

# MPO

broward

metropolitan planning organization

## NORTHERN BROWARD COUNTY LIVABILITY STUDY ACTION PLAN



FINAL

February 2012

# NORTHERN BROWARD COUNTY LIVABILITY STUDY ACTION PLAN

Broward Metropolitan Planning Organization

## TABLE OF CONTENTS

Executive Summary .....	1
Transportation Transformation .....	3
Study Background .....	4
State Road 7 Common Vision Activities .....	5
Recommendations .....	8
Implementation .....	18
Funding .....	19
Livability .....	20
Lessons Learned .....	21
Glossary .....	22
Acknowledgements .....	23

## EXECUTIVE SUMMARY

In 2009, the Broward Metropolitan Planning Organization (MPO) approved the 2035 Long Range Transportation Plan (LRTP). It set forth a Vision for Transportation Transformation in Broward County, based on Premium Transit Service with Mobility Hubs as critical points where people go to make transportation connections. The LRTP established the Livability Planning Initiative for the Broward MPO to develop the detailed elements of the Mobility Hubs and advance the implementation of the 2035 LRTP recommendations.

The Northern Broward County Livability Study is the first effort of the Livability Planning Initiative. The Study Area boundaries are the Palm Beach/Broward County Line, Florida's Turnpike, Sample Road, and the Conservation Easement on the western edge of the developable area of Broward County. Within the Study Area are the City of Parkland, and portions of City of Coconut Creek and the City of Coral Springs, and the City of Margate at the southern boundary. The Study Area includes two Gateway Hubs and six Community Hubs.

The Broward MPO initiated the Study as one of several multi-jurisdictional and multi-agency efforts to address the local and regional mobility issues following the removal of the planned University Drive connection north to Glades Road. The Broward MPO participated in the Southwest Palm Beach County and Northern Broward County Mobility Studies Coordinating Committee along with representatives from Broward County, Palm Beach County, Palm Beach MPO, FDOT and the Northern Broward County municipalities to coordinate study activities and to develop a State Road 7 Common Vision. (See Page 4 for information on the State Road 7 Common Vision Activities.)

The Broward MPO contracted with the Broward Community Design Collaborative at Florida Atlantic University to conduct the Northern Broward County Livability Study as a collaborative interdisciplinary effort, with participation from the FAU Schools of Architecture, Social Work, and Urban and Regional Planning. The first phase began in June 2009 and consisted of planning analyses of the Study Area to determine suitability for pedestrian, bicycle and transit modes, and transit infrastructure. The second phase of the Study, from January to June 2010, focused on the development of strategic design concepts and recommendations for Mobility Hub areas, with public involvement to identify design issues, view presentations and rate proposed concepts for the area.

The Study recommendations present an incremental method of improving transportation and land use within the communities in a manageable and focused way. The areas of focus are:

- Multimodal connectivity around hubs and corridors,
- Improvements to existing transit operations and infrastructure, with plans for premium transit (longer term action),
- Economic development measures where land use designations and zoning in place to encourage private investments,
- Land use plan amendments and transit-supportive zoning and design guidelines in locations along Premium Transit corridors and future Mobility Hubs, and
- Housing opportunities and access to transit.

The Action Plan outlines the projects, responsible agencies, potential funding sources and time frames for implementation of the recommendations. Continued coordination has to occur with agencies and municipalities, some of whom are already taking steps toward achieving the Vision of the 2035 LRTP.

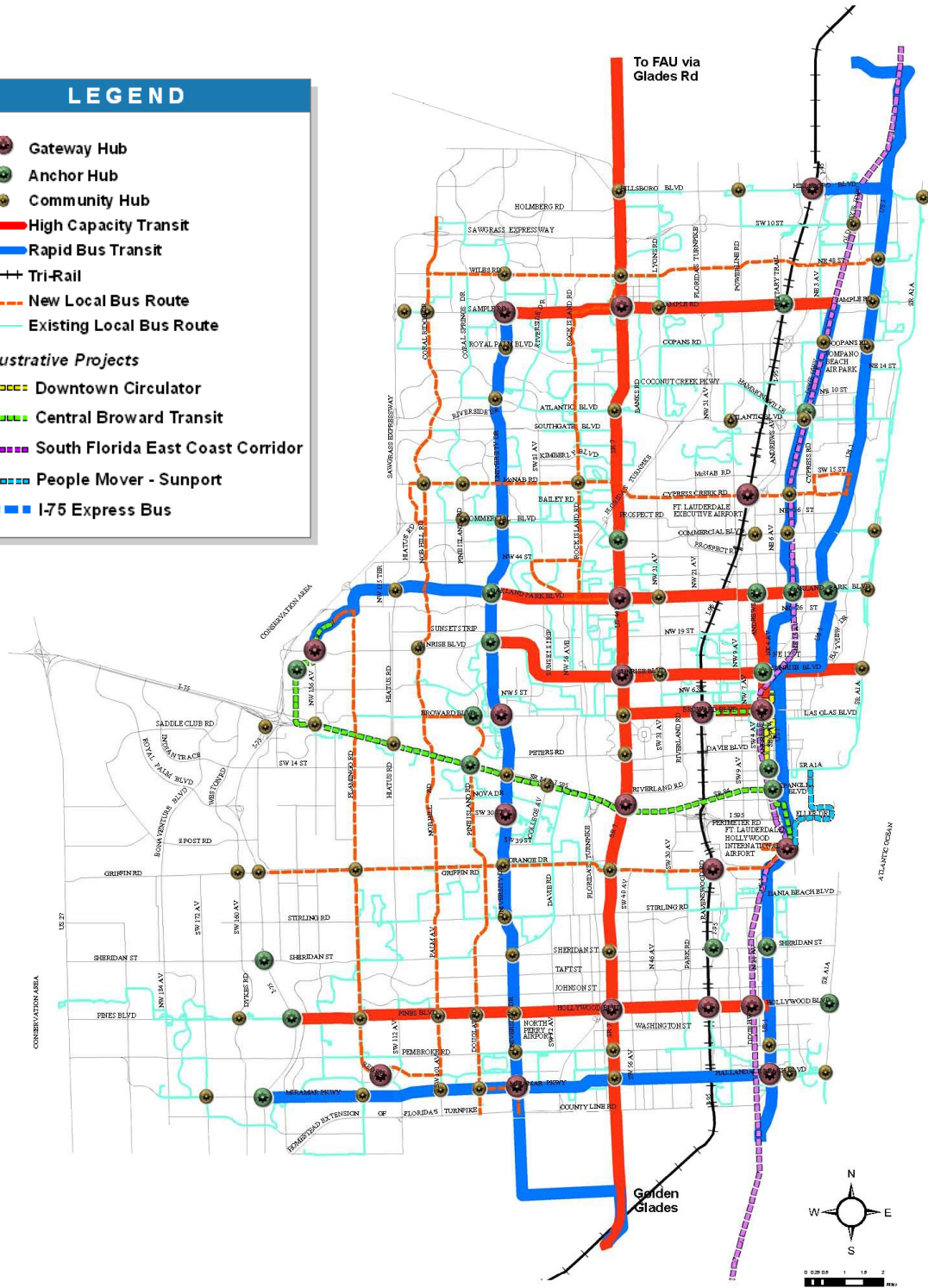
# 2035 TRANSIT COST FEASIBLE PLAN

**LEGEND**

- Gateway Hub
- Anchor Hub
- Community Hub
- High Capacity Transit
- Rapid Bus Transit
- Tri-Rail
- New Local Bus Route
- Existing Local Bus Route

**Illustrative Projects**

- Downtown Circulator
- Central Broward Transit
- South Florida East Coast Corridor
- People Mover - Sunport
- I-75 Express Bus



## TRANSPORTATION TRANSFORMATION

*“Transform transportation in Broward County to achieve optimum mobility with emphasis on transit while promoting economic vitality, protecting the environment, and enhancing quality of life.”*

- LRTP: Transformation 2035 Vision Statement

Broward MPO created the 2035 Long Range Transportation Plan as a framework for balanced investment among a system of many transportation modes. The LRTP establishes the concept of Premium Transit corridors with connections at “Mobility Hubs”: places for transit access with frequent transit service, high development potential, and a critical point for trip generation or transfers within the transit system.

