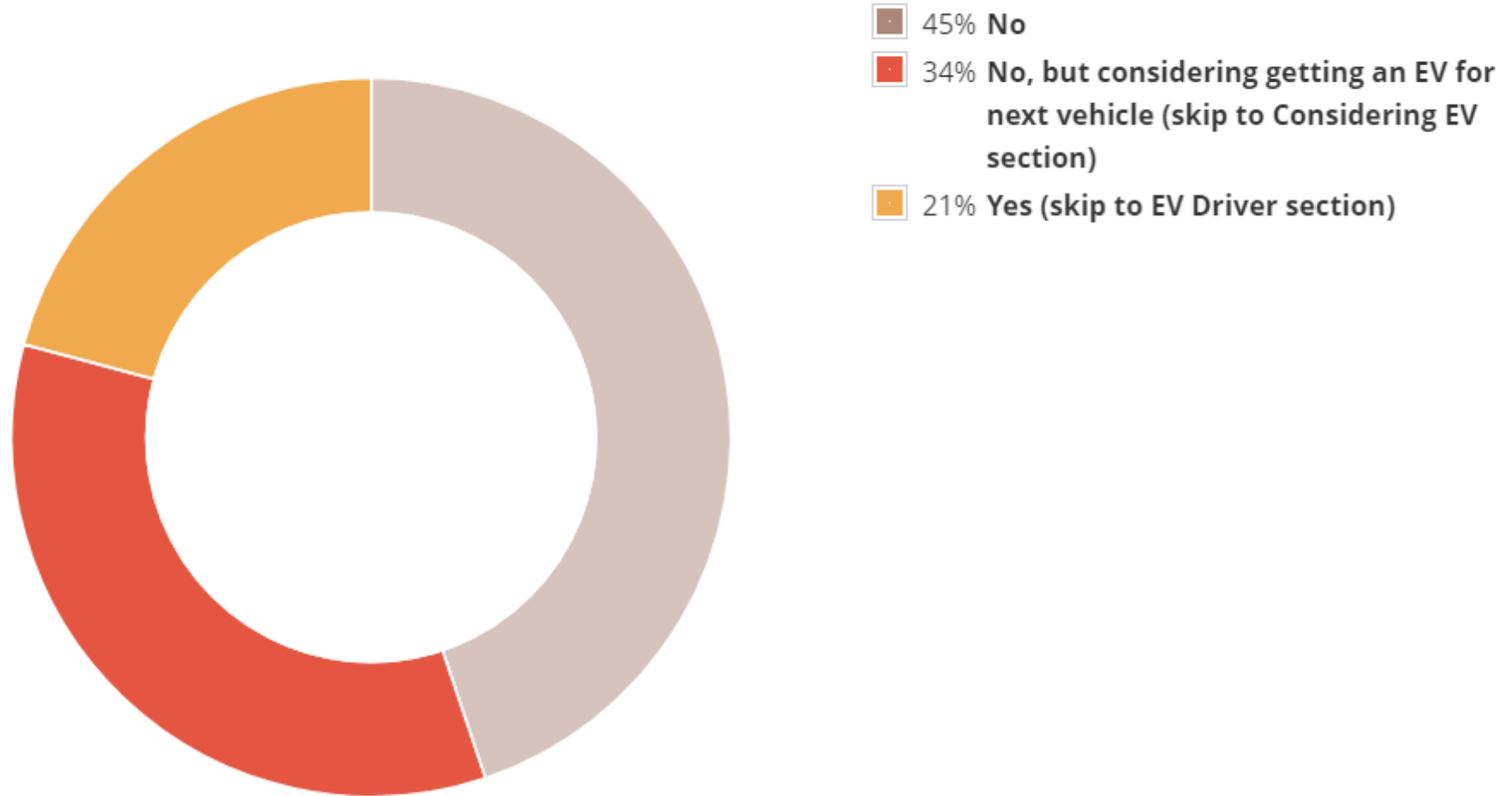
COMMENTS

1,481

SUBSCRIBERS

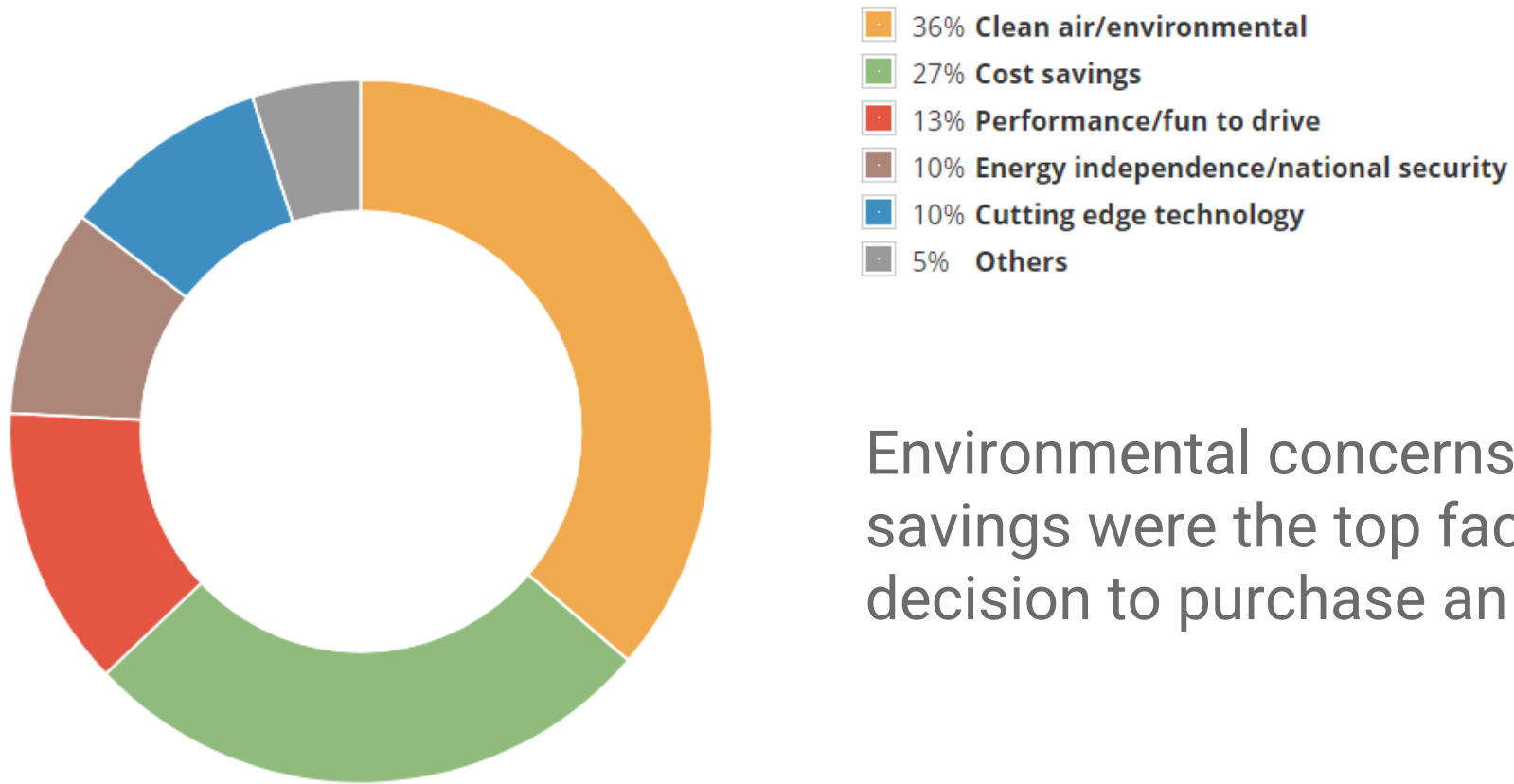
613

Do you currently own or lease an EV?



1,166 respondents

What was the ONE most important factor in selecting an EV over gas-powered vehicles?



