

# **Integrating Health and Sustainability Principles into Transportation Planning in Central Florida**

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*INVEST Research Project Final Report  
Submission to FHWA*



**metroplan orlando**  
A REGIONAL TRANSPORTATION PARTNERSHIP

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## **Introduction**

The dollars spent on transportation projects can be invested in ways that create healthy and sustainable environments. MetroPlan Orlando, the metropolitan planning organization for Central Florida, recently completed an 18-month applied research project to analyze and recommend approaches for incorporating health and sustainability principles into its work. The agency used the Federal Highway Administration (FHWA)'s Infrastructure Voluntary Evaluation Sustainability Tool (INVEST) as a guide and FHWA provided financial assistance. This report details MetroPlan Orlando's entire project with a focus on the INVEST criteria and what's next for incorporating health and sustainability into transportation planning in Central Florida.

In 2013, MetroPlan Orlando adopted a Strategic Business Plan that broadened the agency's focus. A reorganization of advisory committees and commitment to expand partnerships resulted from this strategic planning effort. This shift has included expanding our partnerships to include health and sustainability stakeholders and resulted in MetroPlan Orlando's Health in all Transportation Policies initiative. Over the last five years, this work has enjoyed the support of MetroPlan Orlando's Board of Directors, transportation partners, and senior officials.

INVEST is a FHWA resource designed to assist transportation agencies with their sustainability objectives. It is a collection of best practices regarding sustainability and transportation policies, processes, procedures, practices, and projects. The tool is broken into four modules: System Planning for States, System Planning for Regions, Project Development, and Operations and Maintenance. The Systems Planning for Regions module (SPR) – the one applicable to MetroPlan Orlando – consists of 17 criteria.

The INVEST opportunity came at an opportune time for MetroPlan Orlando. Applying the INVEST framework to their existing work and using it as a guide for applied research enabled a more holistic look at the agency's recent efforts. The recommendations coming out of the project give MetroPlan Orlando direction for the next several years.

MetroPlan Orlando started its project with three objectives: 1) establish health and sustainability metrics, 2) identify sustainability priorities in regional transportation planning, and 3) foster collaborations between transportation, environmental, and health stakeholders. At the completion of its 18-month applied research process, MetroPlan Orlando successfully met two of these objectives and made significant progress on establishing health and sustainability-related metrics.

The 18-month project had three phases, each with a different focus. The first phase involved using INVEST to evaluate what MetroPlan Orlando was already doing through its planning and organizational efforts. A truly healthy and sustainable environment requires close collaborations by all sectors. Phase Two was the Transportation Think-In: Making 2045 Healthy, Sustainable, and Resilient. It brought together 60 community leaders to discuss how transportation impacts their work. The third and final phase followed up the evaluation and summit with the publication of three white papers.

## Phase One: Evaluation

The first step of any applied research process is to understand what has already been done. MetroPlan Orlando used INVEST Version 1.2 to analyze how the agency, and more specifically its Metropolitan Transportation Plan (MTP), incorporates sustainability's multi-faceted nature. The evaluation occurred over a two-month time period and was conducted by two MetroPlan Orlando staff members working in tandem. One person conducted a thorough review of the INVEST criteria against the MTP, while another person reviewed the results for quality assurance purposes. A month later, the person who reviewed the first evaluation conducted another evaluation, which was checked for quality assurance purposes by the first reviewer. The two-person evaluation team and the wait between evaluations enabled MetroPlan Orlando to ensure no analysis was missed.

The evaluation revealed the following insights that informed the Transportation Think-In and White Papers:

- MetroPlan Orlando already does several things well in terms of sustainability. On a scale of Bronze to Platinum, its evaluation score was high enough to receive Gold – one level below Platinum.
- There were five areas where MetroPlan Orlando scored well (12 points or more): SPR-14 Transportation Systems Management and Operations, SPR-09 Travel Demand Management, SPR-08 Freight, SPR-01 Economic Development, and SPR-12 Financial Sustainability.
- MetroPlan Orlando scored poorly (5 points or less) in several areas: SPR-15 Asset Management, SPR-16 Resiliency, SPR-11 Energy/Fuels, SPR-05 Access/Affordability, SPR-02 Natural Environment, and SPR-07 Multimodal Transportation and Public Health.