The Mobility Hub should function as a place of connection between travel modes (walking, biking, park-and-ride, transit, carpooling) and connections to concentrations of housing, commercial, office, and entertainment activities. The concept also presents a focused method for incremental improvements to transportation and land use within communities, and provides a focus for investments in capital improvements to promote alternatives to single occupancy vehicle (SOV) travel.

Mobility Hubs in three categories address scales of intensity and functionality.

- A Gateway Hub is an active area with connections to high capacity transit, surrounded by higher density mixed use developments including downtown areas and transit-oriented developments (TODs).
- An Anchor Hub is an active area with connections to high capacity transit and is located near major institutions, employment centers, town centers, and/or regional shopping centers, with potential to accommodate new transit and pedestrian oriented development.
- A Community Hub is a local or neighborhood center served by rapid bus transit and attracts more local trips than regional trips.

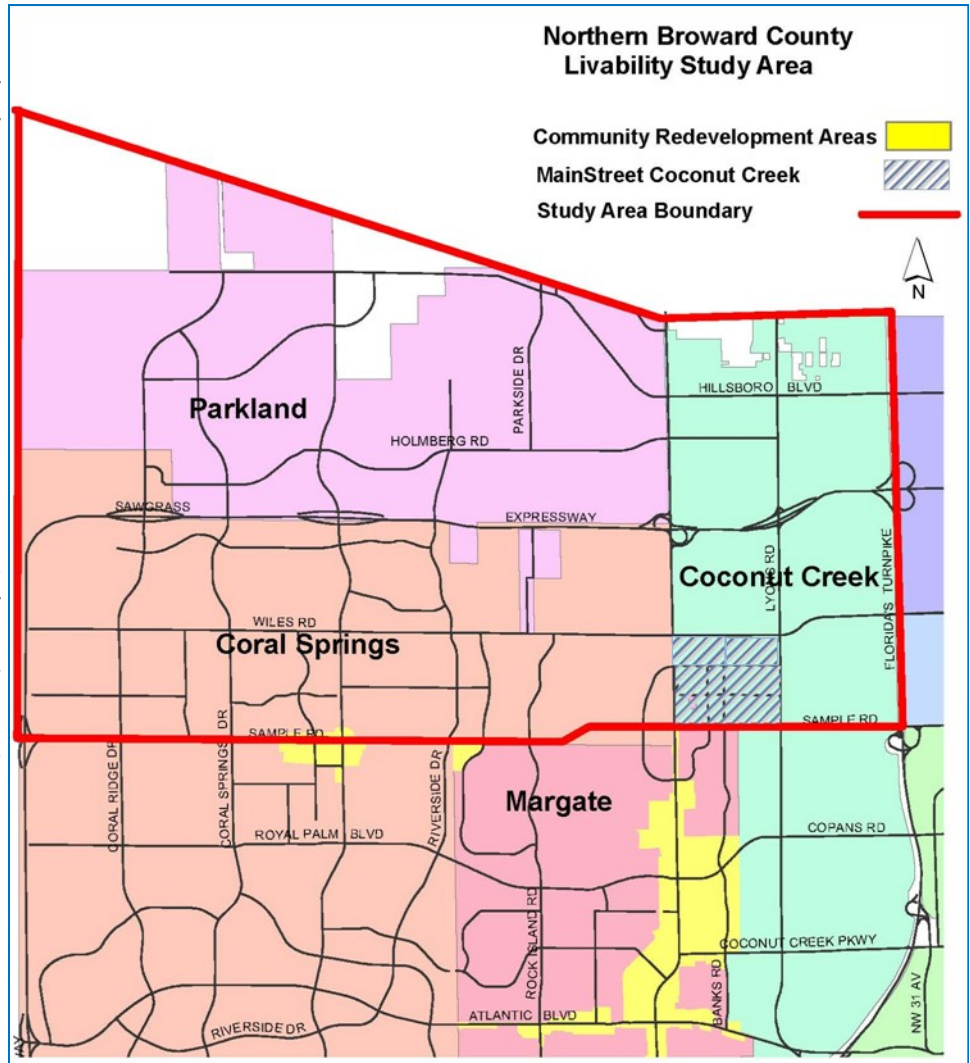
The challenge in Broward County is to integrate the multiple transportation modes including transit, walking and bicycling with transit-supportive and pedestrian-friendly land uses.



## STUDY BACKGROUND

The Northern Broward County Livability Study began as the *Transit-Supportive Infrastructure and Land Use Study*. The Broward MPO directed staff to develop an approach to address the traffic impacts from the removal of the planned University Drive connection north to Glades Road. (See Page 5 for information on the State Road 7 Common Vision Activities.) The Scope of Work identified tasks to examine existing transportation infrastructure and land use, evaluate the potential for transit and supportive development, and propose planning and redevelopment strategies for locations with high potential for transit-oriented redevelopment.

The Study Area covers approximately 25.5 square miles in northern Broward County with boundaries at the Broward/Palm Beach County line to the north (including an area known as “the Wedge”), the Conservation Levee to the west, Sample Road to the south, and the Florida’s Turnpike to the east. Major corridors in the Study Area include State Road 7, University Drive, Lyons Road, Sample Road, and connectors such as Hillsboro Boulevard, Holmberg Road/Johnson Road, Coral Ridge Drive/Nob Hill Road, Coral Springs Drive/Pine Island Road, Loxahatchee Road/County Line Road, Wiles Road and the limited-access Sawgrass Expressway.



When the Broward MPO approved the 2035 LRTP, the Livability Study scope adjusted to incorporate the components of the Cost Feasible Transit Plan: two Gateway Hubs and six Community Hubs, and Premium Transit Service on the State Road 7 and Sample Road corridors. The planning analysis, which had begun prior to the adoption of the LRTP, independently validated the framework of Premium Transit Service and Mobility Hubs within the Study Area.

The City of Parkland is within the Study Area, as are portions of City of Coconut Creek and the City of Coral Springs. The Study Area includes the Coral Springs Community Redevelopment Agency (CRA) area and the MainStreet - Coconut Creek Regional Activity Center. (See map.)

The City of Margate participated in the Study since Sample Road, where the LRTP identifies Mobility Hubs and Premium Transit Service, is the northern boundary of the City.

