

# ACES SUBCOMMITTEE MEETING

*presented to*

**ACES Subcommittee**

*presented by*

**Jim Halley, Statewide Planning Coordinator  
Office of Policy Planning**

*October 2, 2019*



# WELCOME AND INTRODUCTIONS

▮ Name

▮ Agency/Organization

# AGENDA

## ▮ Partner Updates

- » Micromobility Activities in Florida
- » FDACS Office of Energy Update

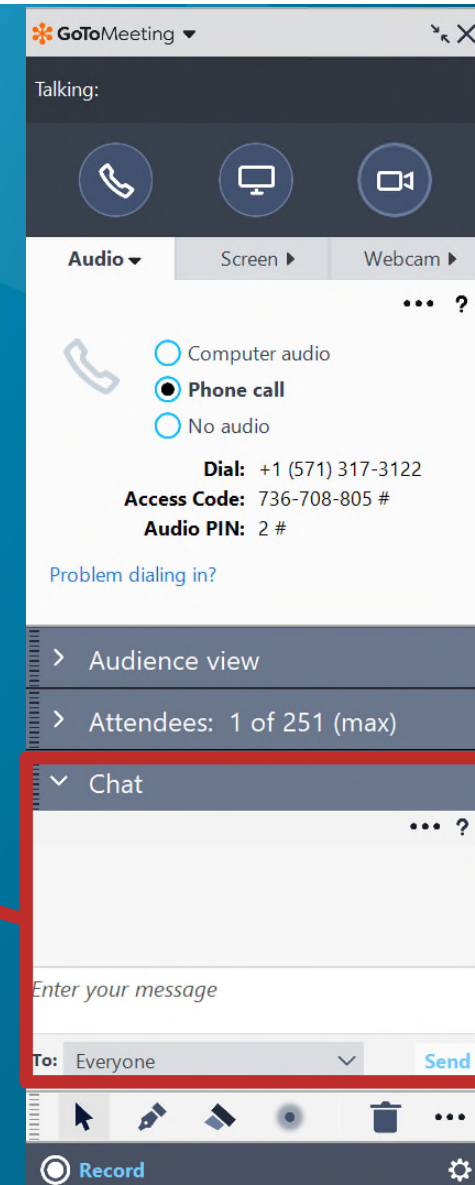
## ▮ Additional ACES Resources

## ▮ Discussion: Potential ACES Strategies to Achieve the FTP Goals

## ▮ Next Steps

# GOTO MEETING INSTRUCTIONS

- ▶ **Please mute your phone when you are not talking.**
  - » Don't put us on hold or take another call or we will hear your hold music.
- ▶ **If you have questions during the presentation, please type them into the chat box.**



# E-Scootershare Pilot Program

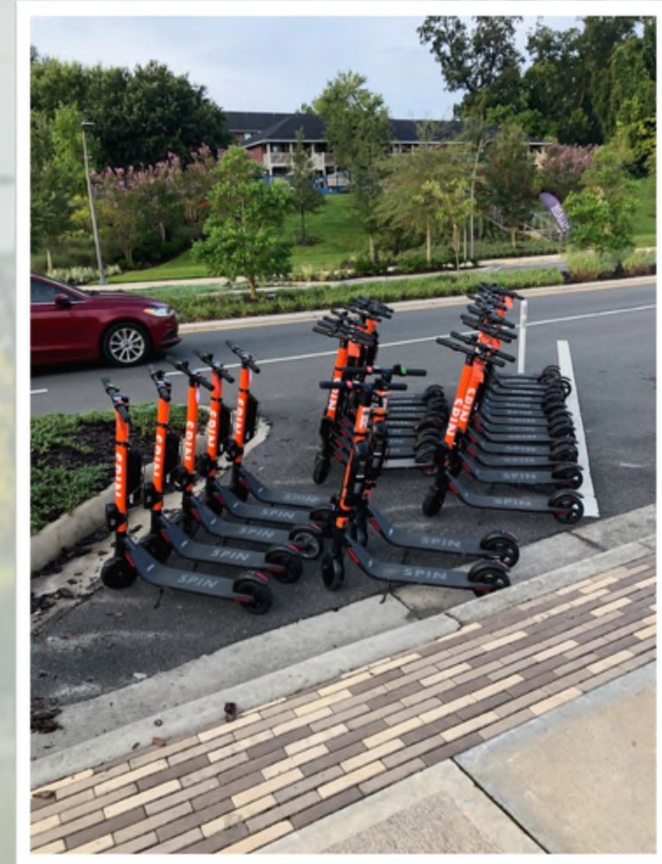


# City of Tallahassee E-Scootershare Pilot Program

- February – May 2019 – reviewed other programs, followed statewide legislation
- May 2019 – statewide legislation changes, e-scooters now classified as bikes
  - RFI released to get more information on vendors who want to come to Tallahassee
- May – June 2019 – Vendors submit RFI, staff reviews, Commission directs
- July 15, 2019 – program kicks off
- September 25 – Commission directs program to extend additional 6 months

