

Integrating Health and Sustainability Principles into Transportation Planning in Central Florida

September 2018

INVEST Final Report

Appendices



metroplan orlando

A REGIONAL TRANSPORTATION PARTNERSHIP

Appendix A: MetroPlan Orlando INVEST Project Roles and Responsibilities

MetroPlan Orlando's entire project involved nearly 100 people. The chart below identifies the key MetroPlan Orlando staff involved:

<u>Staff</u>	<u>Role and Responsibilities</u>
Elizabeth Whitton	Project Manager: responsible for overall project direction. She assisted with identification and outreach to Think-In participants, provided technical expertise with Think-in content, and was the lead author for the Think-In Summary Report and three white papers.
Robin Cusimano	Communications Specialist: responsible for the day-to-day tasks for the Transportation Think-In, including the development of the INVEST communications plan. She provided research and writing assistance for the white papers.
Alex Quintero	Intern: She led the INVEST evaluation and wrote the Phase One memo.
Cynthia Lambert	Public Information Manager: She provided overall communications strategy advice and editing/graphics design assistance for the Think-In and white papers.
Mary Ann Horne	Community Outreach Specialist: She assisted with the development of the INVEST communications plan, the identification and outreach of the Think-In participants, and the execution of the Think-In.

Several others provided input including Harry Barley and Gary Huttman, the Executive Director and Deputy Executive Director at the time. The Think-In is the phase that involved the most people. 60 community leaders attended, 16 staff assisted, 10 UCF students and four community volunteers took part as well.

Appendix B: INVEST Evaluation Summary Memo



June 1, 2017

TO: Office of Natural Environment, Federal Highway Administration (FHWA)

FROM: Alex Quintero, MetroPlan Orlando; Elizabeth Whitton; MetroPlan Orlando

CC: Theresa Parker, FHWA Florida Division

SUBJECT: MetroPlan Orlando INVEST Evaluation Summary Memorandum

In early 2017, the Federal Highway Administration (FHWA) awarded MetroPlan Orlando a grant to pilot implementation of the Infrastructure Voluntary Evaluation Sustainability Tool (INVEST). MetroPlan Orlando is using the funds to incorporate measurable health and sustainability principles into the regional transportation planning process. This memo summarizes Phase 1 of MetroPlan Orlando's INVEST project: an evaluation of MetroPlan Orlando's current Long Range Transportation Plan (LRTP), Blueprint 2040.

Key Findings:

- MetroPlan Orlando's LRTP received 129 out of 255 points: a Gold score.
- The LRTP scores well in the areas that are historically strong for MetroPlan Orlando: TSMO, Transportation Demand Management, Freight, Economic Development, and Financial Stability.
- The LRTP scores poorly in emerging areas: Asset Management, Resiliency, Energy/Fuels, and Access/Affordability.
- Current MetroPlan Orlando operations no longer align with the framework presented in the LRTP. Many things have changed in transportation since it was developed in 2013-2014. MetroPlan Orlando implements projects and changes its processes that improve on the plan's contents.
- The evaluation exposed asymmetries between the LRTP's development process and its final content. It would have been preferred to give half points in several categories: for many of the criteria, the LRTP only mentions or completely fails to make the connection with broader planning efforts.

The rest of the memo provides detailed information regarding the LRTP's score, identifies next steps in areas of improvement, and offers recommendations to FHWA for improving INVEST.

Scores

MetroPlan Orlando has received accolades for its Transportation Systems Management and Operations (TSMO) planning; it is no surprise that the LRTP scores (13 out of 15 points) highest in this category. The next four highest scoring categories are: Transportation Demand Management (13 points), Freight (13 points), Economic Development (12 points), and Financial Sustainability (12 points). The lowest four categories are: Asset Management (1 point), Resiliency (2 points), Energy/Fuels (4 points), and Access/Affordability (4 points).

The Fixing America's Surface Transportation (FAST) Act included a Resiliency requirement for Long Range Transportation Plans. As evidenced by the low INVEST score, MetroPlan Orlando has to improve its understanding in this emerging area of transportation planning. In 2016, the Federal Transit Administration issued the Transit Asset Management Rule. This action further encourages MetroPlan Orlando to work with its transit partners and incorporate Asset Management into the next LRTP. These two new policies provide support to actions MetroPlan Orlando already wants to do and can lead to an improved INVEST score after the adoption of the next LRTP.

Areas for Improvement

MetroPlan Orlando identified three focus areas for Phases 2 and 3 of the INVEST project: Accessibility, Resiliency, and Big Data. Two were low scoring categories and Big Data is included because it is rapidly changing how we plan.

Accessibility

Accessibility is an emerging area of planning. The term refers to a balanced, holistic transportation system that includes physical access and cuts across land use, transportation, and finance. MetroPlan Orlando is interested in how accessibility can connect the region's policies, regulations, and investments. The asymmetry between these areas was evident in the INVEST evaluation. Phase 2 of the INVEST project will help define Accessibility in Central Florida and identify specific steps for translating theory into planning practice.

Resiliency

The FAST Act, passed in 2015, requires MPOs to incorporate resiliency into core products and activities. The requirement, imposed after the 2040 LRTP's adoption, is designed to improve a transportation system's ability to withstand natural disasters. The mandate offers MetroPlan Orlando the opportunity to develop mitigation and adaptation implementation. In 2016, the region had 2 million residents and 68 million tourists—all of whom need to be supported by a transportation system that can withstand a hurricane, wildfire, or sea-level rise.

Big Data

Transportation-related technology is constantly evolving. MetroPlan Orlando and its regional partners should seek to understand best practices for utilizing these technologies, including how to obtain and use big data sets. The LRTP already provides a framework for data transfer. Phase 2 of the INVEST project will explore how technology, specifically big data, can be utilized to inform sustainability decisions.

Accessibility, Resiliency, and Big Data are distinct, but interrelated: each will be discussed at the forthcoming Transportation, Health, and Sustainability Summit. MetroPlan Orlando will be working with its Regional Leadership Council to develop content.

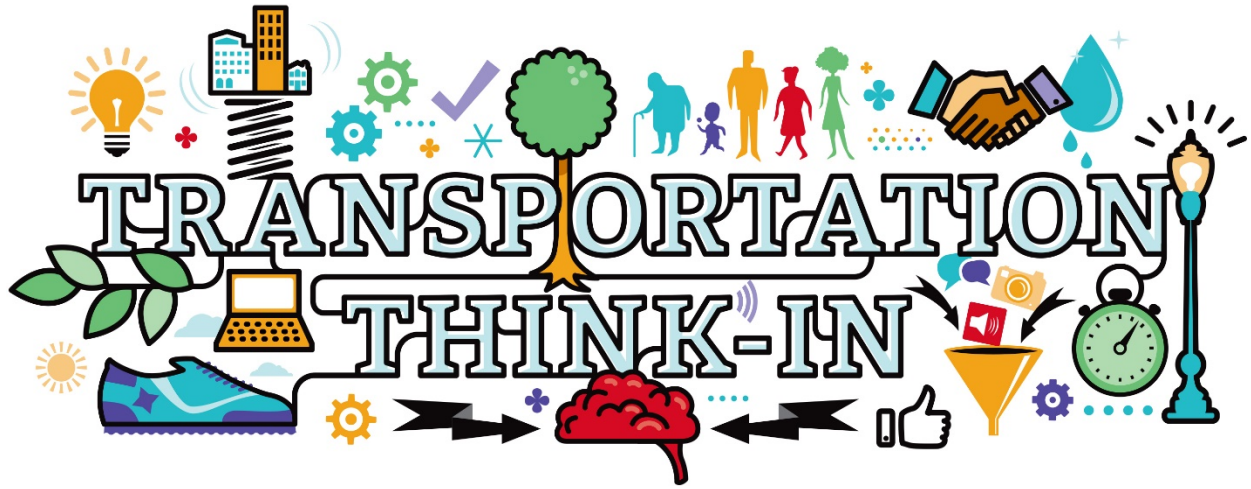
Recommendations for FHWA

Throughout the evaluation, the team noted a few recommendations to enhance the criteria.

- 1) The LRTP received a Gold rating, but it scored low in several categories. Too many questions are yes or no with a point value greater than one. It would be good to award half points: Yes, Partially, No to address areas where the plan includes language but does not fully address implementation related to that criteria.
 - a. Example: SPR 06.6: Does the agency integrate statistically sound approaches to determine projected safety performance into the long-range transportation planning process?
 - i. The LRTP includes the best available data for safety performance measures, but the performance measures are for cars, not bicycles or pedestrians. MetroPlan Orlando answered Yes to the question, receiving three total points. In reality, though, several modes of transportation are missing from our “sound approach to safety performance.”
- 2) Some questions assume silo'd processes. For questions that are framed in silos, agencies that still plan by silos are able to earn more points.
- 3) For SPR-07 Multimodal Transportation and Public Health, add a question related to health data. The incorporation of health data would be innovative and in many regions can be obtained from the federally-required Community Health Needs Assessment, the local health department, or a state agency.
- 4) When an answer to a question in the criteria is no, encourage the user to answer the “Next Steps” section.

MetroPlan Orlando started its health and sustainability work a few years ago, but the activities lacked an identifiable structure. INVEST and its criteria have provided that structure. With these LRTP evaluation results, MetroPlan Orlando has the crucial next steps for fully incorporating health and sustainability principles into the regional transportation planning process.

Appendix C: Transportation Think-In Summary Report



Making 2045 Healthy, Sustainable, and Resilient

Hosted by:



Note

This report summarizes the discussions from MetroPlan Orlando's Transportation Think-In held on February 7, 2018. The information in the pages that follow synthesize the notes taken throughout the day.

The event helped us identify several research questions – ones that we'll work to answer in the coming months and years (see Appendix A). Some will be addressed through a series of policy-oriented reports in the coming months. Others will take much longer to research and develop recommendations. We hope that you will join us as we work towards making the Central Florida region one that has a healthy population, sustainable environment, and supports resiliency in all its forms.

Acknowledgements

The Federal Highway Administration (FHWA) is providing financial support to MetroPlan Orlando's INVEST project, which includes the Transportation Think-In. Thank you to Connie Hill and Teresa Parker from FHWA for your assistance and attendance.

Many people made the Transportation Think-In happen. Thank you to all the participants, who graciously gave us several hours of their day. MetroPlan Orlando's Regional Leadership Council identified participants and personally invited many of them. Several of our transportation partners were also instrumental in developing the participant list. Students from the University of Central Florida volunteered to take notes. They made this report possible. Every MetroPlan Orlando staff member contributed to the Think-In in some way. Thank you to Commissioner Cheryl Grieb, Commissioner Pete Clarke, and Council President John Dowless for attending and contributing to the day's conversations. To Karen Leone de Nie and the Federal Reserve Bank of Atlanta: thank you for your assistance, time, and excellent presentation.

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This report is available on MetroPlan Orlando's website: <https://metroplanorlando.org/programs-resources/health-transportation/>

There is a lot of exciting work going on in the Orlando metropolitan area. And we can achieve great things in the region by coordinating our efforts and leveraging our resources. That was the overarching theme of *Transportation Think-In: Making 2045 Healthy, Sustainable, and Resilient*. Organized by MetroPlan Orlando as part of a Federal Highway Administration (FHWA) project. The nearly day-long event brought together about 60 community leaders from across Central Florida.



Discussions throughout the day were wide-ranging as participants got to know one another, shared stories, and talked about transportation-related challenges our region faces. This report summarizes the thoughts shared during the event and identifies several questions to answer. MetroPlan Orlando will explore some of these questions through applied research in the coming months. The insights gained through the entire project will establish the guiding principles for the region's 2045 transportation plan and inform other MetroPlan Orlando documents.

The report is divided into several sections: Background, Process, Setting the Stage, Keynote, and What You Told Us. The day's agenda focused mostly on three sessions: the Keynote from Karen Leone de Nie of the Federal Reserve Bank of Atlanta, How We'll Work Together, and What We Want to Accomplish. The latter two sessions were conducted in small groups at tables of 7-8. The intimate setting allowed conversation to flow and led to a sharing of insights that MetroPlan Orlando will use as we plan for a regional transportation system that supports positive health outcomes, enhances sustainability, and builds resiliency.



Background

In early 2017, FHWA awarded MetroPlan Orlando a grant to pilot implementation of the Infrastructure Voluntary Evaluation Sustainability Tool (INVEST). MetroPlan Orlando is using the funds to incorporate measurable health and sustainability principles into the regional transportation planning process. The project has three phases:

- 1) Evaluation of Existing and Current Processes: INVEST has 17 best practices for regional planning, which build off MetroPlan Orlando's [health audit and previous work](#).
- 2) Host a Transportation, Health, and Sustainability Summit: a forum for offering direction on how the 2045 regional transportation plan can produce a greater return on investment through health, environmental, and economic benefits
- 3) Strategy Reports: These reports will provide data analysis and insights for the next regional transportation plan, our public opinion efforts, and other yet-to-be-determined documents.

Phase 1 – the INVEST evaluation – identified areas of strength and weakness, which informed the Think-In’s content. The 2040 regional transportation plan scored well on Transportation System, Management, and Operations (TSMO) issues, but poorly on efforts to address transit, affordability, and what’s called the jobs-housing balance. The jobs-housing balance looks at the location of housing compared to the location of employment opportunities. Ideally, jobs and housing are near each other, which makes it easier to provide people with transportation options.

Process

Planning for the Transportation Think-In began in the summer of 2017. MetroPlan Orlando’s Regional Leadership Council, which includes officers from the MetroPlan Orlando Board, Community Advisory Committee, Technical Advisory Committee, TSMO Advisory Committee, and Municipal Advisory Committee, provided input and guidance during the early stages of the process.

A key element for success was the identification of leaders and creative thinkers who could provide new perspectives on transportation challenges in the region. The goal was to identify 50-75 leaders who would represent various sectors of the community, including business, education, faith, economic development, health, housing, local government, social services, and tourism.

Identifying Participants

MetroPlan Orlando wanted to invite what we termed “not the usual suspects.” We have ongoing conversations with traditional transportation stakeholders throughout the year. The Transportation Think-In was an opportunity to engage representatives from organizations who are not commonly represented in transportation planning (see Appendix B).

Staff members developed a preliminary list of organizations that should be represented. This list was presented to the Regional Leadership Council, who helped to identify contacts at the various organizations. MetroPlan Orlando’s investment in building community partnerships played a large role in not only identifying the desired participants but also generating interest in the event. Transportation partners and invited guests were also asked to recommend individuals who should be invited to the event.

Communication

To generate interest, MetroPlan Orlando named the event *Transportation Think-In: Making 2045 Healthy, Sustainable, and Resilient*, which reflected the participatory nature of the event as well as the focus of the discussions. A logo/graphic was created to visually communicate the purpose and themes of the event. A mid-week day in early February was selected for the day-long event.

The event was marketed as an opportunity to help shape the future of the region. Invitees were informed that they were part of a carefully selected think tank.

The participants represented groups that work in:

- Business
- Education
- Tourism
- Health
- Community Development
- Social Service Organizations
- Ending Homelessness
- Ending Hunger
- Workforce Development
- Advocacy
- Real Estate
- Supporting Older Adults



Developing the Program

Using the INVEST evaluation as a starting point for developing the event program, MetroPlan Orlando looked for a keynote speaker who could talk about the connections between transportation planning, sustainability, and community health while inspiring creative thought among the participants. Karen Leone de Nie, assistant vice president in the community and economic development (CED) group at the Federal Reserve Bank of Atlanta, was selected to speak about her research and success in building partnerships that support healthy community development. A primary objective of the program was to generate interactive, collaborative, solution-oriented discussions among the participants (see Appendix C).

Setting the Stage

MetroPlan Orlando Board Chairwoman Cheryl Grieb, an Osceola County Commissioner and real estate business leader, kicked off the program talking about the purpose of the event and introducing MetroPlan Orlando Executive Director Harry Barley, who served as the moderator. The 20-minute Welcome and Warm-Up session provided a foundation for the day's discussions. Attendees learned:



- The combination of safe roads, trains, sidewalks, buses, and trails directly influences travel decisions.
- Demographic shifts and changing preferences within the region and transportation are rapidly changing how we plan and what we fund. The 2045 regional transportation plan provides an opportunity for MetroPlan Orlando to establish guiding principles that reflect these changes.
- The population in Orange, Osceola, and Seminole counties is expected to increase by an additional 1.2 million by 2045.¹
- Balancing the mix of jobs and housing for the future is an important factor in reducing miles traveled in cars and increasing physical activity.²
- The amount of data in the world is expected to increase 400% between 2015 and 2020.³ The ability to filter and extract the data produced through technological innovation will impact our transportation system.



¹ University of Florida's Bureau of Economic and Business Research (BEBR), June 30, 2017

² FHWA, INVEST Version 1.2

³ Brookings Institution, [Modernizing government's approach to transportation and land use data](#), July 2017

- Natural disasters are expected to increase in frequency and severity. The transportation system for a healthy and sustainable region requires resiliency to quickly respond and recover from natural and man-made disasters.
- The average monthly cost for housing and transportation for Central Florida households is \$2,458 and varies by Census tract. Some households spend more than 75% of their annual income on housing and transportation.⁴

Keynote: Working Across Sectors

DON'T BLOCK THE BOX

When a driver does not clear an intersection before the light turns red, the car blocks others from moving ahead. The metaphor: Transportation can help or hurt the work of other sectors.

Transportation can be the arena that brings varied stakeholders and groups together. Karen Leone de Nie's⁵ keynote presentation shared lessons and tips for how this could happen. She titled her presentation *Don't Block the Box: Transportation's Many Intersections* and focused on three lessons she's learned in her career.

Lesson 1: Break the Silos

Too often, we plan within our sectors.

Transportation is a big offender. It's not alone, though. All sectors tend to work within themselves. Ms. Leone de Nie shared an example from the Atlanta Region where a cross-sector collaborative is breaking down silos. The Atlanta Regional Collaborative for Health Improvement ([ARCHI](#)) is a coalition of public, private, and nonprofit organizations. The collaborative utilizes a collective impact model⁶ to address seven strategies (see box).

Lesson 2: Don't Assume the Answer to the Problem is Found Solely in the Problem itself

We need to dig deeper to uncover the root cause of the problem before we can identify the most effective solution. A review of Atlanta workforce development efforts ranked the barriers to accessing job training services. The second highest barrier was the lack of transportation to reach the available job training services. While transportation is not typically a part of workforce development, this example illustrates how improvements in one area can address a problem in another sector.