## **STATE ROAD 7 COMMON VISION ACTIVITIES**

*The reconsideration of transportation linkages between Broward County and Palm Beach County set the context for the Northern Broward County Livability Study. Palm Beach County and the Palm Beach MPO took actions to remove University Drive from the Palm Beach County Thoroughfare Right-of-Way Identification Map and the 2020 Roadway System. This action left the triangular area known as “the Wedge” without a physical connection to Palm Beach County, leading to its annexation into Broward County.*

*The Florida Department of Community Affairs (DCA) determined that Palm Beach County’s Comprehensive Plan Amendment to eliminate the University Drive connection did not meet the requirements of Chapter 163, Part II, Florida Statutes, and identified remedial actions. In 2007, the Secretaries of FDOT and DCA identified the framework of an Action Plan to resolve the remedial actions. In 2008, the Palm Beach and Broward MPOs further defined the Action Plan and highlighted the three steps to address DCA’s noncompliance determination:*

- 1.) perform transportation network needs assessment,*
- 2.) develop a common cross-county vision for State Road 7, and*
- 3.) develop an implementation plan of transportation improvements for both Counties.*

*In 2009, the Broward MPO approved the initiation of the Northern Broward County Study, as well as an update of the State Road 7 Collaborative Report, and a Memorandum of Understanding (MOU) to mutually support the outcome of the State Road 7 Common Vision Studies in Broward and Palm Beach County and the State Road 7 Project Development and Environment (PD&E) Study. Complementing these studies were additional studies, including the State Road 7 Transit Supportive Land Use Study from the Treasure Coast Regional Planning Council (TCRPC) and FDOT’s Multimodal Mobility Strategy Assessment for Northern Broward & Southwestern Palm Beach.*

*A Coordinating Committee met regularly to review the progress of the studies and to coordinate schedules and public involvement activities. The Southwest Palm Beach County and Northern Broward County Coordinating Committee included representatives from Broward MPO, Broward County, Palm Beach MPO, Palm Beach County, Broward County Transit, PalmTrans, FDOT, the Florida Turnpike Authority, and the municipalities in the Northern Broward County area. The Coordinating Committee is a component of a long-term strategy for sustainable land use and mobility options that reduce greenhouse gas emissions in the area crossing the Broward/Palm Beach County Line between the Turnpike and the Everglades Conservation Area.*

*The Coordinating Committee summarized the Mobility Studies in the State Road 7 Common Vision and provided input to FDOT as the State Road 7 PD&E Study began. The PD&E is a formal process to consider engineering design, project costs, environmental and social impacts, and public input in the development of major transportation projects on State Road 7 between Sample Road and Glades Road, considering the State Road 7 Common Vision.*

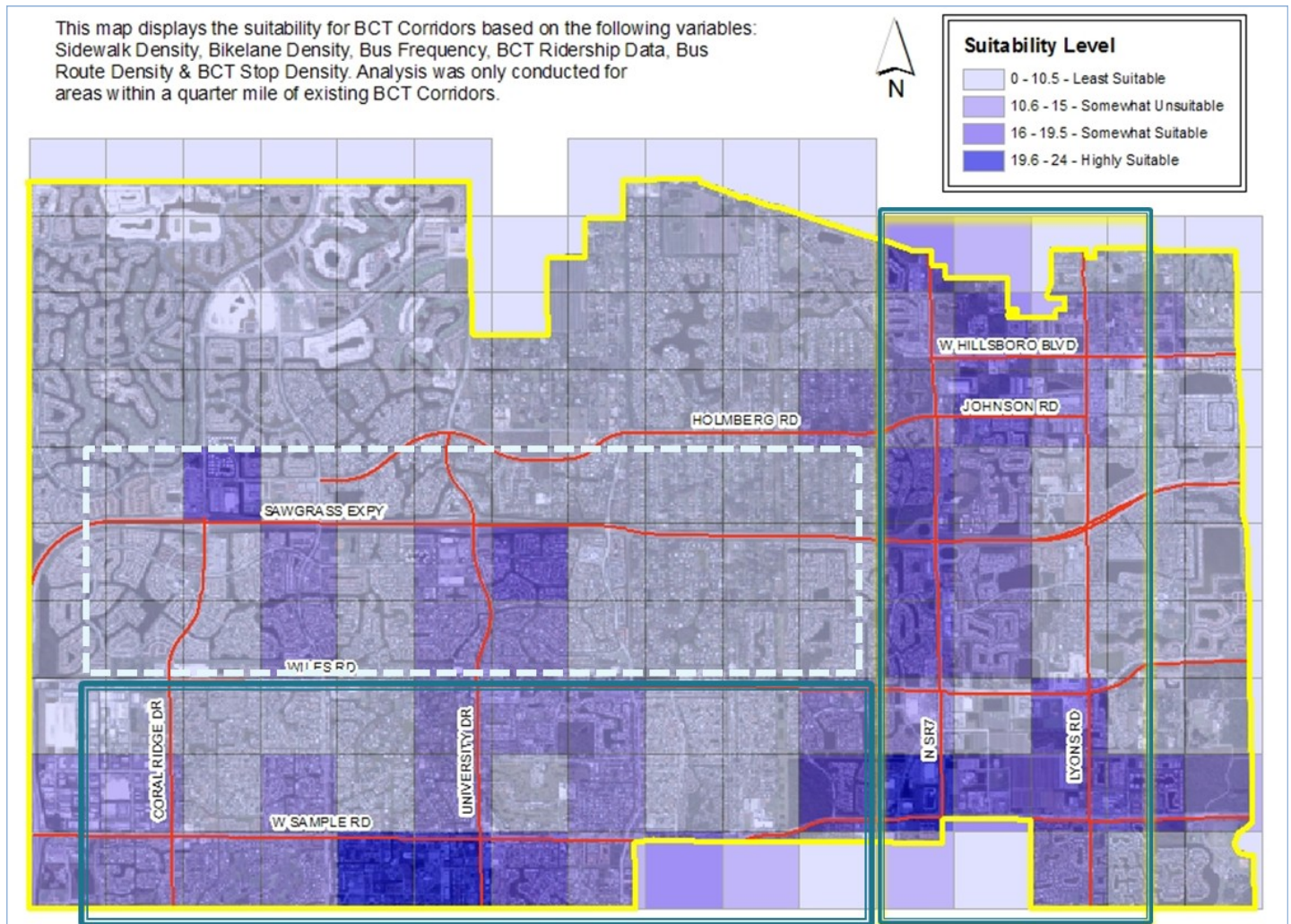


The Broward MPO contracted with the Broward Community Design Collaborative at the Florida Atlantic University (FAU) College for Design and Social Inquiry to conduct tasks within the Northern Broward County Livability Study as a collaborative interdisciplinary effort. Participants included faculty, research assistants and students from FAU Schools of Architecture, Social Work, and Urban and Regional Planning.

Throughout the Study process, the Project Management Team and Working Group provided technical direction. The Project Management Team consisted of staff representatives from the Broward MPO, FDOT, and BCT. The Working Group included municipal staff from Coconut Creek, Coral Springs, Margate and Parkland. The participants met several times to review findings, concepts, and recommendations.

**Study Process**

In June 2009, the FAU School of Urban and Regional Planning initiated the Planning Workshop as the first phase of the Study. Planning faculty directed graduate students as they examined the suitability of land use and built environment for pedestrian, bicycle and transit modes. They used Geographic Information Systems (GIS) to divide the Study Area into 156 “blocks,” each 1/2 mile by 1/2 mile, and analyze 17 data sets for each block. This analysis independently confirmed the 2035 LRTP findings of the potential for transit-oriented development along two corridors (between State Road 7 and Lyons Road, and between Sample Road and the Wiles Road), and potential for future transit-supportive activity along another corridor (between Wiles Road and Holmberg Road). (See map below.)



Source: Joann Skaria and Cara Capp, URP 6930. C. Oner, Ph.D.,





*Public involvement activities included the Community Design Inventory Workshop and Site Survey visits.*  
Source: FAU Broward Community Design Collaborative.



