MIAMI-DADE MPO
Metropolitan Planning Organization

March 8, 2013

2040 LRTP

Agenda

- Introductions
- 2040 Goals and Objectives and Measures
- May 2014 Public Involvement Program
- LRTP Logo/Motto and “Vision” Statement
- LRTP Website
- Meeting Adjournment

2035 LRTP Goals

1. Improve Transportation System and **Travel**.
2. Increase the **Safety** of the Transportation System for Motorized and Non-Motorized Users.
3. Increase the **Security** of the Transportation System for Motorized and Non-Motorized Users.
4. Support **Economic** Vitality.
5. Protect and Preserve the **Environment** and Quality of Life and Promote Energy Conservation.
6. Enhance the Integration and **Connectivity** of the Transportation System, Across and Between Modes, for People and Freight.
7. Optimize **Sound Investment** Strategies for System Improvement and Management/Operation.
8. Maximize and **Preserve** the Existing Transportation System.

Plans Reviewed

LRTP and Federal Plans

- 2035 Long Range Transportation Plan (2009)
- MAP-21 National Goals (2012)
- 2035 Regional Long Range Transportation Plan (2009)
- Creating Equitable, Healthy, and Sustainable Communities [EPA] (2013)

State Plans

- Florida Strategic Highway Safety Plan (2012)
- 2060 Florida Transportation Plan (2010)
- Florida Strategic Intermodal System Strategic Plan (2010)
- Six Pillars 20-Year Strategic Plan (2012)

Local Plans

- One Community One Goal Strategic Plan (2012)
- Comprehensive Development Master Plan (2011, Amended)
- Port of Miami 2035 Master Plan (2011)
- Greenprint: Our Design for a Sustainable Future (2010)

Goal 1 – Improve Transportation System and Travel

1. Improve accessibility to major health care, recreation, education, employment and cultural facilities
2. Enhance mobility for people and freight
3. Reduce Congestion
4. Maximize multimodal travel options and provide travel choices
5. Fill transit service gaps
6. Promote ~~transit~~ system reliability

   (Change from transit to system to address MAP-21 National Performance Goal. Add MOE for highway reliability.)
7. Improve transportation facilities' and services' regional connectivity

Goal 1 – Improve Transportation System and Travel

8. Include provisions for non-motorized modes in new projects and in reconstructions
9. Promote new non-motorized (bicycle, pedestrian, greenways) projects through new projects or reconstructions
10. Increase reverse commute opportunities for disadvantaged communities
11. Promote transportation improvements that provide for the needs of the elderly and disabled
12. ~~Improve transit services that provide access to educational facilities~~ (This is addressed by Objective 1.1)

Goal 2 – Increase the Safety of the Transportation System for Motorized and Non-Motorized Users

1. Improve safety on facilities and in operations
2. Reduce roadway and multi-modal crashes
3. Increase safety at transit stops and intermodal stations and connections
4. Implement safe route to schools
5. Promote the safe mobility of aging vulnerable road users (pedestrians, transit riders, bicyclists, and other nonmotorized vehicles)

   (from State Highway Safety Plan)
6. Accommodate the safe and convenient movement of pedestrians and non-motorized vehicles

   (from Comprehensive Development Master Plan)

Goal 3 – Increase the Security of the Transportation System for Motorized and Non-Motorized Users

1. Enhance the capacity of evacuation corridors
2. Improve transportation security for facilities and in operations
3. Ensure transportation options are available during emergency evacuations for the elderly and persons with disabilities
4. Ensure security at ports, airports, and major intermodal centers/terminals

Goal 4 – Support Economic Vitality

1. Increase access to employment sites
2. Enhance tourist travel and access opportunities
3. Increase and improve passenger and good access to airports and seaports
4. Augment multimodal access to major activity centers
5. Enhance the efficient movement of freight and goods
6. Implement projects that support economic development and redevelopment areas
7. Plan and develop transportation systems to provide adequate connectivity to economically productive rural areas

   (from 2060 Florida Transportation Plan)

Goal 4 – Support Economic Vitality

8. Invest in Port Miami infrastructure to further increase competitiveness for Post Panamax traffic

   (from One Community One Goal)

9. Expand cargo-handling and related intermodal facilities to the optimum extent

   (from Comprehensive Development Master Plan)