Environmental concerns and cost savings were the top factors driving decision to purchase an EV.

240 respondents

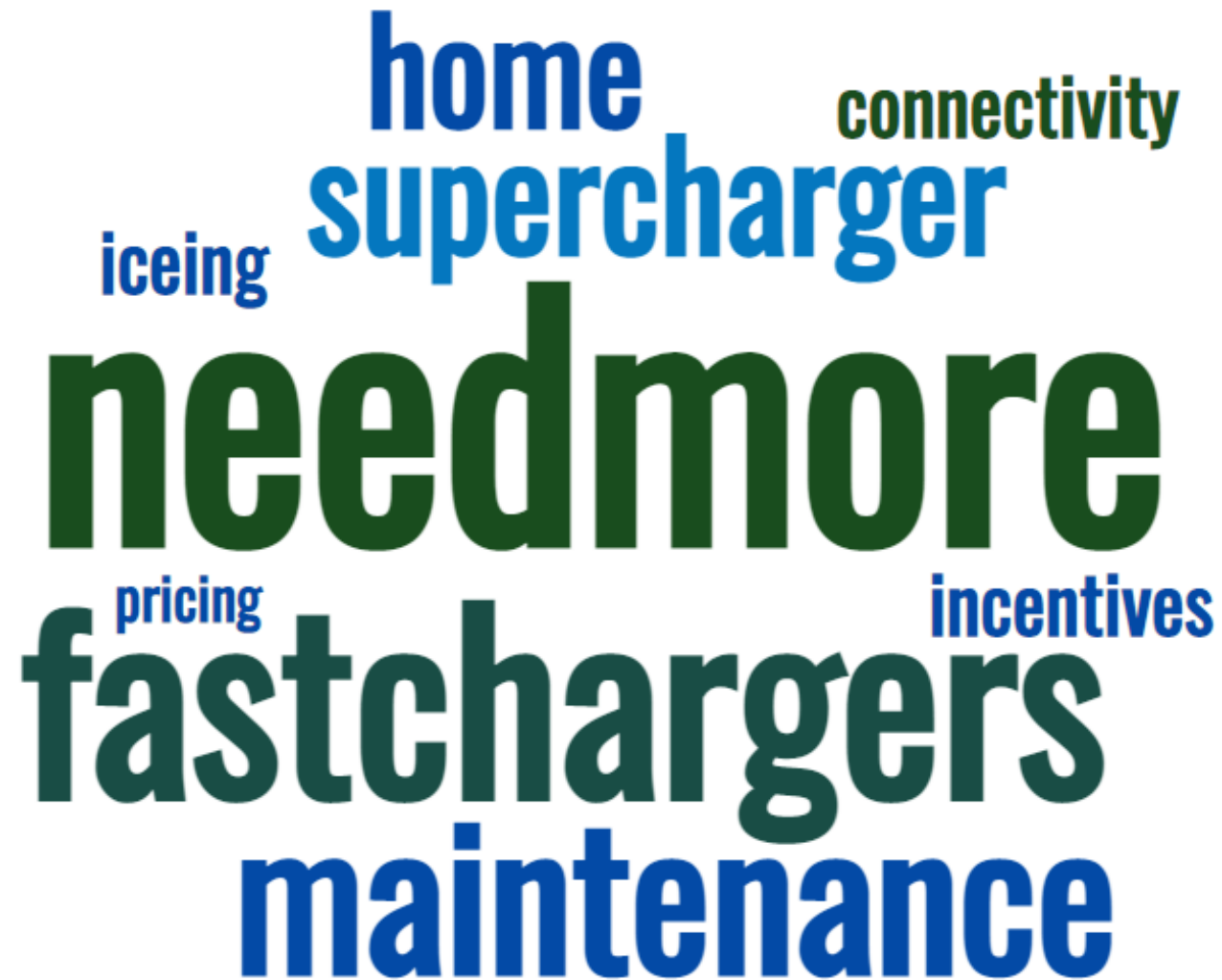
How important were the following factors in your decision to purchase/lease an EV?

