

# 2050 Metropolitan Transportation Plan Technical Workshop

April 11, 2024



# Welcome!

Federal Highway Administration **East Central Florida Regional Planning Council** Central Florida Regional Transportation Authority/LYNX **Orange County** Apopka Belle Isle **Eatonville Edgewood** Maitland **Oakland** Ocoee **Orlando Windermere** Winter Garden Winter Park **SunRail Greater Orlando Aviation Authority** **Osceola County** Kissimmee Saint Cloud **Kissimmee Gateway Airport** **Seminole County** Altamonte Springs **Casselberry** Lake Mary Longwood Oviedo Sanford Winter Springs **Orlando-Sanford International Airport** **Florida Department of Transportation** Florida Turnpike Enterprise Central Florida Expressway Authority **Central Florida Tourism Oversight District** **Orange County Public Schools** **Osceola County Public Schools** **Seminole County Public Schools**

# AGENDA

- I. 2050 MTP Status Updates
- II. CFRPM & Turnpike Modeling Coordination
- III. Existing Conditions & Area Profile
- IV. Goals & Objectives
- V. Drivers of Change
- VI. Open Discussion
- VII. Public Comments
- VIII. Next Steps
- IX. Adjournment



# Status Update

- **Background & Existing Conditions**

- Draft Public Participation Plan available for public comment
- Existing Conditions and Area Profile Technical Report
- Travel Patterns & Origin-Destination Analyses

- **Goals & Objectives**

- Draft Goals and Objectives
- Identification of Drivers of Change



# Status Update

## Technical Analysis

- Coordinating with FDOT on Central Florida Regional Planning Model
- Congestion Management Process updates
- Kicking-Off
  - Health, Housing, and Environmental Evaluations
  - Financial Resources Estimations

## • Needs Assessments

- Transit (ongoing)
- Roadway (ongoing)
- Safety/Vision Zero Action Plan (ongoing)
- TSMO (April 2024)
- Active Transportation (April 2024)







# CFRPM & Turnpike Modeling Coordination

Jamie Snow, WRA LLP

Richard Pascoe, Stantec

Erin Sterk, Florida's Turnpike Enterprise



# Model Updates Are Underway



**FDOT District 5** and **Florida's Turnpike Enterprise** are concurrently updating our respective models to reflect 2022 current year and 2050 future year conditions.

As part of this update, there is a collaborative effort between the two agencies to ensure consistency in land use and roadway assumptions.

## To do this, we need your input!

- We need to know what you know.
- Where have your land use projections changed?
- Where are your roadway improvements?



# Concurrent Process

FDOT District 5	Elements of Update	Florida's Turnpike Enterprise
Central Florida Regional Planning Model (CFRPM) v8	Model	Turnpike State Model (TSM)
Metropolitan Transportation Plan (MTP) Update	Reason for Update	Annual Update Cycle (previously project-specific updates)
Data Collection Phase	Current Status	Data Collection Phase
Updating from Cube to TransCAD	Model Platform	PTV Visum
2022/2050	Base/Horizon Years	2022/2050
Socioeconomic Data updated to include Census and American Community Survey	Base Year Updates	Socioeconomic Data updated to include Census and American Community Survey
Interactive Map Tool + Virtual Meetings	Format for Feedback	Face-to-Face Meetings
Emails + meetings planned for April/May	Schedule	Meetings planned for April/May

# Input from Stakeholders Demonstration

## FUTURE DEVELOPMENT

- Where is future growth expected to occur?
  - Single-Family Residential
  - Multi-Family Residential
  - Commercial
  - Industrial/Warehouse
  - Other Land Use
  - What are the buildout years of the developments?
- Are there areas that are focused growth areas where details may not be known, but should be considered as higher growth than other areas?

- Live demonstration of tool

## FUTURE TRANSPORTATION NETWORK

- Are any new transportation improvements (new local roads, widenings, etc.) planned within your jurisdiction?
  - Capital Improvement Projects
  - Developer-Funded Improvements
  - Are there buildout years associated with these projects?
- Are there any updates you plan on making in the next MTP update cycle?

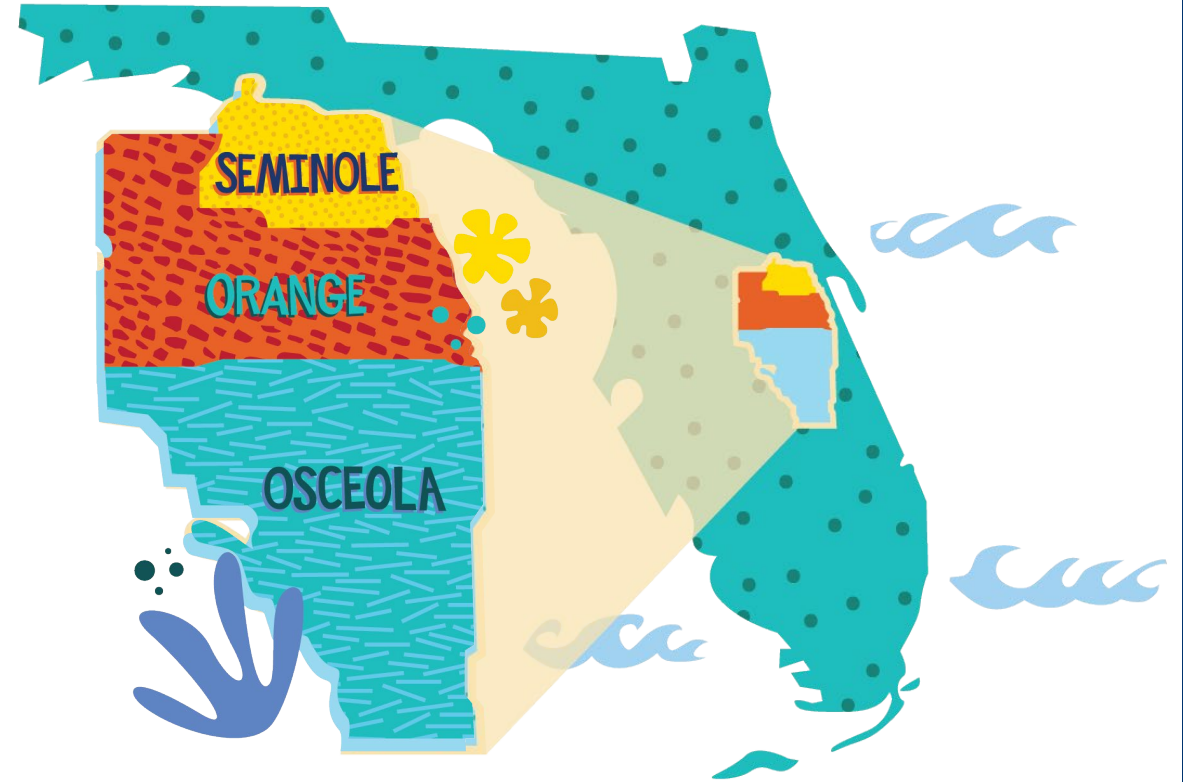
# Questions?

- Use the “Raise your hand” button
- Type your questions into the “Q&A” box



# Existing Conditions & Area Profile

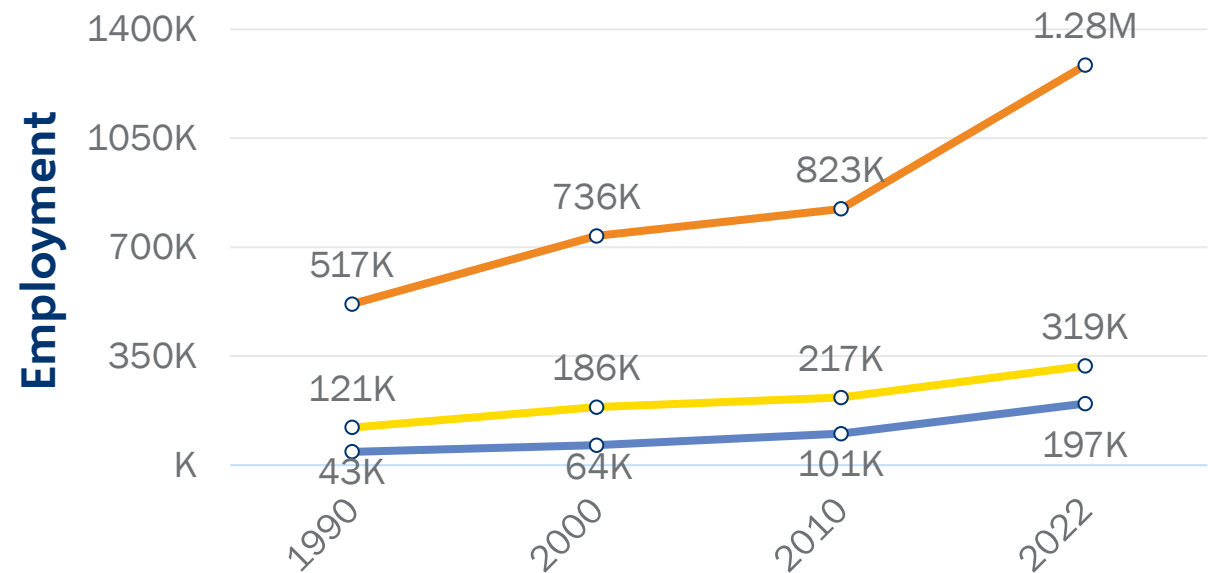
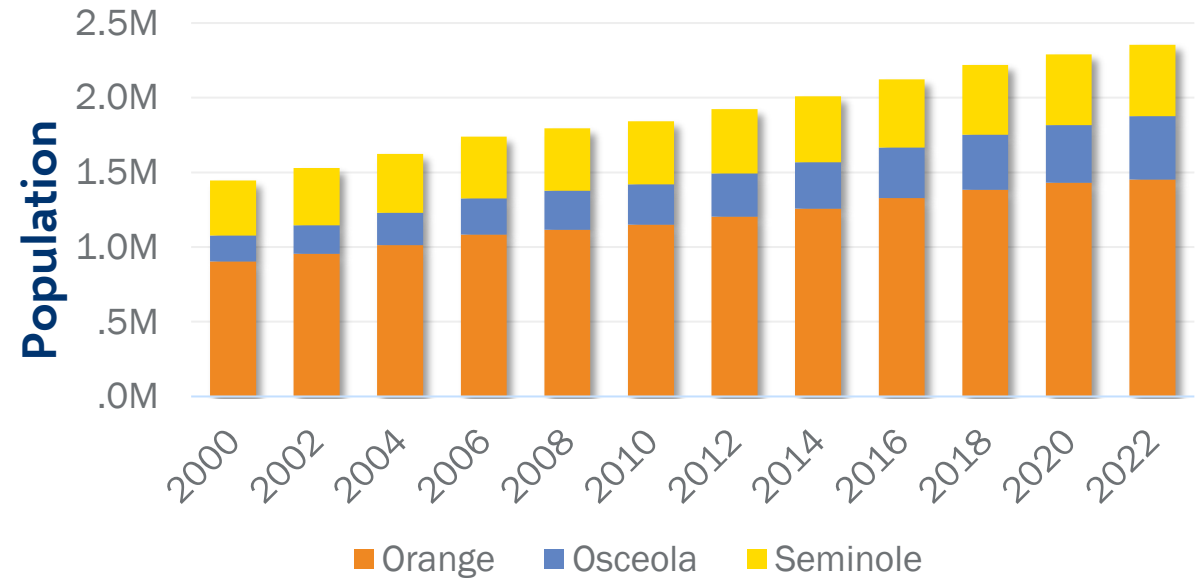
Slade Downs, MetroPlan Orlando