Goal 5 – Protect and Preserve the Environment and Quality of Life and Promote Energy Conservation

1. Minimize and mitigate air and water quality impacts of transportation facilities, services, and operations
2. Reduce fossil fuels use
3. Promote projects that support urban infill and densification
4. Minimize adverse impacts to established neighborhoods
5. Promote transportation improvements that are consistent with adopted comprehensive development master plans
6. Prioritize funding to favor intra-urban (within UDB) improvements
7. ~~Promote the use of alternative vehicle technologies~~

   (This is addressed by Objective 2)
8. Apply transportation and land use planning techniques, such as transit-oriented development, that support intermodal connections and coordination

Goal 5 – Protect and Preserve the Environment and Quality of Life and Promote Energy Conservation

9. Coordinate transportation and land use decisions to support livable rural and urban communities

   (from 2060 Florida Transportation Plan)

10. Protect the ~~natural environment and~~ historic areas

    (from 2035 Regional LRTP)

11. Coordinate transportation investments with other public and private decisions to foster livable communities

    (from 2060 Florida Transportation Plan)

Goal 6 – Enhance the Integration and Connectivity of the Transportation System, Across and Between Modes, for People and Freight.

1. Improve connectivity to Strategic Intermodal System (SIS) and intermodal facilities
2. Provide multi-modal options consistent with the local government comprehensive plan
3. ~~Facilitate connections between transportation modes~~ Integrate modal infrastructure, technologies, and payments systems to provide seamless connectivity for passenger and freight trips from origin to destination (from 2060 Florida Transportation Plan)
4. Improve goods movement by enhanced intermodal access and other infrastructure that serve major freight origins and destinations in Miami-Dade County

Goal 6 – Enhance the Integration and Connectivity of the Transportation System, Across and Between Modes, for People and Freight.

5. Improve freight movement operations and reliability by promoting expedient and cooperative practices across all modes
6. Reinforce and transform Florida's Strategic Intermodal System facilities to provide multimodal options for moving people and freight

(from 2060 Florida Transportation Plan)

Goal 7 – Optimize Sound Investment Strategies for System Improvement and Management/Operation

1. Optimize benefits of capital expenditures
2. Optimize operations and maintenance expenses
3. Optimize applications of People's Transportation Plan funding
4. Maximize use of State, Federal, and private sector funding sources
5. ~~Maximize use of State and Federal funding sources~~
   (Combine with Objective 4.)
6. Promote local improvement projects within the systems improvement context
7. County will establish strong regional linkages with Southeast Florida governments to plan for infrastructure
   (from Comprehensive Development Master Plan)

Goal 8 – Maximize and Preserve the Existing Transportation System

1. Continue to examine the provision and utilization of special-use lanes on the existing system
2. Identify and implement the best available technologies and innovations to improve the reliability and efficiency of the transportation system
3. Identify and reserve corridors and right-of-way (on roadways, railways, and waterways) for future transportation facilities and services
4. Expand the use of Transportation Demand Management (TDM) strategies
5. Achieve and maintain a state of good repair for transportation assets for all modes

   (from 2060 Florida Transportation Plan)

Goal 8 – Maximize and Preserve the Existing Transportation System

6. Reduce the vulnerability and increase the resilience of critical infrastructure to the impacts of climate trends and events

   (from 2060 Florida Transportation Plan)

7. Minimize damage to infrastructure from transportation vehicles

   (from 2060 Florida Transportation Plan)

8. Ensure necessary supporting infrastructure (water, sewage, drainage) capacity is available for new projects and improvements

   (from Comprehensive Development Master Plan)

9. Fix existing infrastructure first

   (from Creating Equitable, Healthy, Sustainable Communities)

Goals and Objectives - Measures

- Measures of Effectiveness (System)
  - ✓ Used to assess the performance of scenarios (E+C, Needs, CFP)
  - ✓ Important indicator of plan performance
- Goal Scales and Weights (Projects)
  - ✓ Used to assess projects against goals and objectives
  - ✓ Qualitative methodology
- Goal Elements Analysis (Projects)
  - ✓ Used to assess projects against goals and objectives
  - ✓ Quantitative methodology

Measures of Effectiveness Variables (System application)