*Presentation to local organization.*  
Source: Christina Pate.

The public involvement and design phases began in January 2010. The FAU School of Architecture and the School of Social Work engaged community stakeholders in:

- (1) Data collection and design analysis of six demonstration Mobility Hubs.
- (2) Public meetings and workshop to identify and prioritize design issues; participate in design presentations and lectures; and, view and rate proposed concepts for the area.
- (3) Presentations to public and private stakeholders, with a survey to identify key issues, challenges and opportunities.
- (4) A “Reality Check” workshop in May 2010 with the FAU Research Team, the Project Management Team and Working Group to develop strategic concepts and recommendations. Subsequent review involved the Working Group representing municipalities, CRAs, and other agencies.

The FAU Project Team completed the project documentation (see below), and the Broward MPO staff led the final two tasks of the Scope of Services: Developing the Planning Strategy, and defining the Implementation program. These tasks included refining the list of recommendations to define projects, and working with the municipalities and implementing agencies to develop the Action Plan.

## DOCUMENTATION

The FAU Project Team provided the following documents (available separately as Appendices):

**Appendix A:** Connectivity Maps\*

**Appendix B:** Strategic Concept Maps\*\*

**Appendix C:** Transit Supportive Infrastructure and Land Use Report (School of Architecture)

**Appendix D:** Community Involvement Process (CIP) Supplement (School of Social Work)

**Appendix E:** Final Report URP 6920 Planning Workshop (School of Urban and Regional Planning)

\* Details, including cost estimates, of the recommendations to enhance walking, bicycling and/or transit use within the Study Area are in Appendix A: Connectivity Maps, with locations and photographs of existing conditions for each of six Study sub-areas (Mobility Hubs) in the Northern Broward County Study Area.

\*\* Appendix B contains Strategic Concept Maps, site-specific recommendations for land use changes and development design solutions that connect neighborhoods to transit corridors and encourage multimodal accessibility. The Strategic Concept Maps show how to improve transit connectivity through infrastructure, land use and development strategies at a local scale, with input from Working Group teams representing municipal and CRA agency representatives, for each of 6 sub-areas around Mobility Hub locations.

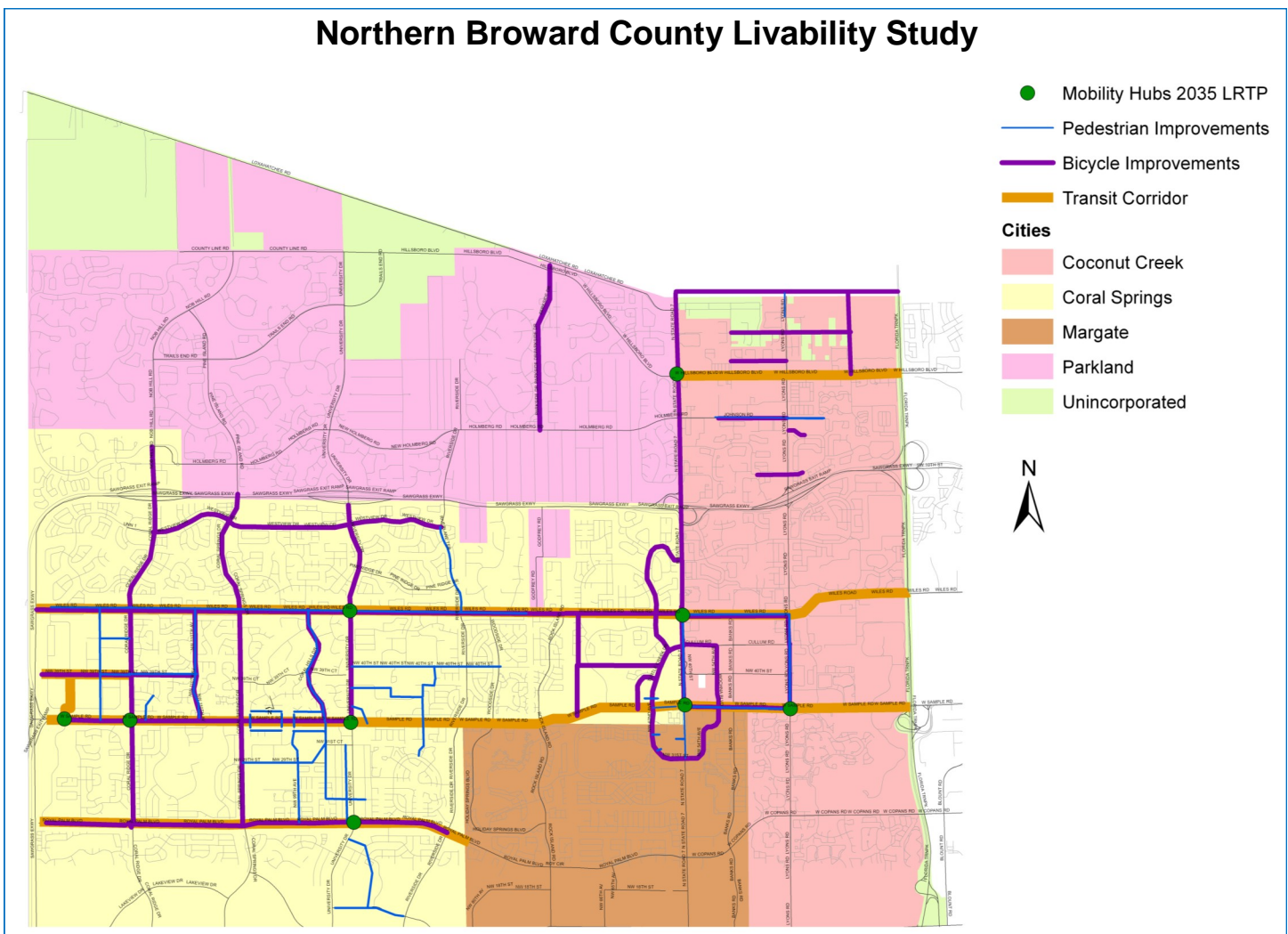
## RECOMMENDATIONS

The Broward MPO established the Livability Planning Initiative to promote and implement the 2035 LRTP recommendations and policies. The Northern Broward County Livability Study confirmed the recommendations of the 2035 LRTP through planning analysis and public involvement.

The Action Plan outlines the projects types and programs in categories according to need and a logical sequence of events: near-term (0-3 years), mid-term (3-5 years) and long-term (over 5 years).

- Early action items include low-cost improvements to transit infrastructure and pedestrian and bicycle facilities near Mobility Hubs and transit corridors.
- In the next 5 years, the Broward MPO should coordinate with BCT and the municipalities to define the Premium Transit Service on State Road 7 and Sample Road, and develop the details of the Mobility Hubs, including the design of the intermodal facilities.
- In the long term, the Broward MPO should support large scale investments on Premium Transit corridors and at Mobility Hubs.

The Broward MPO should continue to work with the municipalities on initiatives to address economic development and housing. The implementation of any Mobility Hub is dependent on the Broward MPO coordinating the placement of the Hub with the municipalities and private property owners who invest in transit-supportive development that encourages ridership.



*Recommendations for bicycle and pedestrian facilities seek to improve connectivity around transit corridors and Mobility Hubs. Source: Broward MPO*

**Initial Broward MPO-Directed Actions (1-3 years)**

PROJECT TYPE	DESCRIPTION
Pedestrian improvements (See Pages 10-11)	Connections within 1/2-mile radius of the Gateway Hubs, within 1/4-mile radius of the Anchor and Community Hubs, and within 1/4-mile of Transit Corridors.
Bicycle facilities (See Pages 12-14)	Connections within 2-mile radius of the Gateway Hubs, within 1-mile radius of the Anchor and Community Hubs, and within 1 mile of Transit Corridors.