# Growth in the Region

- Population on the rise, year over year
- Workforce and job numbers climbing

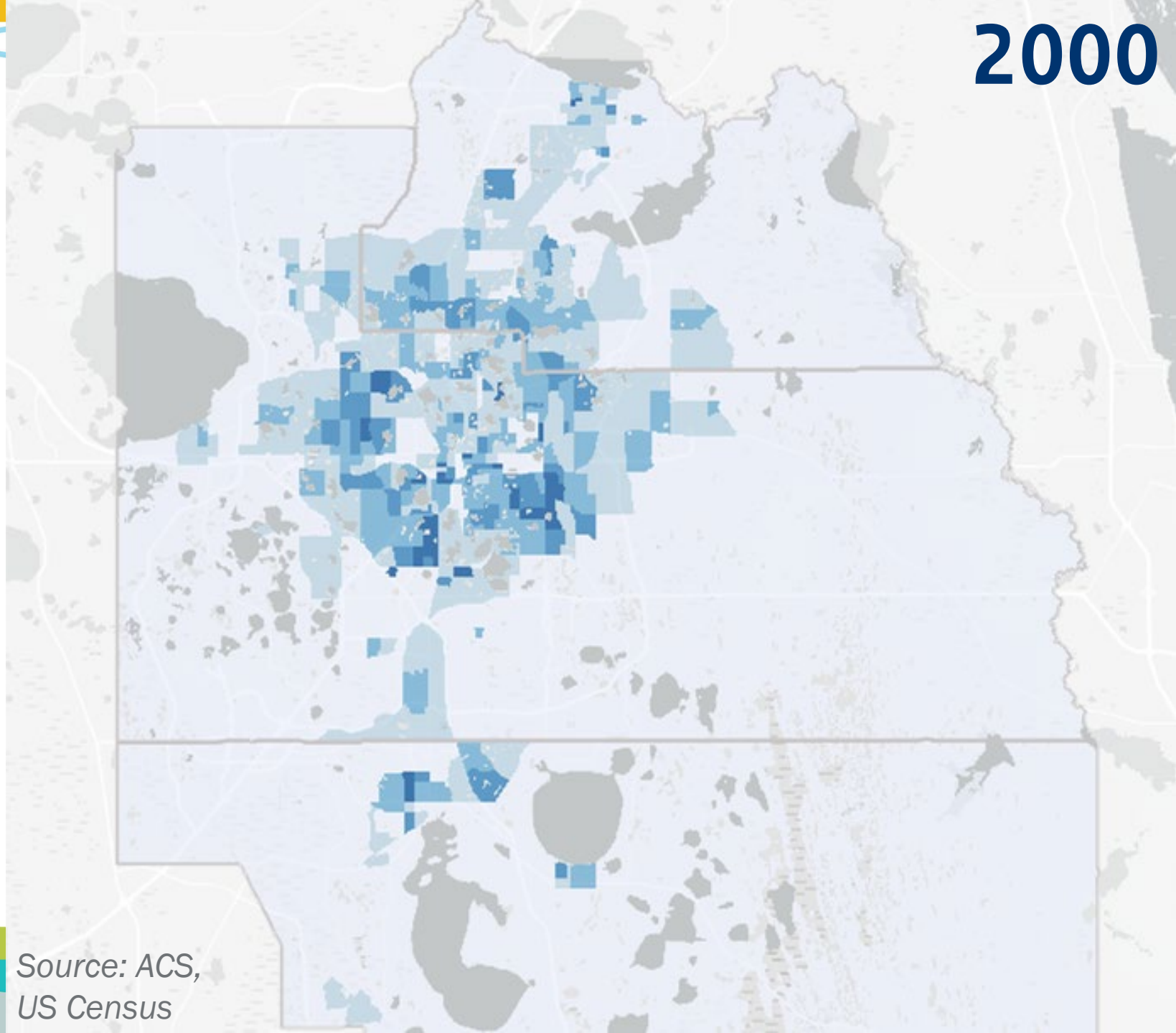


Source: US Census, ACS, Bureau of Economic Analysis

2000

# How We Have Grown

- Development and sprawl
- Growth near expressways and limited access facilities



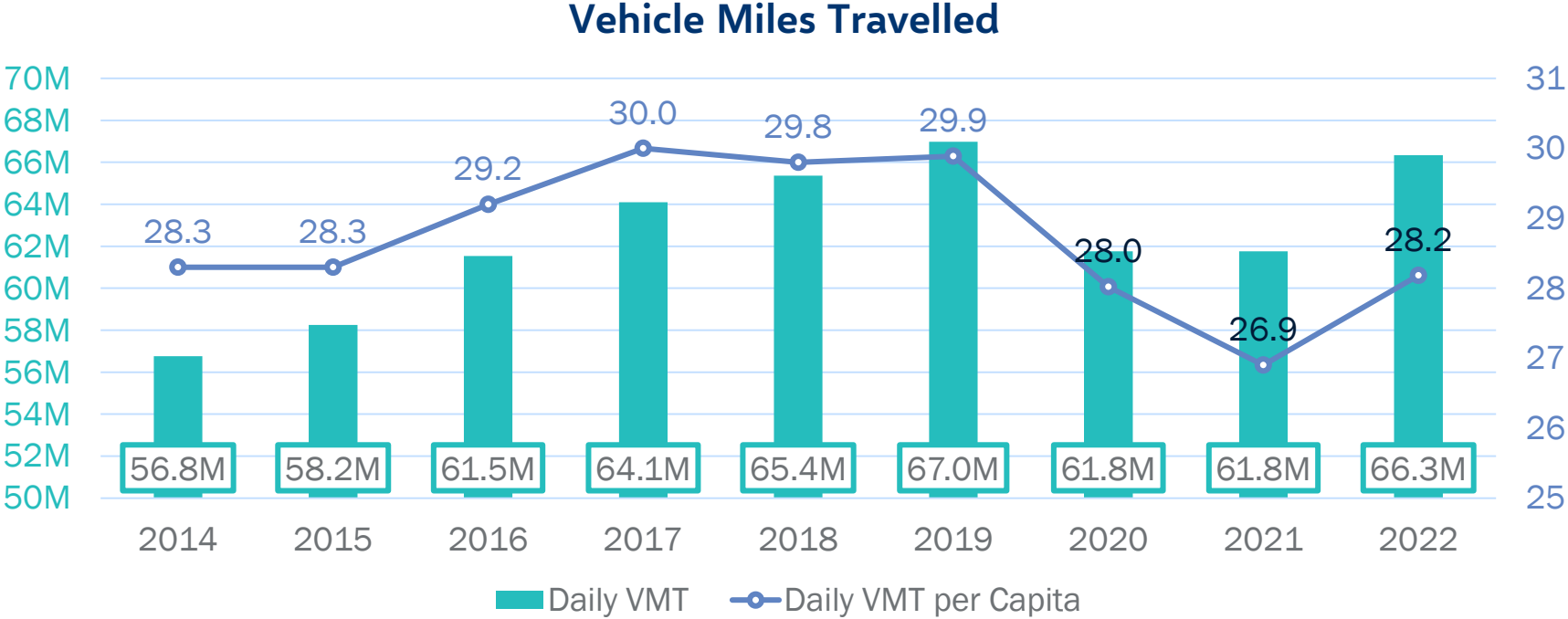
Source: ACS,  
US Census





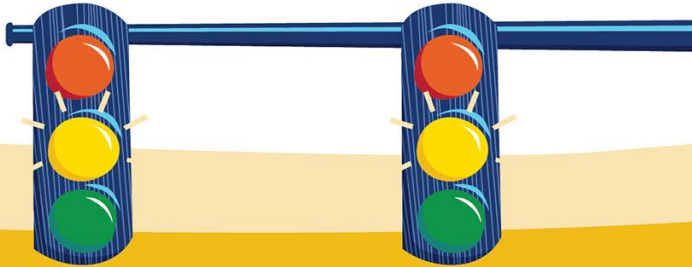
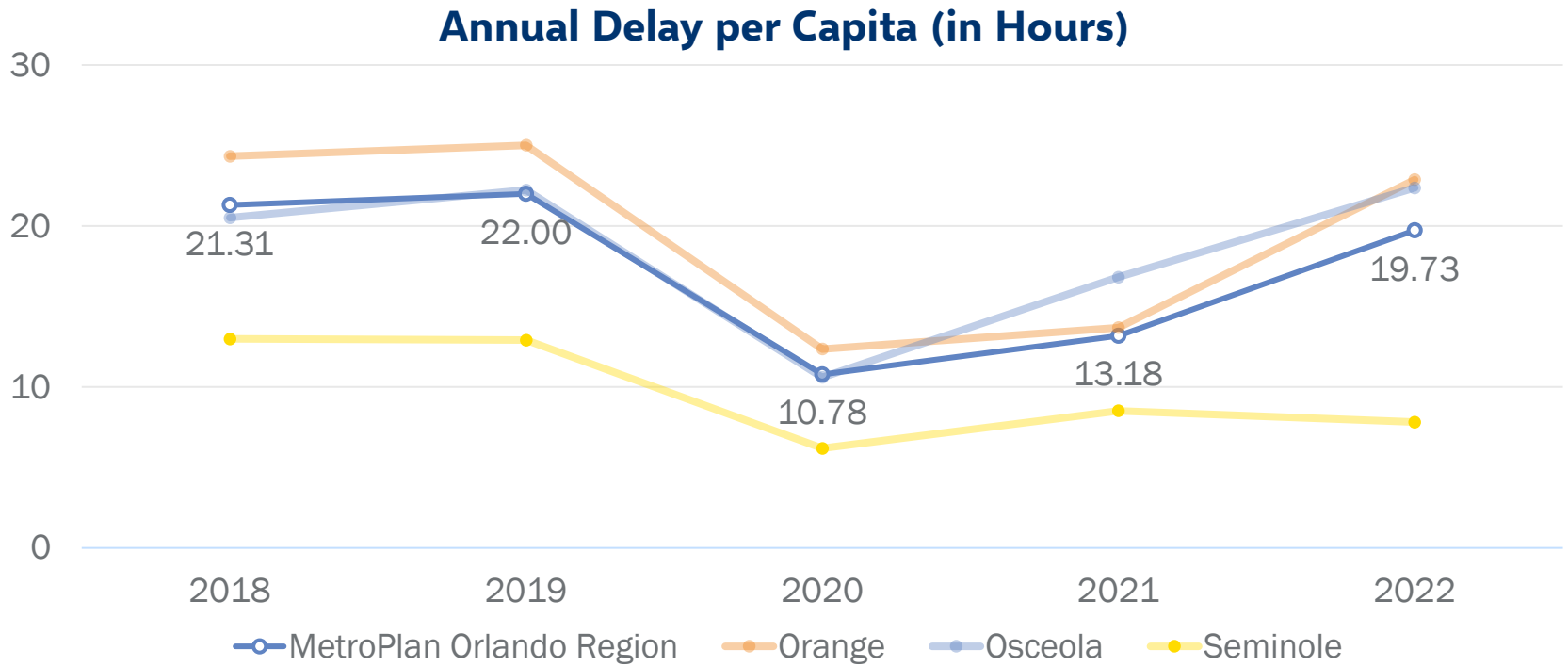
# Shifting Reliability and Performance

