

### 2050 Metropolitan Transportation Plan Technical Workshop

June 13, 2024

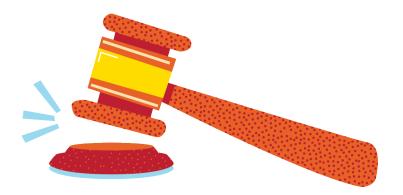


# Welcome!

Federal Highway Administration East Central Florida **Regional Planning Council Central** Florida Regional Transportation Authority/LYNX Orange County Apopka Belle Isle Eatonville Maitland Oakland Ocoee Edgewood 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 **Orlando-Sanford** Sanford Winter Springs **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

- I. General Status Updates
- II. Transit Vision Element Results
- III. Freight Planning Approach
- IV. Refinement of Indicators
- V. Open Discussion
- VI. Public Comments
- VII. Next Steps
- VIII. Adjournment

# AGENDA



## **Status Update**

### Background & Existing Conditions

- Public Participation Plan Complete
- Existing Conditions and Area Profile Technical Report Complete
  - <u>https://metroplanorlando.gov/wp-content/uploads/2050-MTP-Existing-Conditions-and-Area-Profile-Technical-Memo\_Draft\_March-2024.pdf</u>

### Goals & Objectives

- Developed Goals and Objectives
- Prepared Draft Indicators



## **Drivers of Change**

### **Central Florida Region**

- ✓ Demographics
- ✓ Public health
- ✓ Economy
- $\checkmark$  Visitation
- ✓ Development

### **External Factors**

- ✓ Technology
- ✓ Energy

- ✓ Climate & risks
- ✓ Transportation costs
- ✓ State and Federal policy and funding

https://metroplanorlando.gov/wp-content/uploads/2050-MTP-Chapter-8\_Drivers-of-Change\_Draft\_06-2024.pdf

## **Financial Resources**

• Guidance for the development of the MTP Cost Feasible Plan:

- The MTP is required to be fiscally constrained
- Identifies financial resources available through 2050 to fund transportation improvement
- Assessment of federal, state, local, and private sources
- Other potential revenue sources (e.g. discretionary funding)
- Next Steps
  - More detailed discussion during August MTP Technical Workshop
  - Documentation completed by October 2024

## **Status Update**

### **Technical Analysis**

- CFRPM Socioeconomic Data Review
  - 2050 MTP Team Submitted Comments to FDOT

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- TSMO (Completed April 2024)
  - <u>https://metroplanorlando.gov/plans/transportati</u> <u>on-systems-management-operations-master-plan/</u>
- Active Transportation (Completed April 2024)
  - <u>www.MetroPlanOrlando.gov/ATP</u>

### **Ongoing Efforts**

- Safety/Vision Zero Action Plan
- Health
- Housing
- Environmental Evaluations





### State Highway System (SHS) Needs Assessment 2050 MTP | Approach

- Consolidate 2045 MTP SHS Needs List
- Prepare data to facilitate review of 2050 SHS Needs
  - 2050 Traffic Estimations
  - Volume/Capacity Analysis
- Coordination with local jurisdictions and FDOT to develop and refine Draft 2050 MTP SHS Needs List
  - Timeframe: Late-June to Mid-July 2024
  - Location: In-Person
  - Participants: Local Agency Staff & 2050 MTP Team



## 2050 CMP Update

### **Goals & Objectives**

- Consistent with 2050 MTP
- Supported by strategies
- Measurable

#### **Performance Measures**

- Add / Remove measures
- Update targets
- Evaluation and monitoring plan

### **Strategies**

- Assessment
- Determine effectiveness
- Recommend for future deployment

#### Scorecard

- Key Measures
- Recuring updates

CMP Board/Committee Update: June/July 2024 Cycle CMP Metrics & Strategies Overview: August MTP Technical Workshop

### **2050 MTP Schedule**

WE ARE HERE •	2024			2025					
	Jan - Mar	Apr - Ju	n	Jul - Sep	Oct - Dec	Jan - Mar	Apr - Jun	Jul - Sep	Oct - Dec
Goals, Objectives, Measures									
Trends, Conditions, Uncertainties									
Multimodal Needs Assessments									
Infrastructure Investment Decision Making									
Develop Cost Feasible Plan									
Seek Board Adoption									Must be adopted by Dec 2025
Agency / Public Participation									

Transit Vision Element Results

Carl Weckenmann, Nelson\Nygaard





## **Peer Review**



## **Peer Review Regions**

#### **Peer regions**

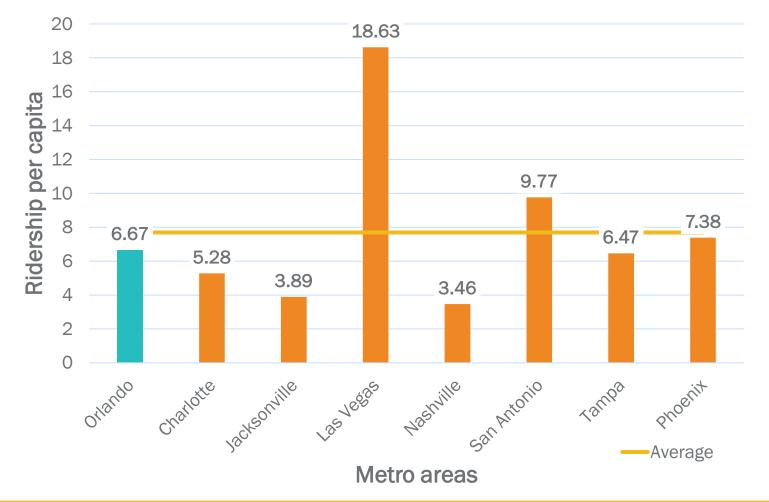
- Charlotte, NC
- Jacksonville, FL
- Las Vegas, NV
- Nashville, TN
- Phoenix, AZ
- San Antonio, TX
- Tampa, FL



### **Peer Region Transit Use**

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#### Transit Ridership per Capita



### **Peer Region Transit Expenditure**

H

**Expenditure per Capita** 



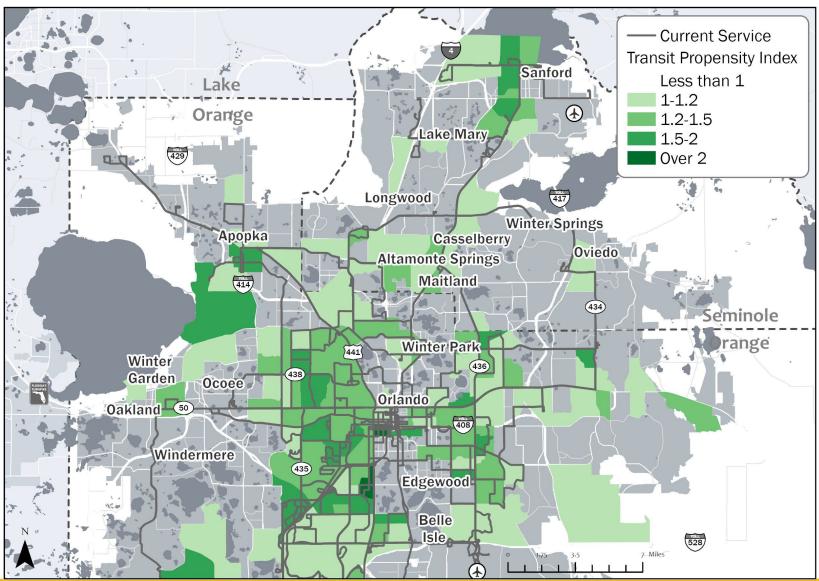


## **Transit Propensity Index**



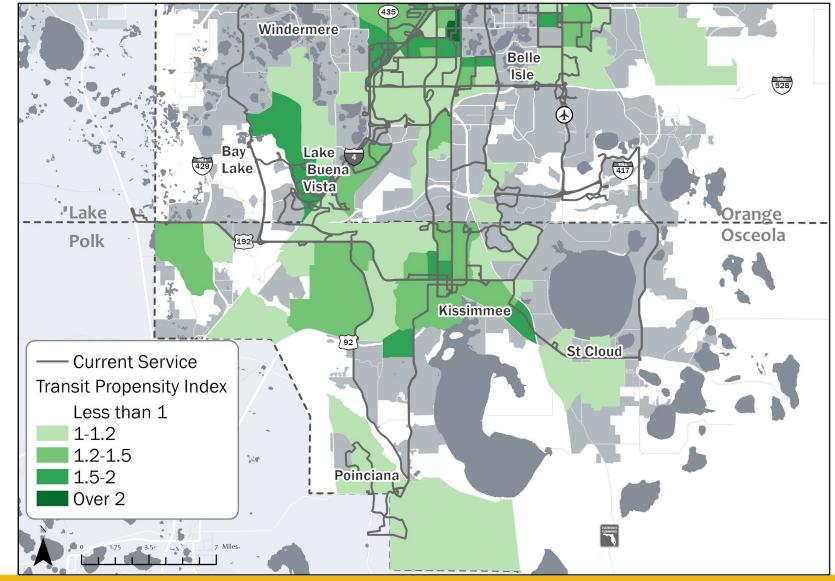
### **Transit Propensity Index - North**

- The Transit Propensity Index (TPI) is calculated to determine markets with the most potential demand for transit services
- TPI helps to identify specific locations in the region with residents most likely to use transit



### **Transit Propensity Index - South**

- The Transit Propensity Index (TPI) is calculated to determine markets with the most potential demand for transit services
- TPI helps to identify specific locations in the region with residents most likely to use transit