**Supportive Activities - Concurrent Projects**

ACTIVITY / PROJECT	DESCRIPTION
State Road 7 - Project Development & Environment (PD&E) - Florida Department of Transportation (FDOT)	Formal process to consider major transportation projects, including transit, pedestrian and bicycle improvements on State Road 7 between Sample Road and Glades Road, incorporating the State Road 7 Common Vision. (See Page 5)
Local transit service—Broward County Transit (BCT)	Improve transit level of service for existing routes. Identify new market segments, and explore options for local and circulator service improvements.
Transit infrastructure improvements along existing Transit Corridors (BCT) (See Page 10)	Shelters, real-time information, route information (schedules and maps), lighting, trash receptacles, benches, wayfinding and directional signage, additional seating, bicycle racks, kiosks, etc. <ul style="list-style-type: none"> <li>• Premium Transit corridors—State Road 7, Sample Road (east of University Drive), University Drive (south of Sample Road)</li> <li>• Local transit corridors—University Drive (north of Sample Road), Sample Road (west of University Drive), Coral Springs Drive, Riverside Drive, Lyons Road, Hillsboro Boulevard, Johnson Road, Westview Drive</li> <li>• Future transit corridors—Wiles Road, Coral Ridge Drive, Rock Island Road</li> </ul>
Trafficways Plan—Broward County Planning Council	Update policies to reflect multimodal transportation infrastructure needs near Mobility Hubs, based on projections for build-out (2035) conditions. Transportation needs assessment are currently biased toward automobile dependency and plentiful free parking.



Source: Abbate, Myat—2010



### **Recommendations for Pedestrian Facilities**

Proposed pedestrian facility improvements must meet specific criteria to be eligible for amendment to the 2035 LRTP on the semi-annual amendment cycle. Proposed projects must contribute to fulfilling the Vision of the 2035 LRTP, and they must have identifiable funding sources to meet the basic condition of the Cost Feasible Plan. The Broward MPO will take the lead in developing cost estimates and identifying specific funding sources for new or additional projects. The LRTP provides the basis for cost estimates (\$68/linear foot for sidewalks; other elements to be determined during design).

TRANSIT CORRIDORS Improvements along corridors (typically arterials and collector roads) with transit facilities and pedestrian crossings	PROJECT LIMITS	MUNICIPALITY
Sample Road	State Road 7 to Florida's Turnpike	City of Coconut Creek
State Road 7	Wiles Road to Sample Road	City of Coconut Creek
Lyons Road	Wiles Road to Sample Road	City of Coconut Creek
Wiles Road	State Road 7 to Florida's Turnpike	City of Coconut Creek
University Drive	Westview Drive to Sample Road	City of Coral Springs
Royal Palm Boulevard	Sportsplex Drive to Riverside Drive	City of Coral Springs
Sample Road	Sportsplex Drive to State Road 7	City of Coral Springs
Wiles Road	Sawgrass Expressway to State Road 7	City of Coral Springs

SECONDARY CONNECTORS Connections from the Primary Connectors within the neighborhoods, typically local roads	PROJECT LIMITS	MUNICIPALITY
Turtle Creek Dr.	Connections to shopping plazas Private property owners	City of Coral Springs Private Prop. owners
NW 33rd Street	Coral Springs Drive to Coral Hills Drive	City of Coral Springs
NW 35 <sup>th</sup> Street	Coral Springs Drive to Coral Hills Drive	City of Coral Springs
NW 38 <sup>th</sup> Street	NW 85 <sup>th</sup> Avenue to NW 84 <sup>th</sup> Avenue	City of Coral Springs
NW 84 <sup>th</sup> Avenue	NW 38 <sup>th</sup> Street to NE 40 <sup>th</sup> Street	City of Coral Springs
NW 41 <sup>st</sup> Street	Coral Ridge Drive to NW 120 Avenue	City of Coral Springs
Wiles Road	Coral Ridge Drive to NW 126 Ave	City of Coral Springs

Details, including cost estimates, of the recommendations to enhance walking, bicycling and/or transit use within the Study Area are in Appendix A: Connectivity Maps, with locations and photographs of existing conditions for each of six Study sub-areas (Mobility Hubs) in the Northern Broward County Study Area.



PRIMARY CONNECTORS Connections from the Transit Corridors to the neighborhoods, typically collectors and local roads	PROJECT LIMITS	MUNICIPALITY
State Road 7	Sample Road to NW 62nd Avenue /NW31st Street (Connections to Peppertree Plaza)	City of Margate
Johnson Road	NW 51st Terrace to eastern terminus (east of Lyons Road)	City of Coconut Creek
Lyons Road	Hillsboro Canal to NW 76th Street	City of Coconut Creek
Shadow Wood Boulevard (NW 14th Street)	University Drive to Riverside Drive	City of Coral Springs
NW 40th Street	University Drive to Woodside Drive	City of Coral Springs
NW 25th Court	Coral Hills Drive to NW 91st Avenue	City of Coral Springs
Brokenwoods Drive	Sample Road to University Drive	City of Coral Springs
NW 38th Drive	University Drive to NW 85th Avenue	City of Coral Springs
NW 85th Avenue	Sample Road to Forest Hills Boulevard	City of Coral Springs
NW 85th Avenue	NW 38th Street to Sample Road	City of Coral Springs
NW 39th Street	NW 126th Avenue to NW 110th Avenue	City of Coral Springs
NW 99th Way	NW 35th Street to NW 33rd Street	City of Coral Springs
NW 99th Avenue	NW 99th Way to Royal Palm Boulevard	City of Coral Springs
NW 101st Avenue	NW 35th Street to NW 33rd Street	City of Coral Springs
NW 104th Avenue	NW 35th Street to NW 33rd Street	City of Coral Springs
NW 110th Ave.	Sample Rd. to Wiles Rd	City of Coral Springs
NW 114th Lane	Sample Road to NW 37th Street	City of Coral Springs
NW 124th Avenue	Sample Road to NW 39th Street	City of Coral Springs
Coral Hills Drive	Wiles Road to NW 25th Court	City of Coral Springs
Downtown Pathway	NW 29th Street from Coral Springs Drive along Coral Springs Medical Center easement to Coral Hills Drive to Sample Road	City of Coral Springs
NW 94th Avenue	NW 31st Court to Royal Palm Boulevard	City of Coral Springs
NW 20th Street / NW 91st Avenue	University Drive to Shadow Wood Boulevard	City of Coral Springs
NW 120th Avenue	Wiles Road to Sample Road	City of Coral Springs
Riverside Drive	Westview Drive to Wiles Road	City of Coral Springs

Details, including cost estimates, of the recommendations to enhance walking, bicycling and/or transit use within the Study Area are in Appendix A: Connectivity Maps, with locations and photographs of existing conditions for each of six Study sub-areas (Mobility Hubs) in the Northern Broward County Study Area.

## **Recommendations for Bicycle Facilities**

Proposed bicycle facility improvements must meet specific criteria to be eligible for amendments to the 2035 LRTP on the semi-annual amendment cycle. Proposed projects must contribute to fulfilling the Vision of the 2035 LRTP, and they must have identifiable funding sources to meet the basic condition of the Cost Feasible Plan. The Broward MPO will take the lead in developing cost estimates and identifying specific funding sources for new or additional projects. The LRTP provides the basis for cost estimates (\$44/linear foot for bicycle facilities; the mix of on-road and off-road facilities will be determined during design).