VMT has increased



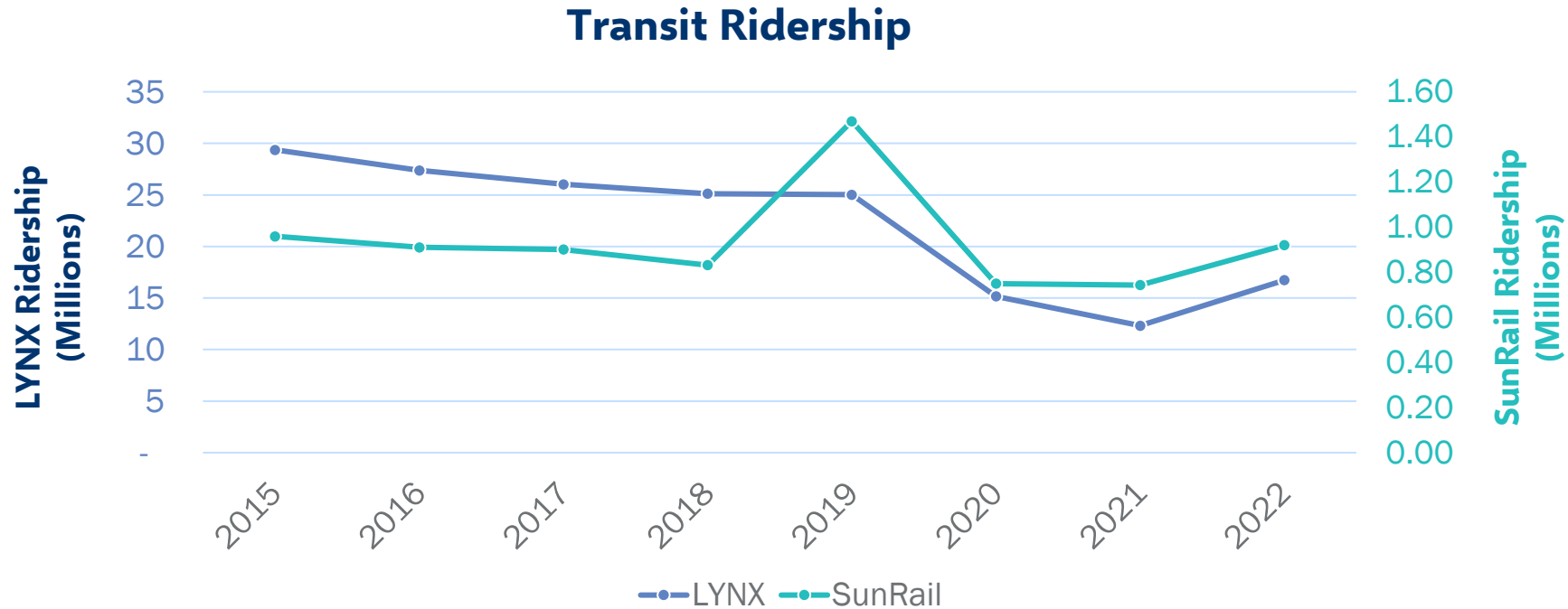
# Shifting Reliability and Performance

Delay has remained even



# Growth and Transit

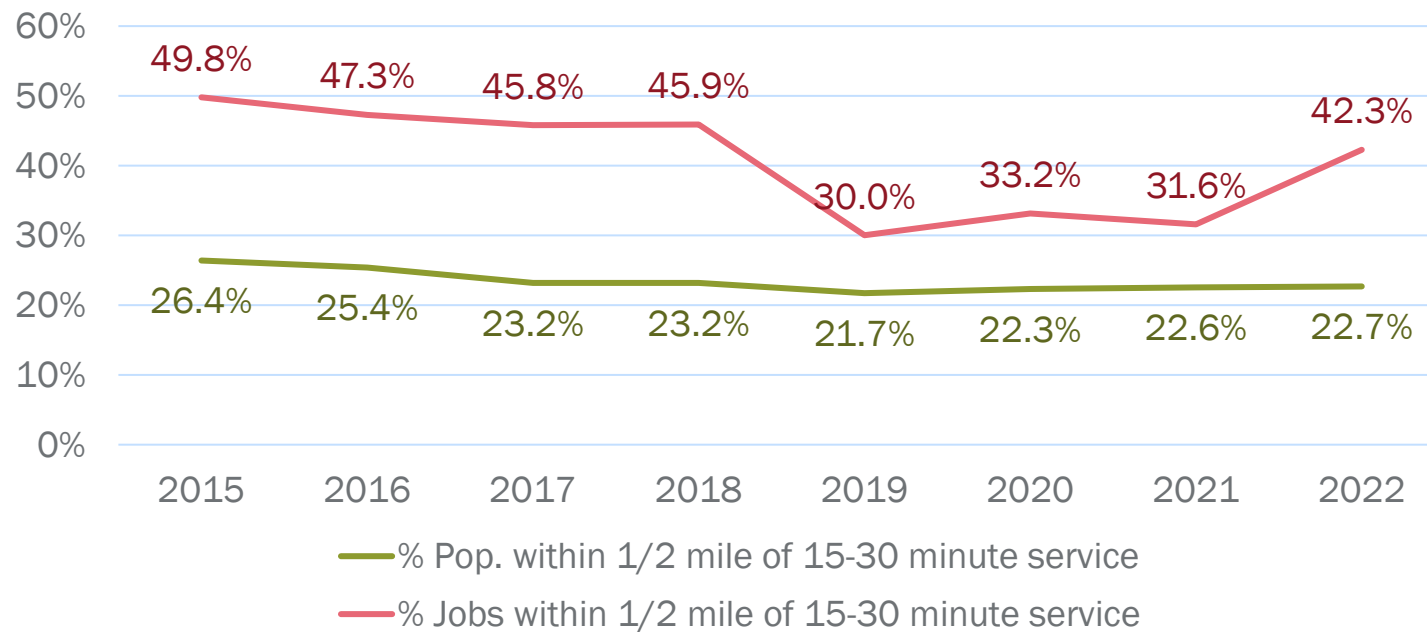
Transit ridership recovering from COVID-19



# Growth and Transit

Fewer people and jobs near transit since 2015, Agencies responding

### Transit Proximity

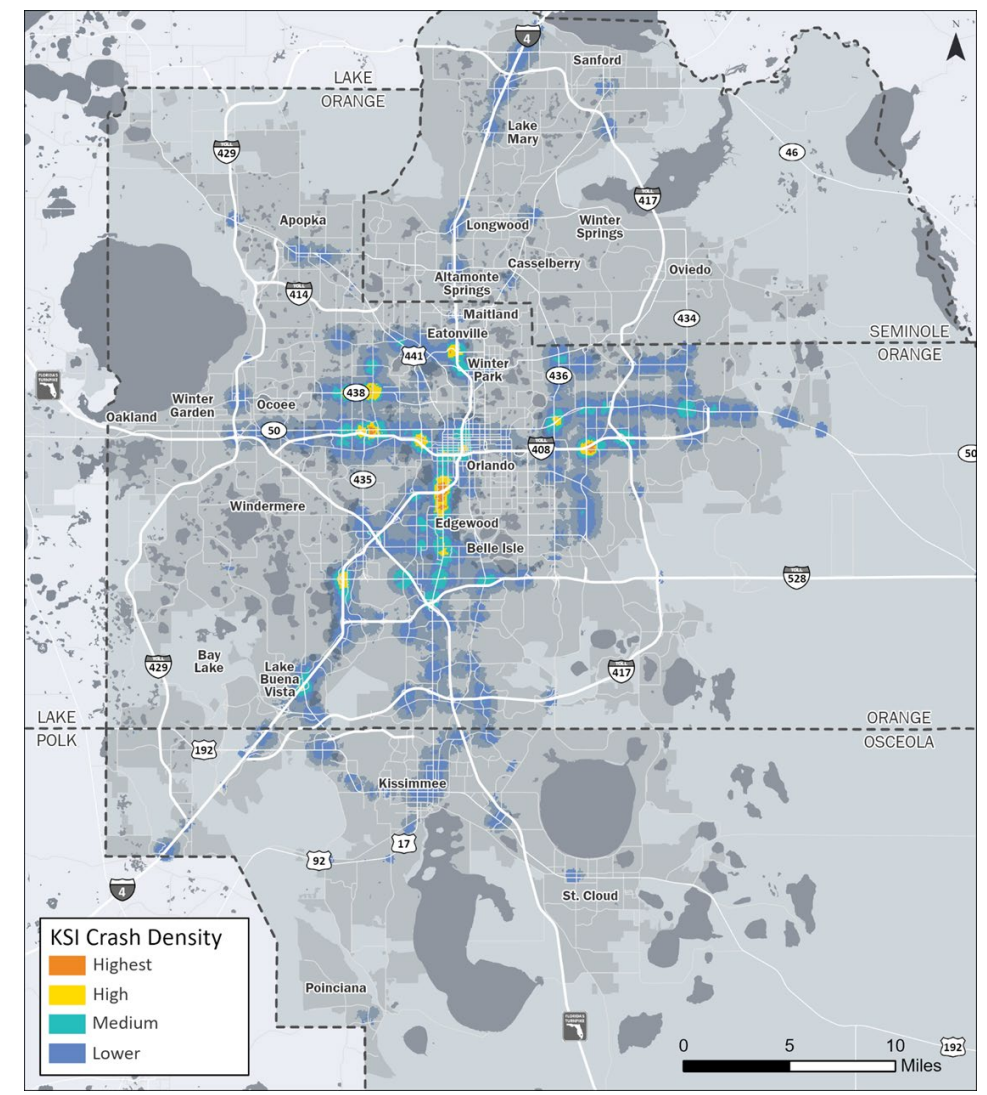
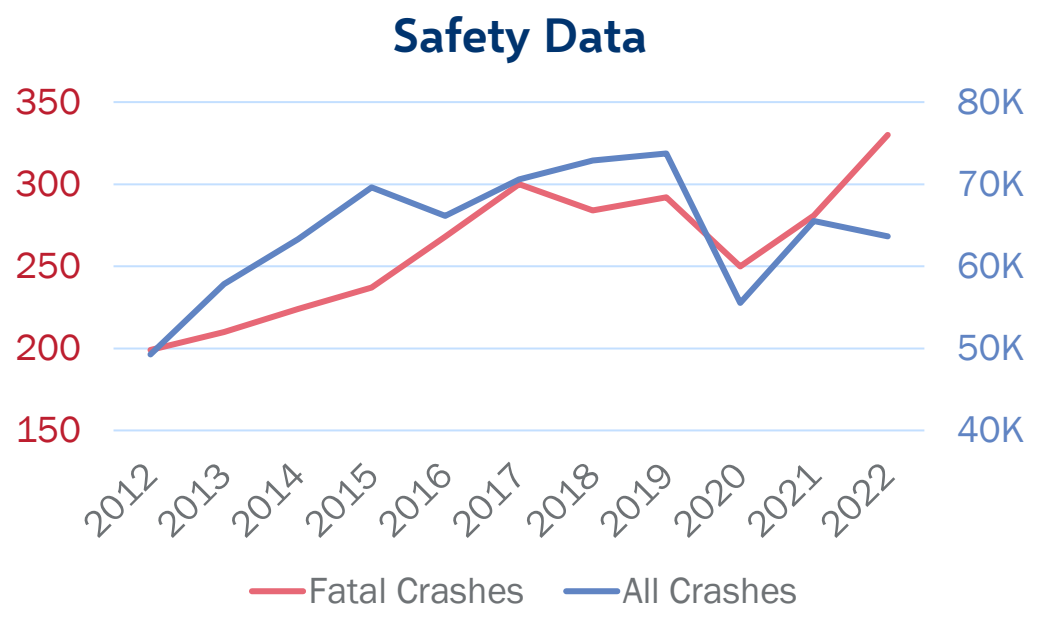






# Growing Safety Concerns

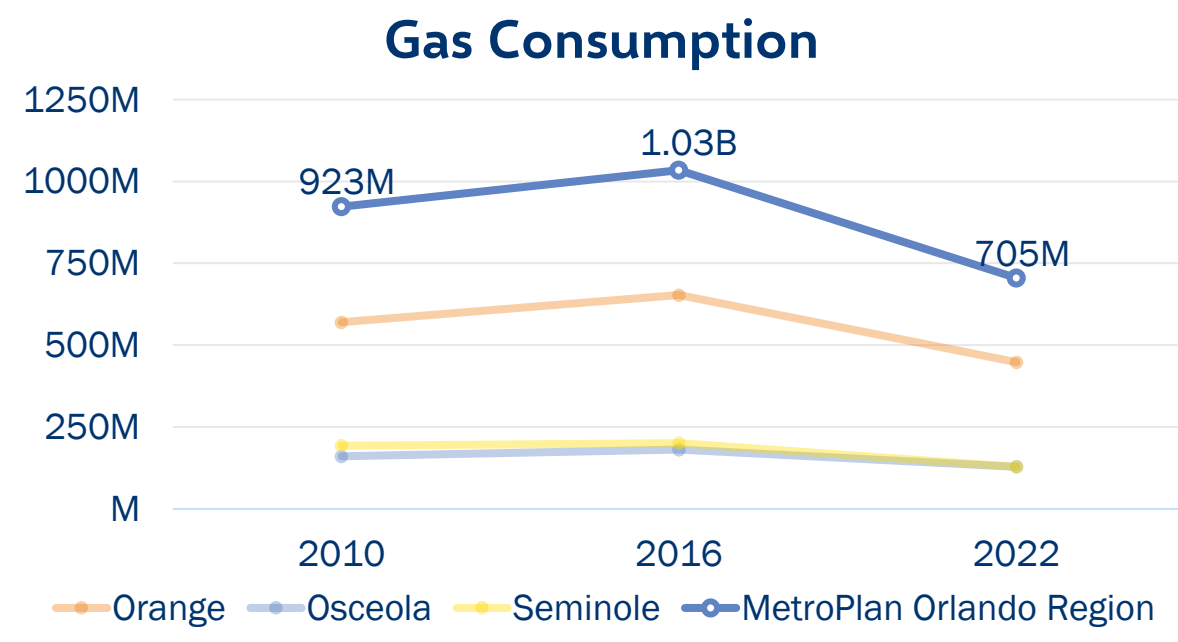
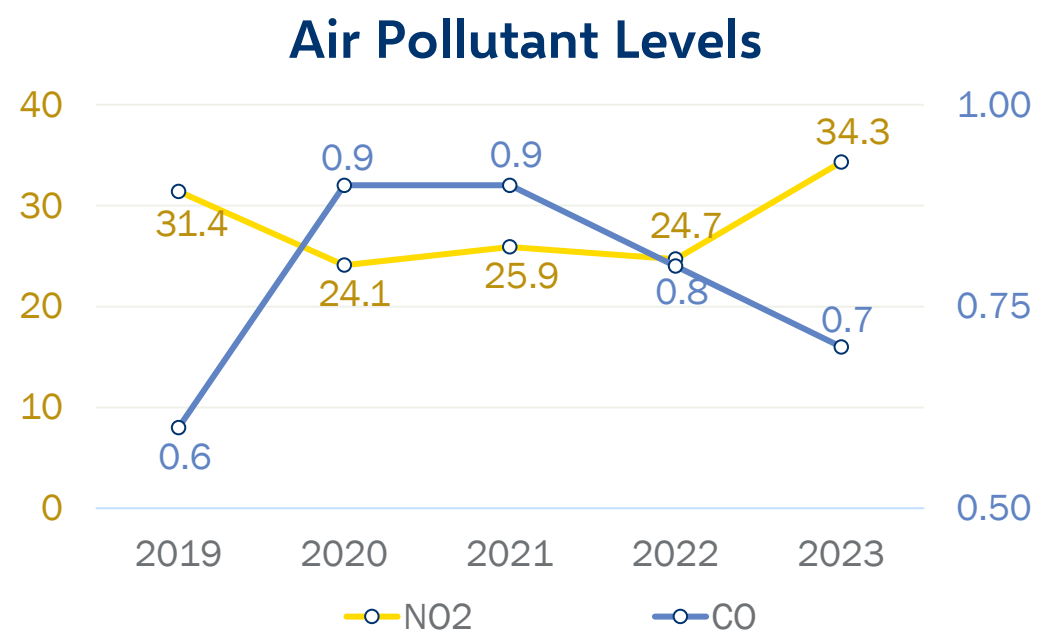
- Rise in crashes
- Rise in roadway fatalities
- Crash hotspots