Unit of Measure	Objective
Investment ($s)	7.4
Expenditure/Travel Time Savings	7.1, 7.2, 7.3
Highway lane and centerline miles	1.1, 1.7, 4.2, 4.3, 4.4, 4.6, 4.7, 5.3, 5.6, 5.10, 6.1, 6.4, 8.1, 8.6, 8.7
Hours of delay	1.3, 1.6
HOV/HOT lane miles	1.4
Level of investment	2.1
Non-motorized facility miles	1.9
Non-motorized trips	1.9
Number of accidents	2.5, 2.6
Number of Projects	1.5, 1.7, 1.9, 5.8, 7.6, 8.4
Percentage of funding	4.4, 4.9, 6.6, 8.5

Unit of Measure	Objective
Percentage of sidewalks/trails	5.11
Qualitative	1.9, 2.3, 2.4, 3.2, 3.4, 4.5, 5.2, 5.4, 5.5, 5.9, 6.2, 6.3, 6.5, 7.7, 8.2, 8.3, 8.8, 8.9
Surface coverage on acres of wetlands	5.1
Tons of emissions	5.1
Total lane miles	3.1
Transfers (Transit)	1.7
Transit passengers	1.2, 4.3
Transit Service Coverage	1.5
Transit service route miles	1.1, 1.4, 1.7, 1.10, 3.3, 4.2, 4.3, 4.4, 4.6, 5.2, 5.3, 5.6, 5.11
Travel Time	1.2, 1.11, 4.1, 6.4
Vehicle Miles Traveled	5.2

Goal Scales – Goal 1: Improve Transportation System and Travel

Low (1): The project does not improve mobility or intermodal connectivity within the existing system.

Medium (2): The project addresses mobility and intermodal connectivity within the existing system.

High (3): The project addresses mobility and intermodal connectivity while enhancing accessibility to elderly/disadvantaged communities and/or educational facilities.

Goal Scales – Goal 2: Increase the Safety of the Transportation System for Motorized and Non-motorized Users

Low (1): The project does not address the safety of the transportation system.

Medium (2): The project indirectly addresses safety as part of a larger project and is designed in such a way as to reduce roadway and/or multimodal crashes.

High (3): The project's primary purpose is to improve safety for non-motorized, and/or multimodal facilities and decreases roadway and/or multimodal crashes.

Goal Scales – Goal 3: Increase the Security of the Transportation System for Motorized and Non-motorized Users

Low (1): The project neither enhances the capacity of evacuation corridors nor multimodal, airport, or seaport operational security.

Medium (2): The project improves evacuation corridors, and, if multimodal, airport, or seaport facilities are involved, improves security features.

High (3): The project increases the capacity of evacuation corridors, taking into account both elderly and disadvantaged populations. If multimodal, airport, or seaport facilities are involved, the project improves security features.

Goal Scales – Goal 4: Support Economic Vitality

Low (1): The project does not improve access to existing/developing employment areas, tourist attractions, economically productive rural areas or freight centers/facilities.

Medium (2): The project improves access to existing/developing employment areas, tourist attractions, economically productive rural areas, and/or freight centers/facilities.

High (3): The project improves multimodal access to redevelopment areas, tourist attractions , economically productive rural areas, and/or freight centers/facilities OR improves capacity at the Port of Miami.

Goal Scales – Goal 5: Protect and Preserve the Environment and Quality of Life and Promote Energy Conservation

Low (1): The project promotes development outside the urban development boundary (UDB) or negatively impacts historic districts/sites.

Medium (2): The project does not promote development outside the UDB but supports non-single occupancy vehicle (SOV) modes of transportation.

High (3): The project improves livability by supporting infill and/or transit oriented development and promoting/developing alternative modes of transportation or alternative vehicle technologies.

Goal Scales – Goal 6: Enhance the Integration and Connectivity of the Transportation System, Across and Between Modes, for People and Freight

Low (1): The project does not address or improve multimodal or intermodal facilities or operations.

Medium (2): The project supports multimodal options that facilitate greater movement of people and goods.

High (3): The project provides for or improves intermodal connectivity to SIS facilities and facilitates greater and more reliable access between modes, or to freight centers.

Goal Scales – Goal 7: Optimize Sound Investment Strategies for System Improvement and Management/Operation

Low (1): The project relies solely on local public funding sources.