ARCHI's Seven Strategies

Encouraging Healthy Behaviors
Family Pathways
Coordinated Care
Global Payment
Capture and Reinvest
Expand Insurance
Innovation Fund

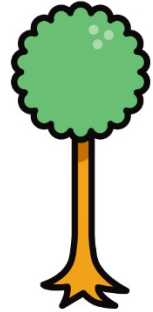
⁴ Center for Neighborhood Technology, Housing and Transportation Affordability Index, January 2018

⁵ Ms. Leone de Nie is the Assistant Vice President in the Community and Economic Development (CED) group at the Federal Reserve Bank of Atlanta

⁶ The [Stanford Social Innovation Review](#) defines collective impact as the commitment of a group of important actors from different sectors to a common agenda for solving a specific social problem.

Lesson 3: Light Up the Runway for Investment

Orlando's ability (or inability) to attract grant capital has an effect on what we are trying to accomplish. Based on the Federal Reserve Bank's [Following the Money Tool](#), Orlando wins 2.1 grants for every 10,000 residents, which amounts to \$8.44 per resident. Our peer regions, such as Austin, Tampa-St. Petersburg, and Las Vegas, win more grants and more money per resident. From 2008-2013, Austin received 6.5 grants for every 10,000 residents, which brought \$50.82 of grant money per person into Austin's economy.



Ms. Leone de Nie asked us to think about the diversity of our workforce and its capacity to develop ideas that attract funding. What are our peer metro areas doing better than us? What lessons can we learn from them for attracting non-governmental capital?

In a short question and answer session, Ms. Leone de Nie used a metaphor that provided perspective for the rest of the day's discussions. She said that we all need transportation options. We do not eat the same food every day because it is not healthy for us. We should apply the same standard to transportation.

What We Learned

Four sessions created the framework for the day's discussions:

- Let's Get to Know Each Other
- Keynote Challenge
- How We'll Work Together
- What We'll Accomplish



The sessions were designed to facilitate conversations among all the participants, who were organized in tables of 8 – a facilitator, note taker, and 6 participants. Each provided their own insights into their work and how transportation affected them. We started with introductions and quickly flowed into topics the Orlando region needs to consider as we grow. Overall, it was clear at every table that how we have planned transportation systems in the past is not how it should be done in the future. For this report, we have organized the day's discussions into themes and identified research questions for each theme.



Funding

Money was mentioned over and over in each small group discussion. The conversations tended to follow four lines of thought: the amount of money available, better use of existing revenue sources (in all sectors), aligning financial resources with needs and priorities of the region, and investing in maintenance and operations more than capital improvements.

Much of the conversation relating to the amount available was an outgrowth of the data shared during the keynote presentation – the comparative lack of non-governmental grants that flow into the metropolitan area. Participants questioned why we are preparing to spend billions on roadway projects; how much is needed to properly invest in frequent, reliable transit service; how to ensure transportation, housing, and other public investments are aligned; and the impact of declining gas tax revenues and automated vehicles on available funding.

Questions to Explore:

- What funding model(s) are needed to match the changing nature of transportation?
- How can performance-based transportation planning build a healthier, more resilient system?
- What resources are available and how can they be utilized across sectors?



Planning in a Cone of Uncertainty

Everyone seemed aware of the changes they could anticipate in their sector in the next few years. Forecasting out a decade or more was harder. Many people talked about change. They knew changes were coming, especially in transportation. And it was mentioned often that changes are needed.

Participants said that continued technical advancements will change how and when we work, how we move around, and lots more. A few of the small groups talked about the disruption these changes will have on the region's low-skilled workforce.

Everyone seemed to agree that simple answers do not exist; the challenges grow more complex the further we look into the future.

Questions to Explore:

- As the region grows and demographics shift, how will the disruption from connected and automated vehicles affect current efforts in sustainability?



- Technological advancements are accelerating change. What can we do to ensure each person has access to the benefits of technology?
- As technology changes where and when we work, how will we plan for changing traffic patterns?

Housing and Transportation

At table after table, people talked about the silos that exist in our work. This was illustrated through many examples. The common theme was that housing and transportation need to break down their silos and work together. The word ‘holistic’ was often used.

What’s your biggest transportation challenge?

“Enough transportation to allow people who are near homeless or homeless to be able to get to jobs more efficiently. Transportation is one of the key drivers in ensuring homelessness in this community is rare, brief and one-time.”

-Shelley Lauten
CEO, Central Florida Coalition on Homelessness

Participants talked about how a robust public transit system could address the region’s affordable housing needs. Broadly speaking, for many, this is a workforce issue. It was stressed through the participants’ expertise that reasonably-priced housing and a transportation system with reliable options were critical to maintaining and growing our region’s workforce. Many of the groups talked about this as an issue to address not only in the future but also today.

Pam Nabors, CEO of Career Source Central Florida, shared an obstacle she has experienced with her clients. Many of these individuals live in east Orlando and have the skills for jobs that pay around \$15 an hour around downtown Orlando or the NeoCity area in Osceola County. The lack of reliable, frequent transit service between the area where Ms. Nabors’ clients can afford to live and the location of employment opportunities forces many to leave jobs or turn down potential jobs.

Questions to explore:

- Where do housing and public transit co-exist well? How can these two areas work together on a regional level? Are there other regions in the U.S. that we could use as examples?
- What are the challenges to breaking down the silos?
- What type of housing do we have? What housing gaps exist? Does the housing we have match the housing we need?



Perception of Transportation

Several, but not all, of the small groups mentioned what some perceived as a stigma around public transportation, particularly buses. And all the groups cited recent positive developments regarding transit – SunRail, LYNX apps for smartphones, and planning activity. The topic of communication and transit’s image was highlighted as an area for improvement. Many participants asked, without answering, how can we tell our story better.

Questions to explore:

- What is our story? And how do we tell it?
- What is the role of advocacy groups and how can they advance the regional vision for public transportation?



Collaboration and Organizational Roles

The Think-In was the first event of its kind hosted by MetroPlan Orlando. The region has a great record of working together as it did with its collaboration to address homelessness. SunRail is the result of years of partnership between transportation, business, health, and local government stakeholders. As previously mentioned, there is a need to address multiple housing issues.

Discussions at the Think-In posed these questions: What is the next area of regional collaboration? What would it take to further break down the entrenched silos that exist? Which institutions should take the lead? It was clear at each table that the solutions and strategies necessary in the coming decades will require more collaboration and working collectively.

Stephanie Murray, a master planner at Walt Disney Imagineering, said that Disney, whose long-term transportation plan is set for 2035, is looking at regional connections that support sustainability, public health and resilience. Murray mentioned efforts to expand transportation options for their employees and customers. She said the Disney transportation system is easy for people to understand and use, but the problem is reaching Disney's property. She said they are partnering with LYNX to improve transportation options.

Questions to Explore:

- How will MetroPlan Orlando advance solutions to all these questions and answers?
- How can evidence and data be further incorporated into our decision-making process?
- Are the current agencies structured to address these existing and forthcoming issues?
- How can ties be strengthened between the public, private, and nonprofit sectors?

Access to Services

Marni Stahlman, president and CEO of Shepherd's Hope, a free clinic for the uninsured, talked about how the lack of transportation often prevents her clients from returning for follow-up appointments. She says better transportation will result in more people getting access to healthcare.



Stahlman illustrates one of the lessons shared by Ms. Leone de Nie. The participants talked about the services their organizations offer – medical care, job training, education, nutrition, etc. But the biggest issue for those they serve: the ability to reach available services. Discussions revolved around transit – where LYNX buses go, how often they run, and how long it takes to ride the bus, particularly if transfers are required. Many participants wondered how SunRail could be more effective, which was often mentioned in concert with how to pay for SunRail after 2021.

Questions to explore:

- Where are social services located and what reliable, frequent transit service is available?
- What funding is needed to ensure reliable, frequent transit service?

Many of the questions posed in this report are overlapping. As we conduct research, we expect to find the answers will be intertwined. That much is clear based on the discussions at the *Transportation Think-In: Making 2045 Healthy, Sustainable, and Resilient*.

Conclusion

The Transportation Think-In resulted in information and insights that exceeded MetroPlan Orlando's expectations. Participants expressed appreciation for the opportunity to have their thoughts heard and were energized at the prospect of working together to build a transportation system that better serves all sectors of our community. The challenge now is to turn the questions that arose during the Think-In into recommendations that lead to

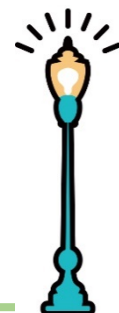


effective policy change and sound investments. While there is a lot of great work occurring, the work done across the region is often conducted in its own lane – to use a transportation metaphor. We have a housing lane, a transit lane, a business lane, etc. and we do not fully understand or try to see the entire street. Let's use past collaborative successes, the insights from the Think-in, and the research from these questions to ensure Central Florida is healthier, more resilient, and sustainable.

Thinking Outside the Box

Participants were encouraged to have a solution-oriented mindset, which generated some creative ideas:

- Autonomous vehicles for first/last mile connections
- Virtual schools/work/services
- Digital interface at bus/rail locations with real-time information
- A mini-bus system
- Health apps and telemedicine to deliver services
- Public-private partnerships with tourism sector to improve transit
- Autonomous buses
- Retrofitting sprawl and setting limits to contain it
- Affordable housing near transit stations



Appendix A: Questions to Explore

Each Question to Explore comes directly from the Think-In's small group discussions, keynote presentation, or follow-up conversations. MetroPlan Orlando will be producing a set of reports in Summer 2018 that address some, but not all, of these questions. We expect the answers to be multi-faceted and might take some time to fully understand. We invite researchers and organizations to partner with us as we strive for a regional transportation system to improve health outcomes, environmental sustainability, and our ability to be resilient.

Funding

- What funding model(s) are needed to match the changing nature of transportation?
- How can performance-based transportation planning build a healthier, more resilient system?
- What resources are available and how can they be utilized across sectors?

Planning in a Cone of Uncertainty

- As the region grows and demographics shift, how will the disruption from connected and automated vehicles affect current efforts in sustainability?
- Technological advancements are accelerating change. What can we do to ensure each person has access to the benefits of technology?
- As technology changes where and when we work, how will we plan for changing traffic patterns?

Housing and Transportation

- Where do housing and public transit co-exist well? How can these two areas work together on a regional level? Are there other regions in the U.S. that we could use as examples?
- What are the challenges to breaking down the silos?
- What type of housing do we have? What housing gaps exist? Does the housing we have match the housing we need?

Perception of Transportation

- What is our story? And how do we tell it?
- What is the role of advocacy groups and how can they advance the regional vision for public transportation?

Collaboration and Organizational Roles

- How will MetroPlan Orlando advance solutions to all these questions and answers?
- How can evidence and data be further incorporated into our decision-making process?
- Are the current agencies structured to address these existing and forthcoming issues?
- How can ties be strengthened between the public, private, and nonprofit sectors?

Access to Services

- Where are social services located and what reliable, frequent transit service is available?
- What funding is needed to ensure reliable, frequent transit service?



Appendix B:
Transportation Think-In Attendees
February 7, 2018
Ace Café
Orlando, FL

<u>Name</u>	<u>Organization Name</u>
Lisa Adkins	League of Women Voters of Orange County
Alice Ancona	Florida Chamber of Commerce
Jared Billings	City Year Orlando
Luann Brooks	International Drive Business Improvement District
Chris Castro	City of Orlando Office of Sustainability and Energy
Susan Caswell	Osceola County Community Development
Diane Court	Orlando Tech Association
John Davis	Orlando Regional Chamber of Commerce
Ignacio Esteban	Florida Community Loan Fund
Sandra Fatmi	Pine Hills Community Council
Roberta Fennessy	University of Central Florida
Rahsaan Graham	IDignity
Eric Gray	United Against Poverty
Jim Hartmann	Alliance for Regional Transportation, Orlando Economic Partnership
Sarah Heintzelman	Florida Hospital
Marie Hernandez	AARP Orlando
Connie Hill	Federal Highway Administration
Fraser Howe	ASCE Florida Section Government Relations Committee
Stephanie Howell	Valencia College
Heather Isaacs	Tavistock Development Company
Misty Johantgen	Experience Kissimmee
Belinda Johnson-Cornett	Osceola Community Health Services
Bryan Julian	Universal Orlando Resort
Dave Krepcho	Second Harvest Food Bank of Central Florida
Patty Maddox	Winter Park Health Foundation
Veronica Malolos	Osceola County Association of Realtors
Celestia McCloud	Osceola County Human Services
Tara McCue	East Central Florida Regional Planning Council
John McReynolds	Universal Parks and Resorts
Stephanie Murray	Walt Disney Imagineering
Pam Nabors	Career Source
John Newstreet	Kissimmee/Osceola County Chamber of Commerce
Lou Nimkoff	Orlando Regional REALTOR Association
David Overfield	Florida Department of Health Orange County
Doreen Overstreet	Orange County Government

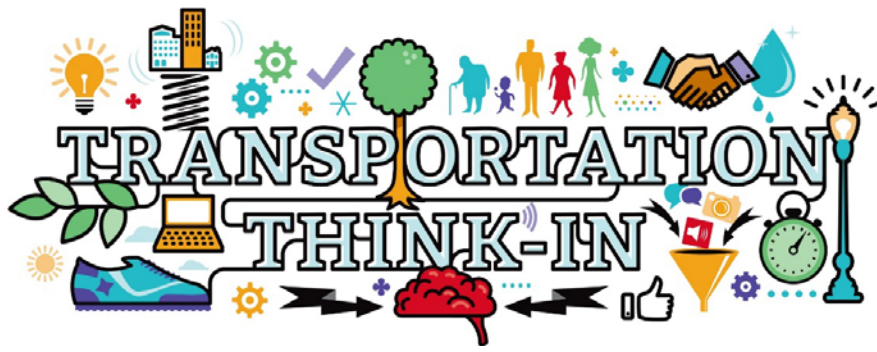
Appendix B:
Transportation Think-In Attendees
February 7, 2018
Ace Café
Orlando, FL

<u>Name</u>	<u>Organization Name</u>
Theresa Parker	Federal Highway Administration
Ellis Perez	Florida Department of Health Orange County
Joe Ranaldi	Seminole County Public Schools
Carmen Rasnick	VelocityRED
Todd Rimmer	Walt Disney Imagineering
Edgar Robinson	Central Florida Commission on Homelessness
Marni Stahlman	Shepherd's Hope
Dan Tapia	Florida Chamber of Commerce
Ronald Tarpley	University of Central Florida
Anne Taylor	IDignity
Jim Thomas	Orlando Tech Association
Jane Tkach	Transportation Disadvantaged Local Coordinating Board
Alberto Vargas	Orange County Planning Division
Donna Walsh	Florida Department of Health Seminole County
Charley Williams	League of Women Voters of Orange County
Jerome Williams	AARP Orlando
Joedel Zaballero	Osceola County
Kelly Brock	City of Casselberry, MetroPlan Orlando TSMO Advisory Committee
Sarah Elbadri	MetroPlan Orlando Community Advisory Committee
Tiffany Homler Hawkins	LYNX
Dan Stephens	MetroPlan Orlando Community Advisory Committee
Mayra Campos	Student
Jacob Cummings	Student
Sarah Ebert	Student
Valentina Gamera	Student
Emily Hanson	Student
Tatum Madden	Student
Raigan McDonald	Student
Irina Pahinina	Student
Aneisha Smith	Student
Karen Leone de Nie	Federal Reserve Bank of Atlanta

Appendix B:
Transportation Think-In Attendees
February 7, 2018
Ace Café
Orlando, FL

MetroPlan Orlando Staff and Board

Cmsr. Cheryl Grieb, Chairwoman
Cmsr. Pete Clarke, Vice-Chairman
Council President John Dowless, Municipal Advisory Council Chairman
Harry Barley
Keith Caskey
Robin Cusimano
Joe Davenport
Cathy Goldfarb
Eric Hill
Mary Ann Horne
Gary Huttman
Cynthia Lambert
Nick Lepp
Jason Loschiavo
Crystal Mercedes
Sally Morris
Nikhila Rose
Virginia Whittington
Elizabeth Whitton
Mighk Wilson



February 7, 2018

Ace Café
100 W Livingston St
Orlando, FL 32801

AGENDA

8:15-8:40 a.m. Continental Breakfast and Coffee – provided

8:40-9:05 a.m. Welcome and Warm Up

- MetroPlan Orlando Board Chairwoman Cheryl Grieb
- MetroPlan Orlando Executive Director Harry Barley
- MetroPlan Orlando Transportation Planner Elizabeth Whitton

We'll open the Transportation Think-In with a short presentation on why we are here and what we want to accomplish.

9:05-9:25 a.m. Let's Get to Know Each Other

A facilitator will lead each table in a series of introductory questions that enable us to learn more about each organization and existing work going on throughout the region

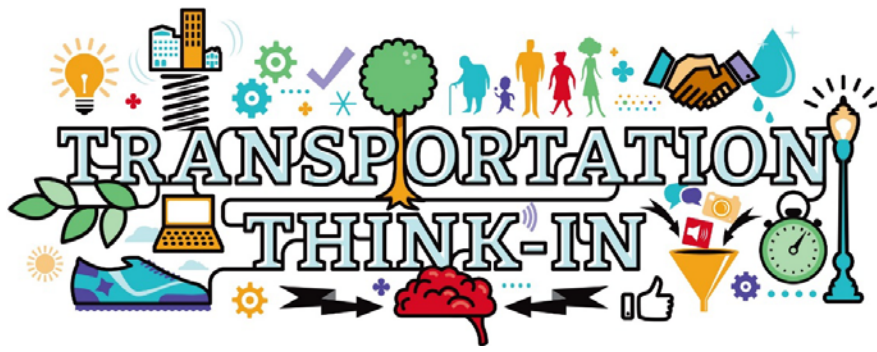
9:25-10:00 a.m. Keynote: *Don't Block the Box: Transportation's Many Intersections*

Karen Leone de Nie
Assistant Vice President, Federal Reserve Bank of Atlanta

Ms. Leone di Nie will give us insights into the intersection of transportation, health, regional planning, economic resilience, place, and much more.

10:00-10:10 a.m. Break

Hosted by:



10:10-10:40 a.m. Keynote Challenge

At tables, we'll reflect on the keynote presentation and how to apply lessons learned for Central Florida

10:40-11:40 a.m. How We'll Work Together

At tables, we'll identify issues that arise from the implications in the Keynote Challenge. What issues will the region face in 5, 10, 15, 20 years? What do we need to know more about?

11:40-12:10 p.m. Buffet Lunch – provided

12:10-1:10 p.m. What We Want to Accomplish

Now that we have identified issues and areas for further examinations, what are possible solutions and strategies that can address these issues?