## **Transit Capital Projects**



## SunRail Improvements

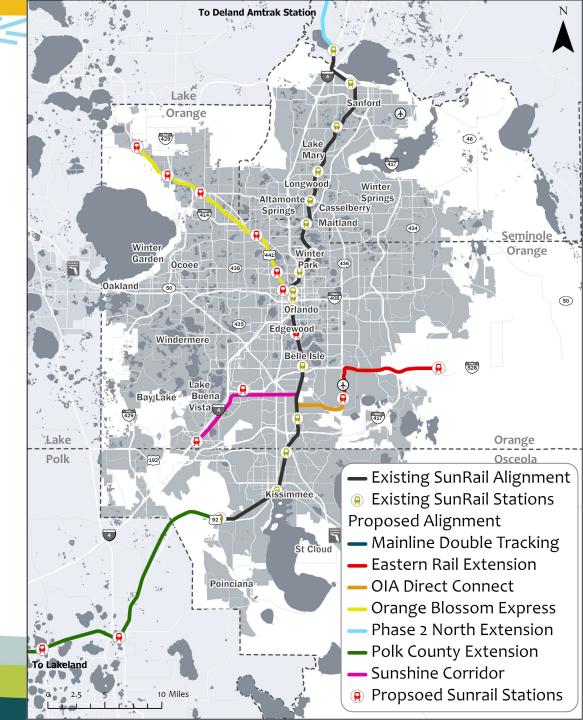
#### **Committed Projects**

Phase 2 North Extension

#### **Future Projects**

- OIA Direct Connect
- Sunshine Corridor
- Mainline Double-Tracking
- New Station at Edgewood
- Orange Blossom Express
- Eastern Rail Extension
- Polk County Extension





## **SunRail Improvement Capital Costs**

Project	Capital Cost (2024 Million \$)
OIA Service Extension	380
Mainline Double Tracking	75
Edgewood Station	18
Sunshine Corridor	610
Orange Blossom Express	1,035
Eastern Rail Extension	345

• Total Capital Cost = \$2.3 Billion



## **SunRail Operating Improvements**

#### **Service Enhancement**

• Increase Frequency to 15 mins Peak, 30 mins Off Peak and 60 mins Weekend

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• New Weekend and Evening Service

#### **Increases for SunRail Additional Service**

	Revenue Hours	O&M Cost
Current Service (2023 Actual)	17,332	\$66.1M
Additional Service	24,264	\$65.4M



## **SunRail Expansion – O&M Costs**

Project	Frequency (Peak/Off-peak)	Annual O&M Cost
OIA Service Extension	30/60	\$8.9M*
Sunshine Corridor	15/30	\$33.1M
Orange Blossom Express	30/60	\$22.0M

\*Additional costs for the OIA service extension presume frequency

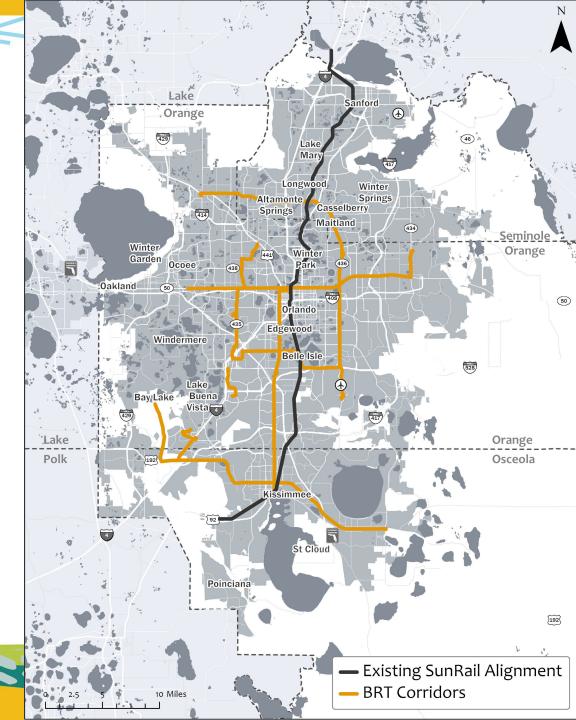
improvements for existing corridor have been previously implemented



## Bus Rapid Transit Corridors

- S.R. 436
- S.R. 50
- Kirkman Road
- Oak Ridge Drive
- South International Drive
- University Boulevard to US 441
- U.S. 441 south of Downtown
- U.S. 192, with extension to Walt Disney World

Total Capital Cost = \$1.6 Billion

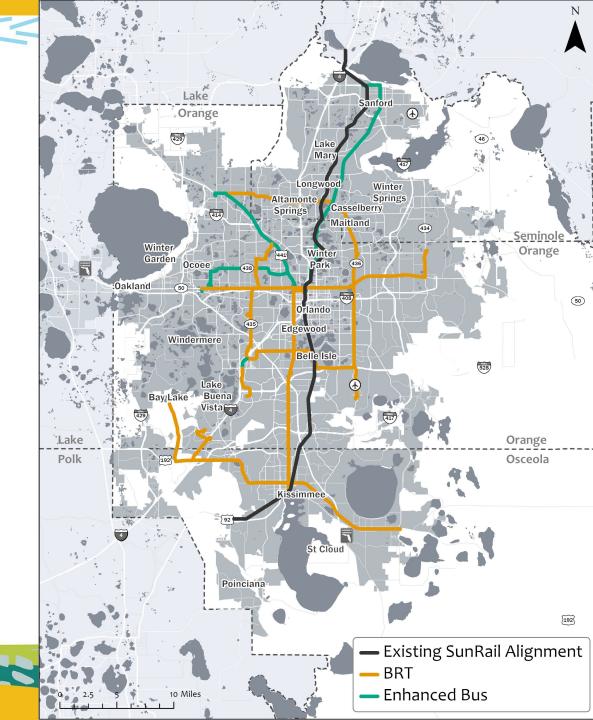


## Other Key Transit Corridors

#### **Enhanced Bus Corridors**

- Silver Star Road
- U.S. 17-92 North
- U.S. 441 North
- North International Drive
- US 17/92

Total Capital Cost = \$116 Million





### Passenger Facilities & Amenities

#### **Expanded Passenger Facilities**

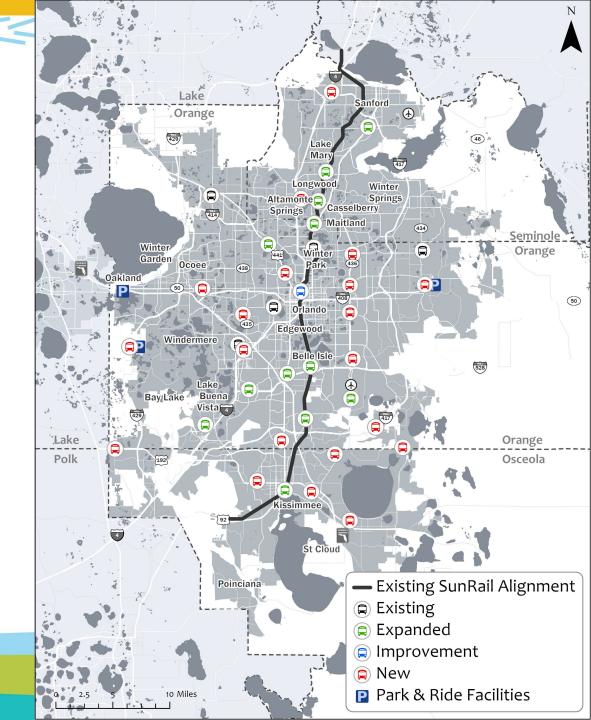
- 20 New Transfer Centers
- 10 Expanded Existing Transfer Centers
- 3 New Bus Park and Ride Facilities
- 10 New Rail Stations

New and Upgraded Transit Centers = \$201.7M

### **Enhanced Passenger Amenities**

- Shelters & Benches
- Access improvements
- Digital Signage/Communications







## **Bus Service Improvements**



## **High Frequency Service**

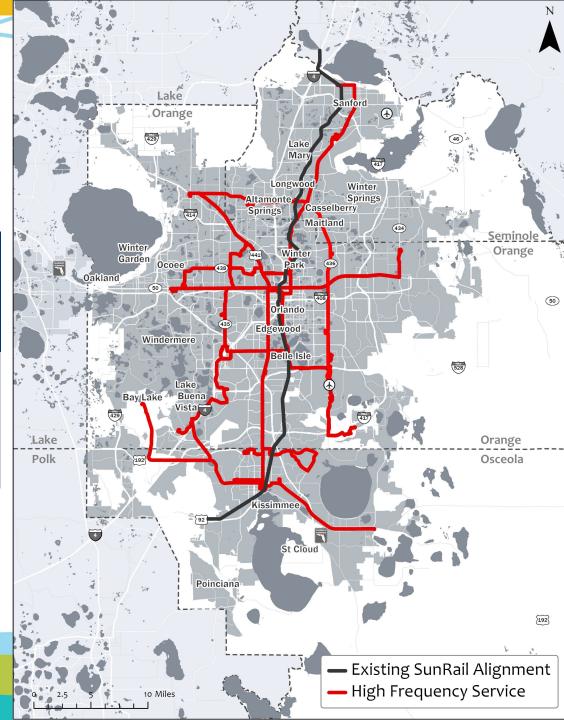
• Running Every 20 minutes or better

Operating statistics for 20-year transit network

Service Type	Number of Routes (Region)	Orange County	Seminole County	Osceola County
High Frequency Service	28	18	6	4