Medium (2): The project employs public funding sources, including Federal or State funds in addition to local public funding.

High (3): The project applies a significant amount of funding from Federal or State, PTP, and/or private sector sources, optimizing both capital investment and operating and maintenance expenditures for transportation improvements.

Goal Scales – Goal 8: Maximize and Preserve the Existing Transportation System

Low (1): The project is not focused on maintenance of the existing transportation system but rather provides for system expansion.

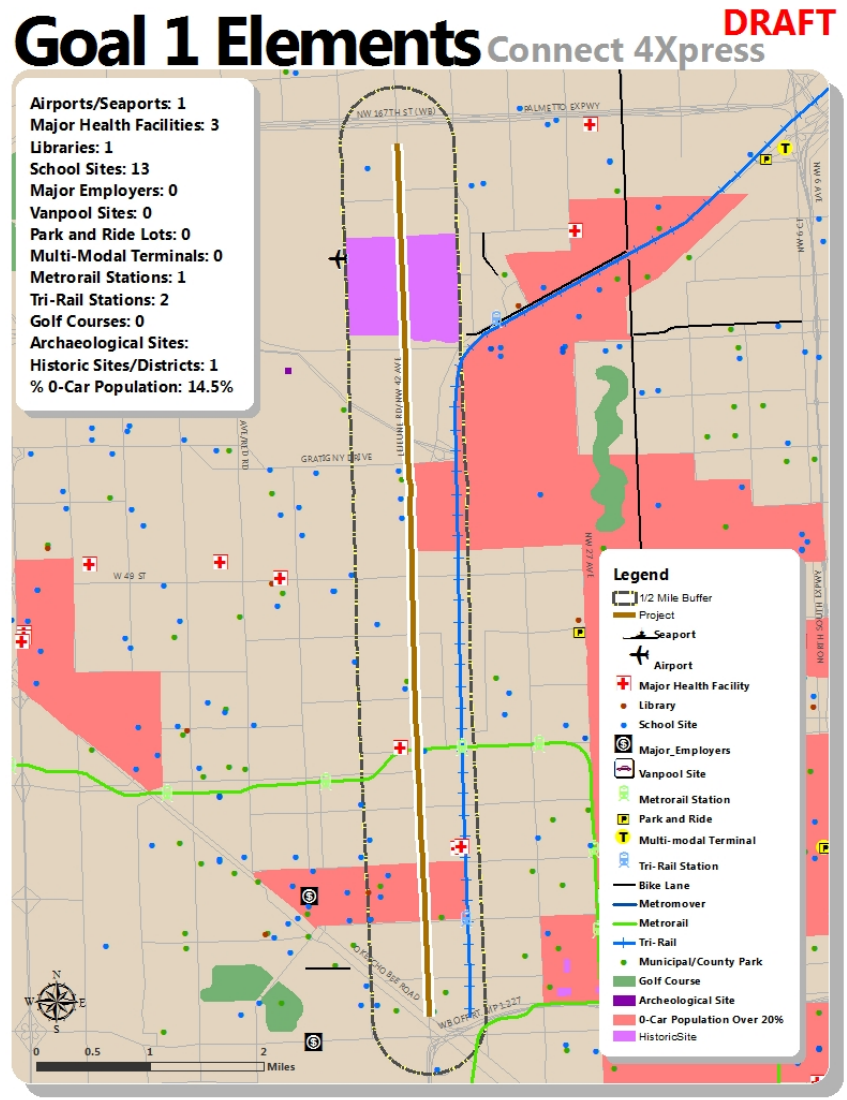
Medium (2): The project increases the overall efficiency and capacity of the existing system without a system expansion focus.

High (3): The project applies innovative technology and concepts including TDM strategies and/or special use lanes to augment the efficiency and capacity of the existing system and/or contributes to a "state of good repair" of the system.

Goal Elements Analysis

- A buffer is formed around each project (1/2 Mile shown)
- Selected elements are summarized within each buffer

  (e.g., the number of airports/seaports, number of schools, number of recreational sites).