# Building a Program

- Parking – lottery system
- Rebalancing – every day
- Issue resolution – within 1 hour
- Data Collection – the same, but different
- Day to day coordination
  - Internally
  - Externally
  - Vendor

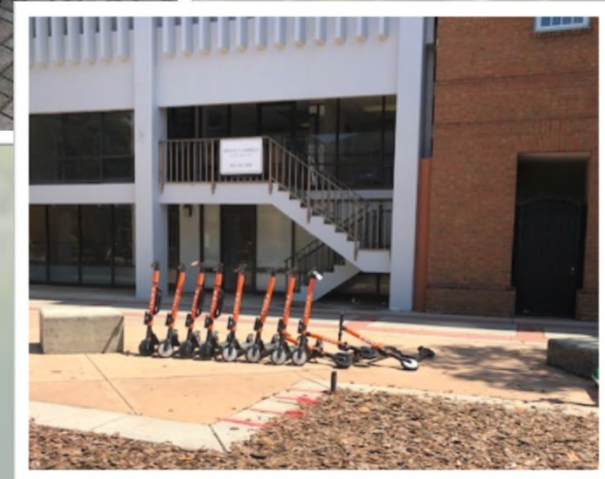
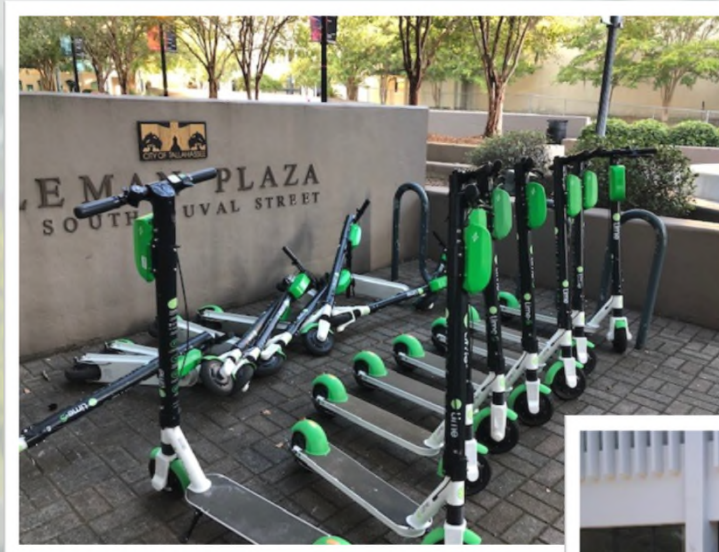




# Implementing and Running a Program

Coordination is key

- Internal coordination
- External coordination
- Vendor coordination
- Parking
- Rebalancing
- Issue resolution
- Data Collection





# Data

- Rides
- Unique Riders
- Ride start and end points
- Number of rides per
  - Day
  - Scooter
  - Hour
  - Location
- Complaints
- Issues and resolution

# Initial Pilot Period Takeaways

- Number of rides: ~ 70,000
- Average duration of a ride: ~18 minutes
- Average trip in miles: ~1.36 miles
- Most Common Ridership Areas: Collegetown, Cascades Park, Downtown
- Number of unique riders: ~ 28,000\*
- There have been a nominal number of crashes, injuries, and citations reported to TPD.

\* This is a tabulation of the number of unique riders reported by each individual vendor. It is possible that individuals utilized multiple vendors and would, therefore, be over-counted.



# Initial Issues and Resolutions

- Scooters blocking sidewalks
- Speed of scooters in parks and pedestrian heavy locations
- Geofence Issues
- Lack of connectivity in the community





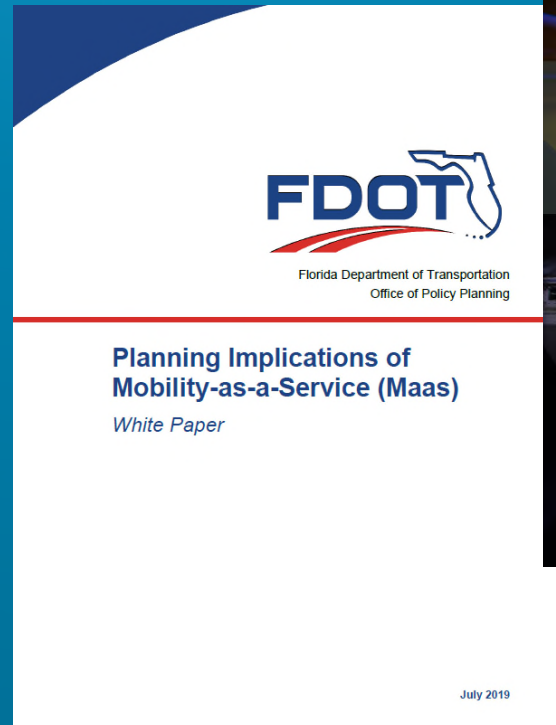
# Questions?