# Growing Environmental Concerns

- Air Quality and Pollution are up
- Gas Consumption is down



Source: FL Dept. of Revenue, FL Dept. of Environmental Protection

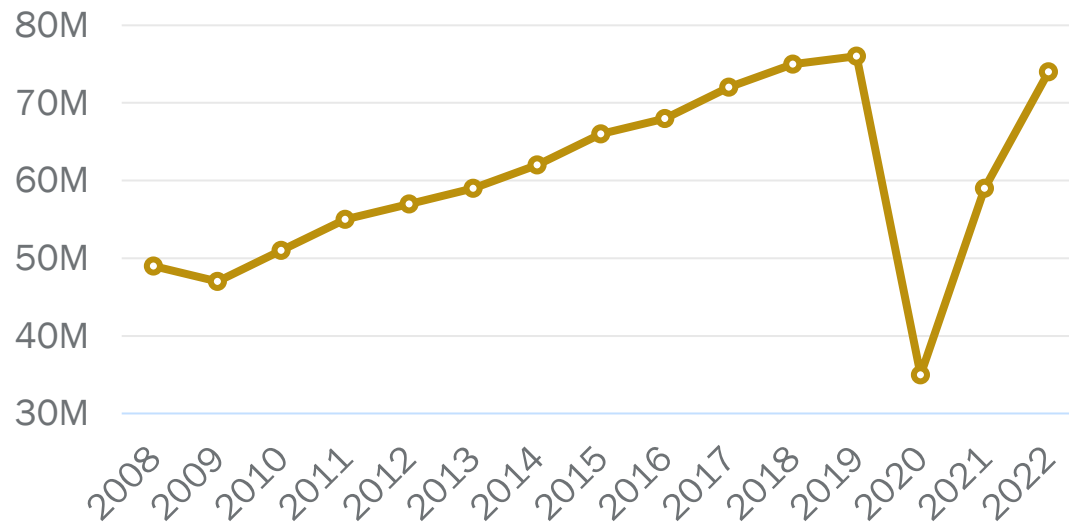


Source: Visit Orlando, FDOT,  
National Transportation  
Research Center

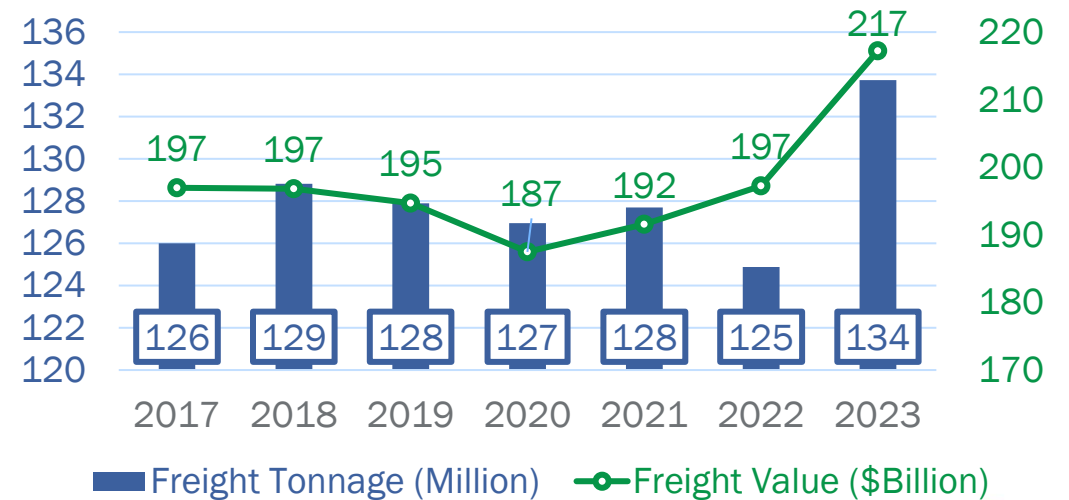
# Economic Growth

- Tourism is growing
- Freight Keeps Industry Moving

### Annual Visitation

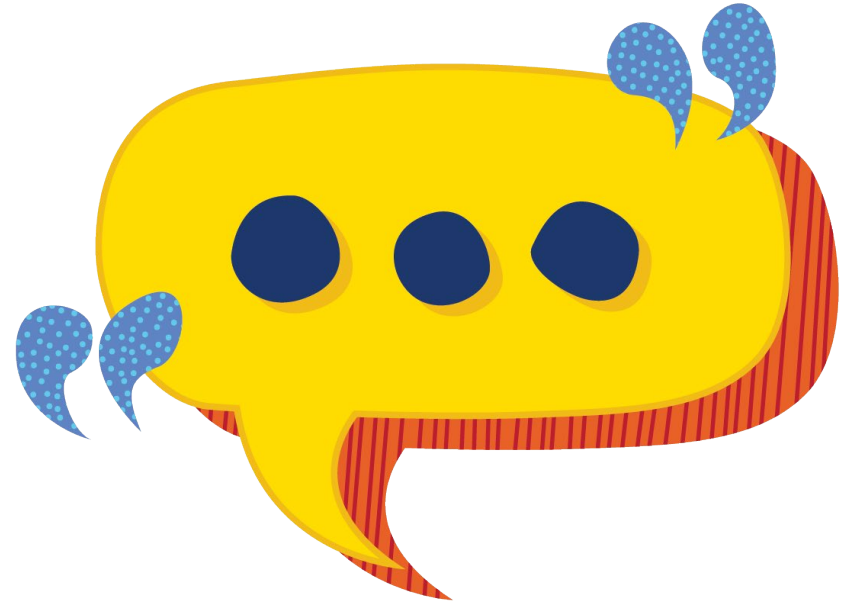


### Freight Activity



# Questions?

- Use the “Raise your hand” button
- Type your questions into the “Q&A” box



# Goals & Objectives

John Kaliski, Cambridge Systematics



# Definitions

## Goal

- A broad statement that describes a desired end state
- *“Provide a safe transportation system for all users”*

## Objective

- A specific, measurable statement that supports achievement of a goal
- *“Reduce fatalities and serious injuries”*

## Indicator

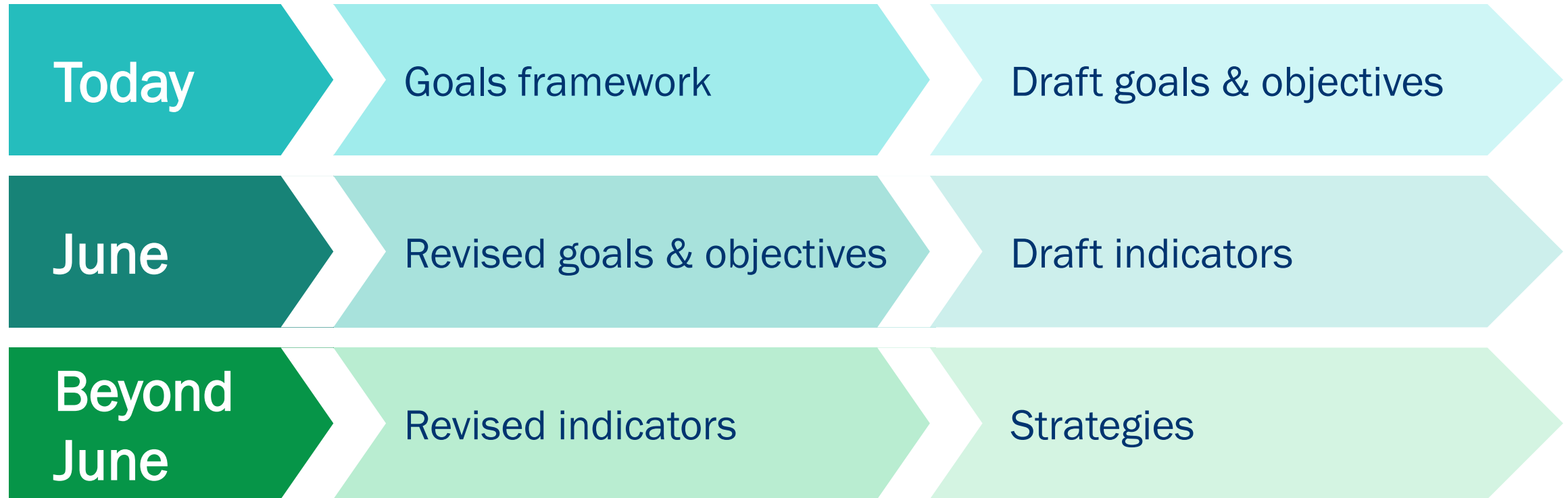
- Data used to measure progress toward goals and objectives
- *Fatalities and serious injuries*

## Strategy

- Approach to achieving one or more goals and objectives
- *“Reduce conflict between vehicles and vulnerable road users”*



# Development Process



# Work to Date



Review 2045 MTP goals & objectives



Compare to federal & state guidance



Compare to MTPs from neighboring/peer MPOs





# Goal Framework

2045 MTP	Proposed 2050 MTP
Safety & Security	Safety
Reliability & Performance	Reliability
Access & Connectivity	Connectivity
Health & Environment	Community
Investment & Economy	Prosperity



# Safety

**Goal** Provide a safe and secure transportation system for all users

- Objectives
  - Eliminate fatal and serious injury crashes, with an emphasis on the most vulnerable users
  - Provide infrastructure and services to help mitigate, prepare for, respond to, and recover from emergencies
  - Increase the resilience of transportation infrastructure to environmental, security, and other risks



# Reliability

**Goal** Provide a reliable transportation system across all modes for people and freight

- Objectives
  - Enhance the multimodal transportation system to maintain a state of good repair
  - Improve travel time reliability for all modes
  - Accommodate changing customer needs and preferences, including changing technologies



# Connectivity

**Goal** Enhance lives through improved access to opportunities for people of all ages and abilities

- Objectives
  - Increase the frequency, service, and accessibility of public transportation and shared mobility services
  - Improve the connectivity and accessibility of active transportation infrastructure
  - Reduce single-occupancy vehicle usage and per capita vehicle miles traveled



# Community

**Goal** Enhance our region's public health and built and natural environments

- Objectives
  - Provide transportation solutions that contribute to improved public health, including reducing adverse health impacts associated with physical inactivity
  - Reduce air quality pollutants and emissions per capita from transportation sources
  - Provide transportation solutions that enhance the natural and built environments





# Prosperity

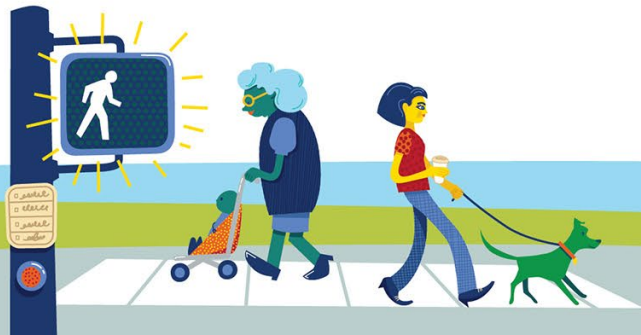
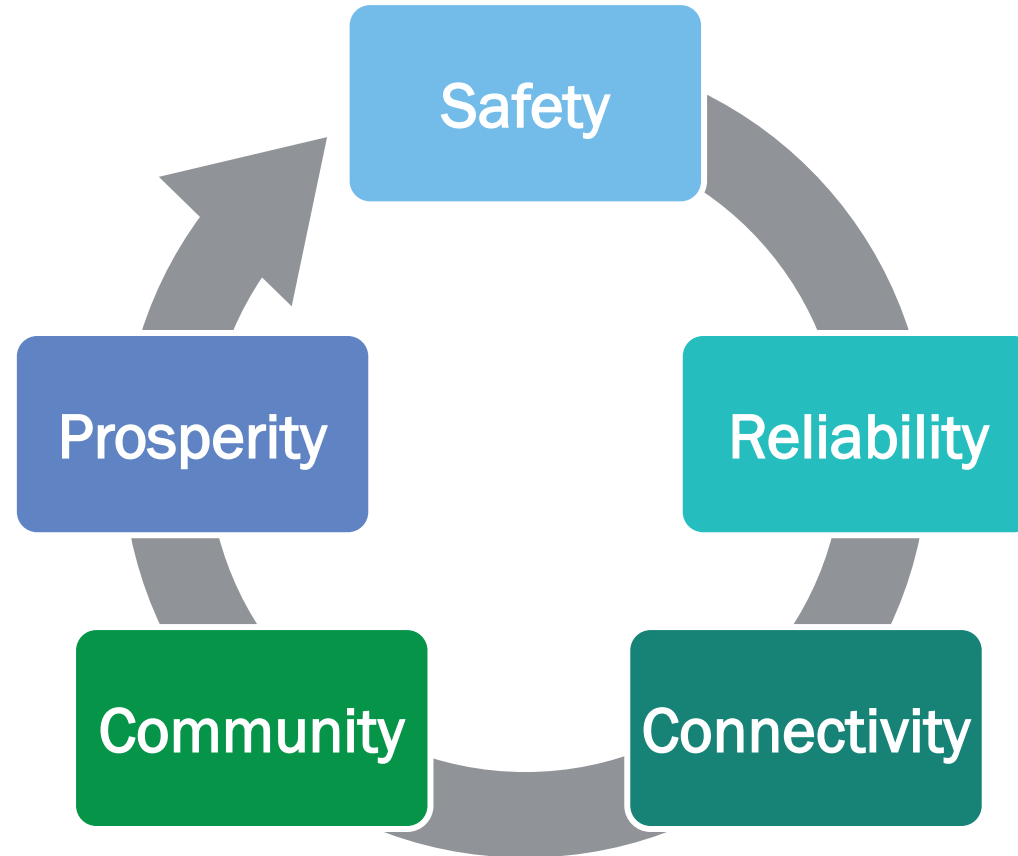
## Goal Strengthen our region's economy