	Very	Somewhat	Not at all
Federal EV tax credit	35% Very	30% Somewhat	34% Not at all
Inexpensive home charging	74% Very	22% Somewhat	4% Not at all
State or local incentives	20% Very	33% Somewhat	47% Not at all
Free charging at select public locations	35% Very	39% Somewhat	26% Not at all
Utility charging rebate	32% Very	31% Somewhat	37% Not at all

227 respondents

Inexpensive Home Charging was cited as the most important factor for EV drivers

What gaps, if any, do you find in the region's public EV charging network?



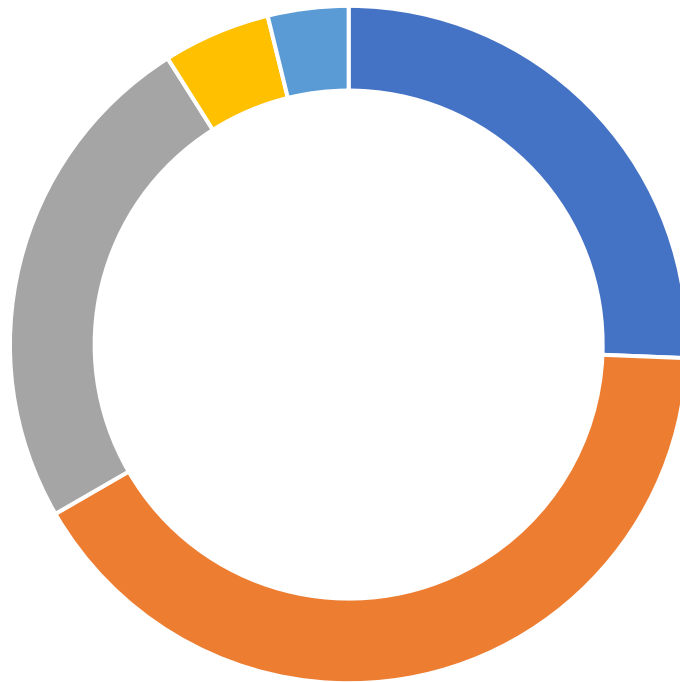
What gaps, if any, do you find in the region's public EV charging network?

- **Beaches**

- Brooklyn
- City-run facilities
- Downtown
- I-10
- I-95
- Jax to Gainesville
- Jax to Orlando
- Jax to Tampa via 301