# Additional ACES Resources



# ADDITIONAL ACES RESOURCES

- ▶ Autonomous Vehicle and Alternative Fuel Vehicle Florida Market Penetration Rate and VMT Assessment Study
- ▶ Preparing the SIS for ACES







*We want to hear from you! Below is information about trends in technology, an informative video, and resources to pique your understanding about why technology matters in planning the future of transportation. We invite you to share your thoughts and ideas on technology and how it will change transportation in the future using the red button below.*

### Why Technology Matters

Technology is constantly evolving and changing the way people interact with one another, work, do business, travel, and even how they buy groceries. New and emerging technologies offer the potential for a safer, more efficient transportation system; more connectivity globally and locally; and streamlined business practices. However, increased reliance on technology brings other challenges to the forefront like cybersecurity and data privacy. Transportation partners need to make wise decisions today to prepare for this future.

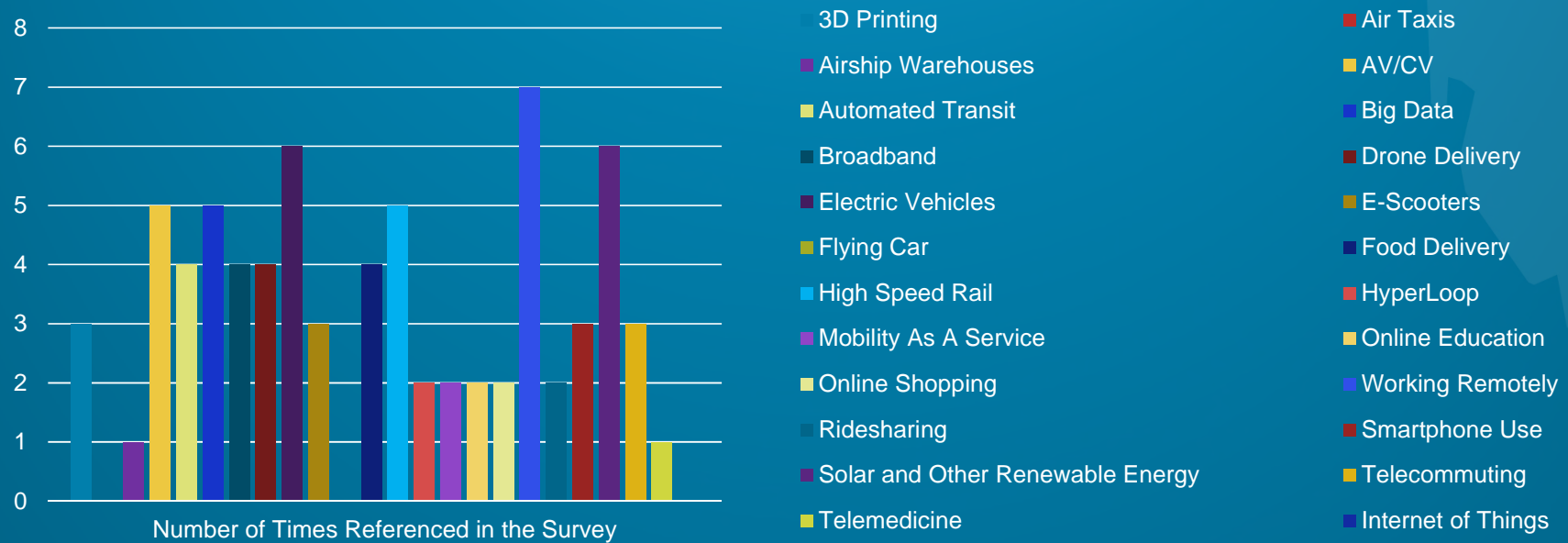
- [FTP and Technology presentation](#)
- [Technology Trends handout](#)

**What Are Your Thoughts and  
Ideas on Technology?  
(click here)**



# TECHNOLOGY SURVEY

What technology trends should we consider as we are reviewing the seven goals of the Florida Transportation Plan?



# **TECHNOLOGY SURVEY – COMMON RESPONSES INCLUDE:**

- ▮ **Automated and Connected Vehicles**
- ▮ **Big Data**
- ▮ **Electric Vehicles**
- ▮ **High Speed Rail**
- ▮ **Working Remotely**
- ▮ **Solar and Other Renewable Energy**



# FTP Strategies Discussion



# PROPOSED FTP GOALS



**Safety and Security for Residents, Visitors and Businesses (*No Change*)**



**Agile, Resilient, and Quality Transportation Infrastructure (*No Change*)**



**Connected, Efficient, and Reliable Mobility for People and Freight**



**Transportation Choices that Improve Accessibility and Equity**



**Transportation Solutions that Strengthen Florida's Economy**



**Transportation Systems that Enhance Florida's Communities**



**Transportation Solutions that Enhance Florida's Environment**

# FTP STEERING COMMITTEE GUIDANCE

- ///▶ Broaden **definition of infrastructure** (including technology/broadband, utilities, charging stations, sensors, etc.)
- ///▶ Define **public sector role**, recognizing most technologies are market-driven
- ///▶ Consider objective/strategies related to **cybersecurity and data privacy**
- ///▶ Address implications of technology on **equity**
- ///▶ Address implications of innovation on **transportation funding sources and needs**