- Objectives
  - Promote transportation investments and strategies that enhance economic prosperity
  - Improve access to jobs
  - Increase Central Florida's affordability as a place to live, work, and visit



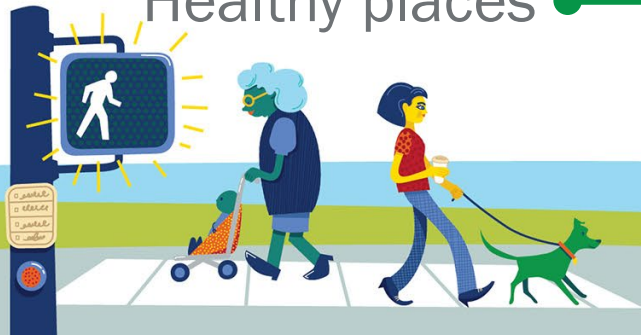
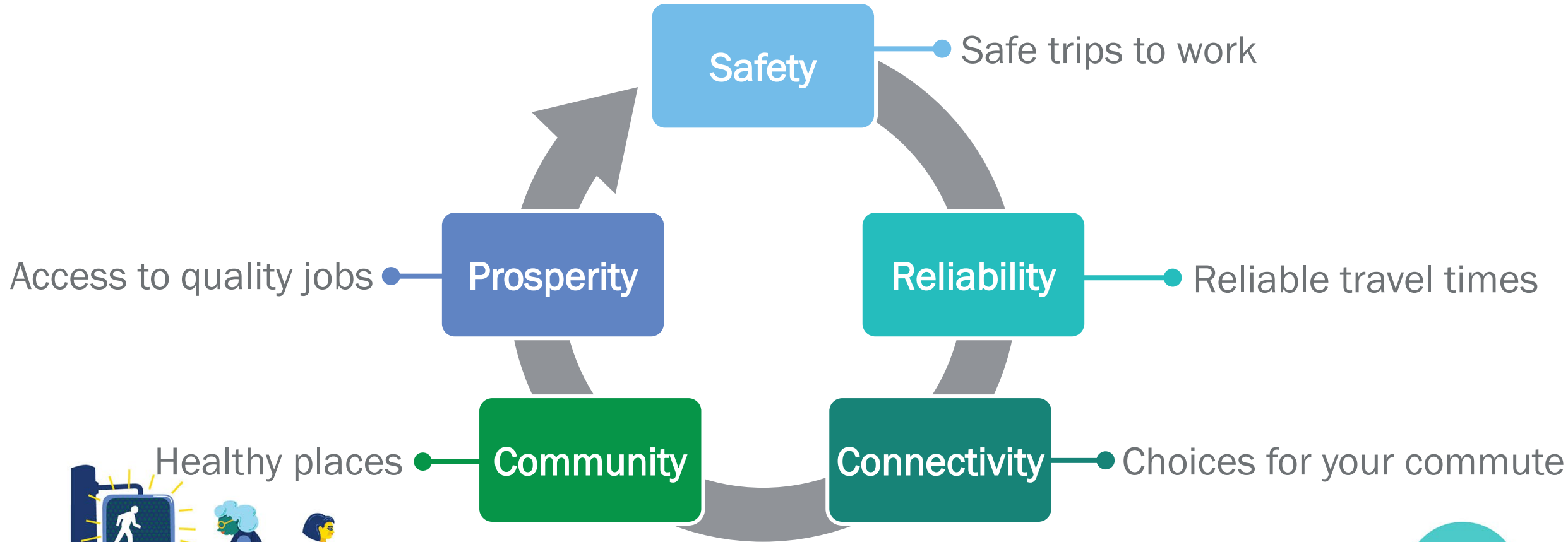


# Goals Are Interconnected



# Example

## 2050 Transportation for Central Florida Workers



# For Discussion Today

- Is there a topic missing from the goals or objectives?
- Is there language that could be made clearer?



# Drivers of Change

John Kaliski, Cambridge Systematics



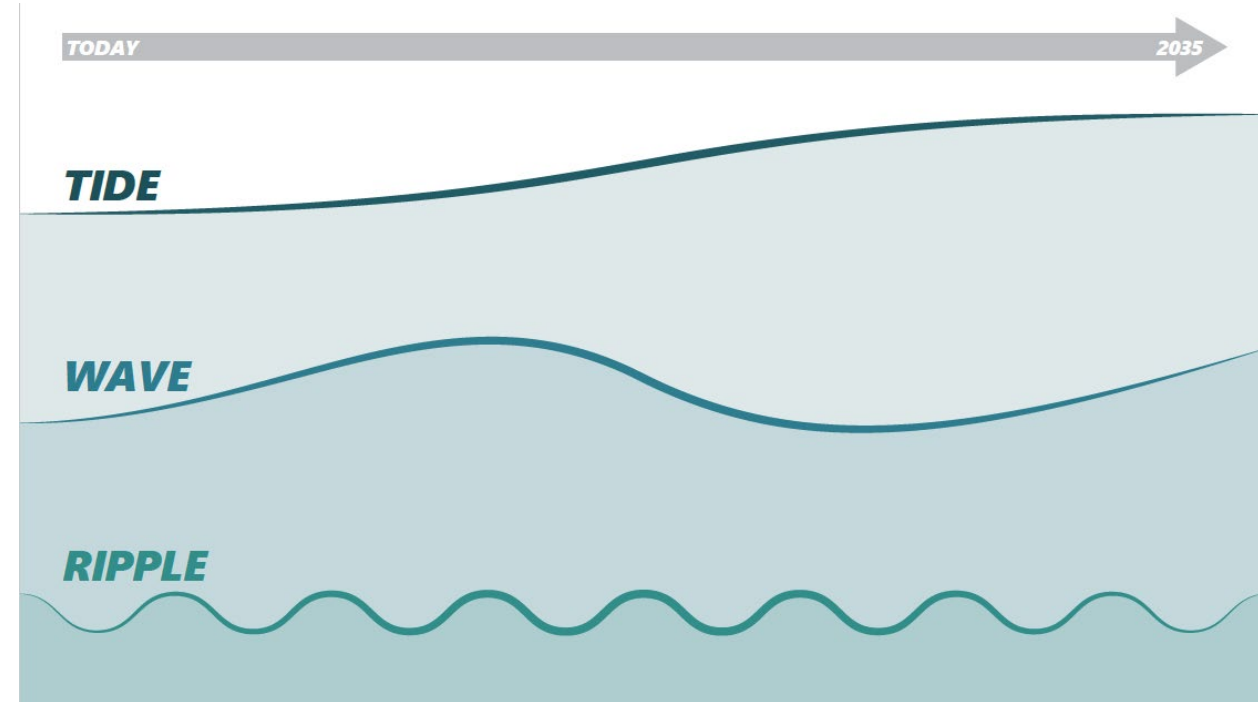
# Drivers of Change

- What are drivers of change?
  - Trends, changes, and disruptions that could impact our demand for and supply of transportation
- Why do they matter?
  - Encourage positive impacts
  - Mitigate negative impacts



# Drivers of Change

- **TIDE:** Major shifts with lasting impacts; 10-year-plus duration
- **WAVE:** Significant changes over a period of 4-9 years; some lasting impacts
- **RIPPLE:** Notable changes during a 1-3- year period with temporary impacts or short-term disruptions.





# Drivers of Change

- Central Florida Region

- Demographics
- Public health (*\*new*)
- Economy
- Visitation
- Development

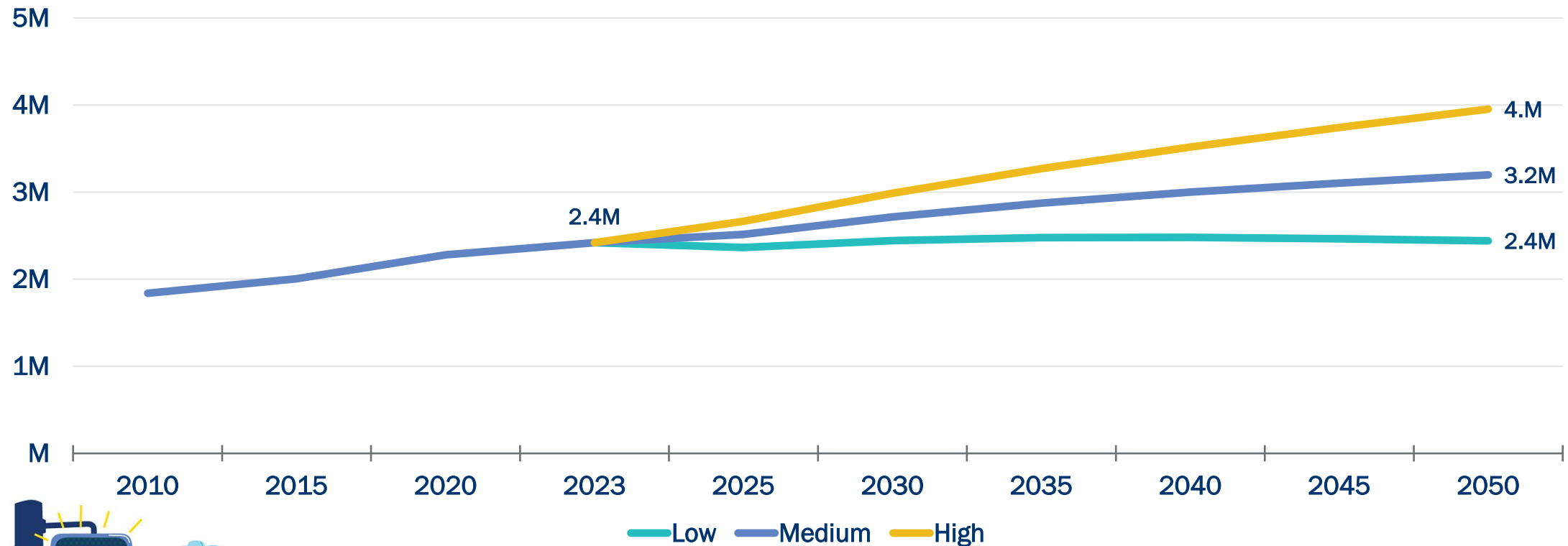
- External Factors

- Technology
- Energy (*\*new*)
- Climate and risks (*\*expanded*)
- Transportation costs (*\*new*)
- State and federal policy & funding (*\*new*)