Annual Service Hours = 1,208,287 Annual Service Miles = 16,516,992





## **Enhanced Local Service**

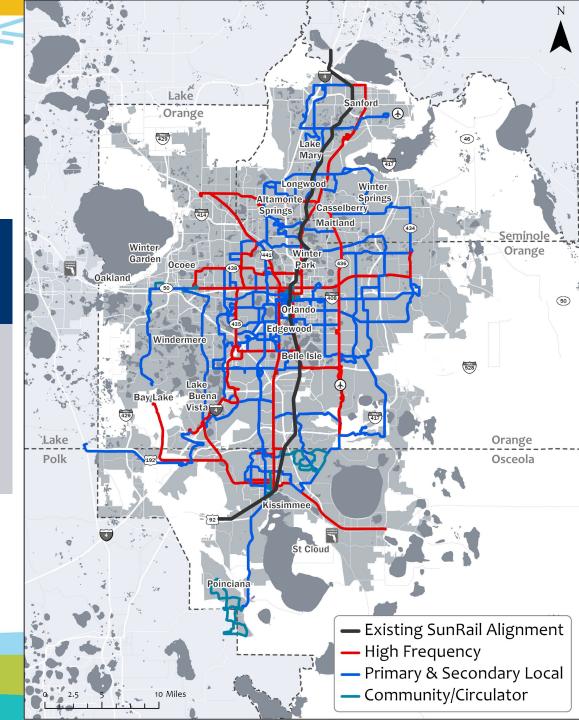
• Local Routes at 30 or 60 minute frequency

Operating statistics for 20-year transit network

Service Type	Number	Orange	Seminole	Osceola
	of Routes	County	County	County
Primary & Secondary Local Stop Routes	44	28	9	7

Annual Service Hours = 1,009,965 Annual Service Miles = 12,543,057





## **On-Demand Service**

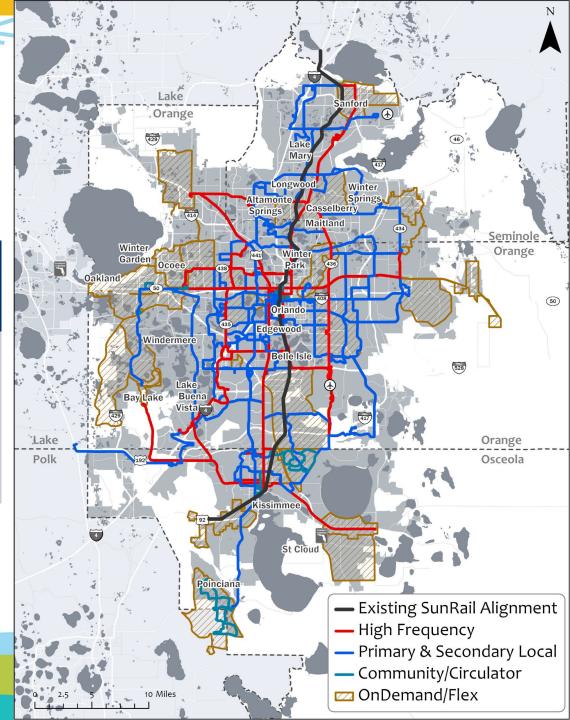
• NeighborLink and Mobility-on-Demand Zones

**Operating statistics for 20-year transit network** 

Service Type	Number	Orange	Seminole	Osceola
	of Routes	County	County	County
Community/ Circulator & On- Demand/Flex	37	21	5	11

Annual Service Hours = 390,261 Annual Service Miles = 3,913,944





## **Regional Express**

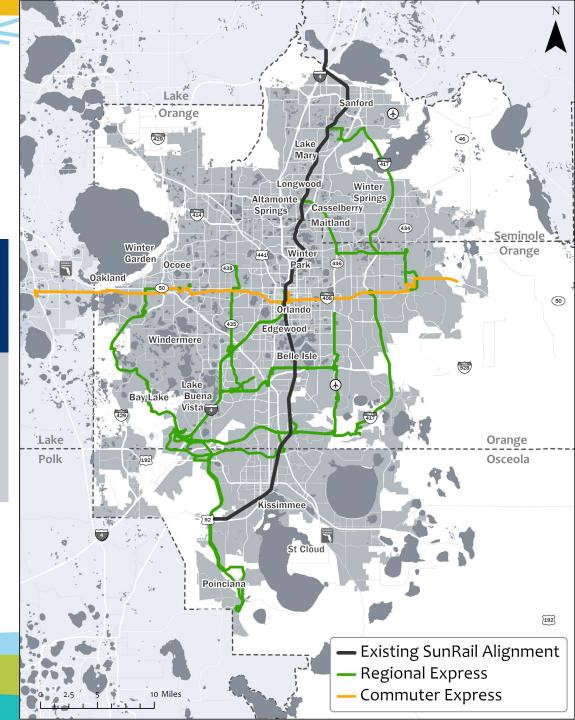
• Limited Stop / Express Service

Operating statistics for 20-year transit network

Service Type	Number	Orange	Seminole	Osceola
	of Routes	County	County	County
Regional & Commuter Express Routes	17	12	2	3

Annual Service Hours = 387,152 Annual Service Miles = 7,279,979





# **Operating Cost & Revenue**

Summary of operating cost in 2024 dollars

Service Plan	# of Routes	Annual Service Hours	Annual Operating Cost (in 2024 \$)	Total Max Fleet
Existing Services	79	1,157,605	\$145.2 M	269
25- Year Needs Plan	126	2,981,028	\$358.3 M	571





## **Service Implementation Phases**

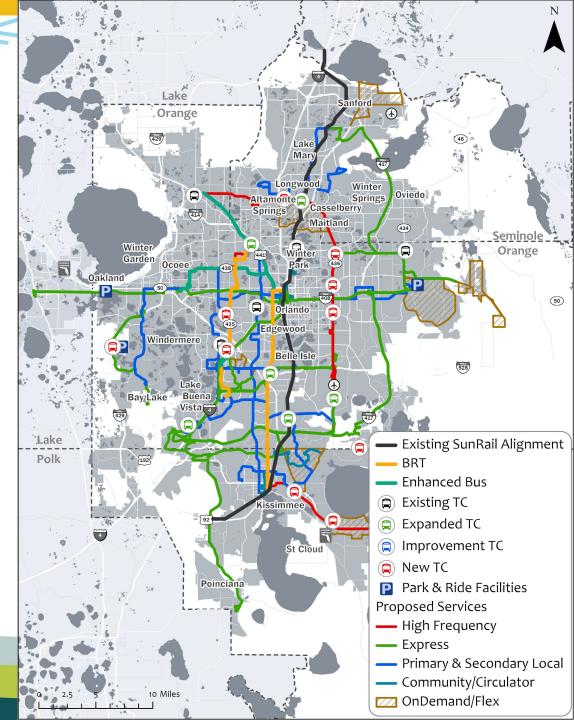


# **Short-Term Transit Vision**

### (2025-2029)

- 3 BRT and 3 Enhanced Bus Corridors
- 16 new and improved Transit Centers (TC)
- 12 High Frequency Routes
- 16 Express Routes
- 11 Primary and Secondary Local Routes
- 7 Community/Circulator Routes
- 8 On-Demand/ Flexible Routes

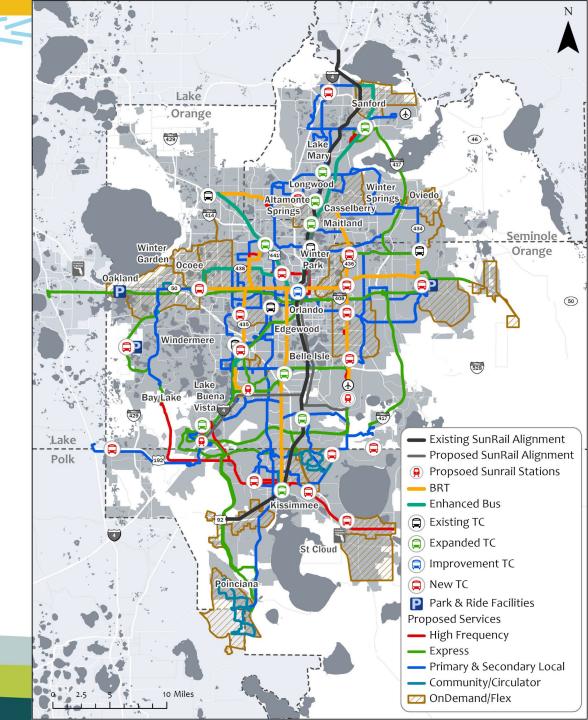




### Mid-Term Transit Vision (2030-2034)

- SunRail Extension to OIA, Sunshine Corridor & Maitland Double Track
- 2 BRT and 1 Enhanced Bus Corridor
- 13 new and improved Transit Centers
- 9 High Frequency Routes
- 1 Express Route
- 20 Primary and Secondary Local Routes
- 4 Community/Circulator Routes
- 14 On-Demand/ Flexible Routes