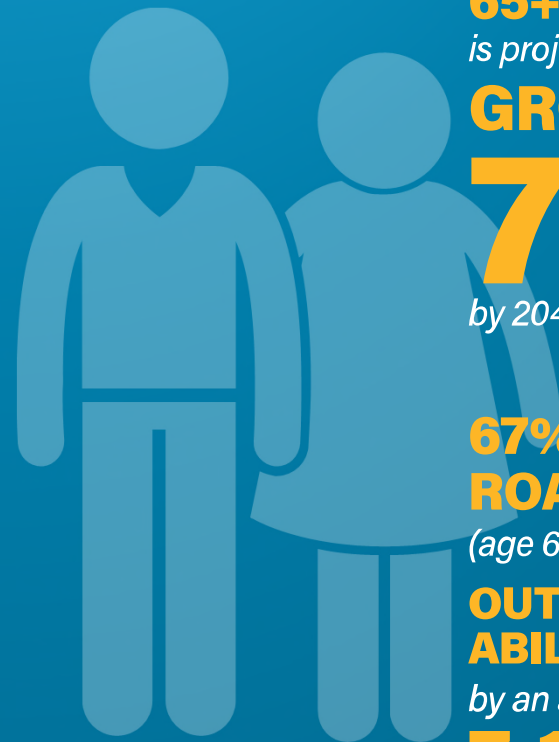


# DRAFT FRAMEWORK FOR STRATEGIES

- ▮ Infrastructure and Design (*November*)
- ▮ Technology and Data (*November*)
- ▮ **Economic and Workforce Development (*today*)**
- ▮ **Customers (*today*)**
- ▮ Partnerships (*January*)
- ▮ Planning and Project Development (*January*)
- ▮ Funding (*January*)

# CUSTOMERS: CONTEXT

- ▮ Large, growing, diverse population
- ▮ Large visitor base
- ▮ Varying levels of familiarity and comfort with emerging technologies



Florida's  
**65+ POPULATION**  
is projected to

**GROW BY**  
**73%**

by 2045

**67% OF AGING**  
**ROAD USERS**

(age 65+) are

**OUTLIVING THEIR**  
**ABILITY TO DRIVE**

by an average of

**7-10 YEARS**

## CUSTOMERS: CONTEXT

**7%** of households in Florida **DO NOT OWN A VEHICLE**  
while another  
**29%** own only **ONE VEHICLE**



**78%** of Florida households have access to **BROADBAND INTERNET**

**80%** of households in urbanized areas



**64%** of households in rural areas

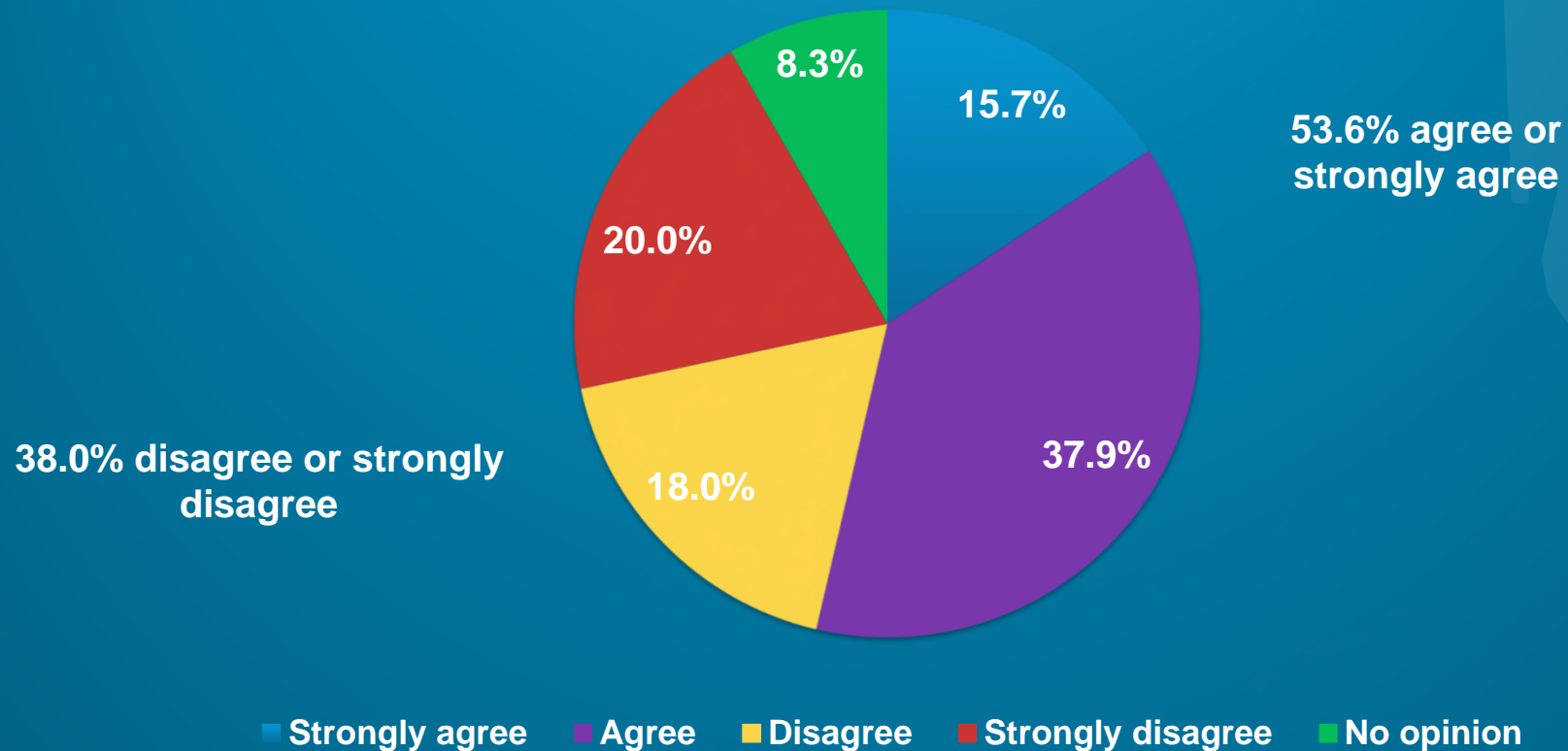
In 2017,  
**8.4 MILLION HOUSEHOLDS** in the United States  
**DID NOT HAVE A BANK ACCOUNT**  
**CREATING BARRIERS** for them to access many  
**EMERGING TECHNOLOGIES & MOBILITY SOLUTIONS**