LRTP Goals and Objectives – Next Steps

- Public workshop to review and weight G&O
- Steering Committee workshop to weight G&O
- Collect data for and fully develop GIS buffering tool

May Public Involvement Meeting Program

- Introduction
- Blocks on display depicting population and employment (not interactive)
- Presentation of draft Goals and Objectives
- Paired comparison analysis to weight LRTP Goals (interactive)

Decision Lens Overview

Decision Lens is a decision-support solutions provider based in Arlington, Virginia with…

- A software solution and an *advanced process for group decision-making* based on a proven and robust methodology
- A technique for quickly collecting and *synthesizing qualitative and quantitative* information from multiple data sources and stakeholders for trade-off, prioritization and/or resource allocation decisions
- An approach to quantifying and *making explicit the subjectivity* that is part of all decision-making in order to use experience and judgment more effectively

Decision Lens Methodology - AHP

- The Analytic Hierarchy Process (AHP) enables decision makers to structure decisions hierarchically
- The goal of the decision at the top, strategic objectives in the higher levels, evaluation criteria in the middle, and alternative choices at the bottom

THE ANALYTIC HIERARCHY PROCESS (AHP) MODEL

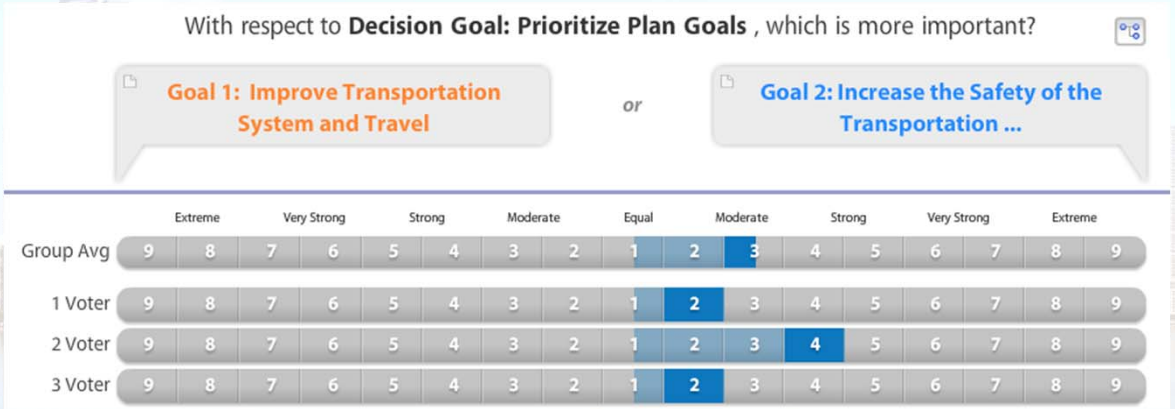
Prioritization of Initiatives

- To determine weights, pairwise comparison process will be used to determine Goals weights

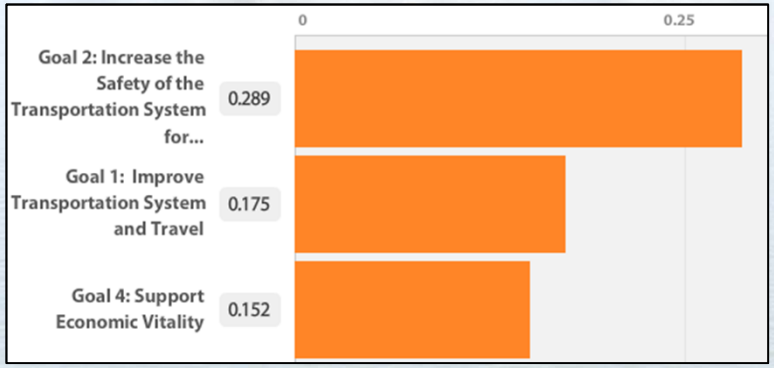
Decision Model Hierarchy (Criteria/Objectives)

Pairwise Comparison

Which goal is more important?
How much more important is it?