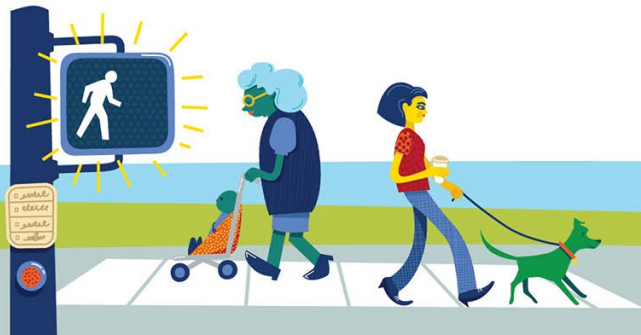


# We Expect to Continue to Grow

## MPO Planning Area Population Growth and Projections (2010-2050)

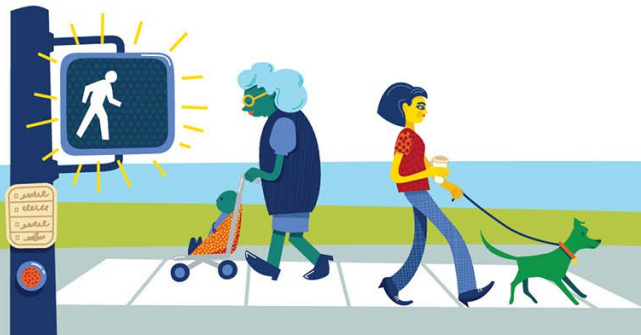
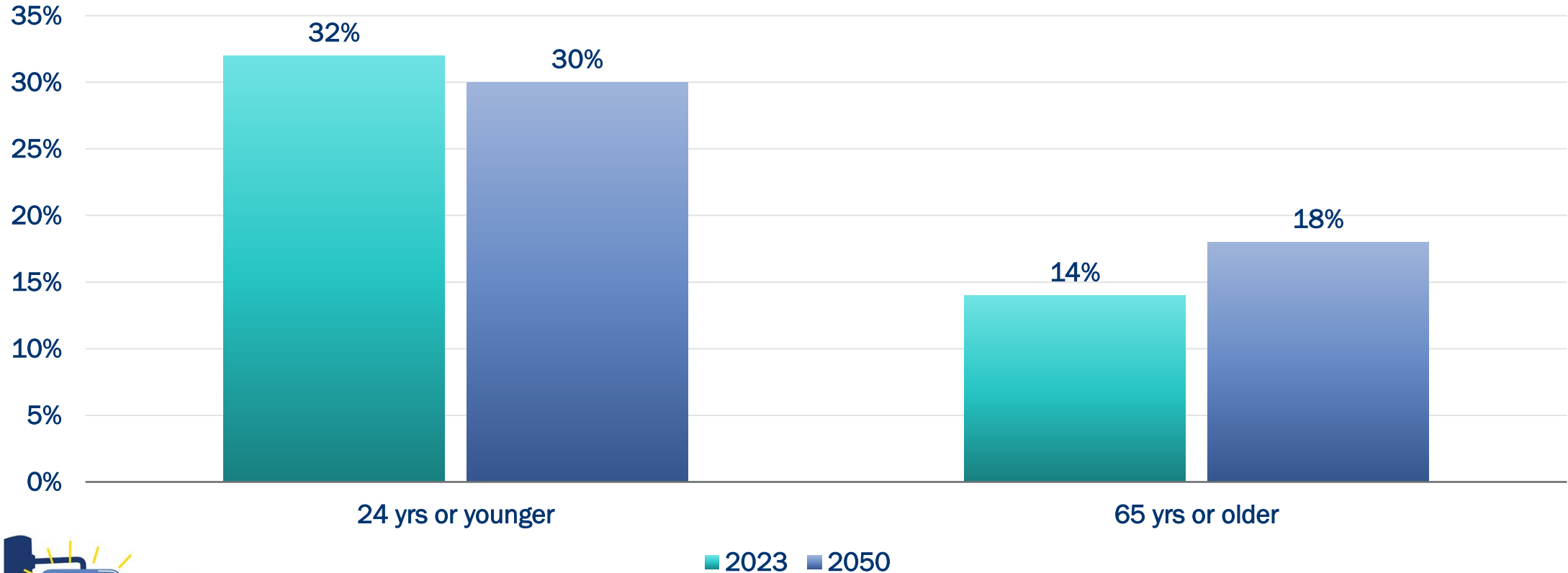


Source: University of Florida, Bureau of Business & Economic Research, 2024  
All data are for the MPO planning area.



# We Will Get Older...but Not by too Much

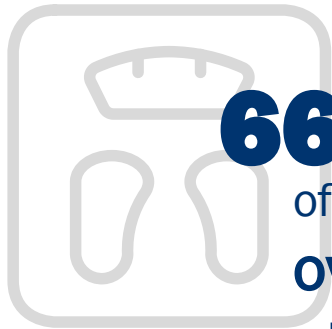
Population by Age Group in MPO Planning Area



Source: University of Florida, Bureau of Business & Economic Research, 2023  
All data are for the MPO planning area.



# We Are Facing More Complex Needs



**66.4%**

of adults are  
**overweight** or  
**obese**



**28.9%**

of adults have  
**one** or **more**  
**disabilities**



**12.6%**

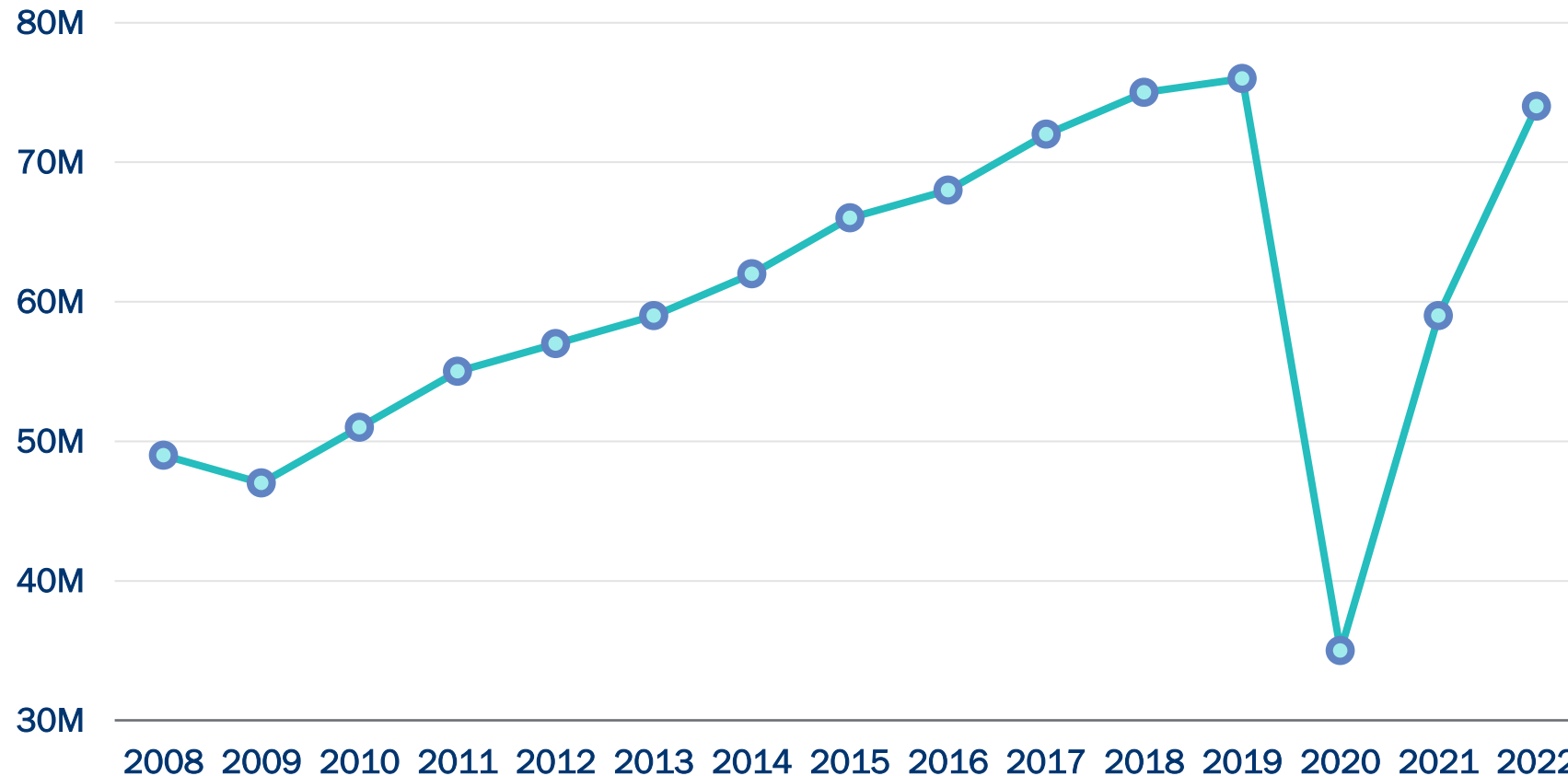
of adults are  
struggling with  
**mental health**



Source: Florida Department of Health, 2019  
All data are for the MPO planning area.



# We Expect Visitor Growth to Continue



Source: Visit Orlando; All data are for the MPO planning area.





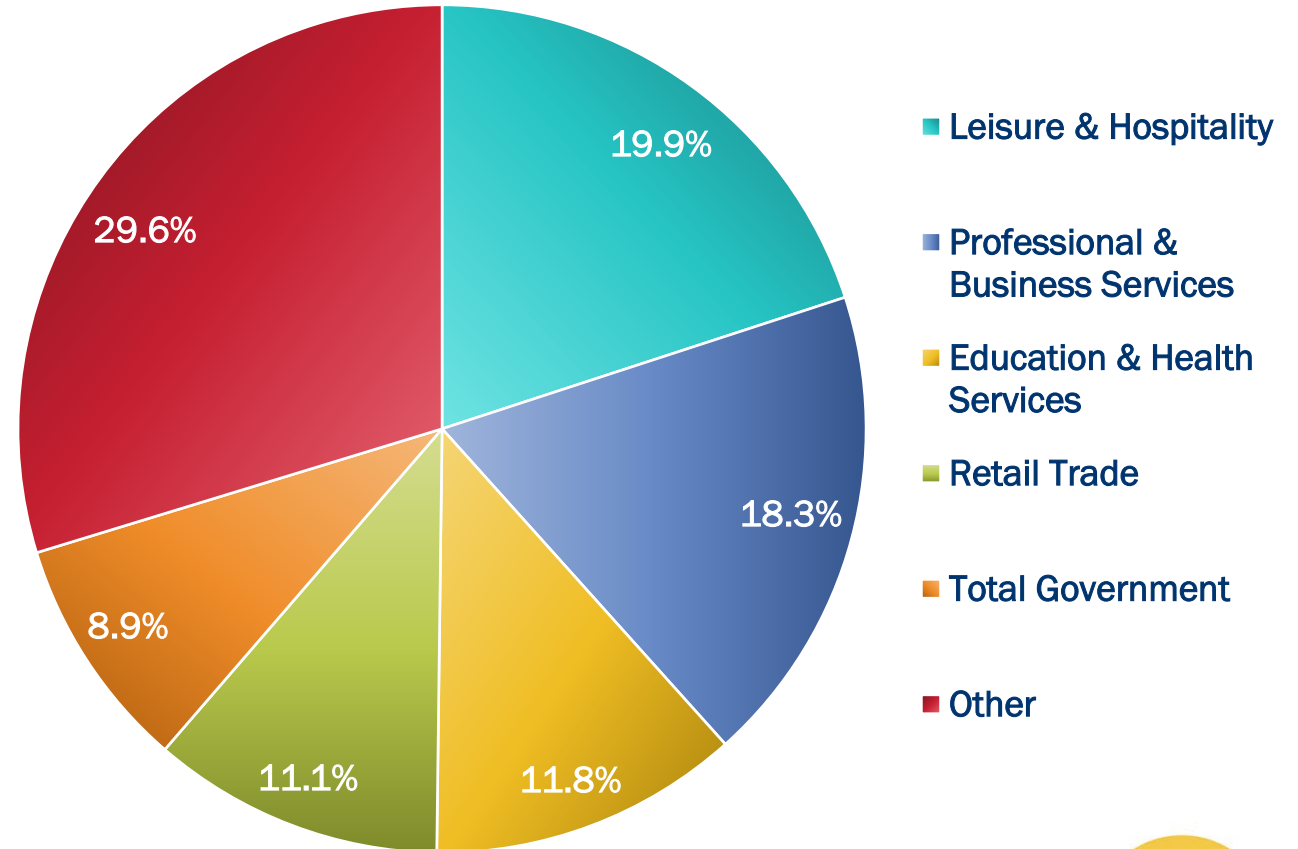
# We Seek to Diversify Our Economy

## Targeted industry sectors

- Advanced manufacturing
- Aerospace & defense
- Business services
- Clean technology
- Headquarters & regional offices
- Innovative technology
- Life sciences & health care
- Logistics & distribution
- Semiconductors

Source: Orlando Economic Partnership

Employment by Industry (2022)