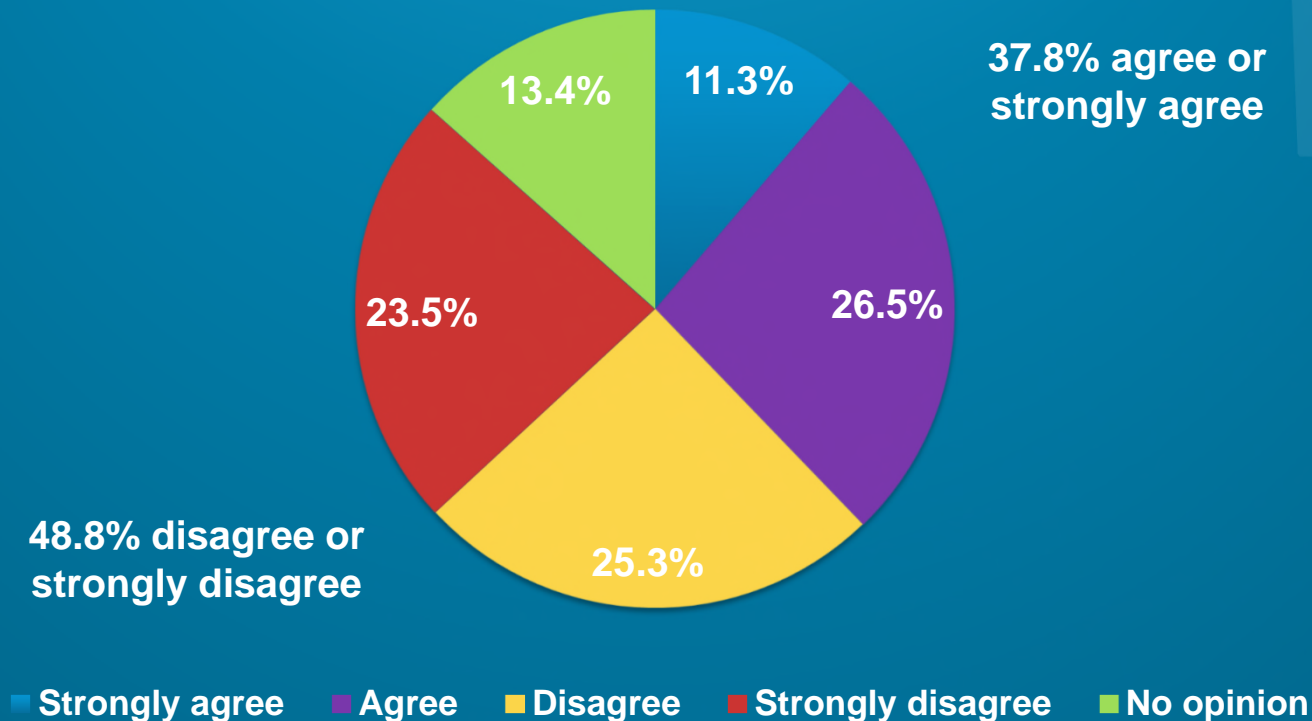
# 2018 SATISFACTION SURVEY FOR FLORIDA RESIDENTS – ACES RESULTS

I would ride in a self-driving car once they have been proven to be reliable.