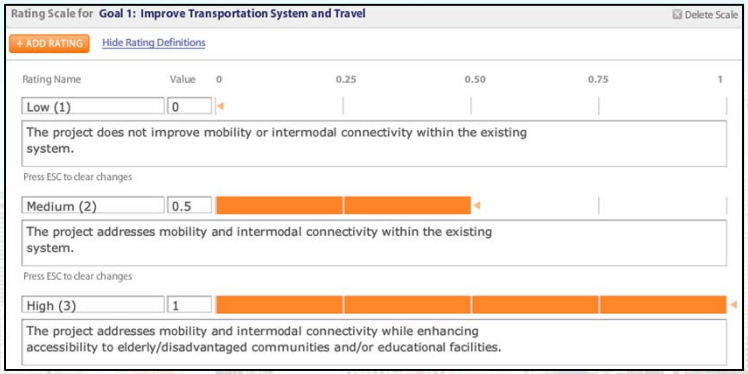
Priority Graph (Weighted Criteria)

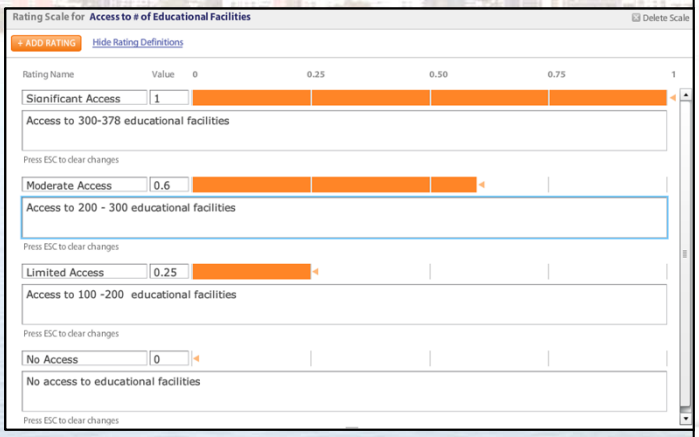


Scales and Voting

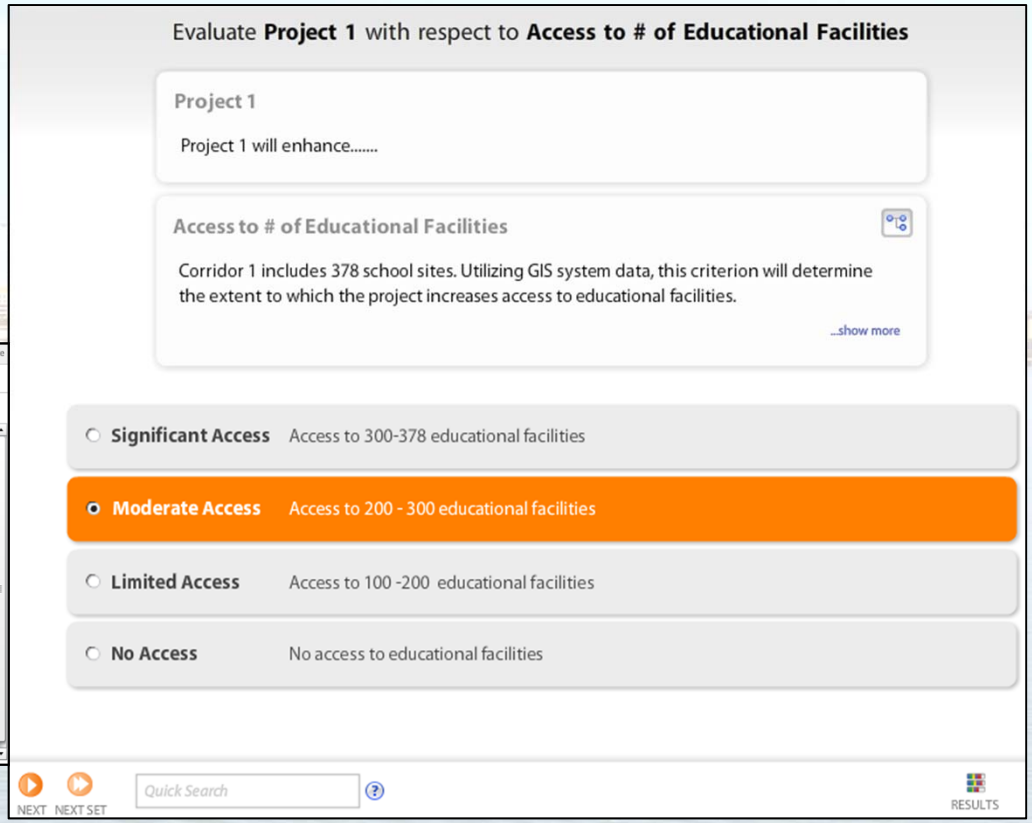
- Customized ratings scales developed for the Goals and the Elements