1:10-1:15 p.m. Public Comment

Each speaker is limited to two minutes. People wishing to speak must complete a "Speakers Introduction Card" at the check-in desk.

1:15-1:30 p.m. Wrap Up

Coming together as a big group, we'll talk about what's next – how we continue the conversations and turn talk into action

In accordance with the Americans with Disabilities Act (ADA), if any person with a disability as defined by the ADA needs special accommodations to participate in this proceeding, he or she should contact MetroPlan Orlando staff member Ms. Cathy Goldfarb (contact info below), at least three days prior to the event. In addition, persons requiring translation services, which are provided at no cost, should also contact Ms. Goldfarb at least three business days prior to the event. Contact Information: Cathy Goldfarb | (407) 481-5672 x315 | Email: cgoldfarb@metroplanorlando.org | Address: MetroPlan Orlando, 250 S. Orange Avenue, Suite 200, Orlando, Florida, 32801

Hosted by:

FRAMING THE FUTURE:

PREPARING METROPLAN ORLANDO TO
ENHANCE CENTRAL FLORIDA'S QUALITY OF LIFE



OCTOBER 2018

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Acknowledgements

Framing the Future is the result of MetroPlan Orlando's applied research effort focused on health and sustainability. It is accompanied by two other reports. The Federal Highway Administration (FHWA) is providing financial support to the project as part of its INVEST and Sustainable Highways Initiative. Thank you to all the FHWA and Volpe National Transportation Systems Center staff for all the advice over the last year. Additionally, the contents in this report were guided by MetroPlan Orlando's Transportation Think-In, an event held in February 2018. Thank you to the participants, facilitators, and speakers.

For all inquiries, please contact: Elizabeth Whitton at ewhitton@metroplanorlando.org

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FRAMING THE FUTURE:

PREPARING METROPLAN ORLANDO TO ENHANCE CENTRAL FLORIDA'S QUALITY OF LIFE

Twenty years ago, the Central Florida region restructured its transportation planning agencies. MetroPlan Orlando was created as a result. Now, as the region prepares for more than a million new residents and the challenges of the 21st century, it is time for MetroPlan Orlando to re-evaluate its role in the region and determine the type of value it brings to creating healthy, sustainable, and resilient places.

MetroPlan Orlando's role in the region is more than just planning for transportation projects. The agency is considered a leader in regional conversations, providing support and advice to initiatives, such as the regional visioning effort *How Shall We Grow* between 2005-2009 and research into understanding the core values of Central Florida residents. A takeaway from MetroPlan Orlando's 2018 Transportation Think-In, an event that gathered 60 community leaders from various sectors ranging from health and housing to business and tourism, was the need to assess the role of organizations and local governments in the region and look for ways these vital community institutions can be more collaborative. This relates directly to the desire to ensure a decision-making process that is more collaborative *across sectors*.

Attendees at the Transportation Think-In questioned what the next regional collaboration effort would be and which institution would lead it. With this line of thought, MetroPlan Orlando identified the following four questions focused around collaboration and organizational roles for further research:

- How will MetroPlan Orlando advance solutions to the questions and challenges brought to light during the Think-In? (17 questions were originally identified)
- How can evidence and data be further incorporated into our decision-making process?
- Are the current government agencies structured to address these existing and forthcoming issues?
- How can ties be strengthened between public, private, and nonprofit sectors?

Answering these questions requires a thorough examination by multiple parties. This could and should take several years. This report includes recommendations that build a roadmap for MetroPlan Orlando to follow as it tries to answer these questions. But these questions have to be considered in the midst of the uncertainty about what the next decade could bring.

Transportation, in general, is changing at a faster pace than previously experienced. Participants at the Think-In discussed the possibilities that need to be considered: a transportation system that meets the needs of our changing and growing population; the impact of increased automation in transportation and ensuring everyone has the ability to benefit; and how the rise of teleworking will influence travel patterns.

This *Framing the Future* report is part of a series that seeks to provide initial answers to these questions. It weaves background information, federal policy, and best practices research together to develop recommendations for MetroPlan Orlando. The information focuses on MetroPlan Orlando as an organization, how it can prepare for impending changes of the next few decades, and actions the organization can take to enhance Central Florida's quality of life through transportation planning.



A NEW ERA IN TRANSPORTATION PLANNING

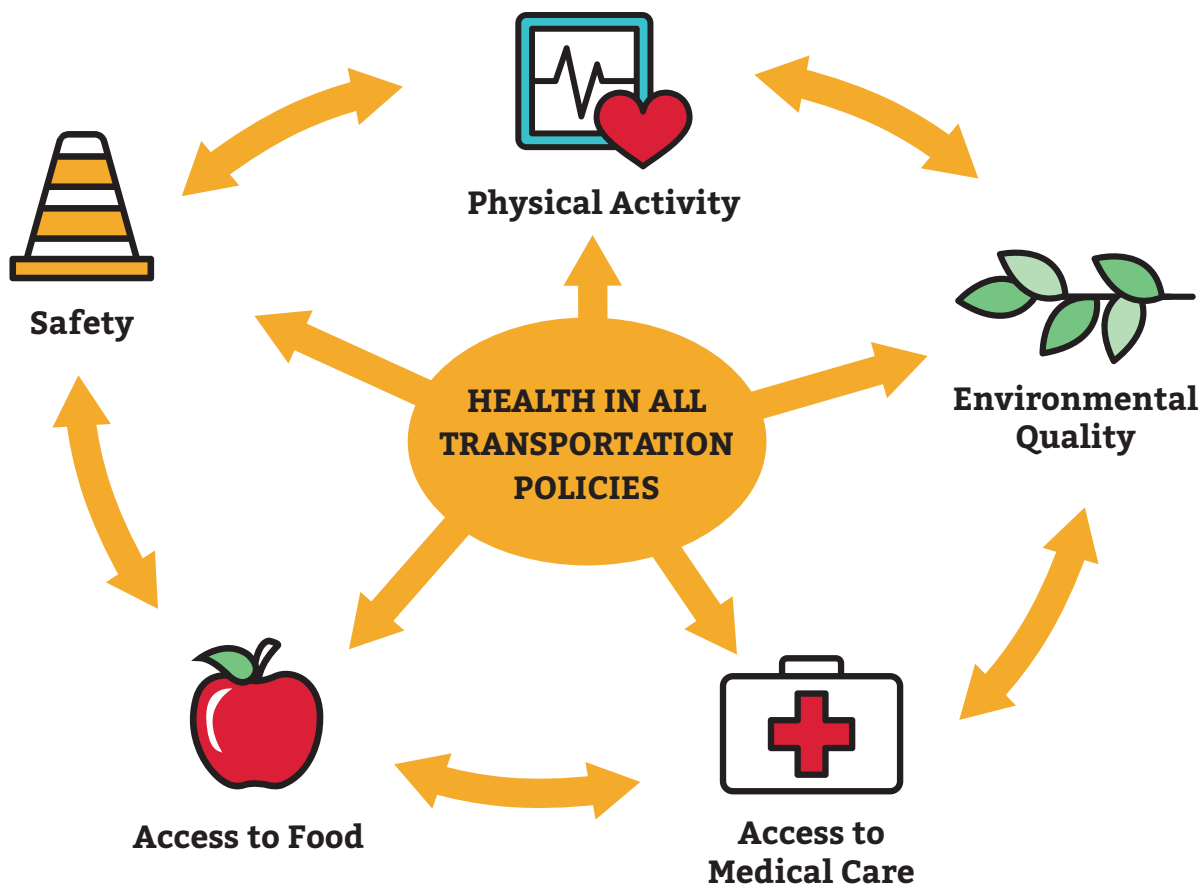


Central Florida is growing up. The actions we take today will lead us to the Central Florida we want to be in the coming decades. Transportation – in the Orlando area, in Florida, and in general – is at a critical juncture. The era of building new interstates is ending. The shift to a transportation system that prioritizes walking, biking, and transit use is underway. Transportation technology advancements are occurring at a faster pace than ever before.

The region's transportation network directly affects each person's ability to interact with his or her community. It determines the jobs and education they can reach and impacts the decisions they make. Here in Central Florida, quality of life can be enhanced or hindered by the availability of transportation options. Quality of life can mean different things to different people. From MetroPlan Orlando's perspective, quality of life is enhanced when:

- Each person has access to as many transportation choices as possible.
- Transit, walking, and biking are the easiest way to travel.
- A range of services can be easily reached via safe transportation options.

MetroPlan Orlando started incorporating a public health focus to its transportation planning efforts several years ago. What started as capacity building workshops with health practitioners led to Florida's first transit-related Health Impact Assessment. Now, the work has evolved to a more Health in all Policies effort, which emphasizes the incorporation of health considerations into decision-making across sectors and policy areas¹.



*MetroPlan Orlando
uses the World Health
Organization's definition
of health: "a state of
complete physical,
mental and social well-
being and not merely
the absence of disease
or infirmity."*

As a metropolitan planning organization (MPO), MetroPlan Orlando has a transportation planning mandate. Thus, it focuses its health work into a Health in All Transportation Policies initiative that works in five areas to enhance quality of life: Physical Activity, Access to Healthy Foods, Access to Care, Environmental Quality, and Safety. When these contributors to public health work together, quality of life is enhanced. In the next five years, our region expects to spend \$7.5 billion to plan, design, and build new transportation projects. Of this amount, \$669 million will be spent to improve transit, walking, and biking in Central Florida². How can we use the region's transportation dollars to create opportunities for each person to reach their home, job, school, doctor, etc. no matter their form of travel?

MetroPlan Orlando uses the World Health Organization's definition of health: "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity." This definition is holistic and representative of the work necessary to improve health in Central Florida. All aspects of quality of life mentioned above support this definition. It not only encompasses our work,

but also the work of our government and nonprofit partners.

Transportation options enhance public health. The Centers for Disease Control and Prevention (CDC) recommends adults engage in 30 minutes of daily physical activity³. When neighborhood and street design make walking and biking easy to do, this 30-minute recommendation becomes part of a person's normal everyday activities⁴. Each transit trip starts with walking or biking. Transit use can assist individuals in meeting the CDC's recommended daily amount of physical activity.

Access to Healthy Food and Access to Care refer to two conditions that affect a person's well-being. The ability to reach and afford healthy food as well as medical care influences a person's stress level. Transportation choices, such as a frequent, reliable bus service or a safe walking environment, can make it easier for someone to reach the doctor or grocery store. A missed or late bus is often the cause of missed medical appointments⁵. In the Orlando region, it costs \$12,600 annually to own and operate a car⁶. That makes car ownership a luxury many residents cannot afford. Often, an individual has to choose between transportation or food⁷.

The number one goal for Central Florida's transportation system is safety. No person should die using our transportation system. But they do. According to the Signal Four Analytics crash database, 295 people died in traffic crashes on Central Florida roads in 2017. Of that number, 79 were people walking. The loss of life or cost of continuing care has a negative effect on a region's economic productivity⁸. Additionally, the fear of walking and biking in unsafe conditions often prohibits people from incorporating daily physical activity into their routine.

A key aspect of safety is the perception of safety. How safe someone feels walking, biking, or using transit is critical to whether they choose to use that mode of transportation. Often, those who walk in unsafe conditions do so because they have to, and

usually, those individuals are from low-income and traditionally underserved areas.

Environmental Quality refers to clean air, the presence of trees, water quality, and much more. Federal law requires environmental considerations to be an integral part of a transportation project – from planning to construction. The Federal Highway Administration's INVEST tool, which has guided this entire research project, is focused on sustainability, a term that is broader than environmental quality. Sustainability refers to balance within the “triple bottom line” – which includes social, economic, and environmental principles. Walking, biking, and using transit all contribute to each of these values. Neighborhoods that are more walkable often increase social interaction among residents and visitors to local businesses. Studies also show that social support leads to more physical activity⁹. Additionally, walking and biking improve air quality by replacing car trips, thus reducing vehicle emissions¹⁰. Transit that uses electric and Compressed Natural Gas (CNG) buses can also reduce vehicle emissions¹¹.

What's Coming

Our transportation vision as a region is implemented through a coordinated set of plans and policies. While these plans and policies are designed to shape the region's future, the current rate of change makes it more challenging to forecast future needs. Contributing to this era of uncertainty are undeniable issues we must consider: population and demographic shifts, climate change, and technological advancements.

Population and Demographic Change

Who is MetroPlan Orlando planning for? Today, the U.S. Census Bureau estimates nearly 2.2 million people live in Orange, Osceola, and Seminole counties combined. This is a 17.7% increase since the 2010 Census. All experts predict that the population in Central Florida will continue to grow. The University of Florida's Bureau of Economic and Business Research estimates that 3.4 million people will live in the three counties in 2045. But there is a story

behind these numbers. MetroPlan Orlando's three-county planning area is geographically larger than the states of Rhode Island and Delaware and our region's population is greater than that of 14 states¹². This region is a majority-minority region and it is expected to become more racially and ethnically diverse¹³. Additionally, the population is aging and MetroPlan Orlando needs to prepare for the graying tsunami – the term associated with the aging of the baby boomers, once the country's largest generation – while simultaneously ensuring that the region retains and attracts a younger population¹⁴.

Climate Change

The state of Florida is expected to be dramatically affected by climate change. The impacts to the Orlando-Kissimmee-Sanford metropolitan area could include severe storms that damage roads, bridges, and rail lines; increased frequency of flooding; and an influx of climate refugees from low-lying areas, such as South Florida and the Caribbean. The uncertainties associated with this known issue must be further understood and considered as part of MetroPlan Orlando's planning efforts.

Technological Advancements

Advancements in technology are changing the way we work, the way we interact, and the way we travel. This has happened before. The technological advancements in manufacturing and the internal combustion engine led to the automobile, which has had a dramatic effect on how we work, interact, and travel. But technology advancements are happening faster than they did 100 years ago and this has a profound impact on planning.

The data available for planning efforts is expected to increase 400% over the next five years¹⁵. Policy that governs transportation planning – at the federal, state, regional, and local level – has not kept pace with the rapid changes in technology. These technological advancements add complexity to the planning environment. The data used and the policies developed will guide the next decade of transportation planning in Central Florida.



MetroPlan Orlando is defining resiliency as a region's ability to prosper amidst unexpected events, such as a hurricane, or man- made issue, such as a road closure.

Federal Requirements

MPOs are responsible for the regional transportation planning process, which must meet certain federal requirements. The Fixing America's Surface Transportation (FAST) Act requires 10 planning factors to be part of metropolitan transportation plans. Additionally, MPOs must establish performance management systems that set targets, identify performance measures to evaluate progress on these targets, and use available transportation funding to achieve these targets. The performance management system established by the MPO should lead decision making within the transportation planning process, which is informed by objective data analysis.

While MetroPlan Orlando's plans must conform to these requirements, the agency's Strategic Plan has more flexibility with time horizons and contents. In 2019, the agency expects to adopt a new Strategic Plan, which will be critical in establishing the majority, if not all, of these performance measures. MPOs can establish their own performance-based processes as long as they are continuing, cooperative, and comprehensive. Performance measures and the transition to a performance-based planning process that improves the region's quality of life implicitly

must include health, sustainability, and resiliency.

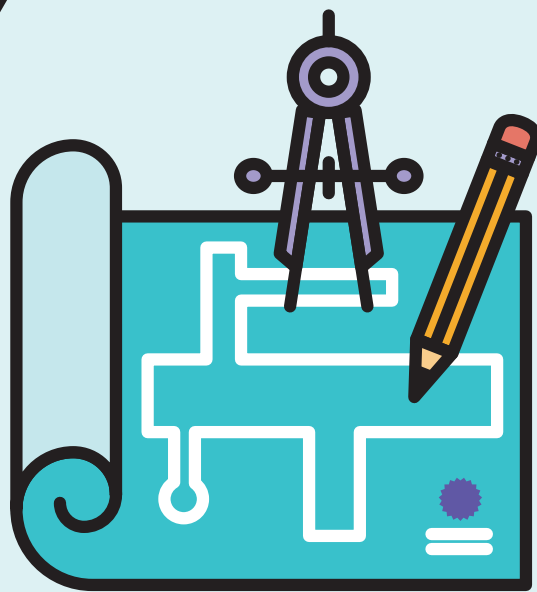
The FAST Act requires resiliency to be included in metropolitan transportation plans. But how this is done is up to each metropolitan area. MetroPlan Orlando is defining resiliency as a region's ability to prosper amidst unexpected events, such as a hurricane, or man-made issue, such as a road closure. Resiliency also includes individuals and their ability to be economically resilient in an economy where automation is changing workforce needs. This is critical for any scenario planning efforts the agency undertakes in the coming years.

Some aspects of resiliency overlap with sustainability and health, but it is also a broad concept. Infrastructure resilience refers to the ability of a piece of infrastructure or the whole system to adapt to potential weather-related vulnerabilities and hazards. It also includes every transportation option and how they could interact with each other following a major event¹⁶.

The U.S. Economic Development Administration defines economic resiliency as "the ability to recover from a shock, the ability to withstand a shock, and the ability to avoid the shock altogether"¹⁷. As the Central Florida region matures, it needs to consider what potential shocks are on the horizon and ways to strengthen these elements of resiliency.



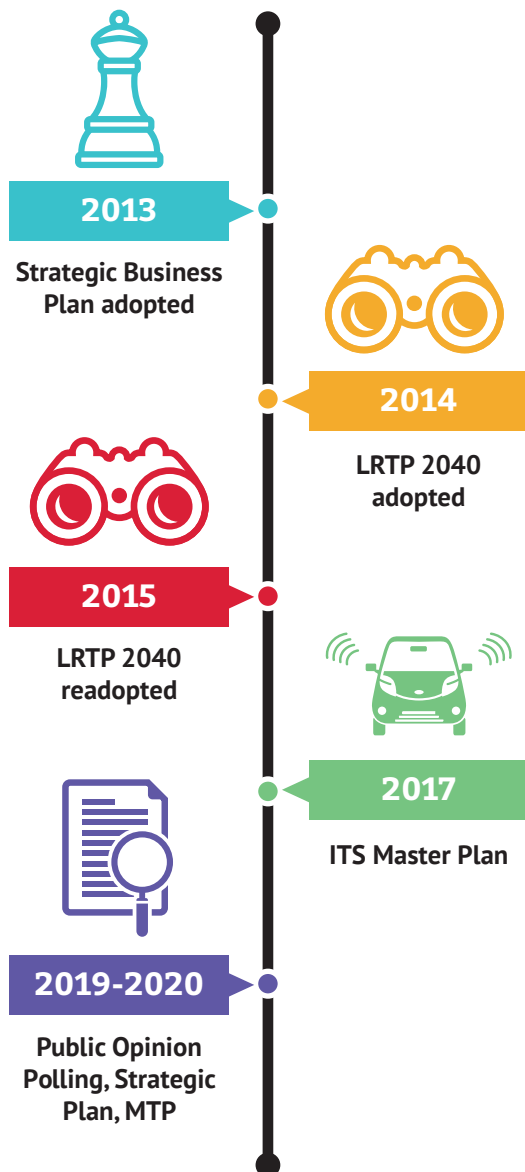
PLANS



As the MPO for the Orlando-Kissimmee-Sanford urbanized area, MetroPlan Orlando has a federal mandate to allocate federal and state transportation dollars to regionally significant projects. The agency is required to produce three plans – the Metropolitan Transportation Plan (MTP), the Transportation Improvement Program (TIP), and the Unified Planning Work Program (UPWP)¹⁸. But the effectiveness of these plans is dependent on many other agency activities.