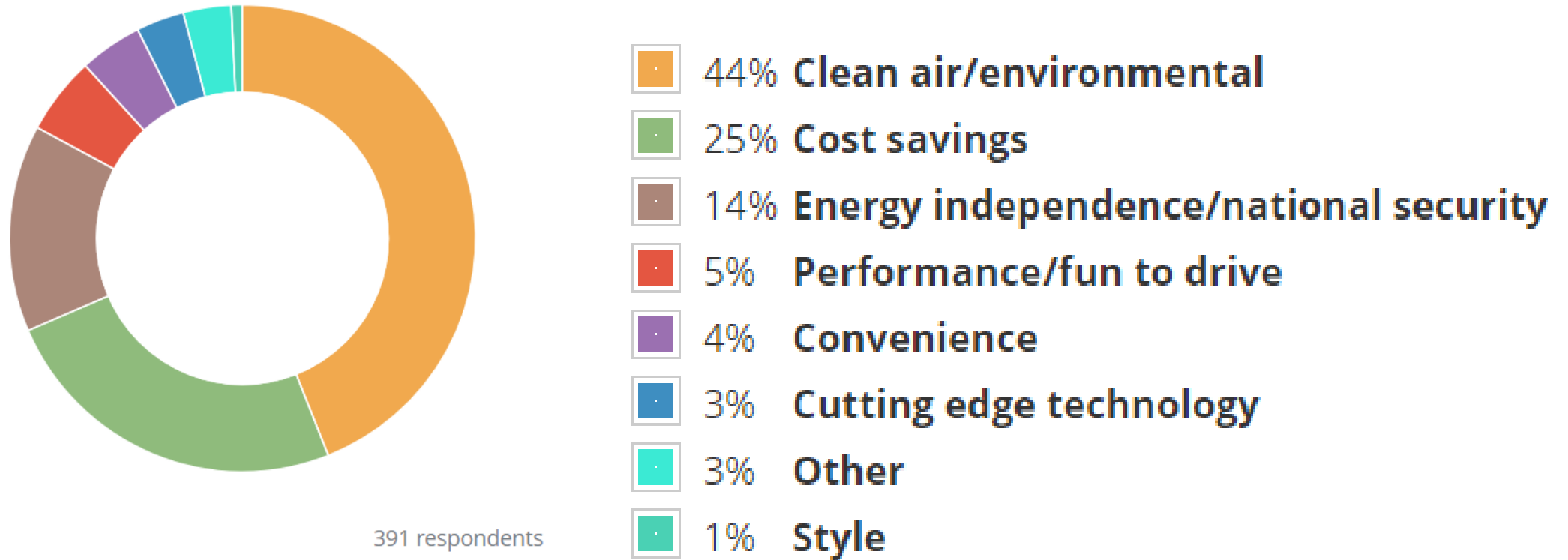
- North Jacksonville
- Orange Park
- Outside urban area
- Popular Jax destinations
- Riverside
- San Jose/295
- Southside
- St. Augustine
- Westside

What type of education, events or resources could the North Florida Clean Fuels coalition provide to engage EV drivers?



- Education – pros and cons
- Charger location/info/more
- Test drive/events
- Incentives
- Solar

What is the MOST important factor in your consideration of an EV or gas-powered vehicle?



How important are the following factors in your decision to purchase an EV?

	Very	Somewhat	Not at all
Federal EV tax credit	51% Very	40% Somewhat	10% Not at all
Inexpensive home charging	79% Very	18% Somewhat	3% Not at all
State or local incentives	44% Very	47% Somewhat	9% Not at all
Free charging at select public locations	59% Very	32% Somewhat	9% Not at all
Utility charging rebate	48% Very	40% Somewhat	12% Not at all

392 respondents

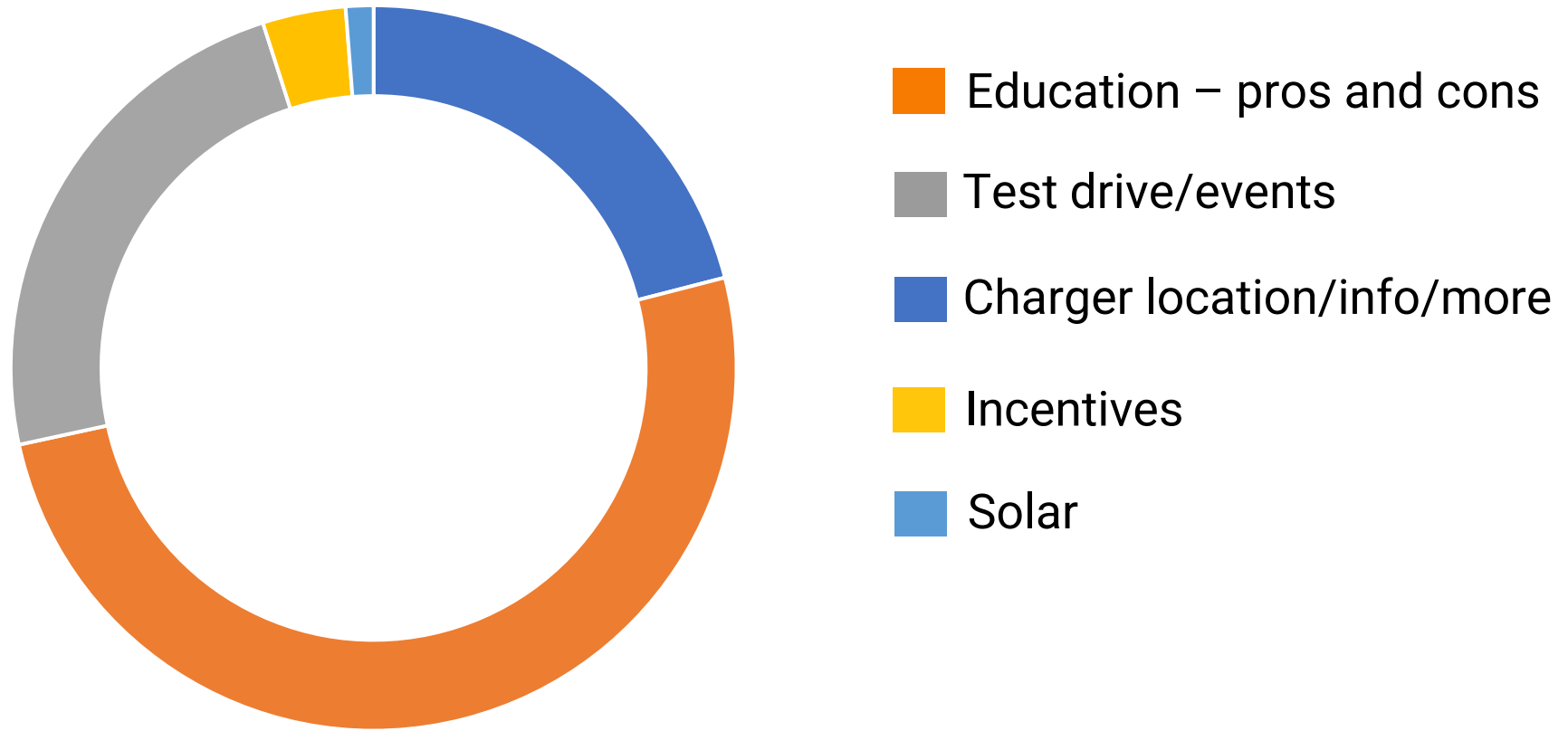
Inexpensive home charging is very important to those considering EVs.