DESIGNATED BICYCLE LANE Streets with curb and gutter. 4 feet minimum of usable pavement (excluding gutter); 6 feet next to on-street parking	PROJECT LIMITS	MUNICIPALITY
Creekside Drive	Turtle Creek Drive to State Road 7	City of Coral Springs
“The Loop” - Turtle Creek Drive	NW 62nd Avenue, NW 54th Avenue, and Cullum Road	City of Coral Springs, City of Coconut Creek, City of Margate
State Road 7	Hillsboro Boulevard to Sawgrass Expressway	City of Coconut Creek / Turnpike Authority

SHARED STREET Low-speed, low-volume streets; typically a residential neighborhood street, with travel lanes at least 10 feet wide.	PROJECT LIMITS	MUNICIPALITY
NW 74th Street	East of Lyons Road	City of Coconut Creek
NW 74th Place	West of Lyons Road	City of Coconut Creek

Details, including cost estimates, of the recommendations to enhance walking, bicycling and/or transit use within the Study Area are in Appendix A: Connectivity Maps, with locations and photographs of existing conditions for each of six Study sub-areas (Mobility Hubs) in the Northern Broward County Study Area.

MULTI-USE PATH/DESIGNATED BICYCLE LANE A parallel path may be appropriate if driveways and intersections are very limited, as along a riverfront or a limited-access roadway.	PROJECT LIMITS	MUNICIPALITY
FPL Easement	Turtle Run Boulevard to Turtle Creek Drive	City of Coral Springs
FPL Easement	Wiles Road to Sample Road	City of Coral Springs
Parkside Road	Loxahatchee Road to Holmberg Road	City of Parkland
Sample Road	State Road 7 to Lyons Road	City of Coconut Creek, City of Margate
State Road 7	Hillsboro Canal to Sample Road	City of Coconut Creek, City of Coral Springs
Perimeter of MainStreet Coconut Creek	Sample Road to State Road 7 to Wiles Road to Lyons Road	City of Coconut Creek
NW 71st Street	West of Lyons Road	City of Coconut Creek
Hillsboro Canal	State Road 7 to Florida's Turnpike	City of Coconut Creek
Johnson Road	East of Lyons Road	City of Coconut Creek
NW 39th Avenue	Hillsboro Canal to Hillsboro Boulevard	City of Coconut Creek

Details, including cost estimates, of the recommendations to enhance walking, bicycling and/or transit use within the Study Area are in Appendix A: Connectivity Maps, with locations and photographs of existing conditions for each of six Study sub-areas (Mobility Hubs) in the Northern Broward County Study Area.



*Redevelopment scenarios: at Sample Road and University Drive, and at State Road 7 and Johnson Road.*  
Source: FAU School of Architecture: Lew Vitier, Angelica Ulseth, Thant Myat (2010).

RECOMMENDATIONS FOR BICYCLE FACILITIES Enable the flexibility to adapt a facility type, i.e. bike lane, urban shoulder, extended shoulder, shared outside lane, etc. to a particular roadway based upon available right-of-way, lane configurations, available roadway width. This option enables the City to make appropriate choices to accommodate bicycle facilities on City streets based upon current roadway design.	PROJECT LIMITS	MUNICIPALITY
Wiles Road	Sawgrass Expressway to State Road 7	City of Coral Springs
Royal Palm Boulevard	Sportsplex Drive to Riverside Drive	City of Coral Springs
University Drive	Sawgrass Expressway to Sample Road	City of Coral Springs
NW 39 <sup>th</sup> Street	West of Coral Ridge Drive	City of Coral Springs
NW 39 <sup>th</sup> Street	Coral Ridge Drive to NW 110 <sup>th</sup> Avenue	City of Coral Springs
Westview Drive	Coral Ridge Drive to Riverside Drive	City of Coral Springs
NW 110 <sup>th</sup> Avenue	Sample Road to Wiles Road	City of Coral Springs
Coral Hills Drive	Sample Road to Wiles Road	City of Coral Springs
Sample Road	Sportsplex Drive to University Drive	City of Coral Springs
Coral Ridge Drive	Holmberg Road to Royal Palm Boulevard	City of Coral Springs
Coral Springs Drive	Sawgrass Expressway to Royal Palm Boulevard	City of Coral Springs
Riverside Drive	Sawgrass Expressway to Royal Palm Boulevard	City of Coral Springs
Terrapin Lane	Sample Road to Turtle Creek Drive	City of Coral Springs
Sol Press Boulevard	Lyons Road to start of two-lane segment	City of Coconut Creek
Sawgrass Boulevard	Lyons Road to start of two-lane segment	City of Coconut Creek
Serko Boulevard	Lyons Road to start of two-lane segment	City of Coconut Creek

Details, including cost estimates, of the recommendations to enhance walking, bicycling and/or transit use within the Study Area are in Appendix A: Connectivity Maps, with locations and photographs of existing conditions for each of six Study sub-areas (Mobility Hubs) in the Northern Broward County Study Area.



**Mobility Hubs**

Any proposed change to the location or designation of Mobility Hubs requires an amendment to the 2035 LRTP. The amendment must have identifiable funding sources to meet the basic condition of the Cost Feasible Plan, and must contribute to fulfilling the Vision of the 2035 LRTP. The recommendations for new Mobility Hubs will require further analysis to ensure that the new locations meet the criteria for inclusion, including transit ridership and redevelopment potential. The municipalities will play a key role in determining how to supply the appropriate level of development intensity to generate the transit ridership to qualify as a Mobility Hub. If the proposed Mobility Hub amendment meets the criteria, the Broward MPO can amend the 2035 LRTP on the semi-annual amendment cycle.

**Broward MPO Activities**

ACTIVITY		DESCRIPTION
Mobility Hub Coordination - MPO/transit operators		As part of the Major Investment Studies and/or Alternatives Analyses to define the Premium Transit Service, the MPO will work with the transit providers (BCT, SFRTA, others) to design the intermodal facility aspects of the Hub to correspond to the transit service.
Mobility Hub Coordination - MPO/municipalities		The MPO will coordinate the placement of the Hub with the municipalities and private property owners as they invest in transit-supportive development at the level that is appropriate to generate sufficient transit ridership to qualify as a Mobility Hub.
Mobility Hubs—MPO		Formalize designation of new and relocated Hub locations.
Remove:	Community Hub:	State Road 7 and Hillsboro Boulevard Sportsplex Drive and Sample Road Wiles Road and University Drive
Add:	Community Hub:	State Road 7 and Johnson Road Hillsboro Boulevard and Lyons Road University Drive and Westview Drive Coral Ridge Drive/Nob Hill Road and Holmberg Road

Details of Mobility Hubs including site-specific recommendations for land use changes, infrastructure investments, and development strategies are in Appendix B: Strategic Concept Maps.