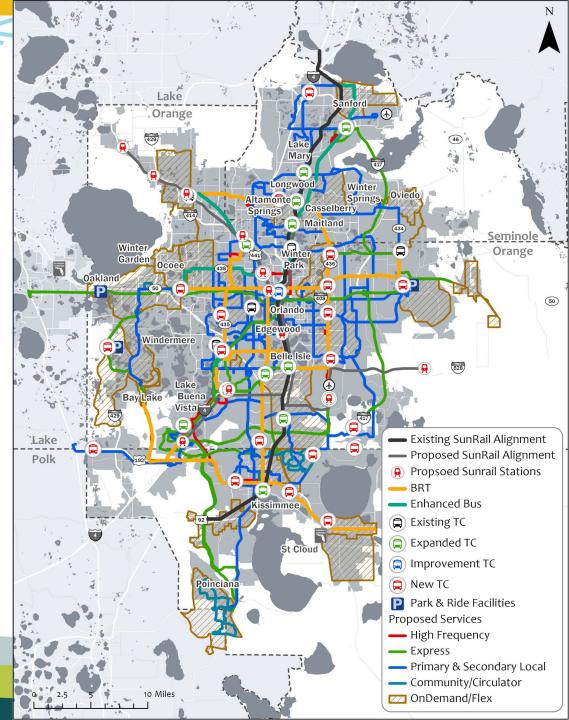




### Long-Term Transit Vision (2035-2049)

- SunRail Extension to Apopka (Orange Blossom Express), South International Drive (Sunshine Corridor), and towards the east of OIA.
- Additional SunRail station at Holden Ave (Edgewood Station)



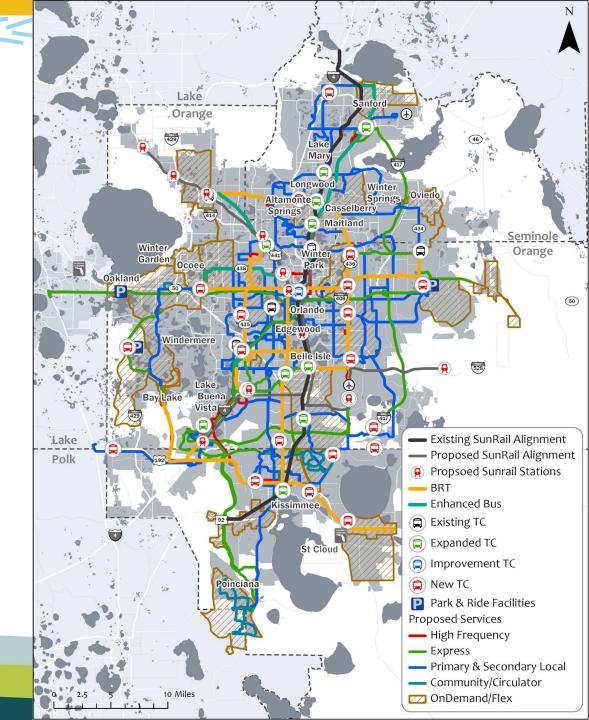


### Long-Term Transit Vision (continued)

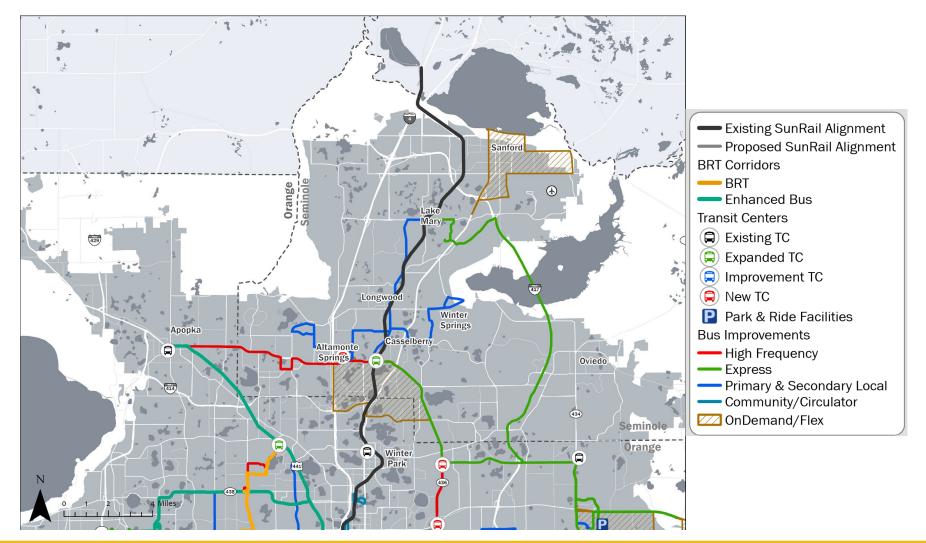
### (2035-2049)

- 2 BRT Corridors
- 4 new and improved Transit Centers
- 7 High Frequency Routes
- 12 Primary and Secondary Local Routes
- 5 On-Demand/ Flexible Routes

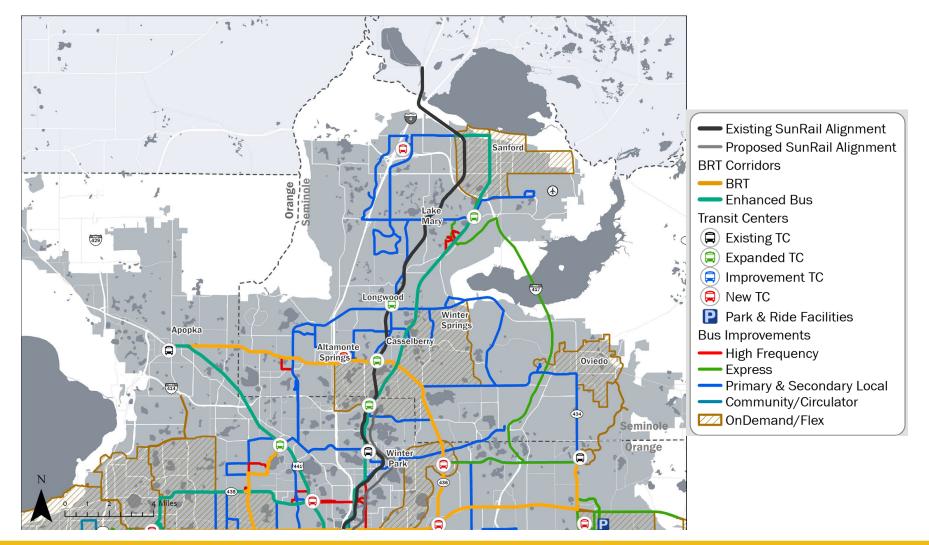




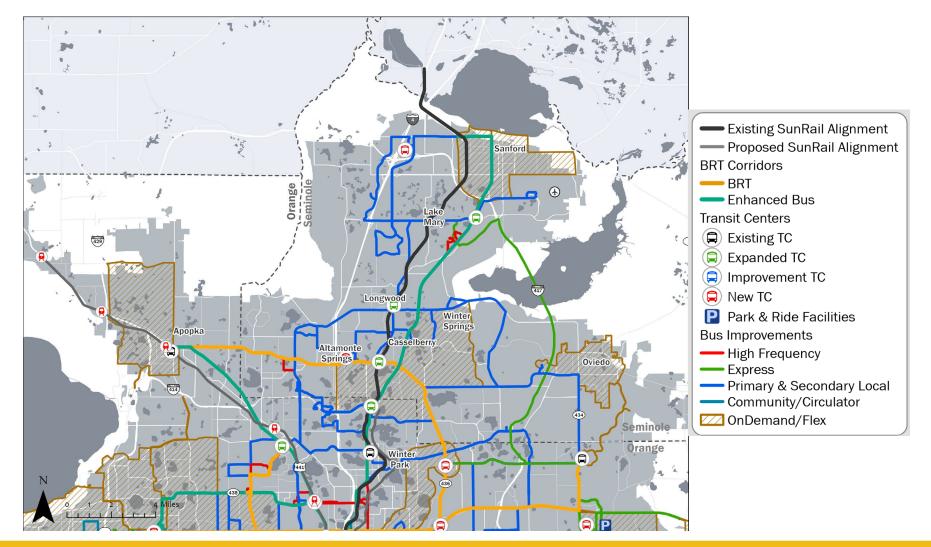
### Seminole & Northern Orange County Short-Term Transit Vision



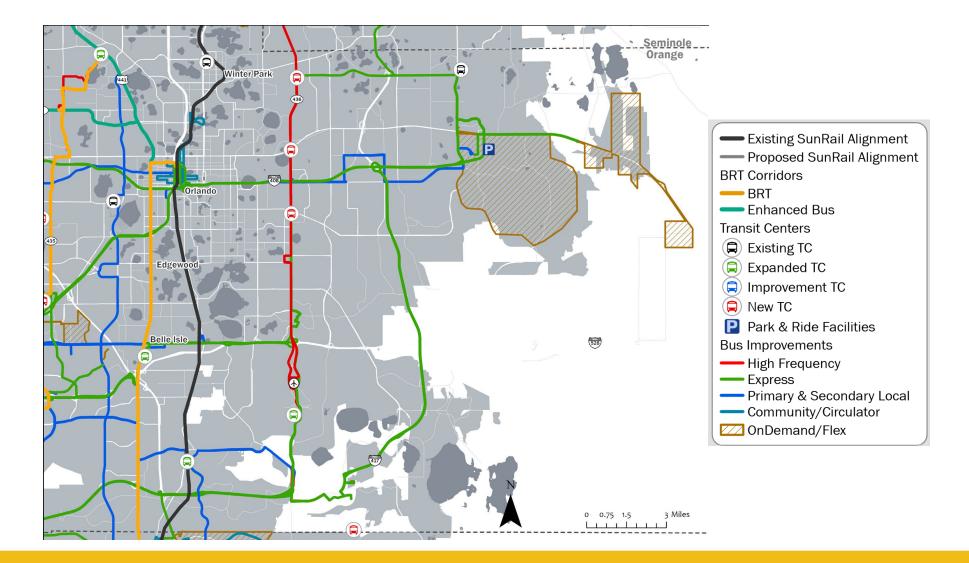
### Seminole & Northern Orange County Mid-Term Transit Vision