To what degree have the following factors held you back from purchasing an EV at this point?

	Very much	Somewhat	Not at all
Not ready to purchase a new vehicle yet	46% Very much	35% Somewhat	19% Not at all
Cost	48% Very much	42% Somewhat	10% Not at all
Concerns about range	42% Very much	40% Somewhat	18% Not at all
EV availability - desired type/features	40% Very much	36% Somewhat	25% Not at all
Location of charging stations	58% Very much	31% Somewhat	11% Not at all
Other (explain below)	25% Very much	12% Somewhat	63% Not at all

386 respondents

What type of education, events or resources could the North Florida Clean Fuels Coalition provide to help people learn more about EV's?



Don't Want an EV

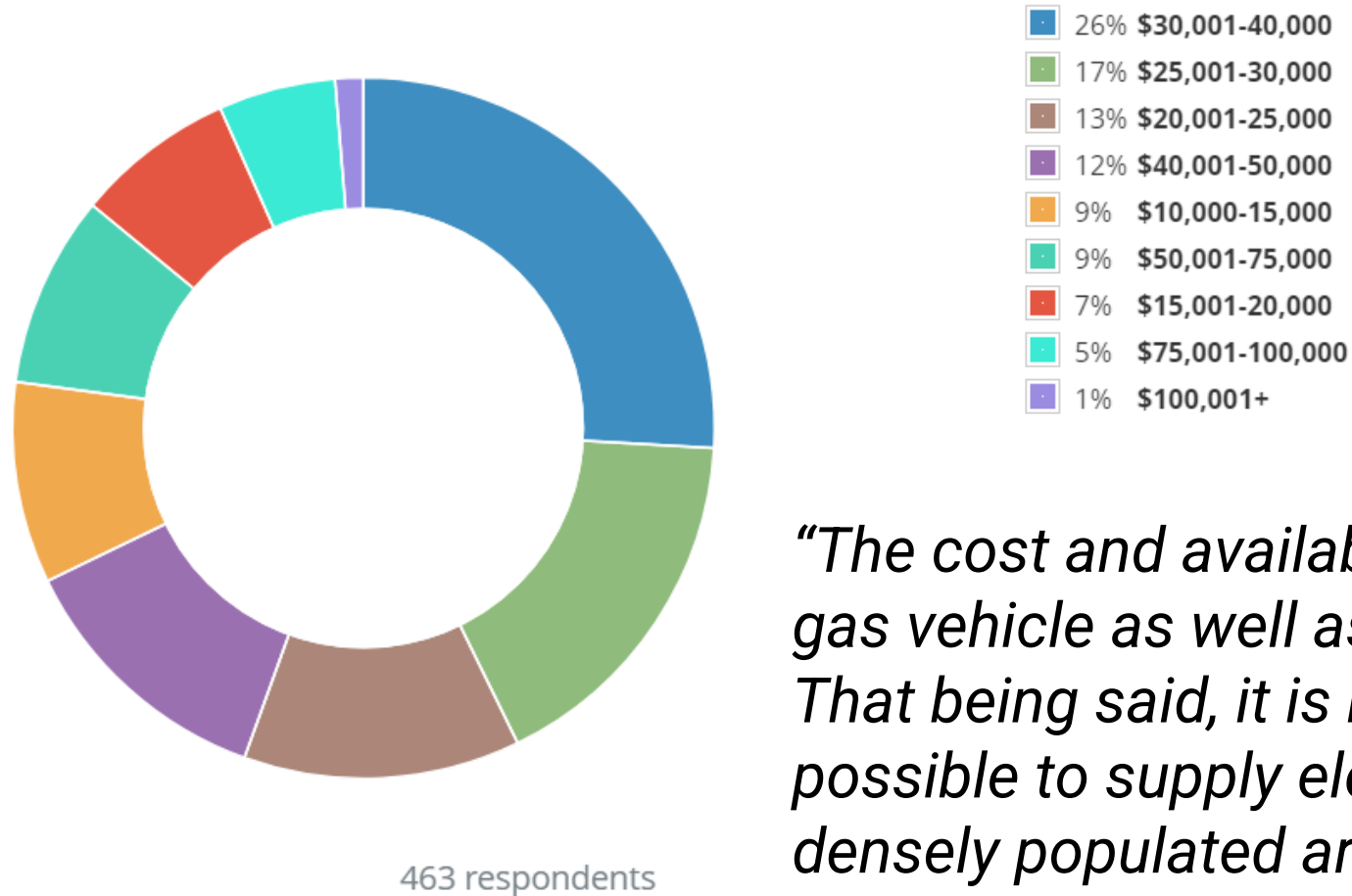
How significant are the following factors in your decision not to purchase an EV?