**Supportive Activities**

ACTIVITY		DESCRIPTION
Wayfinding and signage system		Directional signage and safety alerts for Mobility Hubs and transit corridors to announce pedestrian and bicycle activity
Shared parking facility with retail		For park-and-ride use with revenue generation to support transit operations and maintenance—possible location related to Mobility Hub at University Drive and Sample Road.
Urban Plazas and Public Spaces		Acquisition, design and construction—Mobility Hubs TBD
Plan for Public Art		Determine locations, themes, types , scale, etc.
Mobility Hub management and maintenance		Promotion, maintenance and programming, including urban plazas and public spaces

### **Supportive Activities and Programs—Transportation**

ACTIVITY	DESCRIPTION
Multi-jurisdictional TMA or similar organization.	Determine coordinated approach to address transportation/transit needs on Sample Road.
Shuttle feasibility—Seek opportunities for local circulators, jitneys and other small forms of transportation .	Multi-jurisdictional circulator with connections among employment centers (Downtown Coral Springs, Coconut Creek MainStreet, Margate TOC) and Tri-Rail Station in Pompano Beach; possible link to Educational Corridor shuttle
Multimodal connectivity - traffic response programs	Formalize traffic response programs - congestion management on transit corridors, traffic calming on local and collector roads, neighborhood traffic management plans
Area-wide Congestion Management Process	Consider the creation of local Stakeholder/Citizens Commissions to review/comment on Mobility Hubs, Premium Transit and Congestion Management approaches.
Transportation Systems Management and Operations (TSM&O)	Integrated program to optimize the performance of existing infrastructure though implementation of multimodal, cross-jurisdictional systems, services, and projects. Designed to preserve capacity and improve security, safety, and reliability of transportation systems.
Multimodal Quality of Service (MMQOS) Standards	Encourage Broward County to adopt MMQOS standards into Transportation Element of Comprehensive Plan to comply with Mediated Settlement Agreement with DCA
Pedestrian connectivity to private properties	Improve pedestrian infrastructure in parking lots for increased connectivity and comfort. Create pedestrian and bicycle connections to neighborhoods, at local request. (See Appendix for details.)
Bicycle and pedestrian facilities at problem intersections and crossings	Improve connections and safety for bicycle and pedestrian passage through areas that are difficult to traverse, such as arterial crossings, and interchanges with Florida’s Turnpike and Sawgrass Expressway.
Low-cost information/marketing approaches to improve pedestrian and bicycle safety,	Develop print and website campaign to modify traffic behavior and improve multimodal safety. Provide standardized presentation materials for wider distribution.
Transit Ambassadors	Seniors and volunteers providing information and directions to transit users and visitors at Gateway Hubs.

### **Long-Term Implementation of Large Scale Investment in Transportation**

ACTIVITY	DESCRIPTION
Implement State Road 7 PD&E recommendations	Short-, mid-, and long-term multimodal transportation improvements
Premium Transit—Alternatives Analysis—State Road 7	Alternatives Analysis—Identify market segments of choice riders and target premium transit service to likely riders
Premium Transit—Alternatives Analysis—Sample Road	Alternatives Analysis—Identify market segments of choice riders and target premium transit service to likely riders

### **Supportive Activities - Land Use / Zoning and Design Guidelines**

ACTIVITY	DESCRIPTION
Land Use Plan Amendments	Pursue amendments to Broward County Land Use Plan to allow appropriate level of mixed-use transit-supportive development near Community Hubs. (See Page 15 for list of potential new Community Hubs)
Zoning and Design Guidelines	Create regulatory language to require/encourage transit-supportive design near Mobility Hubs. Ensure pedestrian connectivity, comfort and safety.
Development Clearinghouse	Information system geared to clarifying policy to developers
Parking Management Strategies	Improve existing approaches and experiment with new systems to encourage transit-supportive development near Mobility Hubs.

### **Supportive Activities - Business Retention, Attraction and Expansion / Housing**

ACTIVITY	DESCRIPTION
Encourage private investment near transit corridors and Mobility Hubs	Public and private sector marketing and economic development activities at the local level.
Leverage transportation investments.	Explore development incentives, including buying down development costs, with strategic public investments in transportation infrastructure.
Housing	Explore options to apply local Housing Funds to encourage housing infill development near Mobility Hubs on Sample Road and State Road 7.
Housing demonstration project	Address specific market needs - student, seniors, workforce housing - near Mobility Hub.



Source: Place Design Pty. Ltd.

# IMPLEMENTATION

The Action Plan is set forth for implementation. The recommendations, which are both realistic and affordable, support the Vision for the area. The stewards of the Action Plan include the Broward MPO, FDOT, transit operators and municipalities, as well as the private property owners in the area and the local communities.

## Next Steps

The Action Plan contains a list of projects, jurisdictional locations and potential funding sources. The agencies and municipalities with jurisdiction in the Northern Broward County area will need to review and approve the recommendations. The Action Plan cannot advance without the input from the implementing agencies and jurisdictions. With the exception of funding, the municipalities should agree to take responsibility for projects within their jurisdiction. In some cases, the municipalities have already developed streetscape standards and designs for bicycle and pedestrian facilities. Some projects will require the combined efforts of public and private entities.

The Broward MPO will take the lead in identifying specific funding sources for new or additional projects to be added to the 2035 LRTP Cost Feasible Plan. Any proposed amendments to the 2035 LRTP, such as new Mobility Hubs, and pedestrian and bicycle facilities, must have identifiable funding sources to meet the basic condition of the Cost Feasible Plan. Proposed projects must also contribute to fulfilling the Vision of the 2035 LRTP. If the proposed projects meet the criteria, the Broward MPO can amend the 2035 LRTP on the semi-annual amendment cycle.

## Phasing

Implementation of the recommendations will take place over time. Near-term improvements include relatively small-scale projects to improve multimodal connectivity and transit accessibility. Mid-term projects will require actions from local partners to lay the foundation for implementation, such as land use plan amendments, zoning and design guidelines, and economic development measures. In the long term, transit planning studies, such as Major Investment Studies and Alternatives Analyses, are necessary to define Premium Transit Service and the details of the Mobility Hubs, and to lay the foundation for large-scale capital investments. Mixed-use projects and transit-supportive housing fall into this category.

## Future Actions

The Broward MPO agrees on the need to implement the 2035 LRTP, following the outline of the Action Plan and the list of projects. The Action Plan contains five categories of projects and tasks, in groups according to need and a logical sequence of events: near-term (0-3 years), mid-term (3-5 years) and long-term (over 5 years). Near-term phasing does not imply that other projects are not important. Rather, all the projects in the Action Plan combine to complete the full intent of the Livability Study.

“Supportive Projects” are either already under way or part of other efforts that the Broward MPO supports, and are in the Action Plan because they are integral to implementation of the 2035 LRTP .

Early action items provide the foundation for subsequent projects. The following projects are among the early action items under way:

- Pedestrian and bicycle connectivity around existing transit routes
- Municipal coordination for Sample Road transit
- TOC Land Use Plan Amendment on State Road 7 in Coconut Creek
- Economic development incentives in Margate, Coconut Creek around future Gateway Hub at State Road 7 and Sample Road
- CRA infrastructure improvements in Downtown Coral Springs— University Drive and Sample Road