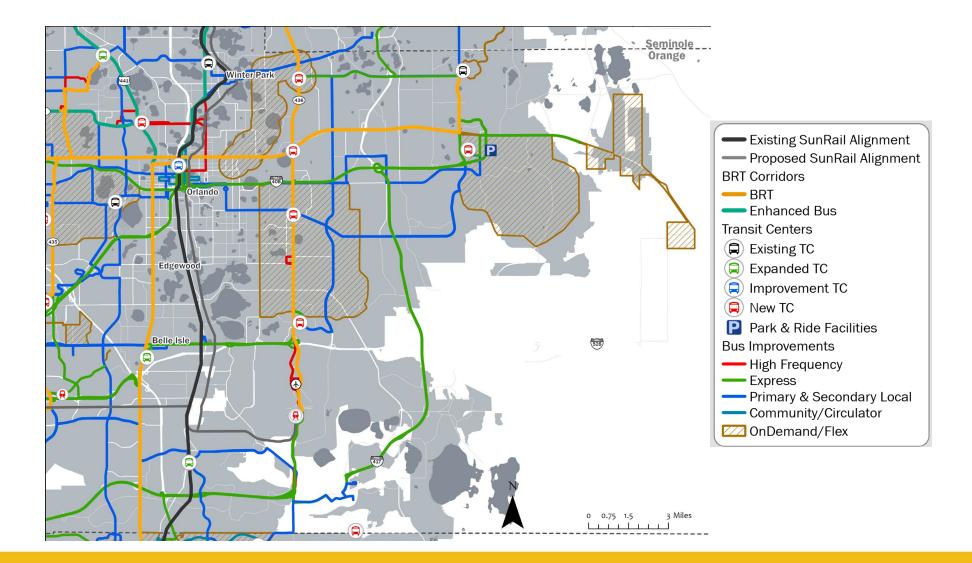
### Seminole & Northern Orange County Long-Term Transit Vision



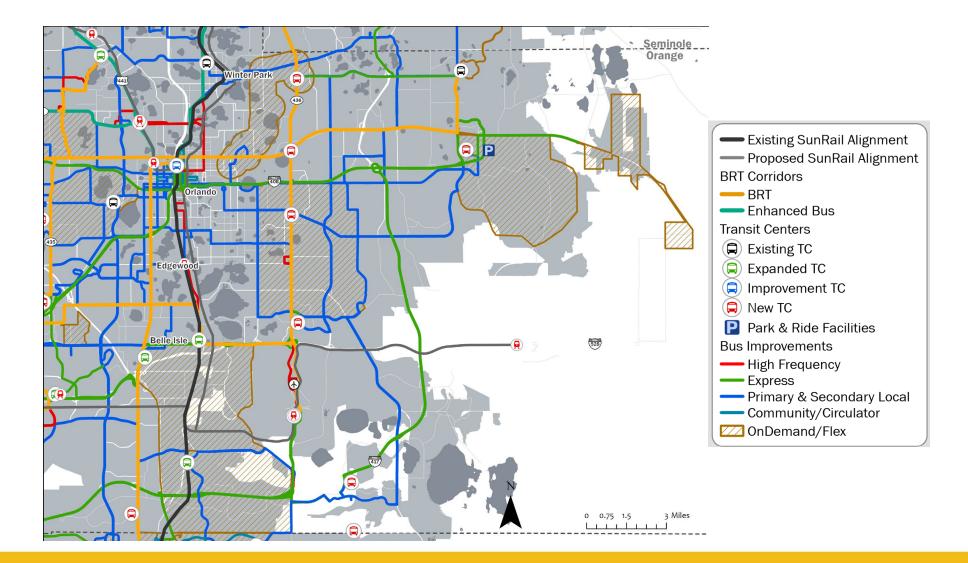
### Eastern Orange County Short-Term Transit Vision



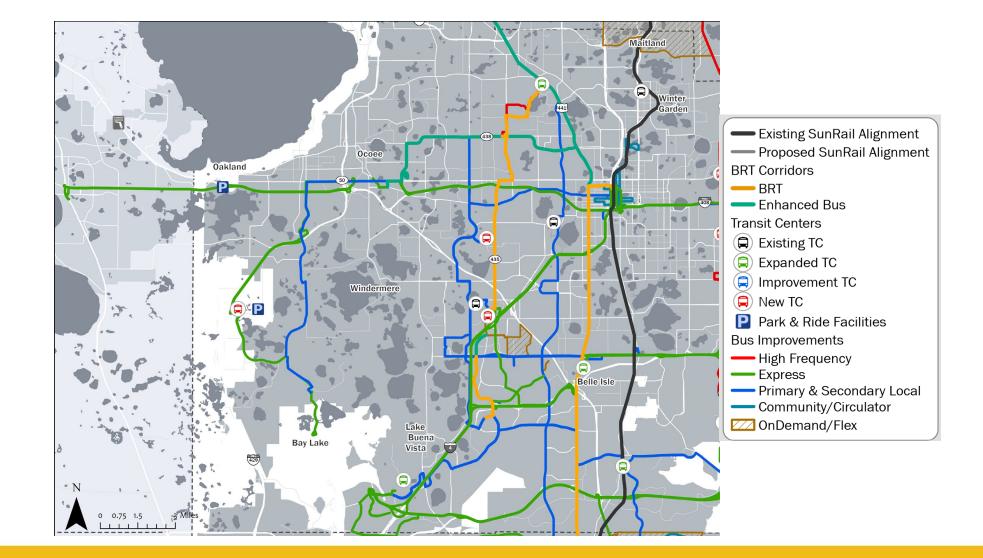
### Eastern Orange County Mid-Term Transit Vision



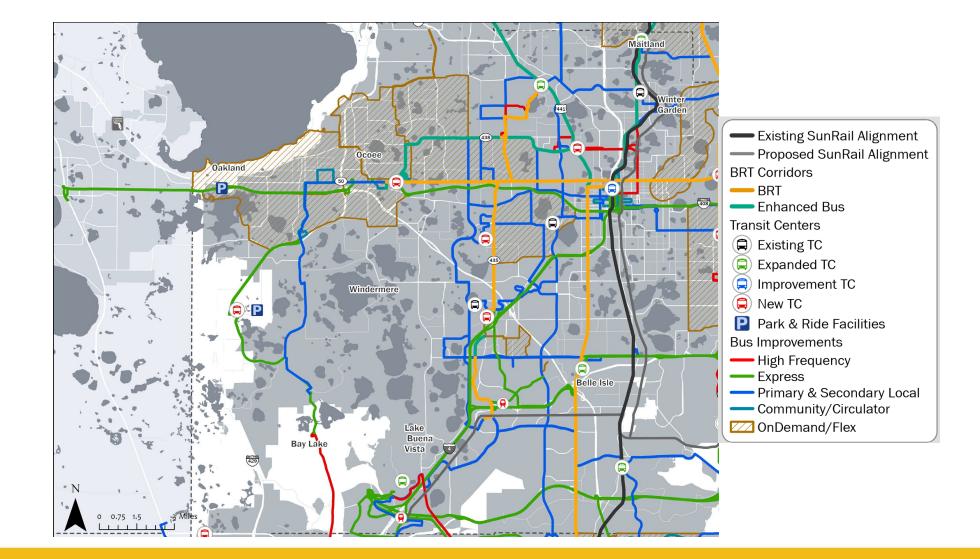
### Eastern Orange County Long-Term Transit Vision



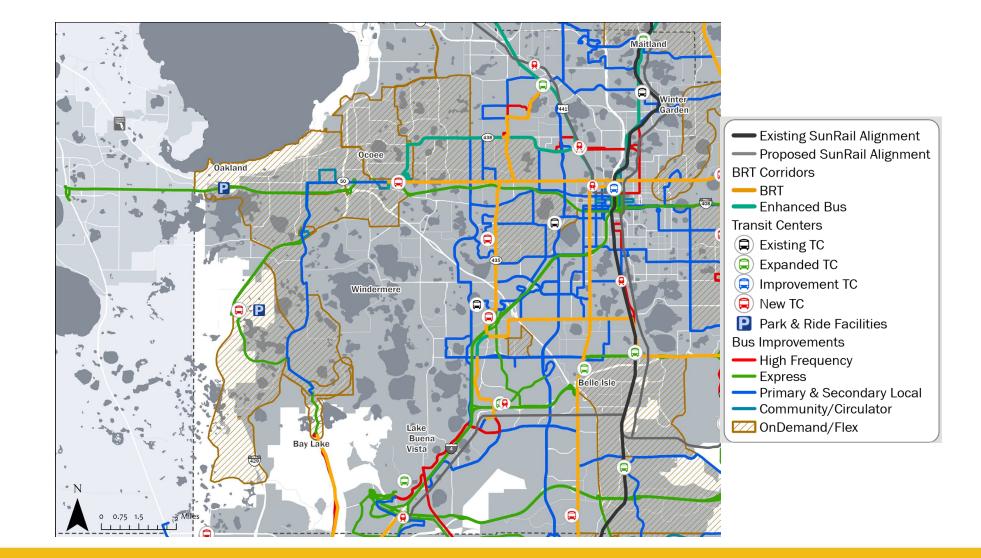
### Western Orange County Short-Term Transit Vision