# 2018 SATISFACTION SURVEY FOR FLORIDA RESIDENTS – ACES RESULTS

I would feel comfortable knowing that a family member or someone close to me (e.g., an elderly parent) regularly travels in a self-driving vehicle.



# CUSTOMERS: POTENTIAL STRATEGIES

- ▮ Focus on how emerging technologies can enhance **safety, mobility, accessibility**, and other FTP goals
- ▮ Use technology to enhance **customer service**, such as integrating schedule and payment information across systems
- ▮ Plan for how emerging technologies will support customer needs during **special events/emergencies**



# CUSTOMERS: POTENTIAL STRATEGIES

- ▮ Adapt technologies to address **specific needs of customer groups**, such as
  - » Seniors, youth, low-income, limited English proficiency, disabled, etc.
  - » Visitors
- ▮ Develop proactive policies to ensure emerging technologies enhance equity and **access to opportunity** and avoid unintended consequences
  - » Particular attention to residents without smartphones, broadband, or credit cards/bank accounts policies/incentives
- ▮ Plan for customer needs during the **transition** to comprehensive adoption of specific technologies such as automated or connected vehicles

# CUSTOMERS: POTENTIAL STRATEGIES

- ▮ Continue **public awareness and education** about the use and impacts of emerging technologies
- ▮ Commit to ongoing research on **customer acceptance** and needs related to transportation technology including customer surveys and pilot tests
- ▮ Monitor and prepare for potential **changes in travel patterns** resulting from emerging technologies, including changes in how, where, and when people travel (particularly shifts across modes or systems)

# SHARING OUR IDEAS

- ▮ Works best from website – no registration required
- ▮ Use [www.pollev.com/FDOTPLANNING](http://www.pollev.com/FDOTPLANNING) to access the polling questions
- ▮ Respond to each question using your mobile device or laptop
- ▮ You can also use your cell phone – text “FDOTPLANNING” to 22333 to join the poll





Respond at [PollEv.com/fdotplanning](https://PollEv.com/fdotplanning)  
Text **FDOTPLANNING** to **22333** once to join, then text your message

## Potential strategies related to "Customers" - what's missing?

"Planning for rural communities -how do they fit into the ACES plan"

"engaging partners like Bank of America about access to bank accounts. Consider recent efforts in Florida of reaching youth."

"Transportation of Minors or those who need guardians"

"Strategic support of technologies that help us achieve safety and congestion improvements (not all technologies are equally important)"

"Is there a public sector role in supporting use by the unbanked?"

"Include hospital, emergency departments, Federally Qualified Health Care Centers, County Health Departments and other health clinics to provide information about transportation to underserved seeking access to health care"

"Don't forget to include insurance industry as a partner"

"Strategies to integrate new technology but also understanding older technology will be operable / functional and utilized for a long time. AV tech will not replace ALL other cars 100% in our lifetime"

"acceptance and needs should also consider values and preferences"

"Auto dealers' responsibility for advising potential customers on vehicle operations"

"Great opportunities for on-demand services for rural communities. VIA Transportation is serving the city of Arlington, TX with on-demand transit services instead of fixed-route."