	Very	Somewhat	Not at all
Cost	65% Very	20% Somewhat	15% Not at all
Concerns about range	76% Very	15% Somewhat	8% Not at all
EV availability - type and desired features	38% Very	34% Somewhat	28% Not at all
Location of charging stations	68% Very	16% Somewhat	16% Not at all
Other (explain below)	60% Very	6% Somewhat	34% Not at all

517 respondents

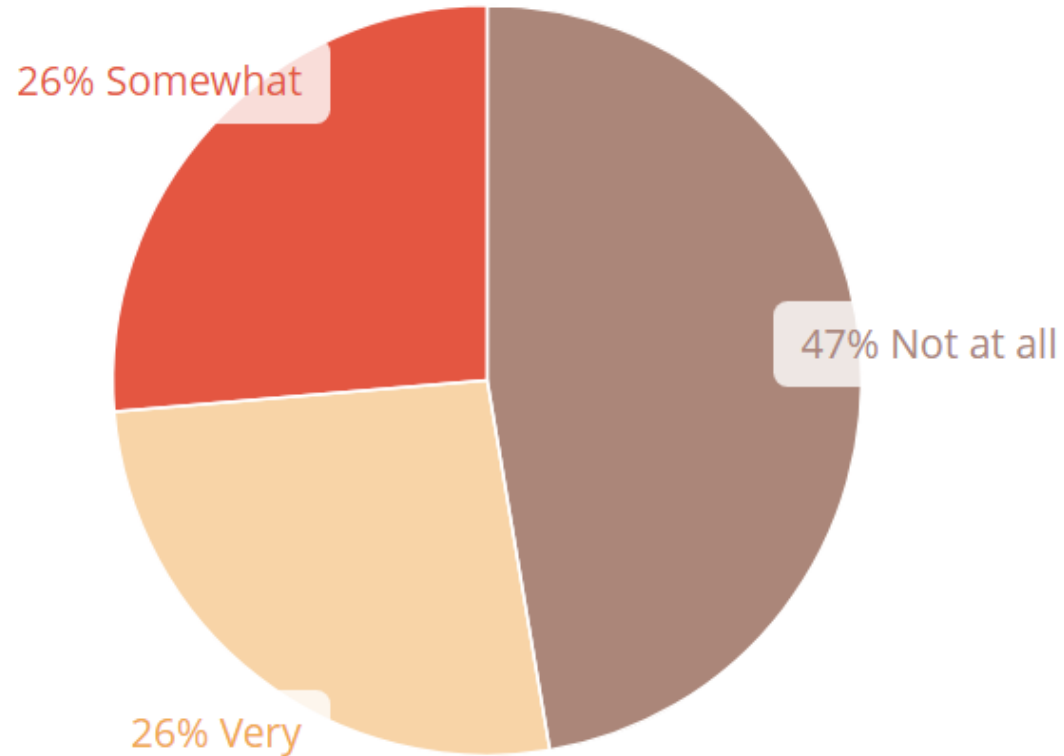
Range is the top concern for those not wanting an EV.

What is the highest price range you would consider for buying a new or used vehicle?