### Western Orange County Mid-Term Transit Vision

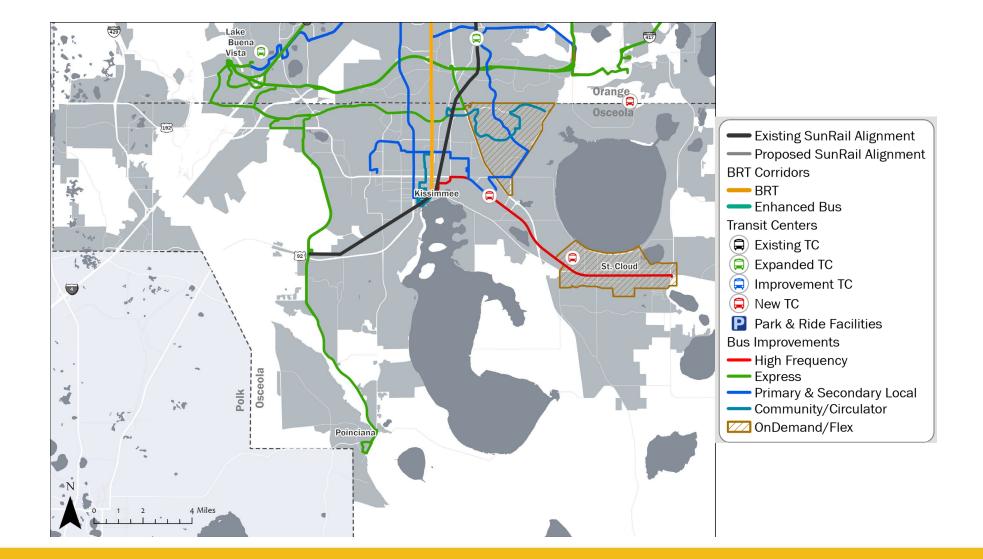


### Western Orange County Long-Term Transit Vision



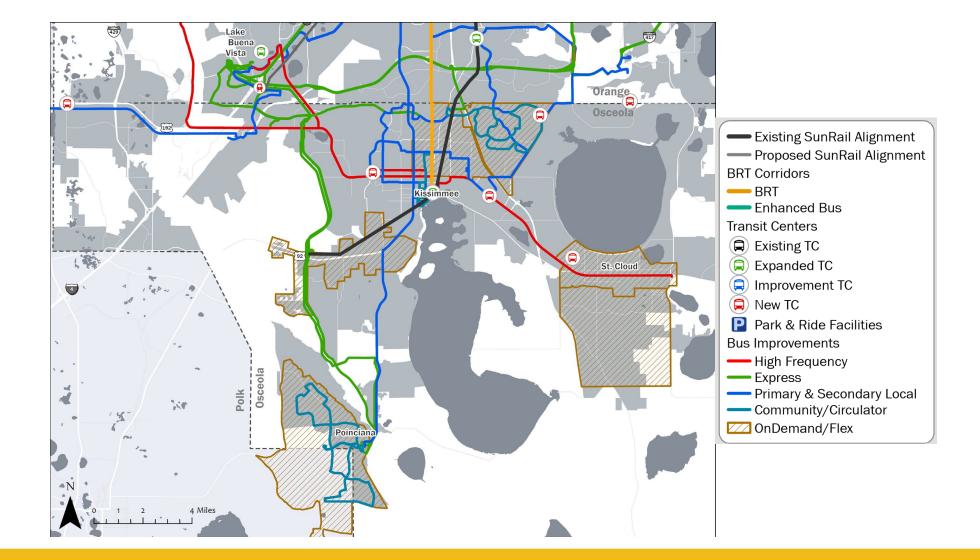
### **Osceola County Short-Term Transit Vision**

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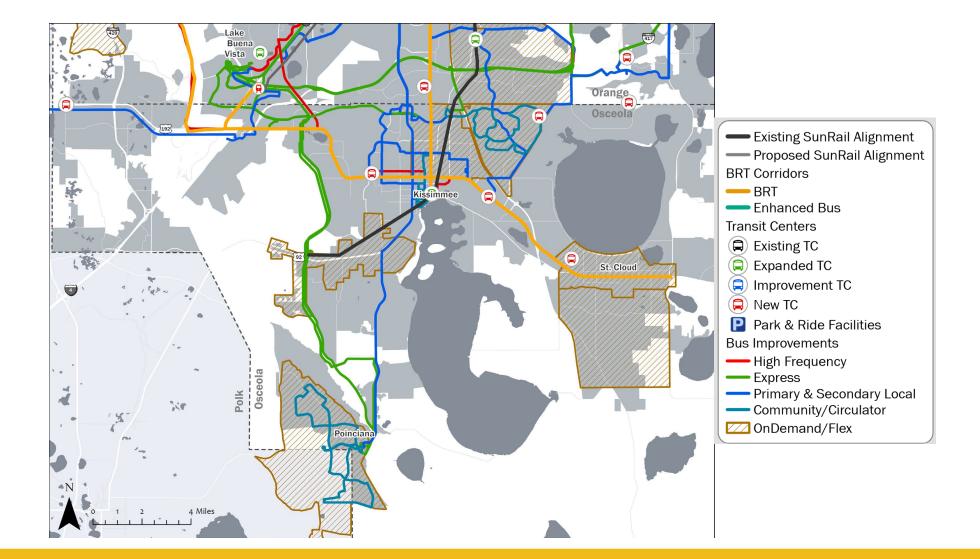


### **Osceola County Mid-Term Transit Vision**

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### **Osceola County Long-Term Transit Vision**



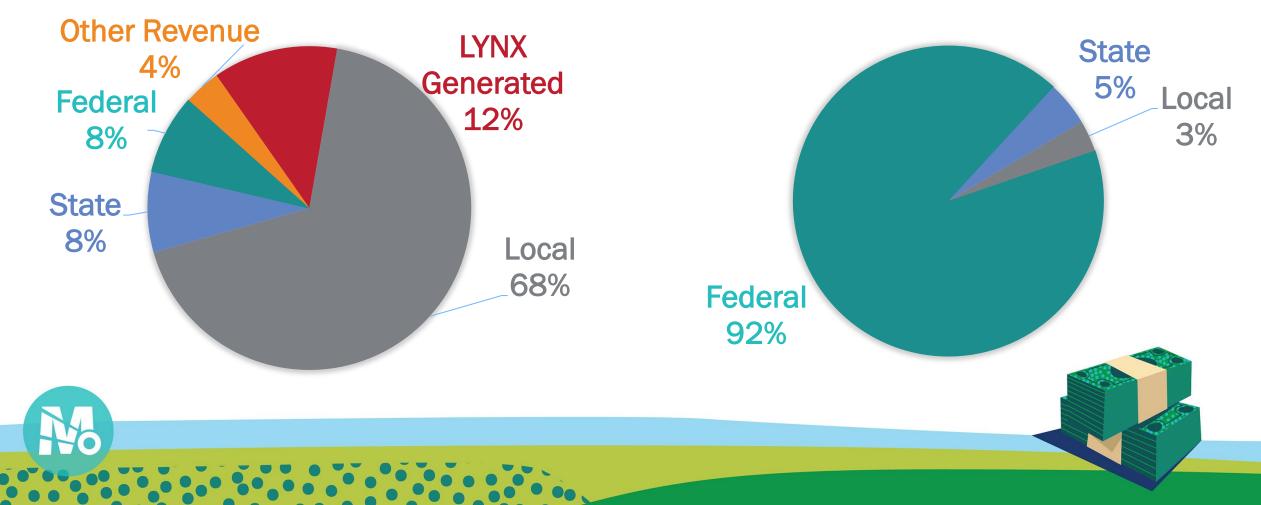


# **Transit Funding**



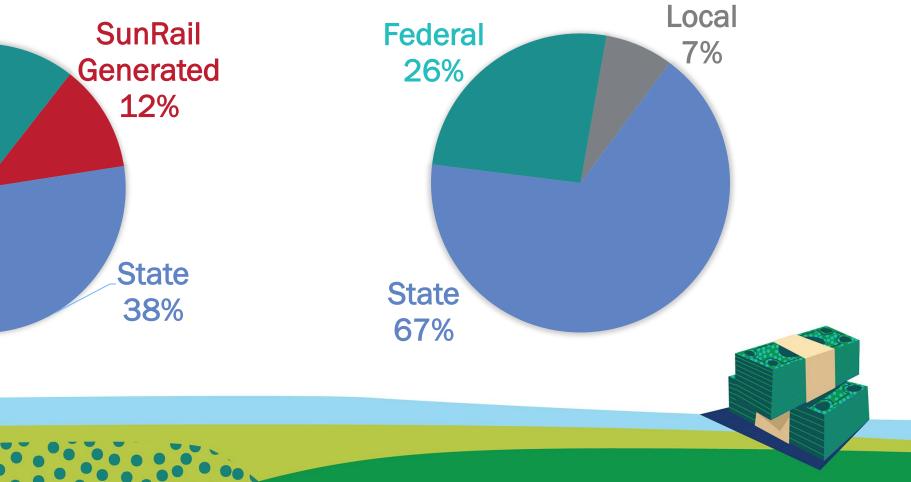
## LYNX Sources of Operating & Capital Funds

• Operating Funds Sources for 2023 (Total= \$182,615,821)  Capital Funds Sources for 2023 (Total= \$94,334,810)



### SunRail Sources of Operating & Capital Funds

- Sources of operating funds for 2023 (Total = \$67,887,771)
- SunRail **Federal** Generated 50% 12% State 38%
- Sources of capital funds for 2023 (Total = \$59,942,563)



# **Potential Funding Sources**

### **Federal Sources**

- Rebuilding American Infrastructure with Sustainability and Equity (RAISE) Grants
- Infrastructure For Rebuilding America
   (INFRA) Grants
- Multimodal Projects Discretionary Grant Program.
- Capital Improvement Grant New Starts
- Grants for Buses and Bus Facilities
   Program

### State Sources

- FDOT Strategic Intermodal System (SIS) Program
- FDOT New Starts Transit Funding
- Intermodal Development Program
- Transit Corridor Program
- County Incentive Grant Program (CIPG)
- Intermodal Access Program





- Draft report has been completed.
- Final report will be available by the end of June 2024.
- The Transit Vision Element will be incorporated into the 2050 MTP, ensuring that transit needs & projects are represented in the final plan.