# ECONOMIC AND WORKFORCE DEVELOPMENT: CONTEXT

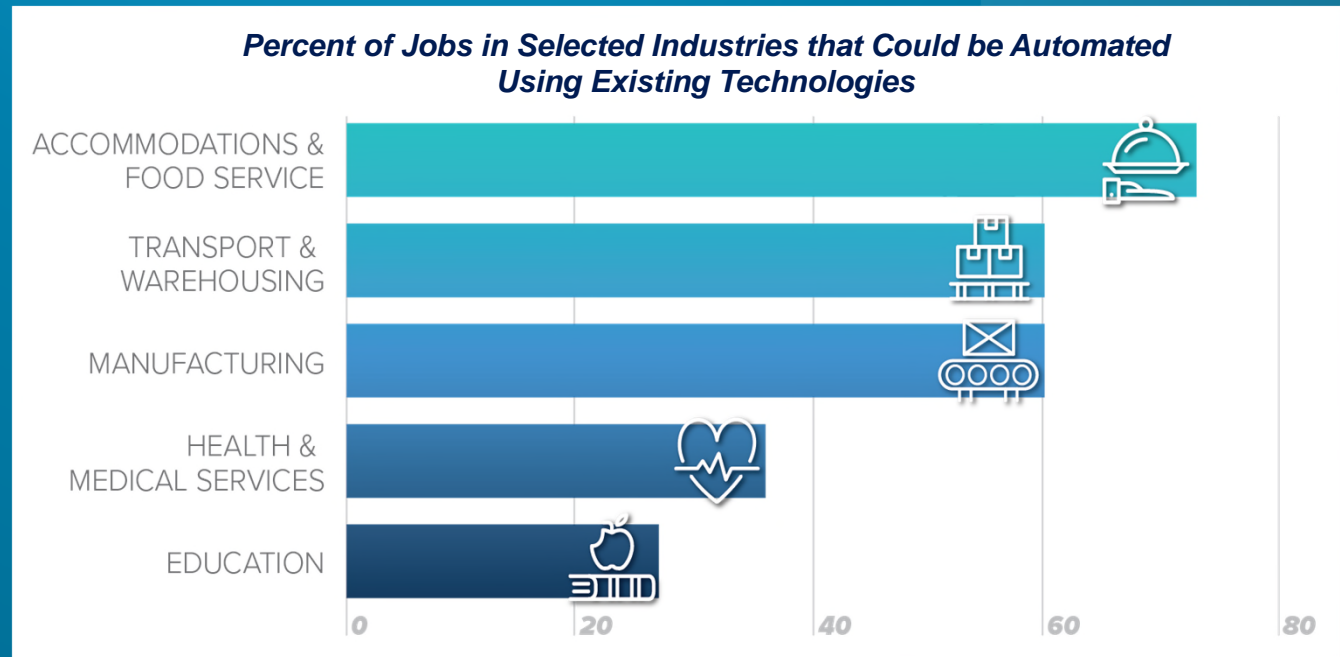
## HEADLINES

Paving the way: Ron DeSantis signs bill  
allowing self-driving vehicles in  
Florida



# ECONOMIC AND WORKFORCE DEVELOPMENT: CONTEXT

- ▶ Job growth strongest in knowledge-based and non-routine activities
- ▶ More than ½ of all jobs could be automated today using currently available technologies
- ▶ More than ½ of all jobs in 2030 could be in industries or occupations that do not exist today



Source: McKinsey Global Institute



# TRANSPORTATION CONSTRUCTION WORKFORCE SUPPLY GAPS

## High-Potential Supply Gaps

Occupation Title	2018-2026 Total Openings	2018-2026 Average Annual Openings	Total Enrolled	Total Supply
Structural Iron and Steel Workers	5,439	687	97	0
Carpenters	63,636	7,955	430	67
First-Line Supervisors of Construction Trades and Extraction Workers	50,202	6,275	142	62
Operating Engineers and Other Construction Equipment Operators	19,628	2,454	150	36
Mobile Heavy Equipment Mechanics, Except Engines	5,088	636	74	15
Plumbers, Pipefitters, and Steamfitters	30,261	3,783	2,291	101
First-Line Supervisors of Landscaping, Lawn Service, and Groundskeeping Workers	16,127	2,016	716	120

# ECONOMIC & WORKFORCE DEVELOPMENT: POTENTIAL STRATEGIES

- ▮ Encourage **private sector companies** involved in research, development, manufacturing, and services for transportation technology to **locate and expand in Florida**
  - » Continue to provide a favorable environment including forward-looking, predictable laws and regulations
  - » Continue to provide opportunities for industry partners to test equipment and software in Florida
  - » Ensure key transportation technology industries are a focus for Department of Economic Opportunity, CareerSource Florida and Enterprise Florida programs and resources

# ECONOMIC & WORKFORCE DEVELOPMENT: POTENTIAL STRATEGIES

- ▮ **Develop, attract, and retain a **skilled workforce** for transportation technology research, development, manufacturing, and services**
  - » Work with industry partners to document workforce supply, demand, and gaps
  - » Work with education and workforce development partners to close talent gaps through targeted training and development programs
  - » Encourage lifelong learning opportunities for transportation workers
  - » Maintain centers of excellence in transportation technology research and education
  
- ▮ **Focus on **automating tasks, not jobs****
  - » Support initiatives that automate lower-value, routine activities but retain knowledge-based or non-routine service jobs in Florida
  - » Retrain and assist with transition of existing transportation workers anticipated to be impacted by automation

# ECONOMIC & WORKFORCE DEVELOPMENT: POTENTIAL STRATEGIES

## ▮ Prepare for unique impacts of ACES in **urban areas**

- » Create mobility hubs in areas with access to multiple transportation options, jobs, and services
- » Prepare to repurpose land and structures currently used for parking and other vehicle functions in urban areas to support community and economic development visions
- » Support continued growth in **e-commerce and distribution**

## ▮ Prepare for unique impacts of ACES in **rural areas**

- » Assist with transition of rural workers in industries like truck driving that may be impacted by automation
- » Assist rural local governments in preparing for economic opportunities related to specialized manufacturing, technology services, and entrepreneurship
- » Support continued growth in **e-commerce and distribution**



Respond at [PollEv.com/fdotplanning](https://pollev.com/fdotplanning)

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## Potential strategies related to "Economic and Workforce Development" - what's missing?

"Language restricting automation could potentially hurt business recruitment efforts in FL and cause firms to seek friendlier environments"

"Impact of global trade...out of Florida's control but need to track"

"Work with high schools and technical schools, social originations, i.e. churches to attract workforce"

"Monitor/consider economic development that follows new technologies; new economic development opportunities because of the technologies"

"Hospitality industry is the largest industry employer in Florida."

"Incentivize industry to contribute to local workforce development"

"Hospitals typically employ a large workforce in communities."