| Criterion    | Title  | Score      |
|--------------|--|------------|
| SPR-01       | Integrated Planning: Economic Development and Land Use (for Regions) | 12         |
| SPR-02       | Integrated Planning: Natural Environment (for Regions)               | 5          |
| SPR-03       | Integrated Planning: Social (for Regions)                            | 10         |
| SPR-04       | Integrated Planning: Bonus (for Regions)                             | 0          |
| SPR-05       | Access and Affordability (for Regions)                               | 4          |
| SPR-06       | Safety Planning (for Regions)  | 11         |
| SPR-07       | Multimodal Transportation and Public Health (for Regions)            | 5          |
| SPR-08       | Freight and Goods Access & Mobility (for Regions)                    | 13         |
| SPR-09       | Travel Demand Management (for Regions)                               | 13         |
| SPR-10       | Air Quality & Emissions (for Regions)                                | 7          |
| SPR-11       | Energy and Fuels (for Regions)                                       | 4          |
| SPR-12       | Financial Sustainability (for Regions)                               | 12         |
| SPR-13       | Analysis Methods (for Regions)                                       | 8          |
| SPR-14       | Transportation Systems Management and Operations (for Regions)       | 13         |
| SPR-15       | Linking Asset Management and Planning (for Regions)                  | 1          |
| SPR-16       | Infrastructure Resiliency (for Regions)                              | 2          |
| SPR-17       | Planning and Environmental Linkages (for Regions)                    | 9          |
| <b>Total</b> |  | <b>129</b> |

The results highlighted an interesting finding. MetroPlan Orlando does the ‘traditional’ transportation categories well, but is behind in emerging fields of transportation. For example, the Freight, TSMO, and Financial Sustainability categories had near perfect scores. Federal regulations guide MetroPlan Orlando’s activities in these categories. But for areas like Public Health and Affordability, there are no regulations or guidance. Additionally, the evaluation exposed asymmetries between the MTP development process and its final content (more details in the INVEST Recommendations section).

## **Phase Two: Transportation Think-In**

The Transportation Think-In was the first event of its kind in Central Florida. It gathered 60 community leaders whose day-to-day work is not directly related to transportation, but their work is impacted by the decisions of transportation leaders. The Think-In was designed to gather feedback from the community leaders and identify focus areas related to health, sustainability, and resiliency. The relationships formed and the information shared will guide the agency through its planning activities in the next few years.

The event was nearly a full day. The agenda included an introductory presentation, keynote, and four small group discussions. The introductory presentation highlighted what MetroPlan Orlando learned during the INVEST evaluation and a few key future trends. Karen Leone de Nie from the Federal Reserve Bank of Atlanta gave the keynote presentation, Don’t Block the Box: Transportation’s Many Intersections.

The majority of the day, though, was dedicated to four small group discussions: Let’s Get to Know Each Other, Keynote Challenge, How We’ll Work Together, and What We’ll Accomplish. Each table had six participants, a facilitator, and a note taker. Each participant provided their own insights into their work and how transportation affected them. The discussions 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. These conversations yielded areas for further research: Funding, Planning in a Cone of Uncertainty, Housing and Transportation, Perception of Transportation, Collaboration and Organizational Roles, and Access to Services. The Think-In’s Summary Report is in the Appendix.

## **Phase Three: White Papers**

While the Think-In identified six interrelated areas for research, three were selected as topics for the white papers: Funding, Housing, and Organizational/Collaborative Roles. Each report delved into analysis that explored the Think-In conversations further and concluded with recommendations for MetroPlan Orlando specific to health, sustainability, and resiliency.

### *Housing*

The need to think about housing and transportation together was a key theme throughout the Think-In. It was pointed out that Orlando’s development patterns support auto use and this has negative effects on the region’s population. The region’s high housing and transportation costs are an outcome of the jobs-housing imbalance.

This white paper presents a housing primer for transportation professionals. A large part of the paper focuses on the region’s housing issues. The paper ties the region’s Affordable Housing Initiative

recommendations to potential transportation activities. Planning for housing and transportation together has positive economic, health, and environmental impacts.