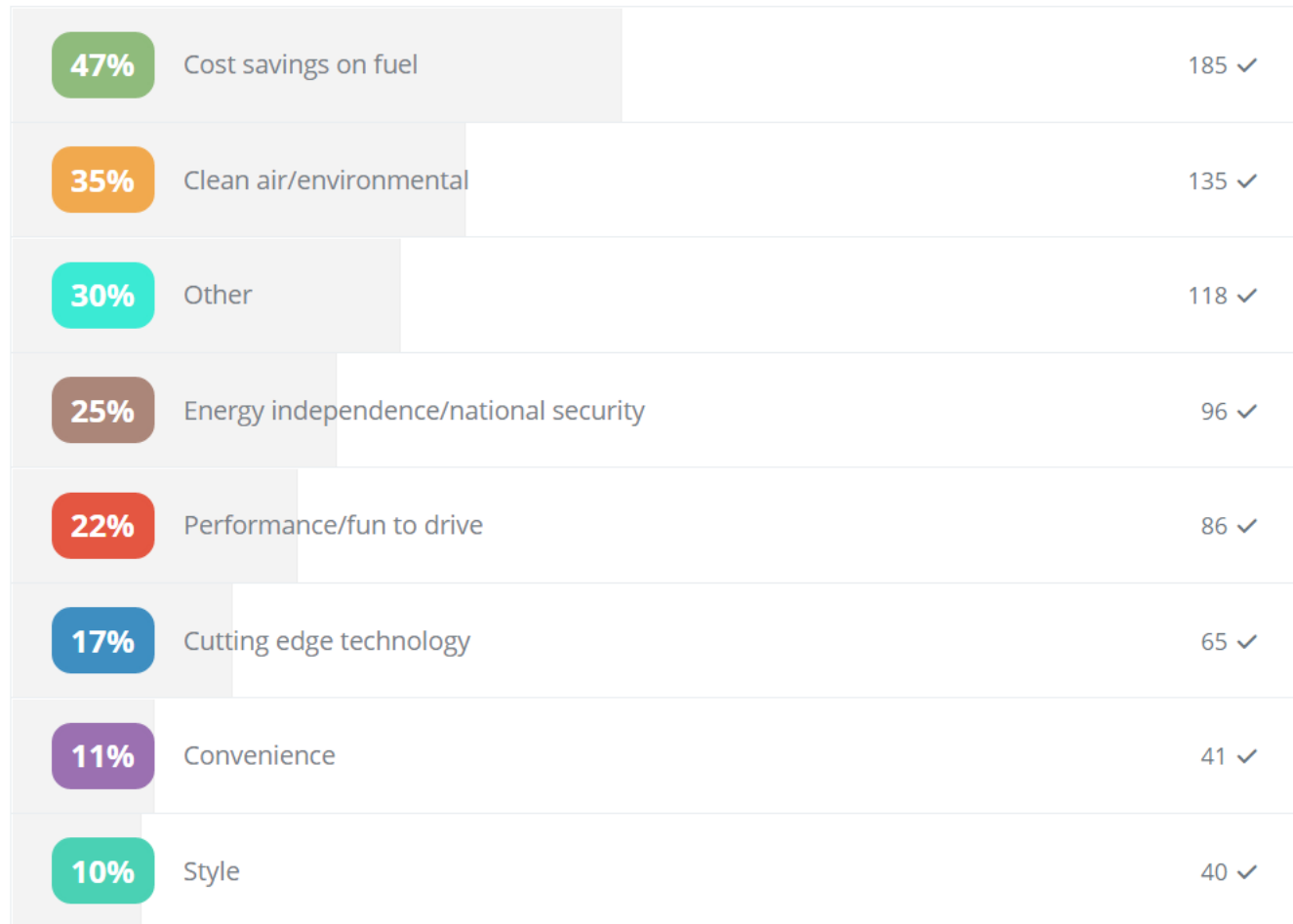
“The cost and availability should equal a gas vehicle as well as the infrastructure. That being said, it is not feasible nor possible to supply electric accessibility to densely populated areas ie.... apartment complexes, and intercity populations.”

How important would a financial incentive be in deciding to purchase an EV?



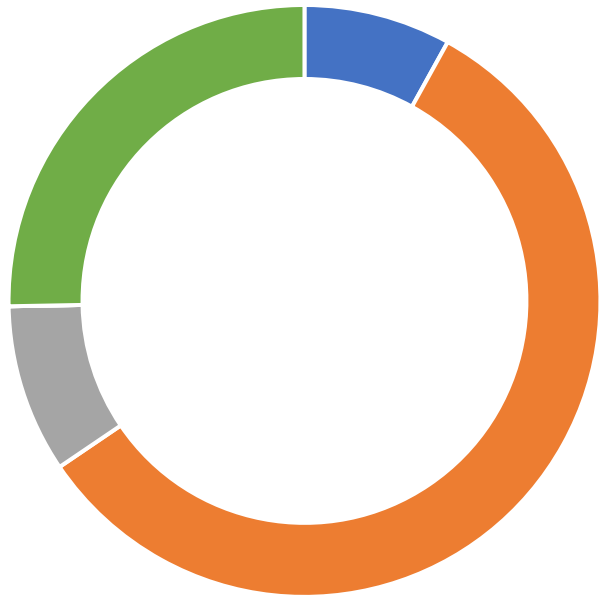
466 respondents

If purchase cost was not a consideration, which of the following would be good reasons to purchase an EV? Select all that apply.



390 Respondents

What type of education, events or resources could the North Florida Clean Fuels Coalition provide to help people learn more about EV's?



- Education – pros and cons
- Political
- Test drive/events
- Charger location/info/more

Current EV drivers:

- want more reliable fast-charging stations
- are a key resource in sharing their EV ownership/driving experiences

Those considering EVs:

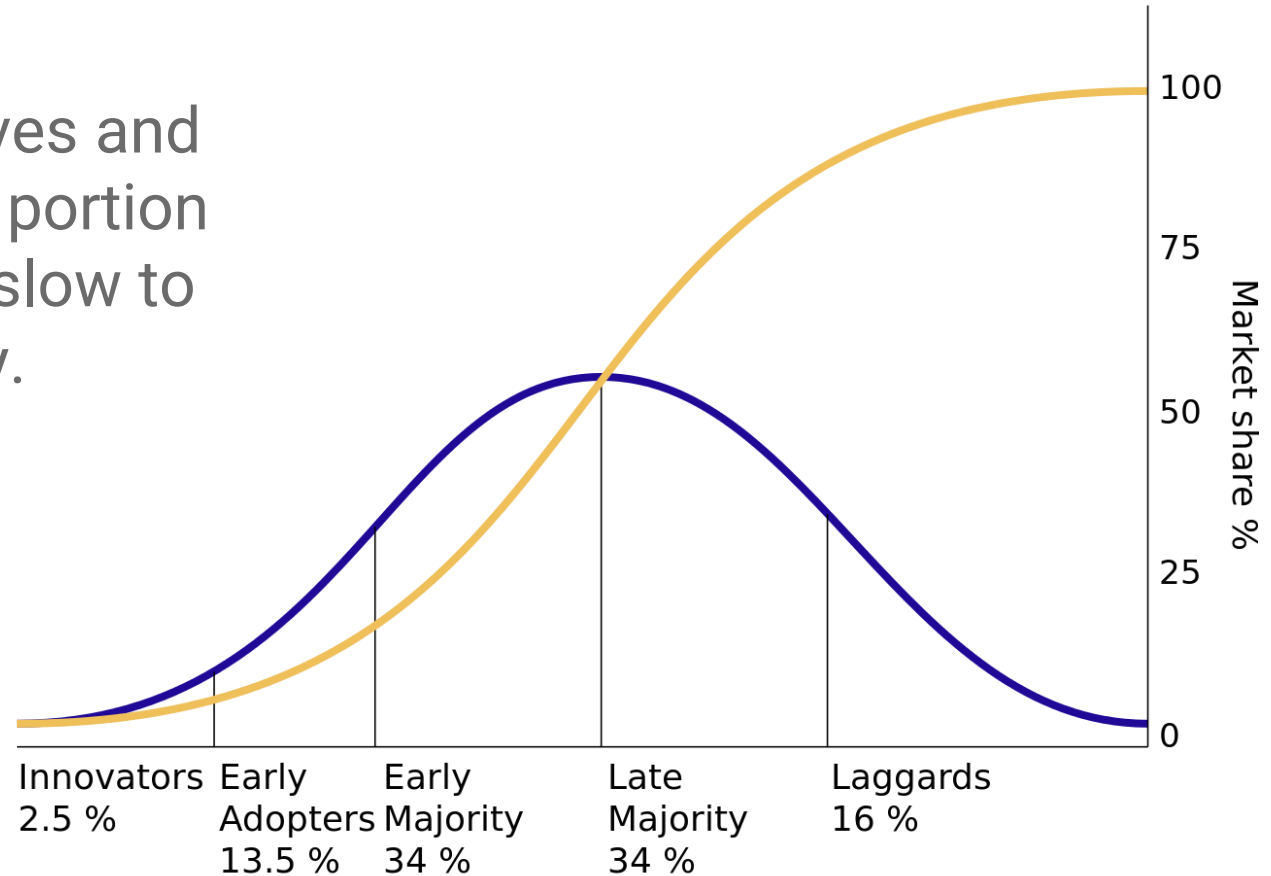
- are concerned about availability of desired models, cost, maintenance and availability of fast charging stations
- want to learn more, especially from current EV drivers

Those not interested in EVs:

- want information showing the all the **pros and cons** in all aspects of EVs
- express political commentary and feel behavior change is being forced upon them
- may be slower to adopt new technology in general

Technology Adoption

Regardless of incentives and education provided, a portion of consumers will be slow to adopt new technology.



The diffusion of innovations according to Rogers. With successive groups of consumers adopting the new technology (shown in blue), its market share (yellow) will eventually reach the saturation level. The blue curve is broken into sections of adopters.

Things Outside of Our Control

- Charging station maintenance
- Charging station locations – NFCFC can provide input and invest as opportunities arise
- Electric vehicle pricing and incentives – prices continue to increase with incentives/rebates; though lower priced models will be available in near future
- Electric vehicle availability
- Political/social beliefs

VIDEO

- EV owner experiences – include making the purchase decision (why EV?), driving, charging, maintenance
- Tap experts to provide content for “explainer” videos for web, social media and presentations
- Batteries – lithium mining, CHIPs & Science Act, battery maintenance and replacement
- Process and costs for home charging including installation and use at various times of day (utilities)
- EV environmental benefits – include production and power generation (environmental/utilities)

EVENTS

- Continue to partner with JEA on EV ride and drive events, and conduct additional North Florida Clean Fuels Coalition targeted EV events

PRESENTATIONS

- Develop easy-to understand EV FAQ presentation for elected bodies and community organizations

LEGISLATION

- Work with municipalities to encourage EV charging stations in new multifamily and large retail development

OTHER OUTREACH

- Build relationships with dealerships – especially those that will provide lower cost EVs (Nissan, Mini Cooper, Chevrolet, Mazda, Hyundai)



www.northfloridacleanfuels.com



Wrap-up and 2023 Outlook

Elizabeth DeJesus and Marci Larson



Upcoming Events

Sat. 2/11: Electric Avenue at Caffeine and Octane
Avenues Mall, 8-11 a.m.

2/16-19: Jacksonville International Auto Show

Prime Osborn Convention Center

<https://thejaxautoshow.com/>