"Not sure it's applicable to this group but think about auto mechanics as well and training their workforce for new technology"

"Are some industries dependent on new technologies?"

"Tap into STEM programs with schools"

# Florida Office of Energy

## Electric Vehicles Presentation

October 2, 2019



Florida Department of Agriculture and Consumer Services • Commissioner Nicole “Nikki” Fried

# Functions & Responsibilities

- Legislatively designated state energy policy development office within Florida
- Evaluate energy related studies, analyses, and stakeholder input
- Promote and advocate for the development and use of renewable energy resources and energy efficiency technologies
- Use available state and federal funds to develop and manage energy efficiency, renewable energy, and energy education programs
- Produce an Annual Energy Report
- Serve on the Florida Building Commission
- Serve as the State clearinghouse for all energy information



# Areas of Focus



Energy Efficiency



Renewable Energy



Transportation



Education





# Drive Electric Orlando



- Used a \$400,000 award from the U.S. DOE Clean Cities to work with the Electrification Coalition and the Central Florida Clean Cities Coalition to promote Drive Electric Orlando.
- Drive Electric Orlando offers:
  - An option to rent an electric vehicle in Orlando, Florida
  - Incentives for renting an electric vehicle include:
    - free valet parking,
    - preferred parking spots,
    - ample charging stations,
    - free three-month membership to CLEARLane Access which allows travelers to skip the identification check point at the airport and head straight to the physical screening



# Drive Electric Orlando



- Program partners include:



- For more information visit <http://pluginperks.com/plugin-perks/>.



# EV Roadmap Goals

- Identify EV charging infrastructure impacts on the electric grid.
- Identify solutions for any negative impacts.
- Locate areas that lack EV charging infrastructure.
- Identify best practices for siting EV charging stations.
- Identify technical or regulatory barriers to expansion of EV charging infrastructure.



# EV Roadmap Next Steps

- Continue discussions with sister agencies.
- Develop a scope of work and timeline.
- Work with National Energy Labs to perform modeling.
- Draft report.
- Hold stakeholder meetings for feedback and recommendations.





# Alternative Fuel Resiliency Plan

- Catalog alternative fuel infrastructure including details on each site;
- Develop best practices regarding resiliency for locating alternative fuel infrastructure;
- Analyze and report on AFVs for emergency response efforts;
- Analyze and report on alternative fuel generators for emergency power sources;



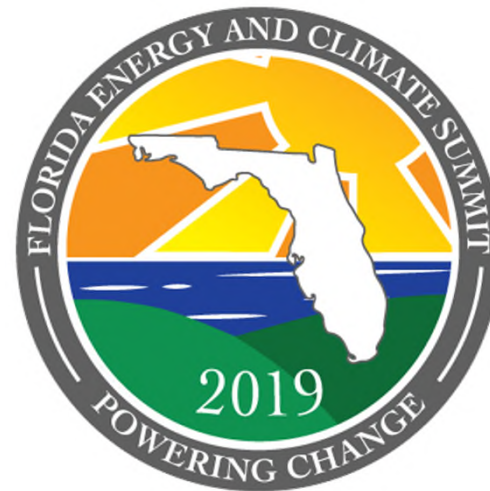
# Alternative Fuel Resiliency Plan

- Develop communication protocols for alternative fuel infrastructure status updates;
- Study the supply chain for each fuel source to identify strengths and weaknesses;
- Develop a statewide alternative fuel resiliency plan; and
- Incorporate alternative fuel related missions into the annual statewide hurricane exercise.



# 2019 Florida Energy and Climate Summit Powering Change

October 1-3, 2019  
Grand Hyatt Tampa Bay  
Tampa, Florida



Contact Information:

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Florida Department of Agriculture and Consumer Services • Commissioner Nicole “Nikki” Fried



# Topics for Next Meeting



# TOPICS FOR NEXT MEETING

## ▮ Partner Updates

## ▮ Subject Matter Expert Presentations

## ▮ Discuss Potential Strategies to Achieve the FTP Goals

- » Infrastructure and Design
- » Technology and Data

## ▮ Review/Revise Strategies

- » Customers
- » Economic/Workforce Development

# Next Steps



# UPCOMING MEETINGS

## ▮▮ **Steering Committee**

- » November 14, Ocala (in person)

## ▮▮ **ACES Subcommittee**

- » November 20, 2019, in-person meeting, in conjunction with Florida AV Summit
- » January 2020 – TBD (teleconference)

## ▮▮ **Resilience Subcommittee**

- » Campaign kick-off webinar: October 3, 12-1 p.m.
- » Subcommittee meeting: In-person, October 29-30, Broward MPO

## ▮▮ **New Safety Subcommittee**

# FLORIDA AUTOMATED VEHICLES SUMMIT

▮ November 20-22, 2019

▮ Hilton Miami Downtown

» [https://secure3.hilton.com/en\\_US/hi/reservation/book.htm?execution=e1s1](https://secure3.hilton.com/en_US/hi/reservation/book.htm?execution=e1s1)





# QUESTIONS?

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