In the last five years, MetroPlan Orlando has adopted a Strategic Business Plan (referred to as the Strategic Plan throughout this report), a new Long Range Transportation Plan (referred to as the Metropolitan Transportation Plan throughout this report), and several other plans. It has also restructured its advisory committees and increased its partnership outreach. A lot of change has occurred and more is expected in the coming years. The plans developed in the next few years will establish the projects that will be funded with federal and state transportation dollars.

PLANS TIMELINE



Strategic Plan

The Strategic Plan is the agency's compass, establishing a path forward for how we do business, interact with our partners and the public, and what we prioritize as an organization. The last Strategic Plan was adopted in 2013. It had a five-year planning horizon and is due for an update. The existing Strategic Plan led to changes in several staff positions and a focus toward transit, walking, and biking. As a result, MetroPlan Orlando reorganized its advisory committees to facilitate deeper and broader discussions in the regional transportation planning process.

Strategic Plans are not federally mandated, but many MPOs have gone through a strategic planning process. This is considered a best practice for MPOs. The lack of a mandate provides MetroPlan Orlando with a lot of discretion for its next strategic planning process. To use a metaphor, the Strategic Plan can act as the agency's brain while the plans described below are the limbs that allow for movement to happen.

Metropolitan Transportation Plans

The Metropolitan Transportation Plan is a 20-year look into the future. It identifies the projects needed to implement the regional vision and MetroPlan Orlando's Strategic Plan. Previously, MetroPlan Orlando and most MPOs in the state of Florida referred to this document as the Long Range Transportation Plan, but the Code of Federal Regulations uses Metropolitan Transportation Plan,

MetroPlan Orlando has conducted public opinion polling since 2001. The results identify the region's attitudes toward various aspects of transportation.

which is the terminology used throughout this report¹⁹. The MTP must meet certain requirements, which include cost feasibility, performance management, and the incorporation of 10 planning criteria.

The MTP is implemented through two additional documents, TIP and the Prioritized Project List (PPL). The TIP is a list of capital projects the region has the funding to implement over the next 5 years. The PPL is a ranking of every project the region wants to complete in the five years that follow the TIP's planning horizon. Projects move from the PPL to the TIP once funding is identified.

Unified Planning Work Program (UPWP)

The UPWP is MetroPlan Orlando's budget, which identifies the projects, research, partnerships, and other work staff will do to advance the Strategic Plan, MTP, and other plans. This two-year document is a work plan for monitoring progress on all of MetroPlan Orlando's activities.

Public Opinion Polling

MetroPlan Orlando has conducted public opinion polling since 2001. The results identify the region's attitudes toward various aspects of transportation. Over time, the methodology has evolved to incorporate internet polling, telephone interviews,

and in-person interviews. This research allows the organization to track public sentiment on transportation issues over time.

Turnings Plans into Projects

Each road, sidewalk, bus route, and rail line has its beginnings in a planning document. MetroPlan Orlando is responsible for many of Central Florida's transportation plans. It also advises on the plans produced by counties, municipalities, service operators, and the Florida Department of Transportation. But as a planning agency, MetroPlan Orlando has no authority to implement the projects that are incorporated into its plans. MetroPlan Orlando sets the policies and project delivery process that enables implementation. The Florida Department of Transportation, the Central Florida Expressway Authority, LYNX, counties, and cities are the agency partners responsible for implementing transportation projects.

The document over which MetroPlan Orlando has the most authority is its Strategic Plan, which heightens its importance. It sets the decision-making framework for the agency, its board, and its advisory committees; therefore, the process it establishes is critical. The success of the MTP is dependent on MetroPlan Orlando's implementation partners. But implementation is tied to a performance-based planning process that MetroPlan Orlando will establish about halfway through the MTP development process.



LET'S LEARN FROM OUR PEERS



No two organizations are alike. But the work of other organizations can offer MetroPlan Orlando examples related to collaborative and organizational roles. This section looks at how transportation organizations have developed strategic plans, MPOs use performance management, and a unique collaboration in the Atlanta region.

Strategic Planning

Although strategic plans are not required, as stated earlier, they are considered a tool for establishing the priorities and direction of the agency. MetroPlan Orlando staff reviewed strategic plans from MPOs and transit agencies across the country. Transit agencies are included in this review because strategic plans or similar documents are more prevalent in transit agencies. This review revealed that most MPOs and other transportation agencies have 5-year strategic plans. Some transit agencies have 10-year plans.

None of the MPO strategic plans incorporated a performance-based planning process, but they did include internally-focused performance measurements and targets. The strategic planning effort underway in the Indianapolis region with its MPO and regional agencies could be a good example for MetroPlan Orlando as it begins its next strategic planning process. Project delivery is not incorporated into the MPO plans, but is a focus in transit agency plans because transit agencies implement capital projects.

Performance Management

Many MPOs have engaged in performance management for decades. Staff reviewed what select MPOs are doing in regards to performance management and quality of life. MetroPlan Orlando looked specifically at MPOs in Chattanooga, the San Francisco Bay area, and Nashville. These were determined based on a recently published guidebook from Transportation for America and previous staff research. The majority of the information below comes directly from Building Healthy and Prosperous Communities, a guidebook produced by Transportation for America and the Public Health Association.

A New Approach to Evaluating Projects

Chattanooga is smaller than the Orlando area, but its MPO serves 15 municipalities and four counties – the same regional nature as MetroPlan Orlando. The Chattanooga-Hamilton County/North Georgia Transportation Planning Organization recently changed how transportation projects were selected for funding. This change to the Project Selection Framework removed the siloed approach within transportation project selection.

The Project Selection Framework evaluates projects on a geographic scale, not by mode as is traditionally done across the country. Projects with a local or community orientation are evaluated against each other – no matter if they are a highway project, bike project, or transit project – as opposed to all projects. These community projects are small, but tend to have a significant impact on quality of life by increasing physical activity, access to food, and safety. Projects that connect a community to a regional activity center also are evaluated against each other. These projects tend to enhance quality of life through better transportation options to employment and social services. And projects, such as interstates, that connect multiple regions are evaluated separately. Chattanooga's framework is an acknowledgement that communities within regions are diverse and it is inappropriate to compare a project on a suburban arterial road to a collector street that needs sidewalks²⁰.

Prioritizing Quality of Life

The Nashville MPO is a pioneer in using the project prioritization process to advance its health and quality of life objectives. With each new MTP development cycle, it issues a call for projects, which leads to all submitted projects undergoing an evaluation against established performance measures. The 2040 MTP assigned points (on a 0-100 scale) to each project, giving more weight to projects related to public health. Eighty of the possible 100 points are related to public health through safety, environment, equity, and multimodal options²¹. This is an example of how the project prioritization process can be utilized as



The use of a collective impact model formalized through the participation of so many organizations furthers the breakdown of the siloed approach that is common throughout communities.

part of a performance management process that enhances quality of life.

Opposite Coasts, Similar Issues

Across the country from Orlando, the San Francisco Bay metropolitan area has the highest incomes in the nation, while the Orlando area ranks near the bottom in income²². But the two areas have a lot of similar problems. Population growth and a decrease in appropriate housing supply have created a severe lack of affordable housing and strains to the transportation system.

The Metropolitan Transportation Commission (MTC), San Francisco's MPO, recently adopted Plan Bay Area 2040. The plan was developed with the Association of Bay Area Governments, which enabled cross-sector collaboration and the integration of land use, housing, health, and transportation issues. This collaboration influenced Plan Bay Area 2040's targets and performance measures.

The MTC first established performance targets in 2001 and reevaluates these targets on a periodic basis. Following a six-month public engagement

effort, thirteen targets were established prior to the development of Plan Bay Area 2040. Projects identified for possible funding were evaluated against these 13 targets during the plan development process. This evaluation process included a simple scoring process (a project received a +1 or -1 for each target) as well as a benefit-cost analysis conducted using the region's travel demand model and the Integrated Transport and Health Impact Modeling tool. These individual project evaluations were incorporated into the scenario analysis conducted as part of the planning effort. This enabled MTC to understand how the scenarios would impact the established targets.

The scenario incorporated into the adopted Plan Bay Area 2040 would positively impact 9 of the 13 targets, while negatively affecting the remaining 4 targets. For example, Plan Bay Area 2040 would – when fully implemented – reduce per-capita CO2 emissions from cars and light duty trucks by 15%. But the target of reducing the share a low-income household spends on housing and transportation would not be met. The evaluation showed that Plan Bay Area 2040 would increase this share by 13%²³.

Creating Healthy Communities Through Collaboration

These are examples of what other MPOs do. In Atlanta, though, additional work is underway that deserves mentioning. The Atlanta Regional Collaborative for Health Improvement (ARCHI) uses a collective impact model to align regional resources in ways that improve health and ensure economic vitality. More than 70 organizations – including the MPO, health departments, local hospitals, universities, and housing authorities – are part of the collaborative. Together, they pursue cross-sector activities to eventually reduce health care costs by 13%, reduce non-urgent trips to the emergency room by 13%, reduce hospital readmissions by 13%, increase worker productivity by 7%, and increase access to preventive and clinical care by 16%. The use of a collective impact model formalized through the participation of so many organizations furthers the breakdown of the siloed approach that is common throughout communities.



AND CONCLUSION



1 – Develop a 10-year Strategic Plan

A review of the MPO strategic plans revealed that most have a five-year planning horizon. Often, changes identified in strategic plans take a couple of years to happen. Once the changes are made, a year or more is needed to properly evaluate the change and how it supports the MPO's strategy. A 10-year Strategic Plan would incorporate two MTP planning cycles and allow for an evaluation process that yields more insights.

MetroPlan Orlando adopted its current Strategic Plan in 2013 and similar to the MPO plans reviewed, it has a five-year planning horizon. The strategic planning process conducted in 2013 identified very similar questions to those asked at the Think-In. While it is impossible to determine, this could mean that the changes MetroPlan Orlando made -- or is in the process of making -- as a result of its last Strategic Plan have not had time to show their full results. For example, the Strategic Plan identified a need to improve the project evaluation methodology for the MTP and the resulting project list. This has yet to be adopted by the MetroPlan Orlando board. The next MTP will formalize a new project evaluation methodology, which can be a key intervention for enhancing quality of life.

Transportation projects take years – often more than five years – to implement. Transit agencies have 10-year strategic plans, typically. If MetroPlan Orlando's Strategic Plan leads to project delivery changes, it could take a decade to understand the impact of the changes. In addition to the lengthy project delivery process, quality of life benefits can take decades to realize. Some impacts – such as funding changes and anything that leads to increased transit service – can produce quality of life benefits in the short term, but most will take years to occur. A 10-year Strategic Plan allows MetroPlan Orlando to better understand the impacts of its Strategic Plan changes. While this is a recommendation for a 10-year planning horizon, the Strategic Plan could incorporate annual evaluations or it could be evaluated at the start of a MTP development cycle.

2 – Start development of MetroPlan Orlando's 10-Year Strategic Plan in Summer 2018

The Strategic Plan will set MetroPlan Orlando's direction for the next decade. This strategic planning effort should establish performance measures, targets, and timelines for guiding the MTP development. The next MTP is scheduled for adoption in December 2020. This means that the Strategic Plan needs to be adopted in 2019.

STRATEGIC PLAN TIMELINE



3 – Use Public Opinion research to identify what aspects of quality of life matter most to Central Florida residents

MetroPlan Orlando is scheduled to conduct a public opinion survey in the latter half of 2018 and early part of 2019. This timing allows for the agency to incorporate the polling results into the Strategic Plan and MTP. It is recommended the public opinion survey include questions related to quality of life. MetroPlan Orlando has included these types of questions in previous polls, including “Should health impact, such as air quality, obesity, and stress, be taken into consideration when planning the transportation system?” These range of questions could be expanded to include inquiries about the importance of transportation options, what is considered a realistic transportation option, and how transportation funds are allocated across various transportation options.

The region is large. Sometimes, its size can hide regionally-significant issues occurring within communities. MetroPlan Orlando can work to identify opportunities for understanding perspectives on a neighborhood or community scale. The communities could be those that have more health disparities when compared to the region.

4 – Incorporate performance measures related to the region’s vision around concepts such as health and sustainability

What we measure is what we value – that is the sentiment behind performance-based planning. Performance measures are the indicators that will show what MetroPlan Orlando’s priorities will be going forward into the next decade. MPOs across the U.S. have identified performance measures that MetroPlan Orlando can use. But the most important thing is to use the strategic planning process to establish the regional transportation vision. This will lead to targets the region wants to achieve. The performance measures will show whether we are meeting these targets.

What we measure is what we value

5 – Consider staffing needs necessary to effectively plan for the rapid shifts in transportation and increasing data availability

The Strategic Planning process should include an in-depth evaluation of skills and staff roles necessary for implementing plans and projects that advance quality of life in the region. This analysis could include the use of a data scientist and the best way to acquire these services.

6 – Include non-transportation stakeholders in the strategic planning process, such as housing, health, tourism, and community developers

The Transportation Think-In was the first convening MetroPlan Orlando has organized with the intent of focusing on stakeholders outside the traditional transportation decision-making process. Engagement with Think-In attendees should continue as the Strategic Plan is developed. These stakeholders have a deeper understanding of how transportation and built environment policies affect quality of life.

The Strategic Plan is MetroPlan Orlando’s compass. The existing Strategic Plan broadened the agency’s focus on partnerships. The new one should include these partners as part of the strategic planning process. The collaborative effort could clarify MetroPlan Orlando’s regional role within the context of its transportation planning mandate.

7 – Partner with local governments and coalitions to advance quality of life through advocacy

MetroPlan Orlando develops legislative priorities each year prior to the Florida Legislative session. As mentioned previously, the Central Florida region has worked together to advocate for transportation projects, such as the Wekiva Parkway and SunRail. These coalitions amplified a single message.



MetroPlan Orlando can identify advocacy issues outside of transportation policy that would positively impact the transportation system and support stakeholders leading those efforts. An opportunity exists within housing.

For example, in the state of Florida, 20 cents of every \$100 spent on real estate transactions is directed to the William E. Sadowski Affordable Housing Trust Fund²⁵. Each year since 2003, the Florida Legislature has transferred these funds to other uses. The Sadowski Coalition advocates for full allocation of the affordable housing trust fund. MetroPlan Orlando can support Sadowski-related advocacy efforts to increase funding for housing, which could lead to more housing near bus stops and SunRail stations.

8 – Identify peer MPOs that can serve as barometers and support for MetroPlan Orlando

It is common practice for metropolitan areas to identify regions that are similar in size, economic output, location, etc. Transit agencies also do this as part of the Transit Development Plan process. The motivation behind identifying peer regions is not about competition, but instead focused on building capacity and understanding between similar areas. This establishment of peer agencies is rare among MPOs. MetroPlan Orlando can identify peer agencies across the country, establishing key metrics and knowledge transfer opportunities.

Conclusion

Framing the Future is a roadmap for MetroPlan Orlando as it examines the collaborative role it has within Central Florida. It is part of a series that examines how MetroPlan Orlando can incorporate health and sustainability principles into the regional transportation planning process. All of the information is viewed through a Quality of Life lens – how can we address current issues and the changes that are coming through the agency's transportation planning mandate.

MetroPlan Orlando's success over the last two decades has yielded economic and social benefits in Central Florida and across the state. By strengthening its collaborative role in the region, even more benefits can be realized by each current and future resident in Central Florida.



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TRANSFORMATION:

FUNDING HEALTHY AND SUSTAINABLE
TRANSPORTATION OPTIONS



metroplan orlando

A REGIONAL TRANSPORTATION PARTNERSHIP

OCTOBER 2018

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TRAN\$FORMATION:

FUNDING HEALTHY AND SUSTAINABLE TRANSPORTATION OPTIONS

The Central Florida region is in the midst of a transportation building boom. The reconstruction of I-4 affects about 200,000 drivers each day. SunRail's Southern Expansion adds a new transit option for thousands of people in southern Orange and Osceola Counties. Anyone who travels via air sees the construction underway at the region's two passenger airports. This is in addition to the Wekiva Parkway and several bicycle and pedestrian projects recently completed or under construction.

How are we funding all of these projects? That question has hundreds of answers and this paper attempts to simplify and demystify those answers. The transportation transformation underway is preparing Central Florida for its expected growth and changing demographics. By 2045, at least 3 million people are projected to live in Orange, Osceola, and Seminole counties. Our transportation system will significantly influence where they will live and the quality of life will enjoy.

The changing nature of the Central Florida region was a key aspect to MetroPlan Orlando's Transportation Think-In. This nearly day-long event gathered 60 community leaders from various sectors ranging from health and housing to business and tourism. These leaders represent industries and groups that are impacted by transportation, but who traditionally are not part of the ongoing transportation conversations. Throughout the day, it was clear that those gathered thought we could achieve great things by coordinating our efforts and leveraging resources, like funding.

Six interconnected topic areas for future research emerged from the Think-In conversations. Three were selected to become white papers. This paper addresses funding, and specifically, details about existing funding

sources, the connection between funding and quality-of-life enhancing projects, and recommendations for several next steps. Transportation funding is inherently complex and bureaucratic. But it is important to understand the potential for using transportation funding to create the healthy and sustainable places we want throughout Central Florida.

Transportation and Quality of Life in Central Florida

The region's transportation network directly affects each person's ability to interact with his or her community. It determines the jobs and educational opportunities they can reach and impacts the decisions they make. Here in Central Florida, quality of life can be enhanced or hindered by the availability of transportation options. Quality of life can mean different things to different people. From a regional transportation perspective, quality of life is enhanced when:

- Each person has access to as many transportation choices as possible.
- Transit, walking, and biking are the easiest way to travel.
- A range of services can be easily reached via safe transportation options.