Summary of Recommendations:

*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.
- b) Using federal funds available to MetroPlan Orlando to conduct land use, zoning, and housing studies.
- c) Aligning a percentage of the region’s surface transportation program (STP) funds with the region’s housing goals by incorporating housing-related targets.
- d) Incentivizing municipalities to develop integrated Transportation and Land Use Plans.

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

*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.

*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.*

### ***Funding***

Lots of activities are necessary for ensuring transportation projects move forward and financing is usually the linchpin. Funding is the focus of one of the white papers with a particular emphasis on the revenue sources used to fund projects today, the policies that govern transportation funding, and the connection to health and environmental sustainability. The paper is the first step towards identifying a new approach for funding a transportation system that advances the region’s quality of life goals.

Summary of Recommendations:

*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.

- 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.

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

*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 siloed 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*

*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.

### *Organization and Collaboration*

MetroPlan Orlando calls itself a regional transportation partnership, a nod to Central Florida's multiple counties and numerous municipalities. The *Framing the Future* white paper addresses the role MetroPlan Orlando plays in Central Florida and its responsibilities. The paper includes reviews of each of MetroPlan Orlando's plans and other activities, such as public opinion research, while identifying potential changes in these plans that can lead to a better quality of life in Central Florida.

Summary of Recommendations:

*1 – Develop a 10-year Strategic Plan*

A 10-year Strategic Plan would incorporate two MTP planning cycles and allow for an evaluation process that yields more insights. Transportation projects take years – often more than five years – to implement. 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*

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

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

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

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

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

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 Fund. Each year since 2003, the Florida Legislature has transferred these funds to other uses. 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

## **Next Steps**

The last 18 months reinforced that health and sustainability need to be engrained into everything MetroPlan Orlando does. The 20 recommendations identified in the white papers are actions for MetroPlan Orlando. Some of the recommendations might never come to fruition, but progress on several could have a big impact on health and sustainability in Central Florida.

Initial preparations have started on MetroPlan Orlando's next strategic plan. While the time horizon has not been established, the strategic plan will analyze transportation-related quality of life and develop a direction for MetroPlan Orlando, which will inform the MTP update in 2020. The strategic planning contract includes a next steps memo specifically related to health and other next steps memos are possible. The Strategic Plan is expected to be adopted in Summer 2019.

The recommendations also include actions for MetroPlan Orlando's other work. Public opinion polling is expected to occur in late 2018 and early 2019. Over the next couple of years, the agency will be recruiting new committee members and establishing new priorities or prioritization measures.

## **Recommendations for INVEST**

MetroPlan Orlando's evaluation used INVEST Version 1.2, which was the most recent version at the time. Since Spring 2017, Version 1.3 was released. The recommendations for improving INVEST are based on Version 1.2, but also apply to the most up-to-date version.

- 1) Allow for partial credit on criteria worth more than one point. In most of the criteria, MetroPlan Orlando received full points for criteria and subcriteria it does not fully meet. SPR 06.6 is a good example:
  - a. 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 the “sound approach to safety performance.”

- 2) Frame INVEST criteria as an evaluation against everything an agency does, not against a specific planning document. For example, MetroPlan Orlando’s MTP scored well against the SPR-01 criteria, but the Think-In and White Papers showed a lot of inconsistencies with implementation. The coordination between land use and transportation planning is not as strong as it should be for true sustainability purposes.
- 3) For SPR-03.2, add a point or reframe existing scoring to include a bonus point for engaging MORE than “all interested parties (as defined by current regulations)”.
- 4) For SPR-05, more connection to housing and mixed use/mixed income development needs to be made. These are the key determinants for Access and Affordability and are also a function of economic development strategy.
- 5) 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, and/or a state agency.
- 6) For SPR-10, add a scoring element related to the location of air quality monitoring devices. The location of these devices can expose potential health inequities.
- 7) For SPR-16, add subcriteria about transportation options as a resiliency strategy. Currently, all the subcriteria are about weather-related events and could encourage the construction of additional highway capacity, which negatively impacts the rest of the criteria.
- 8) When an answer to a question in the criteria is no, encourage the user to answer the “Next Steps” section.

## **Appendices (separate file)**

Staff Roles and Responsibilities

INVEST Evaluation Summary Memo

Transportation Think-In Summary Report

INVEST White Papers