# **Questions?**

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



# Freight Planning Approach

Haitao Yu, Cambridge Systematics



# Why freight planning?

### MetroPlan Orlando's Vision:

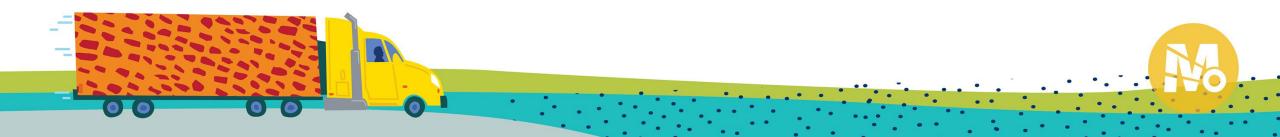
A regional transportation system that safely and efficiently moves people and goods through a variety of options that <u>support the region's vitality</u>.

#### **Inform Decision Making:**

Demands, Issues, Opportunities for Improvement

#### **Issues are Diverse:**

Infrastructure, Operational, Institutional



## Assessment Approach

- State of the Practice / Literature Review
- Freight-focused Existing Conditions Analysis

- Identify Key Freight Corridors and Subsystem
- Freight Industry Outreach and Engagement
- Document Needs and Planning Strategies

Freight Findings to be incorporated into 2050 MTP's System Needs Assessment and inform project development



# **Emerging Trends**

**Macroeconomics Conditions** 

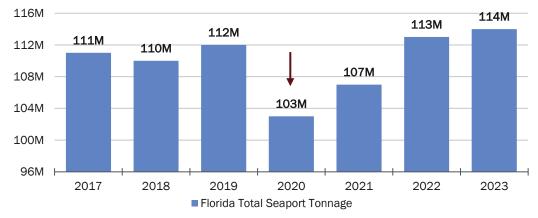
### **Drivers of Change**

- Economic Growth

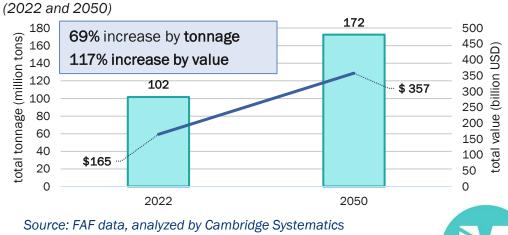
### Adapting to New Landscape

- Market Shifts
  - Domestic sourcing
  - Multi-shoring
  - Trade routes realignment
- Commercial Spaceports

Total Tonnage by All Florida Seaports (thousand tons) between 2010 and 2022



Source: 2022-2023 Florida Seaports Mission Plan, 2023



MetroPlan Orlando Planning Area Commodity Flows by Tonnage and Value (2022 and 2050)

# **Emerging Trends**

Supply Chain

### Sustainable Supply Chain

- Disruptions and Resilience
- The greening of supply chains
  - Modernize freight infrastructure
  - NetZero initiatives

**\$ 182 Million** average revenue loss due to supply chain disruptions. **72%** of organizations experienced supply chain disruptions

Source: Resilience 2022: Interos Annual Global Supply Chain Report, 2022

#### \$78.8 million to \$370.9 million

estimated economic losses for Florida's agricultural production due to Hurricane Idalia

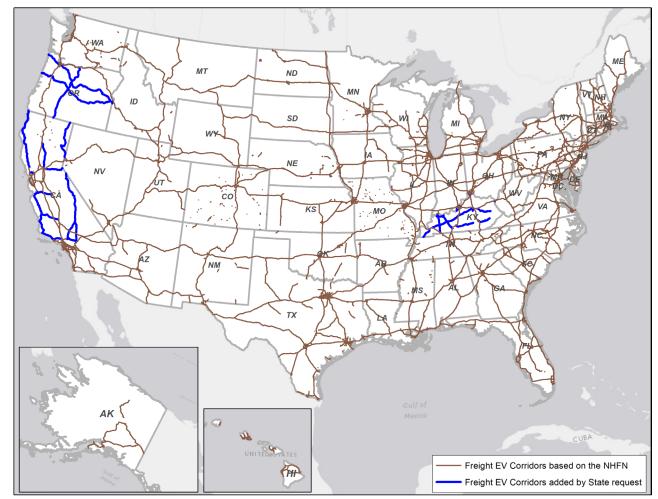
Source: UF/IFAS Economic Impact Analysis, 2023

**Emerging Trends** 

#### New Technologies

### **Technology Advancement**

- Truck Parking Technology
- Electrification
- Automation and Artificial Intelligence
- Autonomous trucks



Source: FHWA, 2024



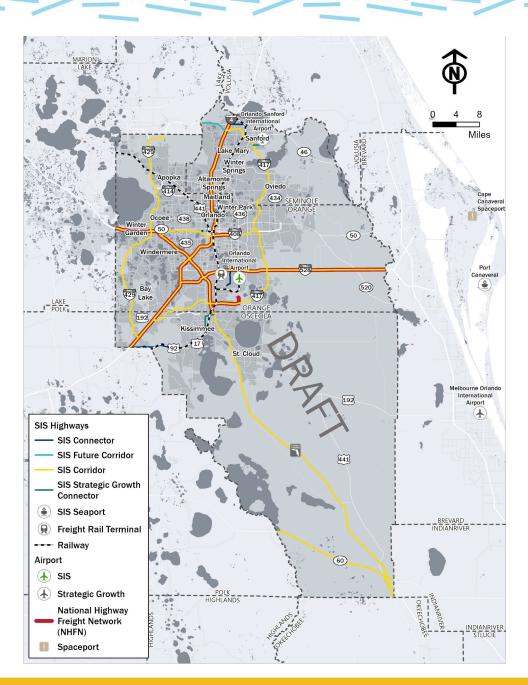
# **Regional Freight System**

### A Multimodal Freight Network:

- Roadway
- Rail
- Air
- Sea and Space
- Truck Parking Facilities

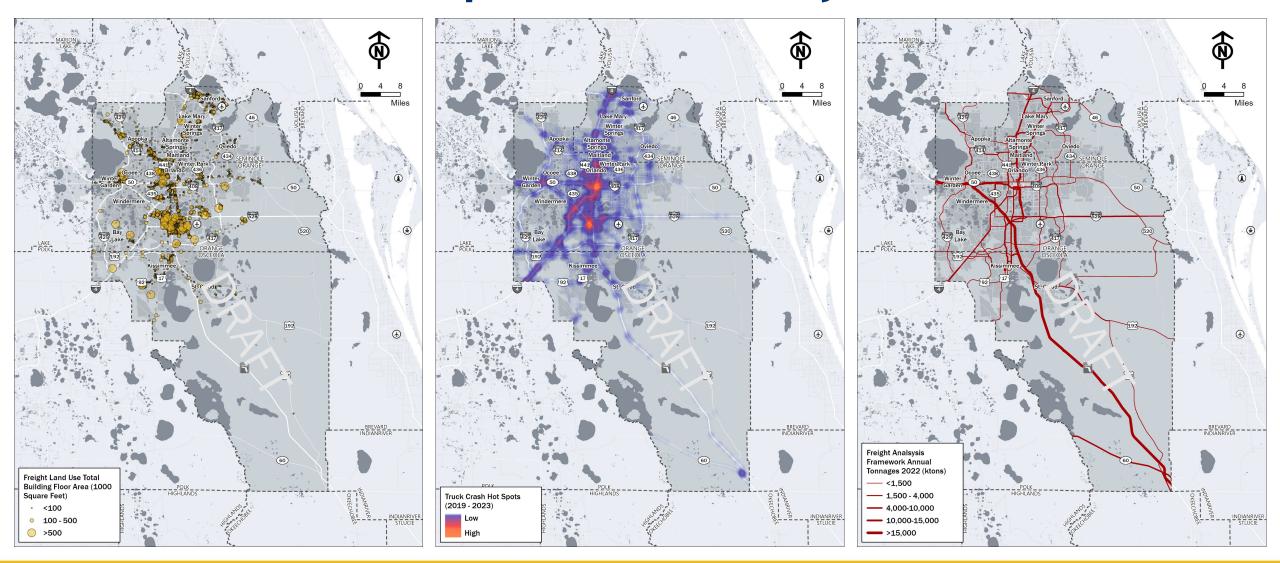
### **Topics:**

- Truck Safety
- Commodity Flows
- Freight-Intensive Land Uses



### **Sample of Data Analyses**

No



## **Industry Outreach**

### **Freight Focused Engagement**

- Well-defined technical work supported by stakeholder input
- An opportunity to interact and collaborate with freight stakeholders