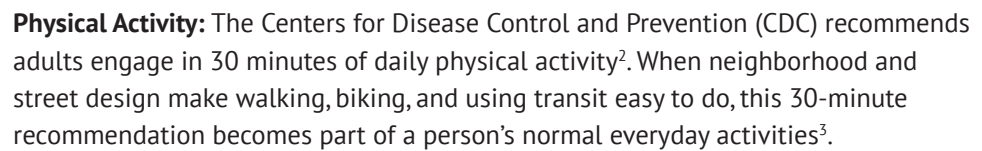
The Think-In was subtitled Making 2045 Healthy, Sustainable, and Resilient. These attributes are essential to improving the quality of life in our region. It is important to connect these quality of life elements to transportation funding. This report and the two others that accompany it are part of an applied research effort MetroPlan Orlando is undertaking to integrate health and sustainability principles into the regional transportation planning process. Simply put,



MetroPlan Orlando – as a government agency with a transportation planning mandate – has focused its efforts on a health in all transportation policies initiative, which has five focus areas. A more detailed literature review of MetroPlan Orlando’s health focus areas is located in *Framing the Future*, a complimentary white paper to this one.

A person's health status is often dependent on the places where they live. Health in all Policies is an approach that incorporates health considerations into decision-making across government agencies¹.

A brief description and type of transportation facility that exemplifies the connection between transportation and health



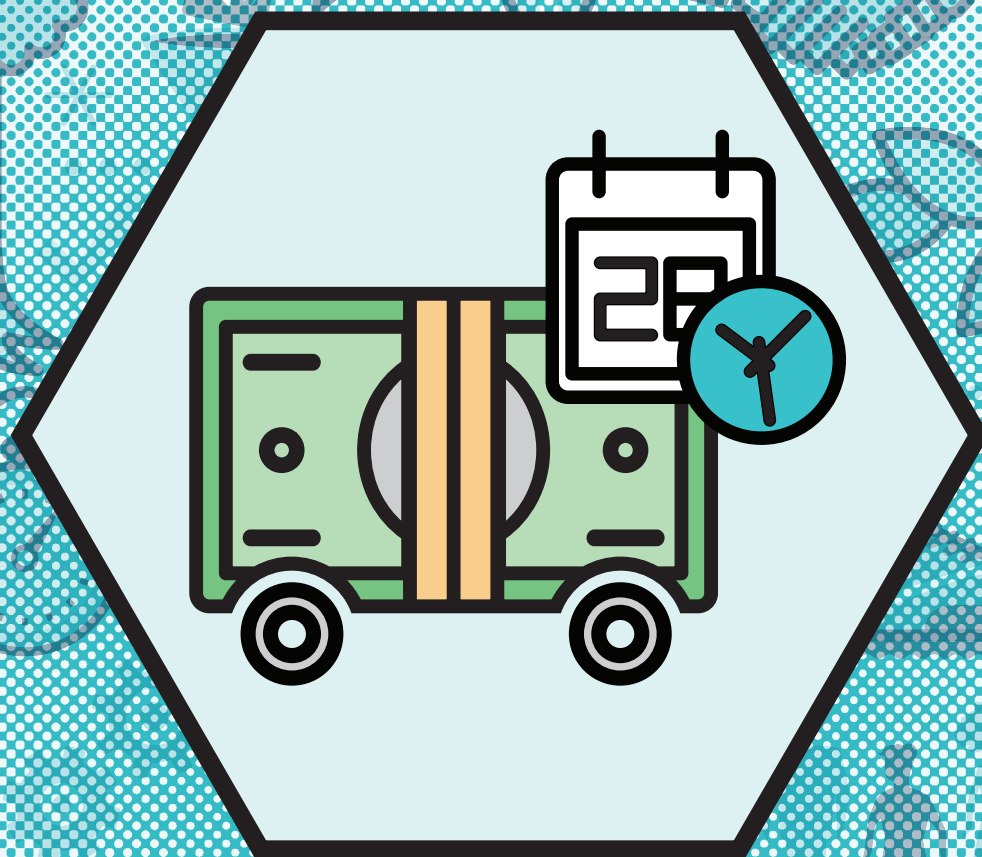
Access to Healthy Food and Access to Care: Transportation choices, such as a frequent, reliable bus service or a safe walking environment, can make it easier for someone to reach the doctor or grocery store. A missed or late bus is often the cause of missed medical appointments⁴.

Environmental Quality: Transportation is a main contributor to air pollution and source of greenhouse gas emissions⁵. Additionally, transportation facilities can impact the presence of trees and water quality in a neighborhood.

Safety: How safe someone feels walking, biking, or using transit is critical to whether they choose to use that mode of transportation. According to the Signal Four Analytics crash database, 295 people died in traffic crashes on Central Florida roads in 2017. Of that number, 79 were people walking.

Example: Pedestrian hybrid beacons at mid-block crossing locations

WHAT WE ARE CURRENTLY FUNDING



MetroPlan Orlando is the metropolitan planning organization (MPO) for Orange, Osceola, and Seminole counties. MPOs have a federal mandate to produce an annual document called the Transportation Improvement Program (TIP), which contains transportation projects expected to be funded in the next five years. Each July, the MetroPlan Orlando board adopts a new TIP. The TIP is a good indicator of existing regional transportation priorities.

Notable Projects in MetroPlan Orlando TIP FY 2019-2023

I-4 Ultimate: the complete reconstruction and expansion of 23 miles of I-4 between SR 528 (the Beachline) and SR 434

I-4 Beyond the Ultimate: rehabilitation and expansion of 20 miles of I-4 east of SR 434 and 20 miles west of Kirkman Rd, plus interchange improvements

Pine Hills Transit Center: a new bus transfer center in the Pine Hills area of Orange County, with a connection to the Pine Hills multi-use trail

Sanford Riverwalk: a bicycle and pedestrian trail along Lake Monroe in Sanford, FL

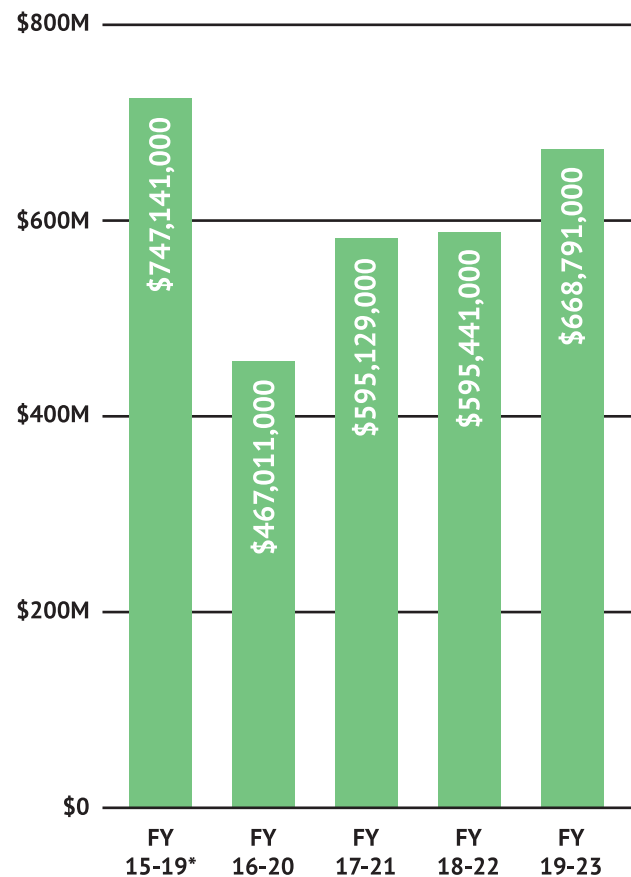
Shingle Creek Regional Trail: a recreational trail between southern Orlando and Kissimmee that parallels parts of Shingle Creek, the headwaters of the Everglades

SunRail Positive Train Control: the implementation of an advanced communications system to enhance safety on SunRail and the Central Florida Rail Corridor

Wekiva Parkway: a 25-mile tolled, limited access highway that completes a beltway around the Orlando metropolitan area

Analysis of the TIPs from the last five years can show a trend of where we are headed. MetroPlan Orlando analyzed the last five TIPs to determine how much is being invested in “health-promoting” projects, which are transportation facilities designed to encourage walking, biking, and transit use. These facilities enhance their health-promoting aspects through supportive land use policies related to smart growth, building design, and more (*see Housing: A Primer for Transportation Professionals in Central Florida* for additional information). In the current TIP (FY 19-23), Central Florida is funding \$669 million through federal, state, and local funds to “health-promoting” projects. Examples include SunRail, the Shingle Creek Regional Trail, a couple of local Complete Streets redesigns, and LYNX bus and service expansions.

TRANSPORTATION SPENDING TO PROMOTE HEALTH

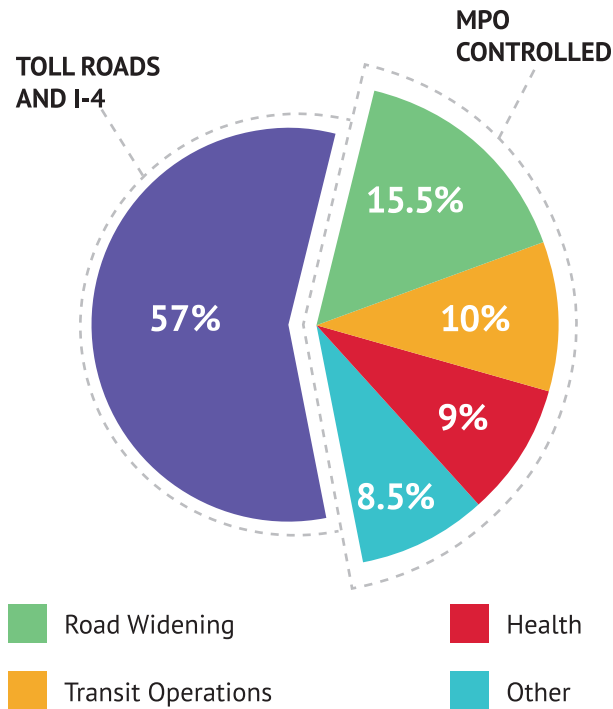


*In FY 15-19, \$474M went to SunRail Phase 1



While these hundreds of millions are a significant amount of funds, the region's TIP has more than \$7 billion programmed. The most recent TIP's funding breakdown is shown in the following graph:

MOST MONEY GOES TO WIDEN ROADS



The Other category includes Transportation System, Management, and Operations projects; airport funds; and routine maintenance. While only 9% of the TIP is explicitly dedicated to health promoting projects, several projects in the Other category have economic and environmental benefits. For example, retiming the region's traffic signals had a benefit to cost ratio of 8:1 and reduced vehicle emissions by 1,200 tons of CO₂ last year⁶. Spending on transit operations is critical for maintaining or improving transit service. Additionally, maintenance can prolong a transportation facility's lifespan, opening up funds that can be used for other projects.

Existing Transportation Funding Policies

Policy created the un-level playing field between highway funding and funding for transit, bicycle, and pedestrian projects. Addressing these structural issues is beyond the purview of this white paper, but there are several transportation-related funding policies that are worth exploring. The key ones are the state's Strategic Intermodal Systems (SIS) priorities and MetroPlan Orlando's Surface Transportation Program (STP) allocations.

The SIS is the Florida Department of Transportation (FDOT)'s priority transportation facilities. These SIS facilities link regions, highways, ports, and economies, with a focus on interregional – connecting Orlando to the Space Coast as opposed to connections within the Orlando-Kissimmee metropolitan area. SIS facilities receive priority for state transportation funding, and currently, the MetroPlan Orlando planning area has only one facility – I-4 – in FDOT's Approved SIS Plan and SIS Cost Feasible Plan, which cover FY 2024-2045^{7 8}.

MetroPlan Orlando's Board of Directors establishes the allocations of the region's estimated \$30 million of STP funds a year. Currently, they are set at:

- 32% for Highways
- 21% for Transportation Systems, Management, and Operations
- 20% for Transit
- 17% for Bicycle and Pedestrian

It is also worth noting that bicycle and pedestrian projects like a Complete Street redesign qualifies for the funds allocated to highways. At a minimum, 37% of the region's STP funds are allocated to capital projects that promote health and sustainability. Highway and TSMO projects can also have the same health and sustainability benefits.

HOW IS TRANSPORTATION FUNDED NOW?



The transformational projects recently completed or under construction are the result of federal, state, and local coordination. This coordination starts with an initial idea and proceeds from planning to design to construction. The roles and responsibilities of the federal, state, and local agencies differ from project to project. A key determinant in the roles and responsibilities of each government agency is often who has identified financial responsibilities for the facility. The federal, state, and local governments each have their own transportation funding sources.

Federal

The federal government uses the federal gas tax and general revenue sources to support regionally significant projects and interstate commerce. For every gallon of gas purchased, 18.4 cents per gallon goes into the Highway Trust Fund. For more information on the federal gas tax, see infographic on page 9. Overall, the federal Highway Trust Fund allocates approximately 20% of its funds to transit and 80% to highways, which also includes bicycle and pedestrian infrastructure. These funds usually carry restrictions regarding what mode they can be used for – as opposed to an overall use to improve the transportation system⁹.

In very simple terms, the federal government distributes its funds two ways – via a formula and at its discretion. The formula funds flow through two main avenues – state departments of transportation and metropolitan planning organizations (MPOs). MPOs serving more than 200,000 people receive what are known as Surface Transportation Program (STP) funds and MetroPlan Orlando's planning area receives approximately \$30 million in STP funds a year. In the last couple of years, these funds have supported new LYNX buses, the widening of John Young Parkway in Orange County, the Hoagland Blvd. improvements in Osceola County, the Shingle Creek Trail in Orange and Osceola Counties, and Safe Routes to School improvements across the region.

The Federal Transit Administration's New Starts program is an example of a discretionary funding

The roles and responsibilities of the federal, state, and local agencies differ from project to project.

program. This is the main source of federal funds for new transit capital projects (it was the source of federal funds for SunRail). It lacks the contracting authority, which allows federal grantees to enter into long-term funding obligation agreements – a benefit enjoyed by the Highway Trust Fund's formula funds¹⁰. Therefore, the New Starts program must depend on the annual appropriations process. This yearly fight for continuing the funds for projects already under construction subjects transit projects to an uncertainty that highway projects do not experience.

Each year, the US Department of Transportation issues Notices of Funding Opportunities (NOFO) for other discretionary funds, essentially opening a national competition for funding a specific type of project. Transportation professionals and decision-makers commonly know the NOFOs by their acronyms – TIGER/BUILD and FASTLANE/INFRA are two examples (see box). The Federal Transit Administration (FTA)'s common NOFOs are for Bus and Bus Facilities as well as Low-No Emissions Buses. LYNX received a Bus and Bus Facilities discretionary grant to build the Pine Hills SuperStop and add eight new buses¹¹.

The funds for these discretionary programs are authorized and appropriated by the US Congress each year. Eligible agencies submit applications and it is the USDOT's discretion to award funding for specific projects. For the purposes of this report, MetroPlan Orlando has drastically simplified the federal funding sources. In reality, the federal transportation funding picture is intricate. See Additional Resources section to learn more.



Commonly Used Terms

TIGER/BUILD: Since 2007, the US Department of Transportation has issued a Notice of Funding Opportunity (NOFO) for capital projects that advance national objectives. From 2009-2017, this funding program was known as the Transportation Investment Generating Economic Recovery (TIGER). It is currently known as BUILD – Better Utilizing Investments to Leverage Development¹².

FASTLANE/INFRA: The Fixing America's Surface Transportation (FAST) Act, the current federal surface transportation authorization, established the Fostering Advancements in Shipping and Transportation for the Long-term Achievement of National Efficiencies (FASTLANE) funding program. Its primary focus is supposed to be freight projects¹³, and in 2017, it became the INFRA program.

Documentary Stamp Tax: the state of Florida levies a tax on the processing of certain documents, such as a deed or certificate of title¹⁵.

Impact Fee: a charge levied on new development to mitigate the development's impact on public infrastructure¹⁶.

State

Each person who buys a gallon of gasoline in Florida pays into the state's Transportation Trust Fund. Similar to the federal trust fund, the state's gas tax is responsible for a large percentage of the revenue going into the trust fund. Unlike the federal government, Florida periodically adjusts its gas tax for inflation. This revenue source supports projects on the state's transportation network. Additionally, 24% of the revenue from the state's documentary stamp tax is

added to the state's Transportation Trust Fund. These funds are administered by the FDOT. These programs fund statewide projects, with priority going to SIS facilities, such as Interstate 4 and the Wekiva Parkway.

Local

The local governments of Central Florida provide substantial funding for projects that make it easier to move within the region. Local gas taxes, impact fees, and property tax revenues are the main forms of local transportation funds. In MetroPlan Orlando's planning area, two counties have a 1-cent sales tax dedicated for infrastructure (see Potential Funding Sources section), which can be used for transportation purposes.

Tolls

Tolls are a familiar concept to most Central Floridians. To travel on State Roads (SR) 408, 414, 417, 429, 528, and Florida's Turnpike, a fee is charged to each vehicle. These fees are assessed at certain points on each road and the price of the fees do not change unless authorized. These fees are considered tolls – and the toll revenue collected is used to pay for all costs associated with construction, rehabilitation, operations, and maintenance of the road¹⁷. The tolls currently assessed on Central Florida's toll roads are a flat rate, meaning they do not vary based on congestion.

Managed Lanes is the appropriate term for roads or lanes that are managed through an approved pricing strategy. When the I-4 Ultimate project is complete and as improvements are made by Florida's Turnpike Enterprise, there will be Express Lanes, a type of Managed Lane. Express Lanes use a dynamic pricing formula. As congestion increases, toll prices in the Express Lanes go up to keep traffic flowing. Another type of managed lane toll is called the High-Occupancy Toll (HOT). HOT lanes allow vehicles carrying multiple passengers to use a HOT lane for free, while vehicles with just a driver are charged a market price toll¹⁸.



THE PROBLEM WITH THE GAS TAX

The 18.4 cents gas tax levied by the federal government does not generate enough revenue to meet the country's transportation needs. The funds collected are deposited into the Highway Trust Fund (HTF), which requires infusions from general revenue sources to stay solvent. From 2008-2014, \$65 billion of non-gas tax revenue has been transferred into the HTF¹⁹. General revenue does not run a surplus, which means these transfers have contributed to the federal budget deficit. In simple terms, the gas tax is unable to provide enough money to meet the federal government's transportation obligations established through its authorization legislation. Why?