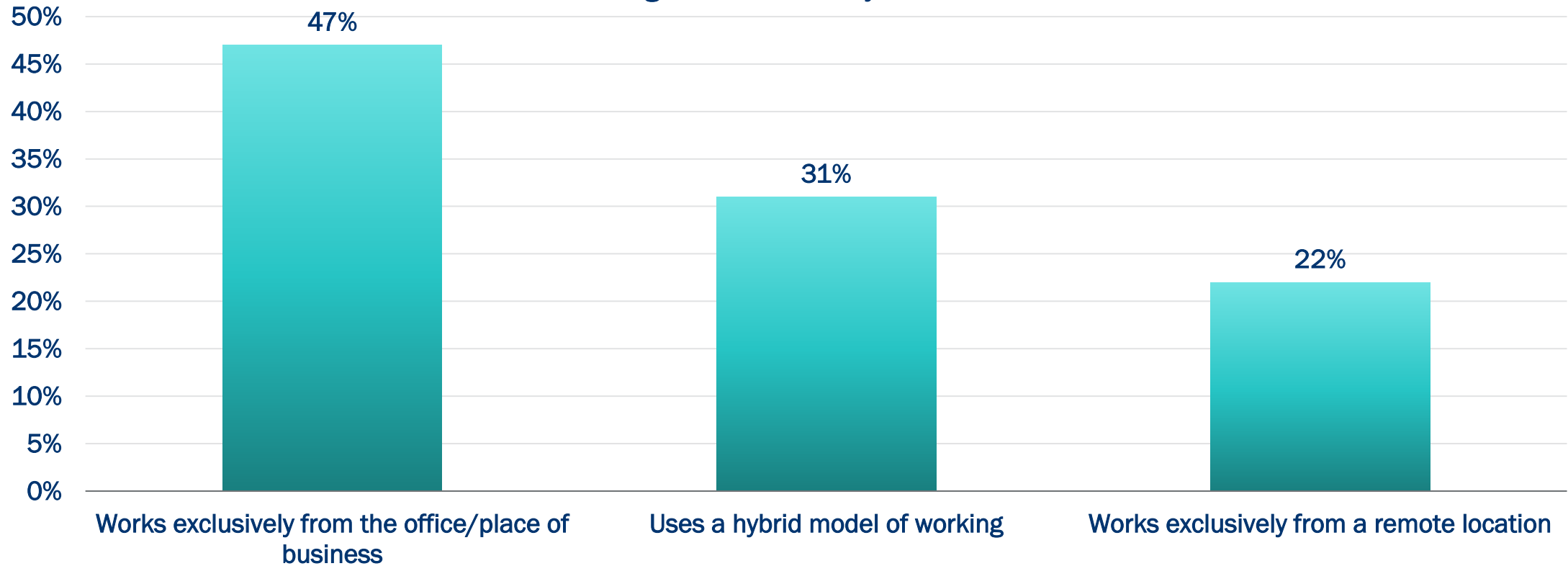
Source: Bureau of Labor Statistics, QCEW, 2022 Annual Average – Reported by Orlando Economic Partnership for Orange, Osceola, and Seminole Counties.





# We Will Work in Different Ways

Percentage of workforce by work location



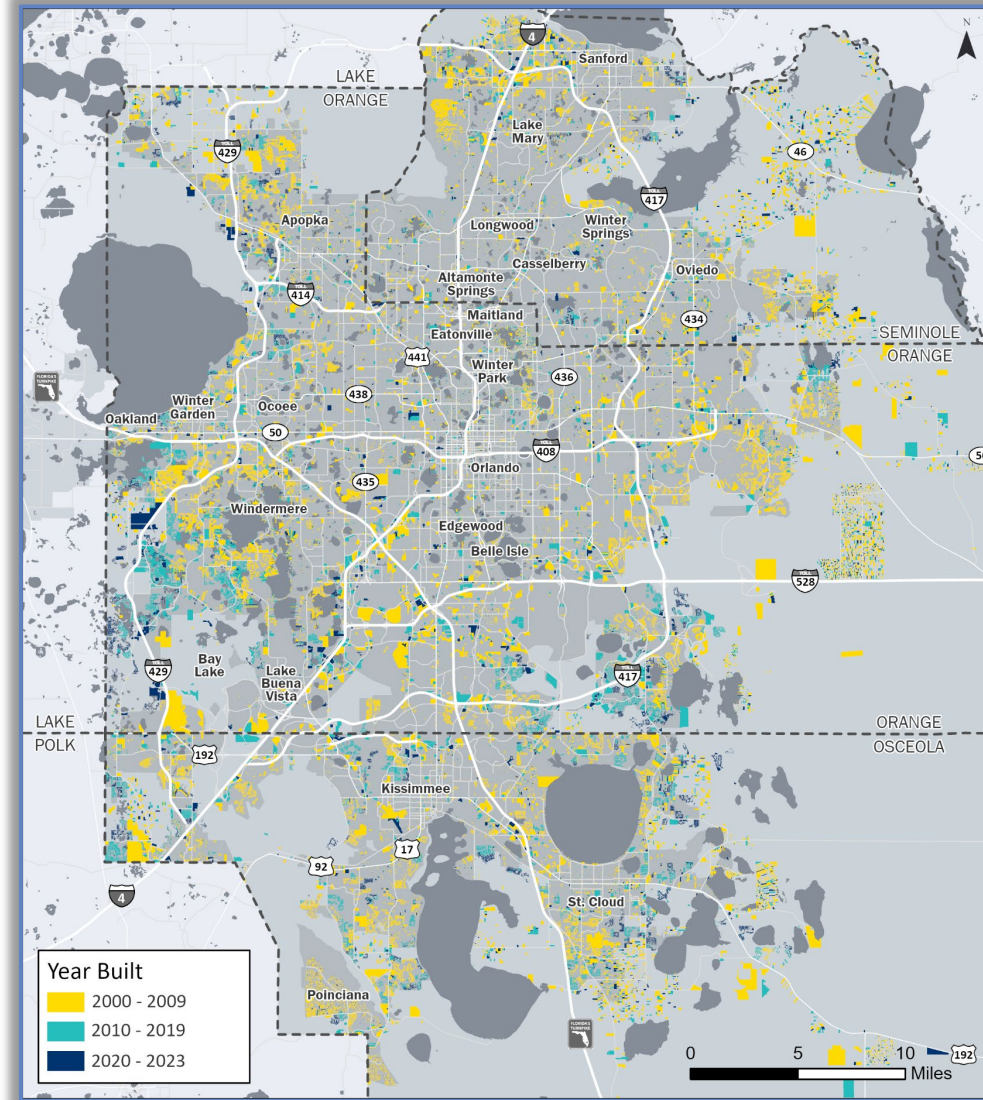
Source: Orlando Economic Partnership, Orlando Business Conditions Survey, Q4 2023  
Survey includes responses from Orange, Osceola, Seminole, and Lake counties.



# We May Grow in Different Places

- More infill/redevelopment?
- More growth in outlying areas?
- Significant new centers?
- Greater integration with surrounding counties/regions?

Source: MetroPlan Orlando, 2024  
Color represents year of project completion



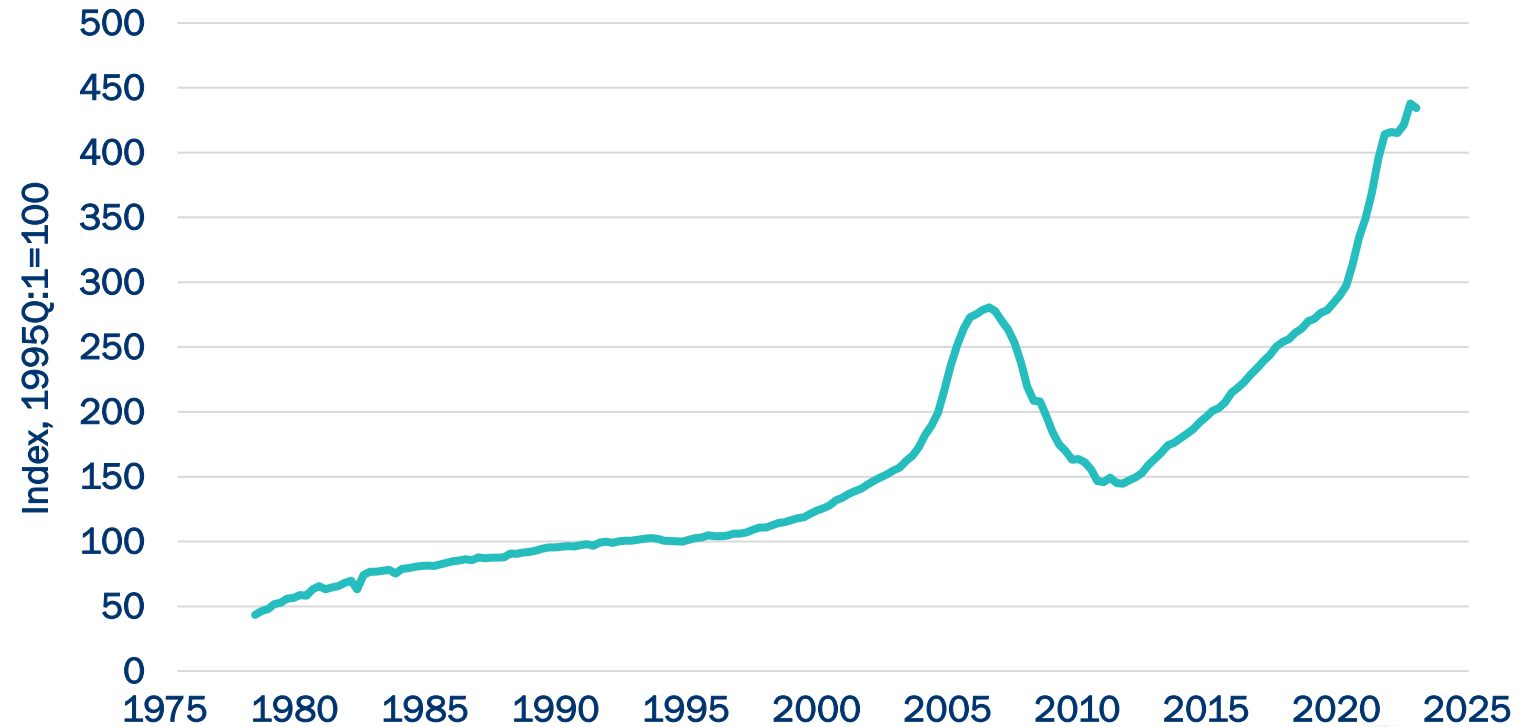
# We'll Worry about Increasing Costs

Housing + transportation account for **54%** of household income in the MPO area

*Source: Center for Neighborhood Technology, H+T Index, 2024*

**46%** of households in the MPO area are **asset-limited, income-constrained and employed (ALICE)** or below the federal poverty line

*Source: United for ALICE, 2022*

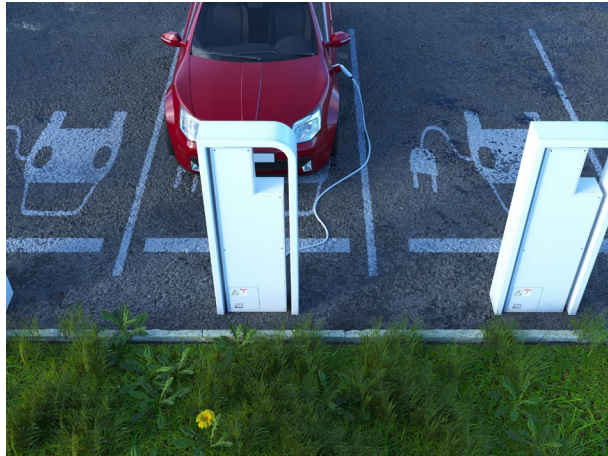


*Source: Federal Housing Finance Agency  
All-Transactions House Price Index for Orlando-Kissimmee-Sanford, FL (MSA)*