- Inform identification on freight needs and planning strategies

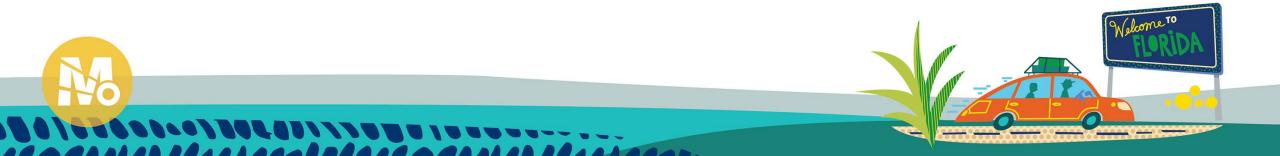
### **Industry Roundtable Events**

- Roundtable # 1 (July 2024) = Capture Industry Input
- Roundtable # 2 (August 2024) = Validate findings and strategies

## **Next Steps**

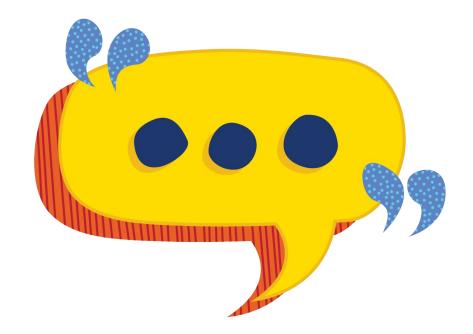
**Freight Needs Assessment** 

- Engage Industry Stakeholders
- Identify Key Freight Infrastructure
- Evaluate Freight-Specific Needs, Solutions, and Strategies



# **Questions?**

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



# Refinement of Indicators

John Kaliski, Cambridge Systematics Danny Shopf, Cambridge Systematics



### **Definitions**

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Goal	<ul> <li>A broad statement that describes a desired end state</li> <li><i>"Provide a safe transportation system for all users"</i></li> </ul>
Objective	<ul> <li>A specific, measurable statement that supports achievement of a goal</li> <li><i>"Reduce fatalities and serious injuries"</i></li> </ul>
Indicator	<ul> <li>Data used to measure progress toward goals and objectives</li> <li>Fatalities and serious injuries</li> </ul>
Strategy	<ul> <li>Approach to achieving one or more goals and objectives</li> <li><i>"Reduce conflict between vehicles and vulnerable road users"</i></li> </ul>

### **Development Process**



### 2050 MTP Goals

SAFETY

Provide a **SAFE AND SECURE** transportation system for all users

RELIABILITY

Provide a **RELIABLE TRANSPORTATION SYSTEM** across all modes for people and freight

Enhance lives through IMPROVED ACCESS to jobs and services for people of all ages and abilities



Enhance the **HEALTH AND VITALITY** of our region's communities and environments





Strengthen our region's **ECONOMY** 

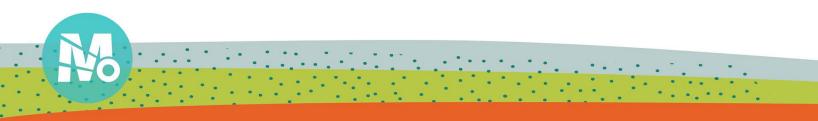




### Provide a **SAFE AND SECURE** transportation system for all users

### OBJECTIVES

- Eliminate deaths and serious injuries on the transportation system, 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







#### 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







Enhance lives through **IMPROVED ACCESS** to jobs and services 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

Enhance the connectivity of the region by reducing trip distance per capita



Enhance the **HEALTH AND VITALITY** of our region's communities and environments

#### OBJECTIVES

 Provide transportation solutions that contribute to improved public health, including reducing adverse health impacts associated with physical inactivity

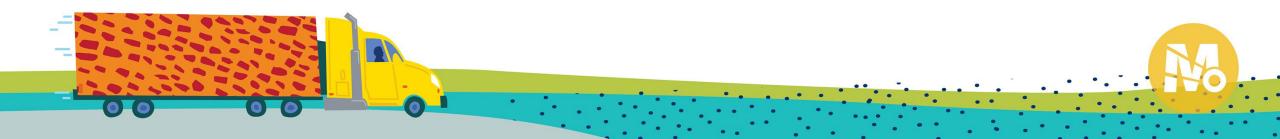
- Reduce air quality pollutants and emissions per capita from transportation sources
  - Provide transportation solutions that enhance the natural and built environments



#### OBJECTIVES

 Promote transportation investments and strategies that enhance economic prosperity

- ✓ Improve access to jobs, with emphasis on essential service workers
- ✓ Increase Central Florida's affordability as a place to live, work, and visit



# **2050 MTP Indicators**

Indicators will focus on what is measurable and indicative of the future of transportation:

- Some indicators are tied to federal performance measure or could become MPO specific performance measures
- ✓ Some become the basis for prioritization criteria
- Some might become part of tracking the trends or signposts for levels of change due to anticipated trends



# What makes a good indicator?

Indicators will focus on what is measurable and indicative of the future of transportation

- ✓ Specific
- Measurable

 Updated on a regular basis with reliably available data

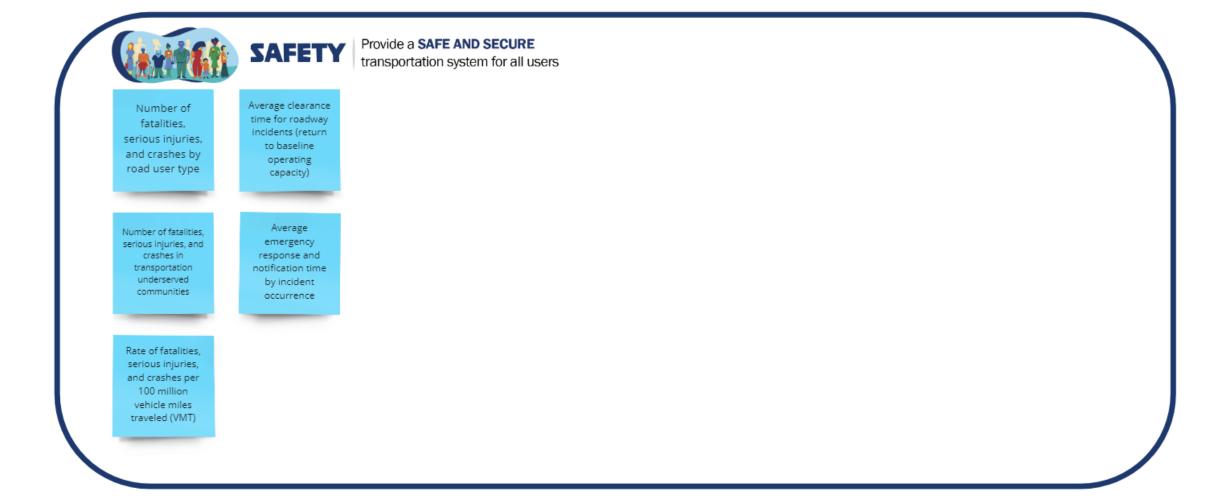
Understandable to the public

Some of the ideas discussed today might fit better in other programs, such as Tracking the Trends or the Congestion Management Process

https://metroplanorlando.gov/maps-tools/tracking-the-trends/



# How do we know we're making progress?



# How do we know we're making progress?

**Brainstorming Potential Indicators** 

Scan QR Code to get started



Review potential indicators for each 2050 MTP goal

- Add a reaction to the proposed indicators
  - It's perfect
  - i'm comfortable with this as written
  - ? Unsure
  - It's not hitting the mark

https://miro.com/app/board/uXjVKBGYctE=/?share\_link\_id=981317201510



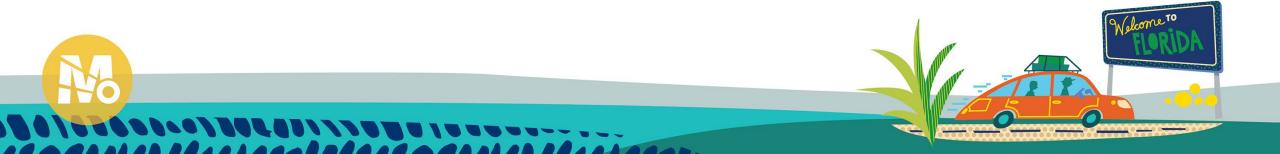
# What's Next?

Refine indicators based on today's feedback

Share indicators with Advisory Committees and Board

✓ Complete 2050 MTP Goals, Objectives, and Indicators chapter

✓ Use goals, objectives, indicators to guide other tasks



# 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 <u>MTP@MetroPlanOrlando.gov</u>

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

# **Next Steps**

#### Review Draft Drivers of Change Report

• Comments due 6/28/24

#### Review Draft Indicators

- Revise based on today's feedback
- Present to June/July Advisory Committee Meetings
- Finalize indicators and incorporate into the 2050 MTP

#### Schedule SHS Needs Assessment Coordination Meeting

 Local agency to respond to invitation email with team availability and attendee list



# **Upcoming Meetings**

2050 MTP Technical Workshop #4

> August 8, 2024 2:00pm Virtual

2050 MTP Technical Workshop #5

October 10, 2024 2:00pm Virtual 2050 MTP Technical Workshop #6

December 12, 2024 2:00pm Virtual



# Thank you!

### MetroPlanOrlando.gov | 407-481-5672 MTP@MetroPlanOrlando.gov