The gas tax levies a charge on a product that is declining in use. The switch to electric vehicles – which do not require gasoline – is reducing

the amount of gasoline-based taxes each year. Additionally, advances in technology have increased fuel efficiency, reducing the amount of gasoline a person needs to buy. This results in a reduction in the amount of gas tax revenue that is collected²⁰.

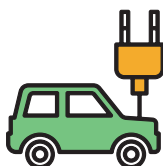
The federal fuel taxes are levied at a per gallon rate rather than at a percentage of the price of a gallon of gas. The federal gas tax is also not adjusted for inflation, which means it has a lower buying power than it did when the rate was established at 18.4 cents in 1993. While Florida's motor fuel tax rate is adjusted (indexed) to the general rate of inflation using the Consumer Price Index (CPI) every January, the same economic circumstances apply.

GAS TAX: A DECLINING TRANSPORTATION FUNDING SOURCE

WHY ISN'T THE GAS TAX WORKING ANYMORE?



Fuel efficiency
is increasing. We're driving farther while using less gas.



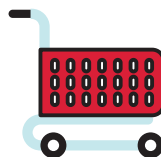
Advances in technology
for hybrid and electric vehicles have made these increasingly popular. Cars that don't use gas don't pay gas tax.



Federal gas tax rates haven't changed
since 1993. At 18.4¢ per gallon of gasoline, the federal Highway Trust Fund is expected to be bankrupt by 2021.

IF NOT THE GAS TAX, THEN WHAT?

The model for how we fund transportation will have to change in the future. Here are some potential funding sources.



Sales Tax:
a charge on the goods and services we buy

- A sales tax to fund transportation requires a majority vote by residents



Vehicle Miles Traveled:
a fee based on the number of miles a person drives

- This funding source is not currently authorized outside designated toll roads.

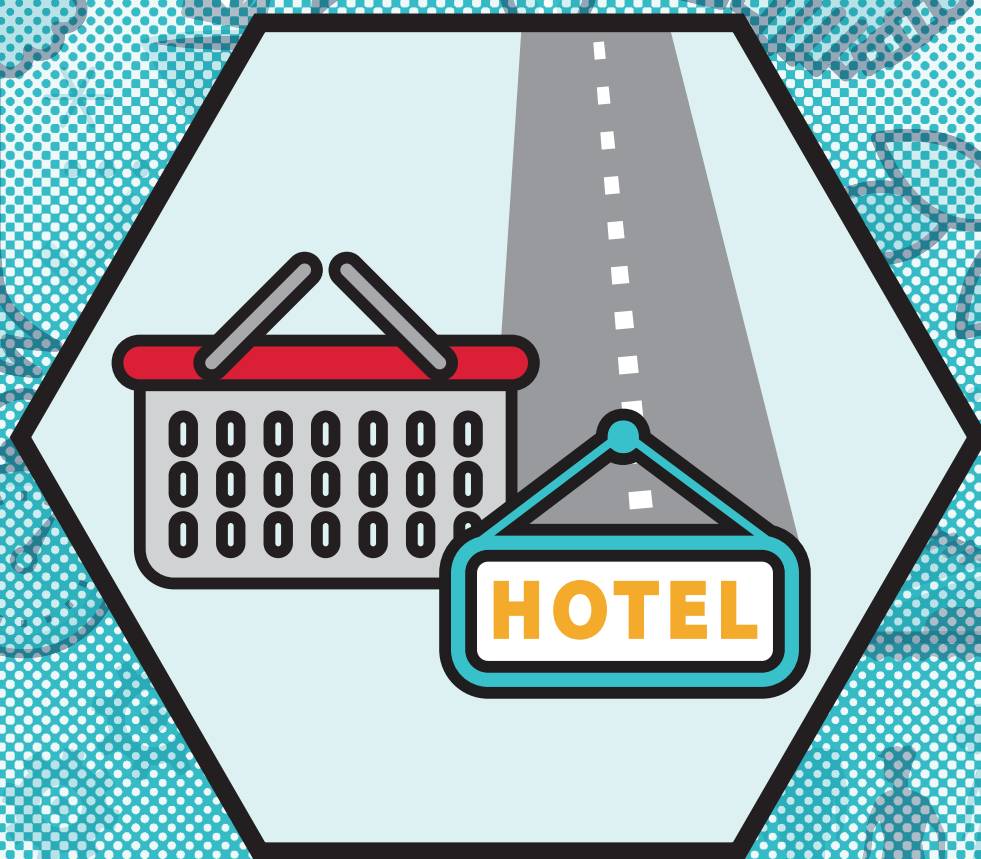


Value Capture:
uses property value increases and resulting property tax revenues to fund transit systems

- This would require authorization at the state and local levels.



POTENTIAL FUNDING SOURCES



The way transportation projects have been funded in the past is unlikely to be how they are funded in the future. As stated previously, existing sources lack the necessary revenue to fund the region's infrastructure needs. New or currently underutilized funding sources will be needed in the next decade. More research is needed before the appropriate funding sources are decided upon, but this section describes five potential sources for additional transportation funding in Central Florida.

Sales Tax

In Florida, a sales tax is charged on most goods. This consumption charge varies by location and the product that is being bought. The state of Florida has a 6% sales tax, while each county is allowed to levy additional voter-approved sales taxes for specific uses. For example, Seminole and Osceola Counties have a 1% sales tax for infrastructure projects. The counties use their sales taxes revenue for all types of infrastructure, such as schools, storm water, and transportation. Seminole County has used a portion of its sales tax revenue for projects such as the Sanford Riverwalk²¹.

In Central Florida, each county has a different local sales tax rate. Orange County has a .5% rate, Osceola County levies a 1.5% rate, and Seminole County's is 1%. The counties' sales tax are voter-approved and all have a sunset provision²². For MetroPlan Orlando's 3-county planning area, at least 50% of the sales tax revenue collected comes from the 72 million tourists that came through the region in 2017.

Each county – through their status as charter counties – is authorized to levy an additional 1% sales tax for transportation – the Charter County and Regional Transportation System Surtax. Currently, only two counties in the state – Duval in Northeast Florida and Miami-Dade in Southeast Florida – utilize this revenue option²³. There is some movement across the state to expand this authorization to municipalities with more than 150,000 people. This would require approval from the Florida Legislature²⁴.

The use of a sales tax to fund transportation improvements does have drawbacks. Each person – no matter who they are – pays the same amount of tax for purchasing the same number of goods. This differs from income and property taxes. The percent of income tax a person pays depends on a person's income. The more a person makes, the higher the percent of income tax they pay. That is the simple economic theory of income taxes that overlooks deductions and the role they have in reducing someone's income tax percentage. In order to pay property taxes you must first own property, which is not a situation applicable to many low-income or underserved populations.

While each person pays sales tax, it has a bigger effect on those considered low-income. In some states – Florida, included – sales taxes worsen income equality – largely due to the existing tax system in place²⁵. That being said, a sales tax for transportation ensures that each person invests in the transportation system. A 1-cent sales tax in Central Florida could bring in an additional \$489 million annually in revenue²⁶.

Bed Tax

Many counties and municipalities in Florida assess a tourist development tax – often called the bed tax. It is a specialized form of the sales tax that is charged to someone who stays at a hotel or rents for six months or less²⁷. In Central Florida, the funds collected are restricted and must be used to build, operate, and market facilities that support tourism, such as convention centers and sports stadiums. Currently, the funds collected cannot be used for public infrastructure projects, such as roads or transit routes.

The Florida Legislature has considered legislation to allow use of the bed tax for other purposes. Recently, the law was expanded to allow some, but not all, counties the ability to use the funds for major capital improvements to tourism-related infrastructure such as transportation and pedestrian facilities²⁸. Orange, Osceola, and Seminole counties are currently not authorized to use its bed tax for the region's transportation system²⁹.



Road Pricing

Data from the FDOT in 2015 highlighted Central Florida's unique distinction of having the most miles of toll roads in the United States³⁰. FDOT has a policy that any new capacity on the state road system must include a form of tolling – or road pricing, a term also synonymous with congestion pricing, value pricing or vehicles miles traveled fee. Road pricing is a fee for each vehicle, incorporating both the supply and demand aspects of transportation. The fee to use a road can be a set fee or vary depending on the current demand and available capacity; the higher the demand and fewer space for vehicles, the higher the fee³¹.

With the significant amount of toll roads currently in Central Florida and forthcoming Express Lanes, it is a concept already familiar to many residents and visitors. For health and sustainability, road pricing has a lot of implications. A switch to a road pricing scheme for the transportation system more accurately distributes costs and can reduce the inequalities that exist with the status quo. This is especially true if transit service is expanded, allowing for an efficient and cheaper transportation option. Those who walk, ride a bicycle, or use transit pay less than someone who uses a less sustainable mode of transportation³². Market-based road pricing can reduce the number of miles a car travels, which improves congestion and air quality³³. When combined together, the reallocation of resources through free-market mechanisms supports transportation options and a higher quality of life for Central Floridians.

Value Capture

Transportation projects are a form of economic development. Value capture is a term for policies that enable governments to capture some of the economic value created through a public investment³⁴. Primarily, value capture refers to real estate-based gains, but can be implemented through a variety of methods, such as special assessment district fees or tax increment financing³⁵.

Transit stations, in particular, have been shown to increase nearby property values. These stations serve

as spots for people to access a bus rapid transit or passenger rail line. The property values around SunRail stations have increased by \$810 million since the train line was first announced. While not all of this \$810 million is attributed to the hundreds of millions in SunRail investment, a portion can be³⁶. At this moment, no value capture mechanism is in place for local governments in Central Florida to realize a financial benefit from the substantial SunRail investment other than increased ad valorem property taxes.

Value capture can be a key financial component for many transit projects. All Aboard Florida, the private company that operates Brightline in South Florida, is using revenue from real estate development near Brightline stations to fund a portion of the train's costs³⁷. This approach utilizes transit-oriented development to support sustainable transportation options, such as transit, walking, and biking.

Mobility Fee

In Florida, several local governments have implemented a mobility fee as an approach to funding transportation improvements. A mobility fee is a charge local governments assess on new development to cover the cost of transportation improvements required to serve those using the new development. It is a type of impact fee, but it allows for the funds to be used for non-road capacity improvements, including bike lanes, transit, and sidewalks³⁸.

Within the MetroPlan Orlando geographic area, five local governments have implemented a mobility fee or multimodal impact fee: Osceola County, City of Kissimmee, City of Maitland, City of Altamonte Spring, and the City of Orlando. A mobility fee can provide a local government more flexibility when funding transportation improvements. The use of a mobility fee should tie a proposed development to the goals of a governing document, such as the comprehensive plan or mobility plan. The flexibility lies within what the fees can be used for. Most mobility fees assessed can be used for bicycling and pedestrian infrastructure, including wide sidewalks and protected bike lanes. Of the five local governments in Central



Florida with mobility fees, all can be used for these types of transportation improvements. Additionally, their mobility fees can be used for transit upgrades – buses, new routes, etc. The City of Kissimmee’s mobility fee goes further and allows for the funds to be used for transit operations³⁹.

A Note on Public-Private Partnerships

Public-private partnership (P3) is a term that is increasingly used – and often incorrectly described. A P3 is an agreement between a public agency and a private entity that facilitates project delivery⁴⁰. The agreements are usually designed to better allocate financial risk between the public and private sectors. These risks often include cost overruns, poor performance, and low financial returns⁴¹. A P3 that implements a transportation project generally utilizes the private sector to finance and manage a project, not to provide a direct financial contribution – the private sector does not give us free money!

P3s vary in size. They are not all large capital projects like the I-4 Ultimate. Transit agencies enter into P3 arrangements to provide better services, reduce operational costs, develop publically-owned land, and other projects designed to provide public benefits. These P3s include Massachusetts Bay Transportation Authority’s P3 with a real estate developer to upgrade, operate, and maintain the Boston Landing Commuter Rail station in exchange for naming rights⁴². In Florida, the Pinellas Suncoast Transit Authority (PSTA)’s has a P3 arrangement with Uber, United Taxi, and Wheelchair Transport to provide ride sharing services in areas where PSTA does not provide direct bus service⁴³.

A Note on Impact Investing

Impact investing – the act of intentionally investing in businesses that generate measurable social benefits – is on the rise. It is expected to grow from \$60 billion today to \$2 trillion by 2030⁴⁵. Affordable housing and clean energy are types of impact investment. There is scant research on impact investing related to transportation and the potential for transportation infrastructure to capture some of the expected growth in impact investing-related capital. The increased use

of a performance-based planning process, specifically one that measures social benefits, could open the transportation field to impact investing, though. There



I-4 Ultimate Project

The I-4 Ultimate project is using a public-private partnership arrangement to facilitate a 7-year project delivery process, instead of the projected 27 year process using traditional project delivery methods. The Florida Department of Transportation (FDOT) and I-4 Mobility Partners have an agreement for financing, designing, building, operating, and maintaining 23 miles of I-4⁴⁴. This arrangement enabled the rehabilitation and expansion of I-4 to occur now and fix existing issues with the interstate.

The entire project has multiple financing sources, the biggest of which is a USDOT loan of \$949 million. I-4 Mobility Partners has the responsibility to ensure I-4 operates at agreed upon targets or FDOT assesses a financial penalty. All the project’s lenders are guaranteed repayment from FDOT, whether it is through toll revenues, gas tax revenues, or other state funds. Each year until 2054, I-4 Mobility Partners will receive a guaranteed payment – referred to as an availability payment – from FDOT minus any penalties for poor performance of I-4’s 23 miles.



The Tax Cuts and Jobs Act created a new community and economic development financing option called Opportunity Zones, which is a designated low-income Census tract eligible for investments from Qualified Opportunity Funds.

are two emerging impact investing tools that seem most applicable to infrastructure development and worth a closer look.

Social Impact Bonds or Pay for Success Financing use private sector funds to achieve public benefits. The theory behind Social Impact Bonds is that the private sector finances a specific intervention designed to achieve a social outcome. Throughout a pre-determined time period, the intervention or program is rigorously monitored and evaluated. If the desired outcome is not achieved, the intervention stops and the private sector loses its investment. If the evaluation identifies successful achievement of pre-determined targets, the government repays the private investors⁴⁶.

This pay for success approach shares the risk of implementation, similar to a P3, and encourages innovation. Each bond/program is structured

differently, but ideally, the money to repay the bonds is derived through the cost savings achieved by the program's intervention. But this emerging financing tool, so far, has had mixed success. A behavior therapy program designed to reduce recidivism at Rikers Island, a prison in New York, was funded through Pay for Success Financing. It failed to do so, and the lenders lost their \$7.2 million investment⁴⁷.

As the name suggests, Social Impact Bonds are primarily designed for funding social programs, but government agencies are starting to identify physical infrastructure projects that could benefit from this pay for success model. DC Water recently received \$25 million in pay for success financing to build green infrastructure designed to reduce the combined sewer overflows into the Chesapeake Bay, a project still in its implementation stage and not yet ready for evaluation to determine success⁴⁸.

The Tax Cuts and Jobs Act, passed in December 2017, created a new community and economic development financing option called Opportunity Zones, which is a designated low-income Census tract eligible for investments from Qualified Opportunity Funds. Investors looking to reduce their capital gains taxes from a previous investment can establish or contribute to an Opportunity Fund, which must invest in an Opportunity Zone⁴⁹. MetroPlan Orlando's 3-county area has 33 Opportunity Zones that are now eligible for Opportunity Fund capital for projects such as small business financing, infrastructure, and real estate⁵⁰. As of August 2018, there is no guidance on the type of infrastructure that qualifies for investment from an Opportunity Fund⁵¹.



AND CONCLUSION

Performance targets tied to person trips instead of vehicle trips relate to the concept of moving people instead of moving cars.

The transportation funding landscape is inherently complex and the information in this paper skims the surface. As transportation continues its rapid change and the Central Florida region grows, there are a lot of next steps for MetroPlan Orlando and its partners to consider. This section describes funding-related recommendations for MetroPlan Orlando in the coming years.

1 – Conduct additional research and feasibility studies for potential funding sources

MetroPlan Orlando, its local government partners, and independent parties can research each potential funding source listed in this report for more in-depth information. As part of this research, feasibility studies on each of these potential funding sources can be conducted. During this process, analysis should consider how these potential sources could provide funding for the projects that promote health and sustainability.

- a. As part of these feasibility studies, there needs to be consideration towards any connection between a funding source and the project delivery process. Often times, the existing project delivery processes can limit which jurisdictions and agencies have the capacity to implement projects that could have measurable health and sustainable benefits. Further examination is needed to analyze if or how a new funding source can address existing project delivery issues.

2 – Conduct additional research into the viability and potential to use impact investing mechanisms to fund planning studies and capital projects

MetroPlan Orlando can partner with a university or other research-oriented institutions to evaluate if and how impact investing mechanisms, such as Pay for Success and Opportunity Zones, could be utilized in Central Florida.

3 – Develop a comprehensive list of built environment-related funding sources that can be leveraged with transportation funding.

The Transportation Think-In highlighted the need to work across sectors. Unfortunately, the restrictions around nearly all funding sources reinforces the silo'd nature of most disciplines. The region can conduct analysis to identify and determine how to utilize all possible sources to create healthy, sustainable, and resilient communities.

4 – Evaluate I-4 variable tolls on travel patterns, driver behavior, and individual decisions

The Express Lanes on I-4 open in 2021. This is an excellent opportunity to analyze how travel behavior might change once a driver has the option to choose between a non-tolled travel lane that is potentially slower and paying a fee to travel at a higher speed. MetroPlan Orlando and FDOT can work with a group of academic researchers to study what, if any, changes occur. The findings could inform how travel behavior will change with the implementation of additional road pricing and also provide insights into the types of road pricing that generate sufficient revenue while promoting health and sustainability objectives.

In 2014, MetroPlan Orlando conducted a value pricing study that identified a variable mileage-based user fee as the most appropriate type of road pricing. This is what will be assessed in the I-4 Express Lanes. An evaluation after the fee is implemented continues MetroPlan Orlando's leadership in developing and implementing Transportation System, Management, and Operations strategies.



5 – Establish performance targets through the transportation planning process that lead to incentives for trips by non-single occupancy vehicles

Performance targets tied to person trips instead of vehicle trips relate to the concept of moving people instead of moving cars. Mobility fees are a funding source tied to person trips, taking into account travel by bike, walking, or transit. The Central Florida region has limited ability to build or expand roads in the next few decades. The funding source used to achieve targets reflects several things – whether the target is achievable and a direct connection between the target and the money available for transportation.