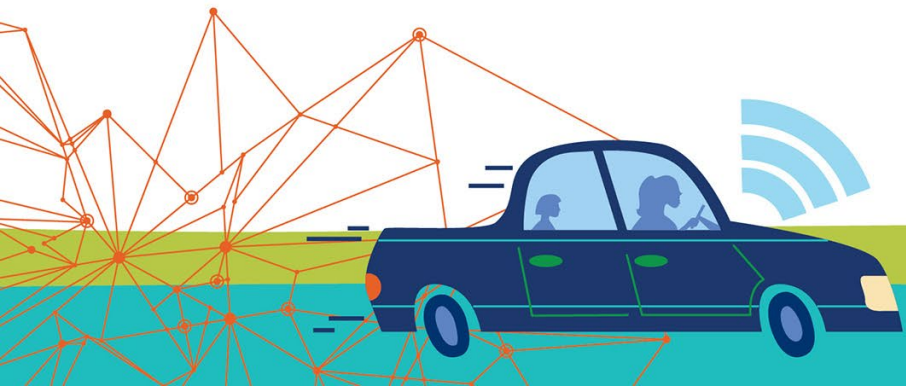


# Technology Will Evolve Even More Quickly





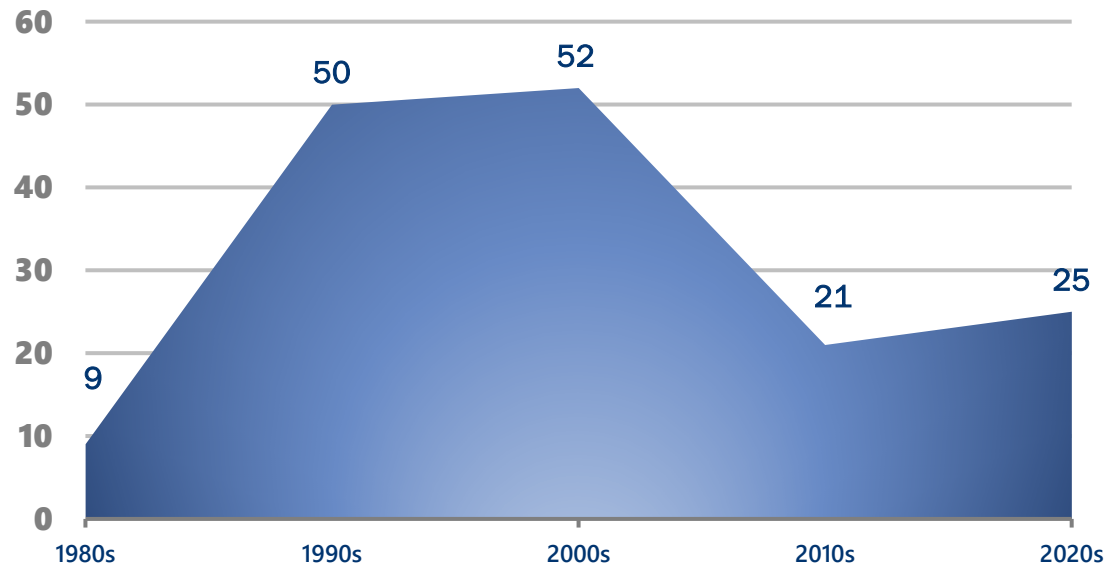
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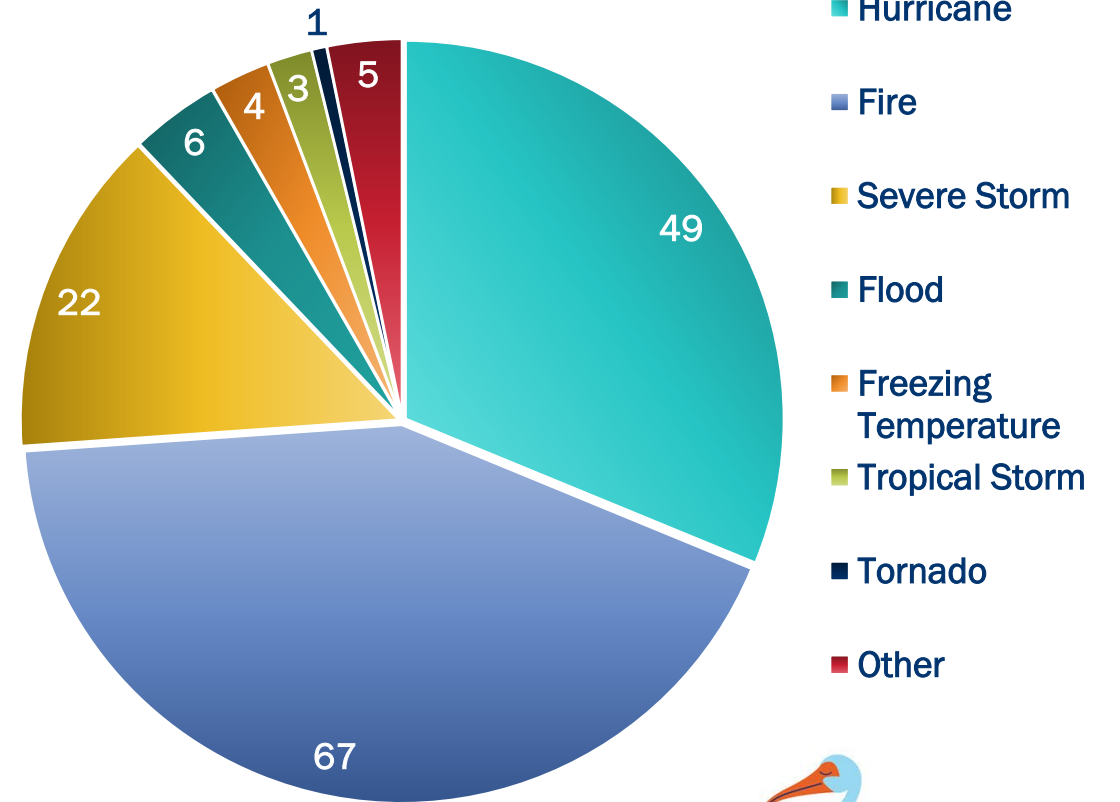


# We Will Face More Risks

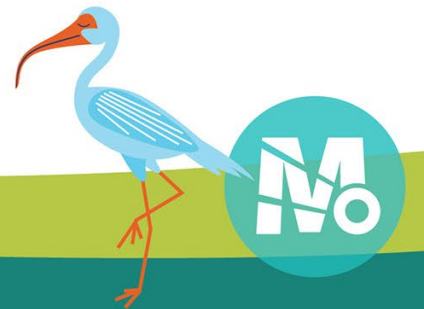
DISASTER DECLARATIONS IN FLORIDA (1981-2023)



MAJOR DISASTERS BY TYPE IN FLORIDA (1980-2023)



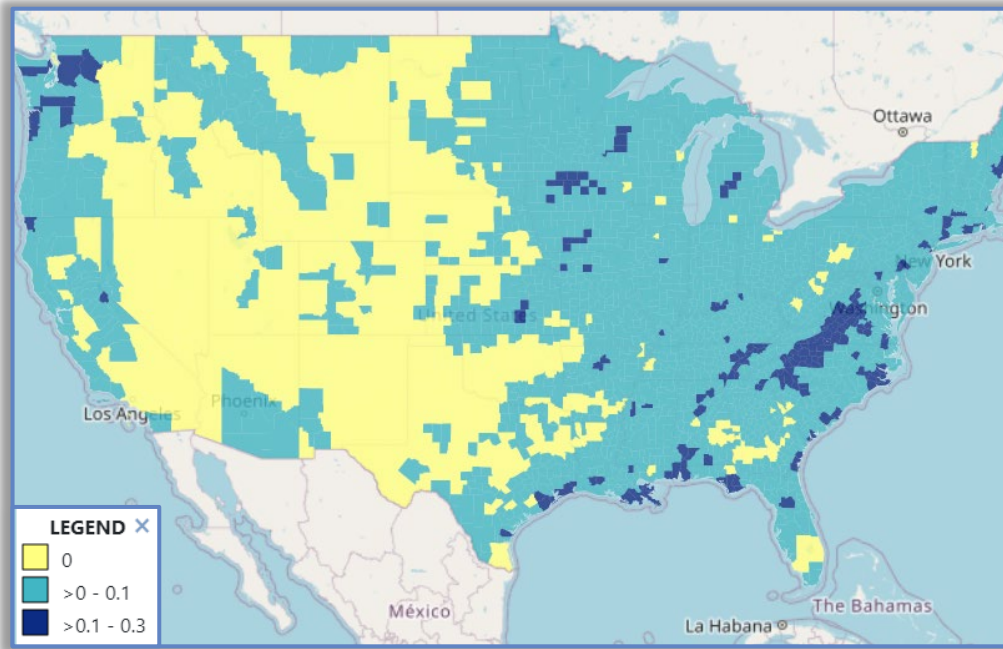
Source: Federal Emergency Management Administration, 2024.



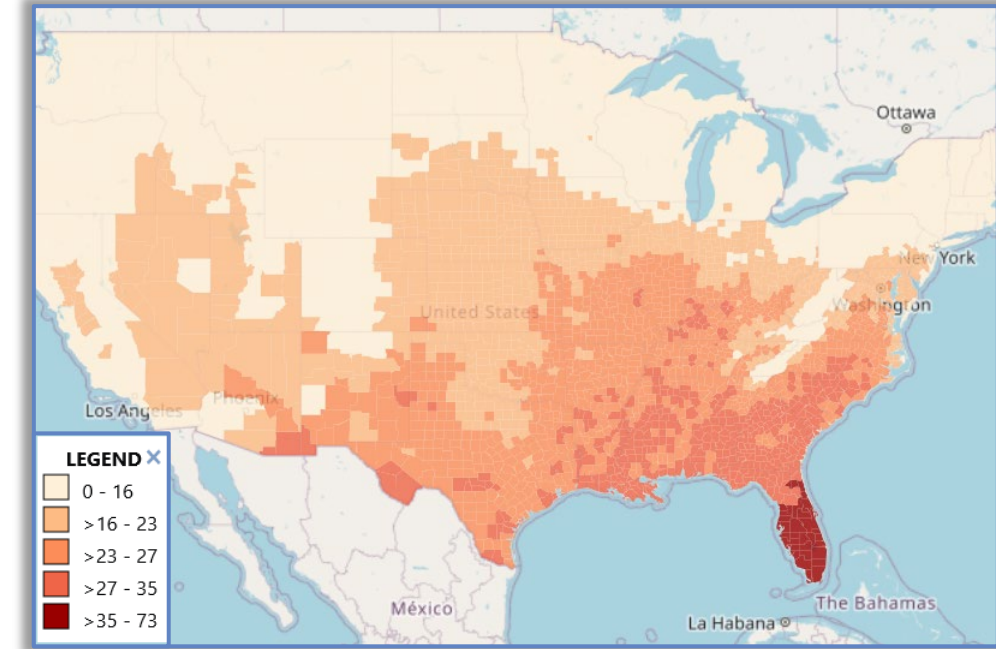
# We Will Face More Risks

## Projected Difference between 2016 and 2045

**MAXIMUM PRECIPITATION DURING AN EXTREME EVENT  
(24-HR DURATION)**



**EXTREME HEAT DAYS  
(90°F THRESHOLD)**



Source: Centers for Disease Control and Prevention. National Environmental Public Health Tracking Network, 2016-2045 differences under RCP 4.5 (low emissions scenario).



# We Will Face More Risks

- Nearly 2 of 3 global leaders expect a “stormy” or “turbulent” outlook for the next 10 years
- More than 2 out of 3 identify extreme weather events as the greatest global risk

“IDENTIFY THE MOST SEVERE RISKS ON A GLOBAL SCALE OVER THE NEXT 10 YEARS”

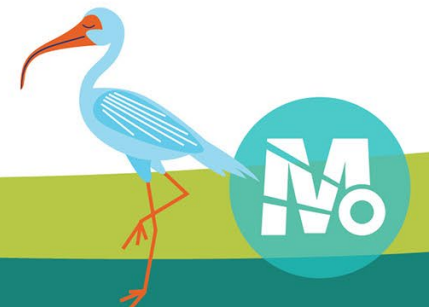
1. EXTREME WEATHER EVENTS
2. CRITICAL CHANGE TO EARTH SYSTEMS
3. BIODIVERSITY LOSS/ECOSYSTEM COLLAPSE
4. NATURAL RESOURCE SHORTAGES
5. MISINFORMATION AND DISINFORMATION
6. ADVERSE OUTCOMES OF AI TECHNOLOGIES
7. INVOLUNTARY MIGRATION
8. CYBERSECURITY
9. SOCIAL POLARIZATION
10. POLLUTION

Source: World Economic Forum, 2024

■ ENVIRONMENTAL

■ TECHNOLOGICAL

■ SOCIETAL





# Discussion Questions

- What are the key tides, waves, and ripples facing Central Florida between now and 2050?
- What key drivers, trends, or uncertainties would you add to this list?



# Open Discussion

- Use the “Raise your hand” button
- Type your questions into the “Q&A” box





# How to Make a Public Comment

## Verbal Comments

Use “Raise Hand” feature (Or dial \*9 if on the phone)

## Written Comments

Type in the “Q&A” box

Email [MTP@MetroPlanOrlando.gov](mailto:MTP@MetroPlanOrlando.gov)

After you are recognized, state your name and organization/address and give your comment within two minutes.



# Next Steps

- **Existing Conditions & Area Profile Technical Report**
  - [www.MetroPlanOrlando.gov/Draft2050Plan](http://www.MetroPlanOrlando.gov/Draft2050Plan)
- **Goals & Objectives**
  - Revise based on today's feedback
  - Present updated draft in April/May Advisory Committee Meetings
  - Identify draft indicators for review in June 2024 MTP Technical Workshop
- **Drivers of Change**
  - Present draft breadth in April/May Advisory Committee Meetings
  - Perform in-depth evaluations and develop technical report



# Upcoming Meetings

2050 MTP Technical  
Workshop #3

June 13, 2024  
2:00pm  
Virtual

2050 MTP Technical  
Workshop #4

August 8, 2024  
2:00pm  
Virtual





# Thank you!

MetroPlanOrlando.gov | 407-481-5672

MTP@MetroPlanOrlando.gov