Customized Rating Scales (Goals and Elements)





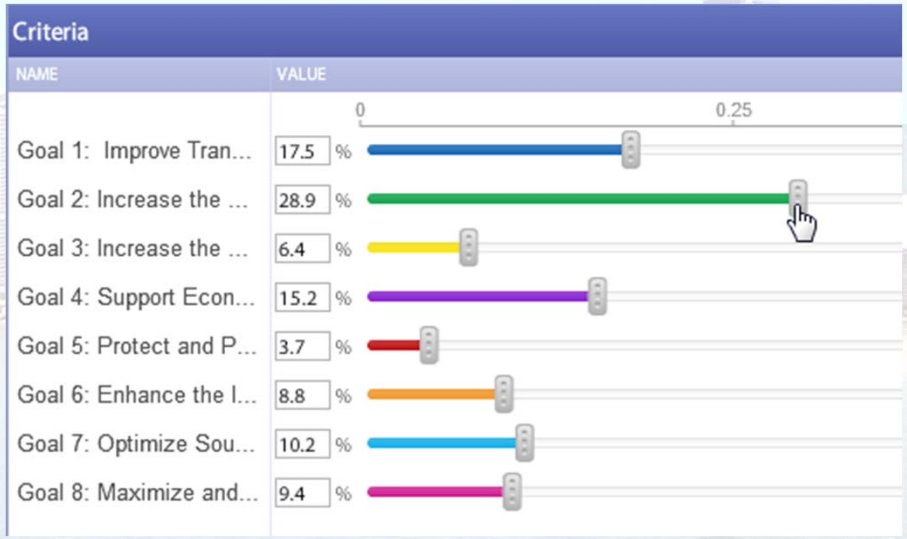
Projects Rated on Goals and Elements



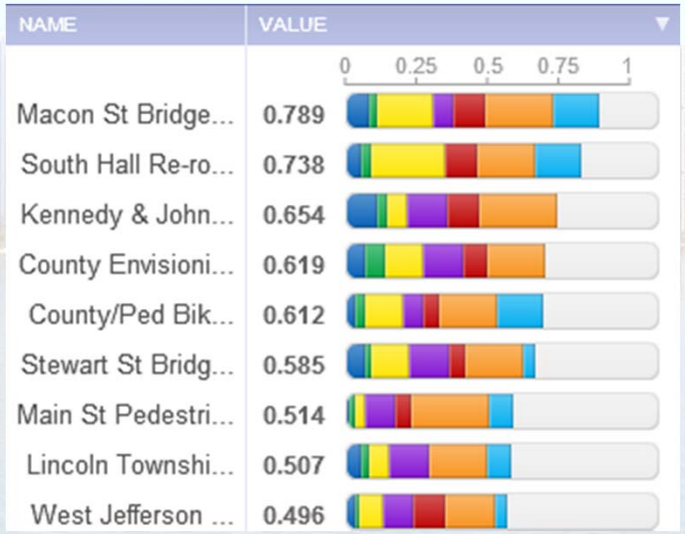
What If Analysis and Results

- Projects prioritized
- Scenario analysis provides stakeholders flexibility

Multi Scenario Capabilities



Results: Prioritized List of Initiatives



2040 LRTP Logo Concepts

2040 LRTP Logo

MOBILITY OPTIONS

2040 Miami-Dade Transportation Plan

EYES ON THE FUTURE

Vision Statement

Provide mobility options for Miami-Dade County residents and visitors and promote economic competitiveness by investing in freight infrastructure while protecting the environment and livability of the County and maximizing the efficiency of the existing transportation system.

Vision Statement

Provide mobility options for Miami-Dade County residents and visitors and promote economic competitiveness by investing in freight infrastructure while protecting the environment and livability of the County and maximizing the efficiency of the existing transportation system.

2040 LRTP Website

- Three basic sections on homepage
  - Projects
  - Latest News
  - Calender of Events
- Living "document" that will be updated throughout process
- Interactive elements on other pages
  - Mapping tool
  - Other public involvement activities

Miami-Dade 2040 LRTP

Questions / Comments

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