Conclusion

The Central Florida region's success in transportation funding has enabled the implementation of several megaprojects. The needs of the region are changing, though, and new funding sources are necessary. Additionally, process improvements are needed to better align existing funding streams with the region's needs. This report does not present the answers, but does offer insights into what we are currently funding, how transportation projects are funded now, and how they could be funded in the future.



ADDITIONAL RESOURCES

If you are interested in learning more about the information described in this report, here is a list of additional resources:

How We Pay for Transportation: the life and death of the Highway Trust Fund, Eno Center for Transportation

- Available at: <https://www.enotrans.org/etl-material/the-life-and-death-of-the-highway-trust-fund/>

Is Congestion Pricing Fair to the Poor?, 100 Hours LA Campaign

- Available at: 100hoursla.com

Value Pricing Study, MetroPlan Orlando

- Available at: https://metroplanorlando.org/wp-content/uploads/value_pricing_fact_sheet-8-8-13.pdf

Life in the FASTLANE, Eno Center for Transportation

- Available at: <https://www.enotrans.org/etl-material/life-fastlane-recommendations-improving-federal-freight-grants/>

SIS Funding Strategy, Florida Department of Transportation

- Available at: <http://www.fdot.gov/planning/systems/programs/mspi/plans/>

Florida Metropolitan Planning Organization Advisory Council: <https://www.mpoac.org/>

Transportation for America: <http://t4america.org/>

Infrastructure and Transportation, Congressional Budget Office

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A Guidebook: Using Mobility Fees to Fund Transit Improvements, Florida Department of Transportation

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- ¹⁵ Impact Fees at a Glance, Orange County, FL Government, <http://www.orangecountyfl.net/PermitsLicenses/Permits/ImpactFeesAtAGlance.aspx#.W6uFDlVKiUl>
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HOUSING:

A PRIMER FOR TRANSPORTATION
PROFESSIONALS IN CENTRAL FLORIDA



metroplan orlando

A REGIONAL TRANSPORTATION PARTNERSHIP

OCTOBER 2018

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HOUSING:

A PRIMER FOR TRANSPORTATION PROFESSIONALS IN CENTRAL FLORIDA

One of the biggest decisions a person makes – or has made for them – is where they will live. This housing decision affects the education one receives and the transportation choices available to them. In turn, this affects the services they can reach, the spaces where they play and interact with others, and ultimately, their life expectancy.

The far-reaching effects of one's housing decision illustrate the intertwined relationship of community sectors like housing, transportation, parks, and more. Too often, however, the work of the professionals in these sectors is conducted in silos: the decision within one built environment discipline is made without full consideration of the impact on another discipline. These silos develop naturally over time as agencies and cities grow and must manage more concerns and responsibilities. This has historically been the case across the country, and Central Florida is no different.

Housing and transportation are particularly related. They are an individual's two biggest expenses¹, and the location of one impacts the availability of the other. Despite their close relationship, housing and transportation are rarely analyzed together as a unit. There are many reasons for this, including the silos within which decisions about housing and transportation are made.

It does not have to be this way going forward. This white paper is a back to basics examination of the co-dependencies that exist between housing and transportation in Central Florida. Aimed at transportation professionals – planners, engineers, financiers – this paper identifies and explains housing topics that transportation decision makers need to understand.

The Transportation Think-In: Making 2045 Healthy, Sustainable, and Resilient

In 2018, MetroPlan Orlando hosted an event that gathered 60 community leaders from various sectors ranging from health and housing to business and tourism. *The Transportation Think-In* featured discussions on various opportunities for the region to be healthier and more sustainable. The conversations fit into six key themes: funding, planning's uncertainties, perception of transportation, collaboration and organizational roles, access to services, and housing and transportation. Throughout the event, participants emphasized the need for a more holistic approach to housing and transportation.

The Think-In led to several housing and transportation applied research areas:

- Coexistence of housing and public transit: where and how do these two areas work together regionally?
- Breaking down silos: what are the challenges?
- Current state of housing in Central Florida: what types of housing do we have and what are the gaps?

These are multi-faceted research areas, and finding answers leads to more questions and necessitates more research. This white paper is focused on a challenge that exists across these areas: overcoming the communication differences preventing groups with a common goal from working together. The simple misunderstandings that can arise from a jargon-filled presentation or a dense, numbers-filled report make it hard for one group of allied professionals to understand another. This paper is a broad overview



of how housing and transportation are analyzed together now, the region's current housing issues, and identifies how other regions are considering the integration of housing and transportation. A series of recommendations is also included.

A Healthy, Sustainable, and Resilient Region through Housing and Transportation

Health in All Policies (HIAP) is a term and approach that emphasizes the incorporation of health considerations into decision-making across sectors and policy areas². In other words, it is a way to think about how a decision in one area impacts another area. The application of a "health lens" can break down the silos that too often occur in our existing processes.

This is a useful technique when attempting to connect housing and transportation. Land use and transportation policies are what lead to healthy neighborhood design³. Healthy communities are an outcome of good neighborhood design, among other aspects of the social determinants of health.

The Community Guide is one of the foremost sources for evidence-based findings related to healthy communities. In December 2016, it released an updated literature review and recommended

that built environment strategies need to combine transportation improvements with a neighborhood design improvement, such as mixed-use development, in order to address physical activity and improve health outcomes. Specifically for transportation policies and projects, they need to address the design of the street grid, sidewalks, trails, bicycle infrastructure, as well as public transit access and service⁴. Why?

Transportation options can enhance public health. The Centers for Disease Control and Prevention (CDC) recommends adults engage in 30 minutes of daily physical activity⁵. When neighborhood and street design make walking and biking easy to do, this 30-minute recommendation becomes part of a person's everyday activities⁶. Each transit trip starts with walking or biking. Transit use can assist individuals in meeting the CDC's recommended daily amount of physical activity.

Land use and environmental design strategies are key for good neighborhood design. These strategies include a mix of land uses, increasing residential density, and access to points of interest, such as health care and grocery stores. These strategies – implemented through smart growth policies, zoning codes, etc. – can lead to healthier, more sustainable communities⁷.

Key Land Use Terms



COMPREHENSIVE PLAN

A state-mandated document that identifies a jurisdiction's vision, where the community wants to grow, opportunities for achieving this growth, and issues that could prevent implementation of the community's vision. The comprehensive plan includes a transportation section, and in the state of Florida, it must contain policies that ensure adequate public facilities are part of the land development process⁸.



ZONING CODE

In Florida, all local governments have a zoning code, which is a tool for implementing the comprehensive plan. There are two types of zoning codes: use-based and form-based. A use-based zoning code establishes the type of uses that can be allowed on a particular parcel. Changing the use of a parcel – for example, a change from one residential unit per acre to two units per acre – requires a zoning variance. A form-based code identifies the ideal structure for a parcel and allows the private market to determine the parcel's use⁹.

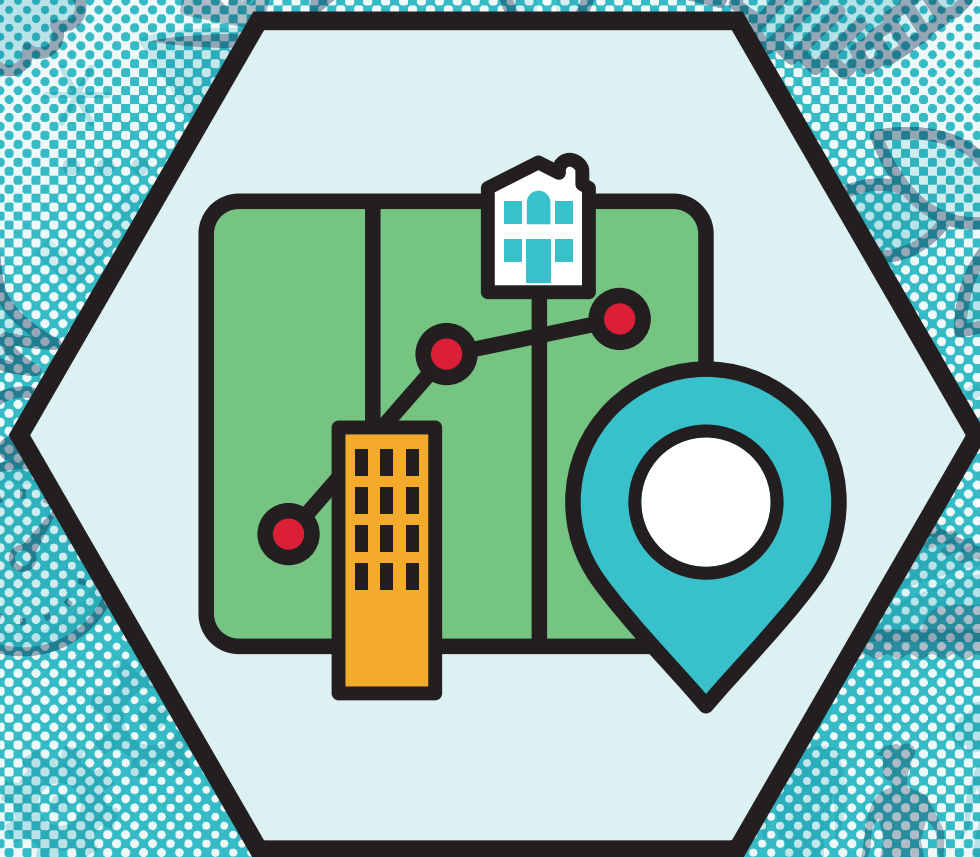


LAND DEVELOPMENT REGULATIONS

A local government's code of regulations that determine how a plot of land is developed. These regulations often dictate how land can be subdivided, the layout of streets within large development parcels, and much more. They are a key tool for creating healthy and sustainable places in local communities¹⁰.



HOUSING AND TRANSPORTATION – WHAT WE DO NOW



A house is the end product of a series of municipal and private market decisions. In Florida, local governments set land use policy, which includes comprehensive plans, zoning codes, and development regulations. These policies, alongside others, are supposed to guide the location and type of new housing units. The financing of new housing units and the associated real estate development is driven by market forces. Historically in Central Florida, this combination of policy and market forces has determined the type of transportation system we have.

A push-pull relationship exists between land use and transportation. Many transportation projects, such as road widenings to serve subdivisions with little connectivity, are pushed by land use policy. Alternatively, transit-oriented developments recently built near SunRail stations are the result of transportation pushing land use policy.

MetroPlan Orlando is the metropolitan planning organization (MPO) responsible for setting transportation policy across the large metropolitan Orlando-Kissimmee-Sanford geographic area. The agency is responsible for allocating millions of transportation funding dollars each year, but has no authority over land use policy. Local governments set land use policy through the adoption of a Future Land Use Map under the comprehensive planning process. The map identifies where new development will go, guiding local government placement of retail opportunities, offices, and varying housing types.

As the MPO, MetroPlan Orlando establishes the regional travel demand model. This model informs nearly every transportation decision that occurs in Orange, Osceola, and Seminole counties. The approved Future Land Use Maps are an input into the travel demand model, meaning the desired location of housing, jobs, and retail is a significant determinant in the type of transportation facilities that are implemented. This approach highlights how transportation is mostly pulled by land use policy.

This pull by land use policy has contributed to a poor jobs-housing balance in Central Florida. In downtown Orlando, there are 2.48 jobs per resident of nearby neighborhoods, causing people to commute from the suburbs into downtown for work¹¹. The commutes can be time-consuming: 28 to 33 minutes depending on which county you are in¹². These commutes strain the existing road system, reduce the cost efficiencies associated with providing multiple transportation options, and reinforce unhealthy behaviors, such as sitting and stress¹³.

Success of transportation facilities, particularly those that encourage healthy and sustainable behaviors, is measured by how many people use the facility. While there are other (and arguably better) ways to measure success, sidewalks, bike lanes, and transit routes alike are considered successful when lots of people use them. For example, SunRail's success is measured by how many people ride the train. However, land use policy determines the built environment in which we move, and the built environment is the biggest influencer on travel behavior¹⁴.

**Jobs-Housing Imbalance:
an indicator of whether
commutes are likely to be
long or short. Fewer jobs
than houses in an area
often means that commutes
will be longer than areas
with a similar number of
jobs and houses.** ¹⁵



CENTRAL FLORIDA'S HOUSING ISSUES



MetroPlan Orlando's three-county planning area recently completed a Regional Affordable Housing Initiative. This two-year research effort led to a thorough understanding of the region's current housing issues and a framework for overcoming them. The unprecedented approach gives transportation professionals insights into the need to consider housing and transportation as one interlocked decision. Key findings from the Initiative:

We are not building enough housing

More than 2 million people live in the 3-county region and more than a million people are expected to live here in 2045. For the region to meet expected housing demand, more than 1,400 new housing units are needed each month¹⁶. An average of 1,300 units are permitted monthly. In simple math terms, the number of units in the development process are less than the amount needed, resulting in a shortage. Generally speaking, more housing units than new households are needed to enable location choice and efficiencies.

The raw numbers illustrate this issue, but a deeper dive into the numbers is more revealing. Of the 1,300 new housing units being permitted, more than 70% are single family homes. Additionally, rental units now make up a significant portion of new units, which has an impact on affordability¹⁷.

The existing housing stock is not affordable

Central Florida has an affordable housing crisis. The Orlando-Kissimmee-Sanford metropolitan area was recently ranked as having one of the most severe shortages of affordable rental homes in the nation for extremely low income renters¹⁸. The analysis in the Regional Affordable Housing Initiative Executive Summary supports this conclusion as well.

The summary report includes a significant amount of data regarding our region's affordability in terms of housing and transportation. Here are three key points:

- The combined housing and transportation costs in the three counties and Orlando range from 53% to 61%. The ideal percentage is 45%.

- The ideal transportation costs for our region are \$7,315 per household a year, but our households spend an average of \$12,600 a year.
- If your household makes the median household income for our 3-county region (\$58,400) and you buy a house for the median homes sales price of \$230,000, you are likely to be cost-burdened – more than 30% of your pre-tax income is going towards your housing costs¹⁹.

The majority of the new or under-construction multifamily buildings are rental housing, which is likely to increase our existing affordability issues. Renting exposes a tenant to more housing price shocks (i.e. increases) than home ownership.

Housing is considered affordable when the cost of rent and utilities is 30% or less of the household's income. When these costs exceed 30% of income, the household is considered cost burdened. When costs exceed 50% of household income, the household is considered severely cost burdened.

The housing stock suffers from “The Missing Middle”

In Central Florida, roughly 60% of households have one or two people. But the majority of the existing housing stock are homes with at least three bedrooms. These are typically single family houses or duplexes in car-oriented neighborhoods. At the extreme other end, 11% of the region’s housing stock is high-rise condos or apartments²⁰. The lack of housing types between these two extremes is a common phenomenon across the United States and even has a name - the “Missing Middle.”

The Missing Middle is a range of multiple housing types that help meet the growing demand for walkable urban living. These housing types typically have small- to medium-sized footprints, with a body width, depth, and height compatible in scale with a single-family home. These characteristics allow housing types of varying densities to be blended into a neighborhood, helping to support public transit and other services and amenities.

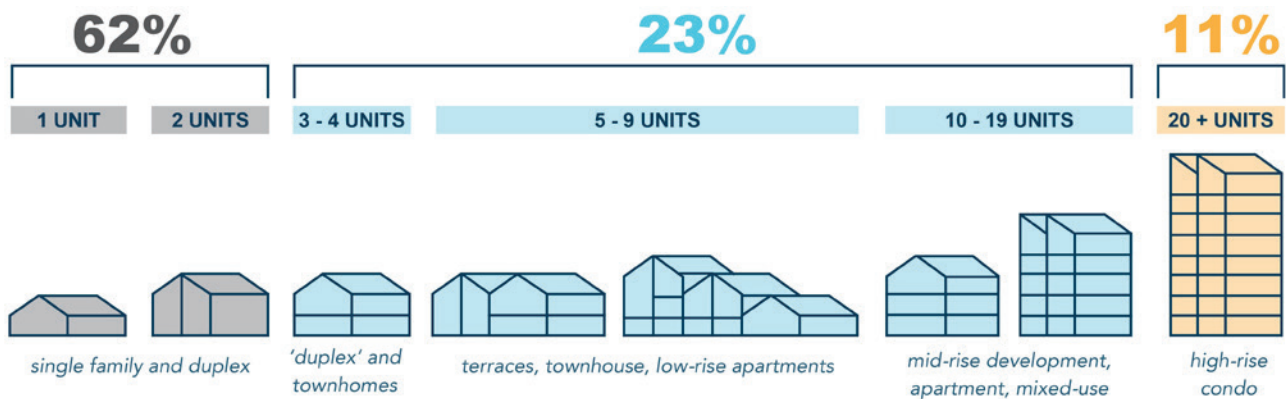
Missing Middle housing types meet the needs of shifting demographics and a growing number of consumers who are looking for something smaller than a single-family home but larger than the traditional apartment. These consumers include baby boomers and empty nesters who want to downsize, young families who may not be able to afford or need a single-family house, and anyone who wants to live in a walkable, urban community with services, amenities, and multimodal transportation systems.

Overall, there is a growing consumer demand to reshape many of America’s conventional suburbs into walkable, transit-oriented communities that provide a variety of housing choices. Missing Middle housing provides a possible solution to the growing demand for walkable communities. These demographic changes and shifting preferences are occurring in Central Florida now and will continue in the decades to come.

In addition to addressing residents’ needs and changing preferences, closing the Missing Middle gap can help address the affordability crisis. Middle housing encourages a mix of socioeconomic households, making it a good option for infill development. Midsized housing is more affordable by design due to its efficient use of space and preferred location near transit, reducing the need for a car.

Building more units per acre, such as townhomes with densities of 5 units an acre, increases the number of people who are able to live in a neighborhood. Increased densities and other urban form decisions (such as building setbacks), make it easier to provide transportation options. Transit, sidewalks, and bike lanes are utilized more when there is a higher number of residents and employees near them. Providing more balance between transportation options produces a more sustainable transportation system and has significant environmental benefits²¹.

CENTRAL FLORIDA’S MISSING MIDDLE



Source: GAI Consultants, Inc. Used with permission.



HOW THE REGION WANTS TO ADDRESS AFFORDABLE HOUSING



As the previous section demonstrates, the Central Florida region has not built enough housing units to accommodate its population growth. Additionally, the low wages of many Central Floridians price them out of buying a market-rate house. This disparity has led to an affordable housing crisis. In response, Orange, Osceola, and Seminole counties and the City of Orlando recently completed a two-year coordination effort to produce a Regional Affordable Housing Framework.

The framework has five goals, 23 tactics, and a host of tools that could be used. For brevity's sake, this report discusses three of the five goals and a handful of the tactics and tools. The full framework is located in **Appendix A**. Three goals have a connection to transportation:

- **CREATE:** Increase the housing supply to meet the needs of all current and future residents
- **DIVERSIFY:** Encourage diversity of housing types and energy-efficient housing
- **INTEGRATE:** Promote social and economic integration

The chart below lists these three goals, one proposed tactic within each goal, and describes transportation's influence on each tactic.

GOAL	TACTIC	TRANSPORTATION RELATIONSHIP
CREATE: Increase the housing supply to meet the needs of all current and future residents	Facilitate partnerships with nonprofit and public agencies, and private industry.	MetroPlan Orlando can be a public agency partner. Transportation partners can identify infrastructure needs, potential funding sources, and collaborate on changing land use policies. This incentivizes collaboration between housing and transportation activities and increases co-benefits.
DIVERSIFY: Encourage diversity of housing types and energy-efficient housing	Increase the availability of development sites by establishing or expanding mixed-use zoning districts.	Infrastructure usually determines where development can occur. Transportation plans identify where roads, trains, buses, bike lanes, and sidewalks go. These planning efforts support new development. While it is well documented that new roads and wider roads encourage sprawl, infill development near existing infrastructure improves transportation options.
INTEGRATE: Promote social and economic integration	Encourage affordable housing near employment centers, transit and essential community services. Support mixed-use, walkable neighborhoods connected by transit	The analysis in the Regional Affordable Housing Initiative Executive Summary highlights our region's high transportation costs. Adding more housing near SunRail or LYNX routes that serve employment centers, and other necessary services can reduce someone's transportation costs and enable more healthy behaviors, such as walking to and from transit.



Types of Housing Tools and Relationship to Transportation Planning

The Regional Affordable Housing Framework identifies 25 regulatory tools, funding sources, and partnership opportunities that could be implemented over the next 10 years. While not all 25 relate to the work of transportation professionals, some do. Six that do relate are defined in the following chart along with their connection to transportation.

TOOL	DESCRIPTION	TRANSPORTATION RELATIONSHIP
Reduce Accessory Dwelling Unit (ADU) Requirements	ADUs are housing units that accommodate one or two people on a property with an existing home as the primary structure. Interior ADUs are within the primary structure, attached units connect to primary structure, and detached units are separate from the primary structure. These structures provide an alternative to expensive rental projects and can be designed to blend in with the neighborhood ²² .	ADUs increase population density in an area without significantly changing urban form. Increased density is associated with more destinations – restaurants, jobs, stores, etc. – being closer together. This can reduce the distance someone travels and influence how they travel. It encourages more transit, walking, and biking trips while improving the cost efficiency of sidewalks, bike lanes, and transit ²³ .
Inclusionary Housing Program	This type of program requires developers to sell/rent a certain amount of its new residential units to lower-income residents. The particulars of the program vary from area to area ²⁴ . Policies can be either optional (encouraged through incentives) or mandatory, and can apply to both rental and for-sale housing ²⁵ .	Inclusionary housing regulations or incentives, especially near high-frequency transit stops, strengthens the housing and transportation connection. Research shows that low-income residents use public transit more than higher-income populations. Housing near transit can also reduce the travel times of low-income populations ²⁶ .
Density/Intensity Bonus	Density bonuses allow developers to build more market-rate units than allowed by the zoning code if they agree to include a certain number of affordable units ²⁷ .	Increased population density and the provision of housing across multiple income levels increases the number of people who can access transit. Additionally, buildings with multiple stories create a sense of enclosure, a safety feature that reduces travel speeds and encourages walking ²⁸ .
Reduce Parking Requirements	Parking is costly to build, adding \$20,000 to \$40,000 per space to total project costs. When minimum parking requirements are present, the higher construction costs are passed on to tenants as higher rents. Reduced parking requirements allow for reduced building costs ²⁹ .	Local municipalities establish parking requirements for new developments and often, these requirements include a minimum of spots, which are frequently underutilized and result in an inefficient allocation of public space.
Adaptive Reuse (Land Use Flexibility)	Adaptive reuse is “the use of abandoned, underutilized, or functionally obsolete properties as housing” ³⁰ . As it preserves the architectural fabric of the community, it often draws less opposition than a new construction project. Zoning modifications can be enacted to encourage the reuse of such properties.	Adaptive Reuse is an infill development that adds residences near existing transportation resources, improving the cost efficiencies of sidewalks, bike lanes, and transit.
Housing Trust Fund	Housing trust funds are funds receiving ongoing public funding to support affordable housing. Housing trust funds shift the funding of affordable housing from annual budget allocations to dedicated public revenue. These funds are established by county, city, or state governments and are flexible to support a variety of methods of addressing housing needs ³¹ .	Additional funds for affordable housing can leverage transportation funding to create healthy, inclusive, and economically vibrant communities.



THINKING ABOUT HOUSING AND TRANSPORTATION TOGETHER



The data analysis is clear – housing and transportation need to be planned for together. By thinking about the two as a unit, the objectives of both can be achieved. MetroPlan Orlando's Health in all Policies initiative has focused on five areas – Physical Activity, Safety, Access to Healthy Food, Access to Care, and Environmental Quality. Transportation planning cannot fully address all of these areas, but progress can be made by incorporating aspects of these focus areas into the work of other built environment professionals.

Each of these five focus areas have a housing or neighborhood scale-related aspect. Physical activity and safety is easier to do when buildings are close together and closer to the street. This also has an effect on the number of people who feel safe walking and biking and acts as a design feature for slowing down vehicle speeds (in a way that establishing and enforcing a speed limit does not).

Transportation is one half of Access to Food and Care. The siting – or deciding where to locate a grocery store, medical clinic, or community market – of facilities or gathering places is the other half. The push-pull relationship can vary, depending on the situation. This further highlights the need to think about housing and transportation together.

For decades, the zoning codes in Central Florida have predominantly focused on separation of uses, which is a vehicle-oriented code.

Environmental Quality refers to clean air, the presence of trees, water quality, and much more. Clean air and water are an outcome of better land use and transportation policies. These policies are crucial for reducing vehicle emissions and encourage more trips by walking, biking, and transit³². Additionally, the co-benefits are enhanced. Neighborhoods that are more walkable often increase social interaction among residents and visitors to local businesses.

The Central Florida region has started this work in recent years. The local municipalities – who have land use authority – are the agencies who have conducted the land use and transportation plans currently being implemented. For example, the Virginia Drive/Lake Highland study is a Transportation and Land Use study conducted by the City of Orlando focused on identifying multimodal projects that would support sustainable and responsible land development in two Orlando neighborhoods³³.

Ten years ago, the Central Florida area went through an unprecedented regional visioning effort. The *How Shall We Grow* effort yielded four key themes: Conservation, Countryside, Centers, and Corridors. These approaches to growth were supposed to guide how Central Florida would support job and population growth. The regional vision, though, was never incorporated into local land use policy. The *How Shall We Grow* effort is recognized for its regional collaboration, and an examination of its effect was discussed at the Transportation Think-In.

The zoning code is a significant factor in furthering the connection between housing and transportation. For decades, the zoning codes in Central Florida have predominantly focused on separation of uses, which is mostly an automobile-oriented code. This is changing, though. The City of Orlando has incorporated an urban design focus into their zoning code for nearly a decade and used the code to address the “Missing Middle” gap as well³⁴.

Orange County has embarked on a zoning code overhaul – its first in more than 60 years. The county has made a conscious decision to switch to



a form-based code (away from a separation of use). This switch is expected to improve how the built environment in unincorporated Orange County creates places with transportation options, safe walking environments, multiple destinations, and a high quality of life.

What Others Do

Integrated land use and transportation plans are prevalent across the United States, and transportation agencies are increasingly getting involved in housing issues. MetroPlan Orlando staff identified a few transportation organizations that lack land use authority but are still able to influence local land use and housing decisions in ways that positively support transportation objectives. These agencies are independent from local government control, like MetroPlan Orlando. The Atlanta Regional Commission (ARC), Los Angeles County Metropolitan Transportation Authority (LA Metro), and Miami-Dade TPO are all regionally oriented transportation agencies that are also involved in land use-related policy.

The ARC, as the Atlanta region's MPO, established the Livable Centers Initiative (LCI) in 1999, which aims to increase the number of people living and working around transit stations. This program's origins are in health and sustainability. The LCI is a conscious effort to reduce the greenhouse gas emissions produced by the transportation sector and improve air quality in the Atlanta region.

The ARC has allocated \$500 million in federal funds to the LCI to conduct and implement planning studies. The uniqueness of LCI lies in its integrated land use and transportation planning. A portion of the LCI funds can be used to update zoning regulations and land use codes that enable more walkable, bikeable, and transit-friendly developments³⁵.

In Los Angeles County, an unprecedented transit expansion is underway. Simultaneously, there is a need to add housing and to do so in a way that improves affordability across the county. LA Metro, the countywide transportation agency responsible for all modes of transportation, is heavily engaged

in community development and housing through its Transit-Oriented Communities initiative. This initiative identifies and advances policies that maximize access to transit by considering mixed-use development, housing, walking and biking infrastructure, parking, and density³⁶.

LA Metro plans, builds, and operates all types of infrastructure. This means that the agency also owns property, sometimes in prime locations for residential development. While this is not something MetroPlan Orlando does, it is worth noting two innovative approaches. LA Metro's Joint Development program utilizes agency-owned land, which is almost exclusively near frequent transit stops, to build more residential, retail, and commercial space. This program must comply with the agency's affordable housing policy, which states that 35% of housing units on agency-owned property must be designated for those who make at or below 60% of the area's median income. Additionally, LA Metro has an affordable housing loan fund that provides early stage financing for new housing projects and for the preservation of existing affordable housing³⁷.

Miami-Dade County has big transit plans with its Strategic Miami Area Rapid Transit (SMART) plan at the center of it all. The SMART plan identifies five potential routes for premium transit across the county. The county's Department of Transportation and Public Works as well as the Florida Department of Transportation are leading the transportation technical studies necessary for implementing the SMART plan. The Miami-Dade Transportation Planning Organization (TPO), though, is leading all coordination efforts. Additionally, the TPO is leading several studies to identify community-driven land use policies that support the transit studies and improve the SMART plan's chance for success. The studies are developing various land use scenarios along the SMART corridors to identify what works best for the local context and desired transit mode – heavy rail, light rail, and bus rapid transit³⁸.



RECOMMENDATIONS AND CONCLUSION



Transportation professionals are in the housing business and land use and housing professionals are in the transportation business. Together, our work can create the types of sustainable environments that enable a high quality of life for Central Florida's residents and visitors. There are several steps MetroPlan Orlando can take to ensure health and sustainability are factored into transportation decisions in a way that also addresses housing issues in Central Florida.

1 – Utilize MetroPlan Orlando's upcoming strategic planning process to identify the agency's role and responsibilities to address the region's housing concerns.

MetroPlan Orlando is expected to adopt a new Strategic Plan in Summer 2019. This plan will guide how the agency engages with its partners and inform all of its planning efforts including the next Metropolitan Transportation Plan (MTP) (also known as the Long Range Transportation Plan). The Strategic Plan could examine the following:

- a. The potential of hiring a consultant to provide advisory services related to housing, built environment research, and health.

Currently, MetroPlan Orlando has two general planning consultants under contract. These are firms that specialize in transportation planning and engineering. MetroPlan Orlando can engage firms that specialize in overall built environment planning with an emphasis on zoning and land development regulations changes, public health, etc. Proceeding with a contract of this kind should be done with care, though, to avoid straying from MetroPlan Orlando's mission.

- b. Using federal funds available to MetroPlan Orlando to conduct land use, zoning, and housing studies.

Historically, MetroPlan Orlando has used its federal planning funds to build the regional

MetroPlan Orlando can work with its local government partners to encourage more land use and transportation planning efforts.

travel demand model and to develop all aspects of the MTP and related planning documents. The transportation system MetroPlan Orlando plans for has measures of success that are dependent on people being able to use the system in an easy, affordable way. Conducting land use and housing studies would be a way to address the people and access side of transportation.

- c. Aligning a percentage of the region's surface transportation program (STP) funds with the region's housing goals by incorporating housing-related targets.

MetroPlan Orlando is required to align transportation projects to an established set of targets and performance measures. The agency can allocate a percentage of its STP funds to transportation projects that advance developments that add people in targeted areas for housing and mixed-use developments.

- d. Incentivizing municipalities to develop integrated Transportation and Land Use Plans.

MetroPlan Orlando can work with its local government partners to encourage more land use and transportation planning efforts. These efforts are more likely to identify sustainable transportation projects that enhance livability in neighborhoods across Central Florida.



2 – Encourage housing professionals to apply for one of the multimodal or underserved advocate positions on MetroPlan Orlando's Community Advisory Committee.

MetroPlan Orlando's Community Advisory Committee has 31 members. Of these, 13 are appointed by the MetroPlan Orlando Board as multimodal or underserved advocates. A few of these multimodal advocates are health professionals. During the application period, MetroPlan Orlando could encourage housing professionals get involved as well by submitting an application for a spot on the committee. Applications are reviewed by an independent panel, which then submits recommendations to the Community Advisory Committee and MetroPlan Orlando Board.

3 – Conduct a thorough analysis of *How Shall We Grow* themes and actual growth patterns from the past decade.

This recommendation comes directly from Think-In participants. The *How Shall We Grow* visioning effort was completed 10 years ago. MetroPlan Orlando and its partners should evaluate the region's growth from the last 10 years against the *How Shall We Grow* themes, with additional considerations given to the development expected to occur in the next five years. Working with other regional stakeholders, MetroPlan Orlando can use this evaluation to develop recommendations for the next 10 years that ensure the region follows through on the ideals in *How Shall We Grow*.

4 – Conduct a comprehensive review of underutilized parcels, such as parking lots near SunRail stations, and analyze their potential for development in the next decade.

To date, there is no regional analysis of underutilized parcels near existing or planned high frequency transit stops. MetroPlan Orlando can partner with other entities to identify these parcels and specific actions to encourage their development in a way that leverages both housing and transportation investments.

Conclusion

Housing and transportation are intricately linked, but often these two built environment disciplines are separated in their planning activities. This has contributed to Central Florida's housing and transportation affordability issues. One of the first steps necessary to address the issue and develop solutions is to first understand what's going on. This white paper is a primer designed to improve this understanding and provide transportation professionals with the necessary information about housing in Central Florida.



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APPENDIX

REGIONAL AFFORDABLE HOUSING FRAMEWORK

A MISSION Establish a regional framework for addressing housing needs and opportunities in Central Florida

B GOALS

- 1 CREATE**
Increase the housing supply to meet the needs of all current and future residents.
- 2 DIVERSIFY**
Encourage diversity of housing types and energy-efficient housing.
- 3 PRESERVE**
Preserve existing affordable housing stock, including financially assisted & rent-restricted units.
- 4 INTEGRATE**
Promote social and economic integration.
- 5 EDUCATE**
Improve financial literacy and education of future home renters and buyers.

C STRATEGIES

- Review and modify development regulations to support a broad range of housing types.
- Promote adaptive reuse of existing nonresidential structures.
- Encourage mixed-income housing through new regulations and creative funding mechanisms.
- Facilitate partnerships with nonprofit and public agencies, and private industry.
- Identify potential sites for affordable housing in Areas of Access and Opportunity.
- Promote state housing legislation that supports affordable housing efforts.
- Explore financing mechanisms and development concepts that support “Missing Middle” and mixed-income development.
- Encourage various types of live-work units as an affordable workspace and housing solution.
- Increase the availability of development sites by establishing or expanding mixed-use zoning districts.
- Promote sustainable building and infrastructure standards and techniques that improve energy and water efficiency.
- Encourage rehabilitation of existing residential buildings.
- Identify properties with expiring affordability covenants and prioritize preservation efforts within Areas of Access and Opportunity.
- Build the capacity of nonprofit housing developers to acquire and preserve at-risk properties.
- Develop incentives for owners of financially assisted and rent-restricted units to extend their affordability contracts.
- Establish regional and local gap financing sources for preservation transactions.
- Promote mixed-income communities by encouraging integration of affordable housing throughout the region.
- Encourage affordable housing near employment centers, transit and essential community services.
- Support mixed-use, walkable neighborhoods connected by transit.
- Expand entrepreneurship opportunities by encouraging greater emphasis on small-scale and “Missing Middle” housing.
- Establish a comprehensive marketing plan to increase awareness of housing affordability resources.
- Establish a campaign to educate the community on factors that affect housing affordability.
- Expand pre-purchase education and training to include one-on-one homeownership counseling.
- Partner with higher education institutions, hospitals, and employers to support investments in workforce education and training.

D TOOLS

REGULATORY TOOLS

ALTERNATIVES

	SHORT TERM	LONG TERM
Modification of Existing Standards to Reduce Barriers	●	
Review Existing Land Inventory for Potential Affordable Housing Sites	●	
Reduce Accessory Dwelling Unit (ADU) Requirements	●	
Access & Opportunity Model		●
Inclusionary Housing Program		●
Reduce/Eliminate Minimum Living Area Requirements	●	
Pilot Projects	●	●
Linkages Fees	●	●

FINANCIAL & DEVELOPMENT INCENTIVES

Expedited Permitting	●	
Density/Intensity Bonus	●	
Flexible Lot Configurations (i.e., setbacks, open space, etc.)	●	
Reduce Parking Requirements	●	
Impact Fee Reduction/Subsidy	●	●
Increase/Eliminate Household Occupancy Limits	●	
Adaptive Reuse (Land Use Flexibility)	●	●

FUNDING SOURCES

	SHORT TERM	LONG TERM
Housing Trust Fund	●	●
Land Banking Through Community Land Trusts		●
Multi-Family Bonds with 4% and/or 9% Tax Credits	●	

PARTNERSHIP OPPORTUNITIES

Public-Private Partnerships	●	●
Public Partnerships	●	●
Public-Nonprofit Partnerships	●	●
Community Land Trust (CLT)		●
Regional Revolving Loan Pool (SHIP Funds)	●	
Partnerships with Higher Education Institutions/Hospitals/Employers		●
Build Advocacy Network/Engage with State Policymakers		●

ADDITIONAL RESOURCES

Shimberg Center's Assisted Housing Inventory	
Incremental Development Alliance	
Mixed-Income Housing Funding Mechanisms (HUD)	