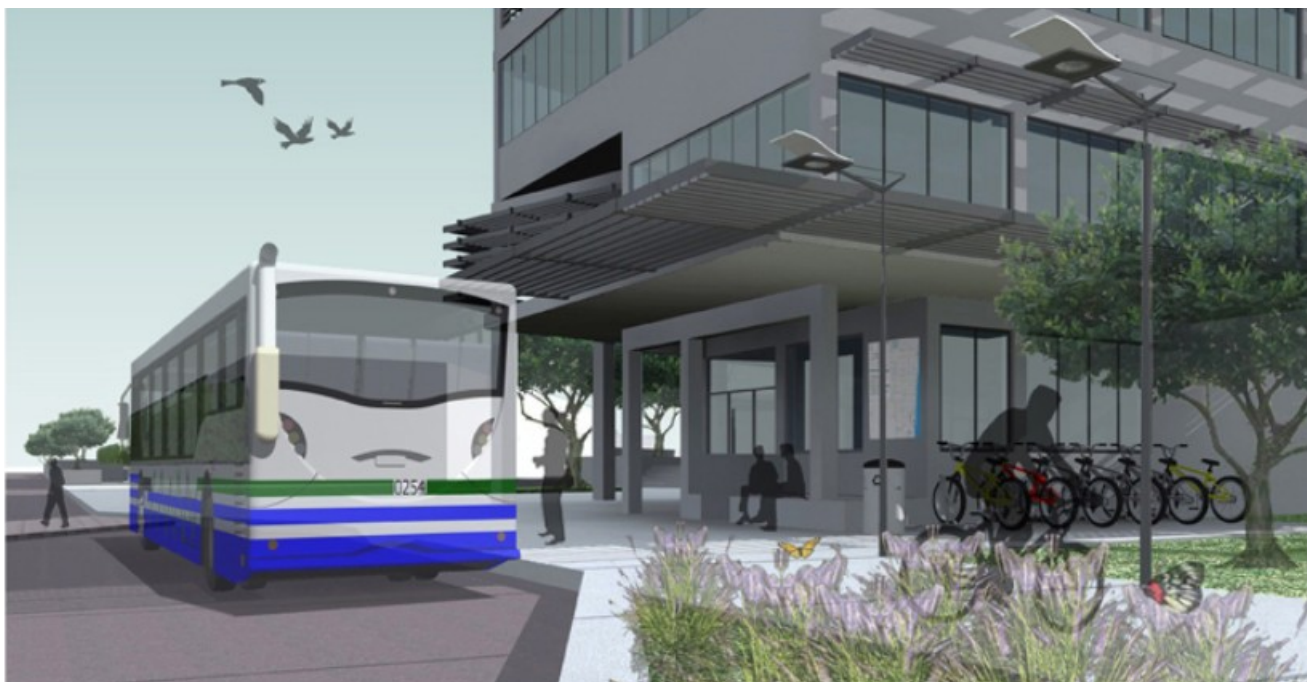
## FUNDING

An ACTION Plan must be a practical plan. Funding for a plan of this magnitude will come from a variety of sources, and implementation will require many years of effort. Cost estimates are based on current information; some projects require further design before it is possible to develop realistic cost estimates.

The Broward MPO will take the lead in identifying funding sources for projects and programs, and all proposed improvements may not be eligible for MPO funding. Potential funding sources should include a combination of public funds including federal, state and local sources, as well as private investment, grants and individual contributions from large numbers of people. The public funds that should leverage private investment and stimulate economic activity. (See Appendix for additional sources.)

Potential funding sources include:

- Broward MPO Allocations of federal transportation funds
- Transportation Enhancement funds
- Local gas tax
- Local Option Sales Tax
- Tax increment financing
- Improvement districts
- Parking revenues
- Local Community Development Block Grant funds
- Municipal Service Benefit Unit (MSBU)
- Municipal Service Taxing Unit (MSTU)
- Bond financing
- Revolving loan funds
- Private foundation grants
- Donations from individuals and groups
- Federal housing assistance
- Housing funds (local)



*Integration of transit facility with private development. Hillsboro Boulevard and Lyons Road.*  
Source: FAU School of Architecture. Bryan Lutz, Student; Anthony Abbate, Instructor. (2010).

## LIVABILITY

The U.S. Department of Housing and Urban Development (HUD), the Department of Transportation (DOT), and the Environmental Protection Agency (EPA) formed the Partnership for Sustainable Communities. They set forth Livability Principles that are the foundation of the Livability Planning Initiative. Among the goals of this Partnership is to encourage communities to develop and support neighborhoods that provide transportation choices and affordable housing while increasing economic competitiveness and directing resources toward areas with existing infrastructure. The 2035 Long Range Transportation Plan provides the basic framework for a system of sustainable transportation and community.

### Livability Principles

- **Provide more transportation choices.** Develop safe, reliable, and economical transportation choices to decrease household transportation costs, reduce our nation's dependence on foreign oil, improve air quality, reduce greenhouse gas emissions, and promote public health.
- **Promote equitable, affordable housing.** Expand location- and energy-efficient housing choices for people of all ages, incomes, races, and ethnicities to increase mobility and lower the combined cost of housing and transportation.
- **Enhance economic competitiveness.** Improve economic competitiveness through reliable and timely access to employment centers, educational opportunities, services and other basic needs by workers, as well as expanded business access to markets.
- **Support existing communities.** Target federal funding toward existing communities—through strategies like transit oriented, mixed-use development, and land recycling—to increase community revitalization and the efficiency of public works investments and safeguard rural landscapes.
- **Coordinate and leverage federal policies and investment.** Align federal policies and funding to remove barriers to collaboration, leverage funding, and increase the accountability and effectiveness of all levels of government to plan for future growth, including making smart energy choices such as locally generated renewable energy
- **Value communities and neighborhoods.** Enhance the unique characteristics of all communities by investing in healthy, safe, and walkable neighborhoods—rural, urban, or suburban.

— HUD-DOT-EPA Partnership for Sustainable Communities

### Access

Improved accessibility benefits the entire community. In implementing the Action Plan recommendations, the Broward MPO must ensure that all projects comply with the accessibility requirements of the Americans with Disabilities Act (ADA). Although improvements may target specific populations, they can result in beneficial enhancements for everyone. As an example, curb cuts for wheelchair access are also useful for roller bladers and baby strollers.

## LESSONS LEARNED

### **The lack of transit-supportive development is due to market forces, not future land use designations and zoning.**

Land development regulations around the proposed Gateway Hubs already allow for a mix of land uses. The decline of housing prices and the difficulty of getting project financing have inhibited development in proximity to the transit corridors. To achieve the Vision of the 2035 LRTP, the Broward MPO and municipalities will need to work together to determine how strategic public investments can leverage private investment that will provide the ridership for Premium Transit.

### **The funding from the Cost Feasible Plan is not a blank check.**

The LRTP Cost Feasible Plan identifies funding for the design and construction of Mobility Hubs. The Broward MPO will coordinate transportation investments with the municipalities to encourage transit ridership. The municipalities will plan for appropriate residential and employment densities to support transit ridership. Private investment should accompany public investment, and the development community will need to demonstrate its commitment to Premium Transit.

### **The construction of Mobility Hubs should follow the definition of Premium Transit Service.**

To make efficient use of the MPO funds, the Broward MPO must adjust the target completion date of 2020 for construction of all Mobility Hubs. The Livability Planning process has made it clear that the planning of Premium Transit Service must precede the Mobility Hubs to ensure the Hubs respond to the Transit Service. Additional study of premium transit service will flesh out the details of the Hubs.

### **Broward MPO should make near-term investments to improve existing transit service and infrastructure.**

While the planning studies are underway to define the Premium Transit Service, the MPO can direct funding to improve the transit experience for current riders. Infrastructure improvements, such as shelters and real-time information, are not dependent on Premium Transit to be of benefit to current riders. Strategic improvements to pedestrian and bicycle connectivity will benefit the surrounding community, even for non-transit riders. The shelters and street furniture can be modular and easy to un-install and move to permanent locations after the determination of the final location of the Hubs.

### **Coordination with municipalities and agencies must occur at many levels.**

Communication must flow at many levels and through many levels: elected officials, management, staff, stakeholders and community. Formal review and approval of Memoranda of Understanding (MOU) are important tools to ensure coordination with municipalities from the start.

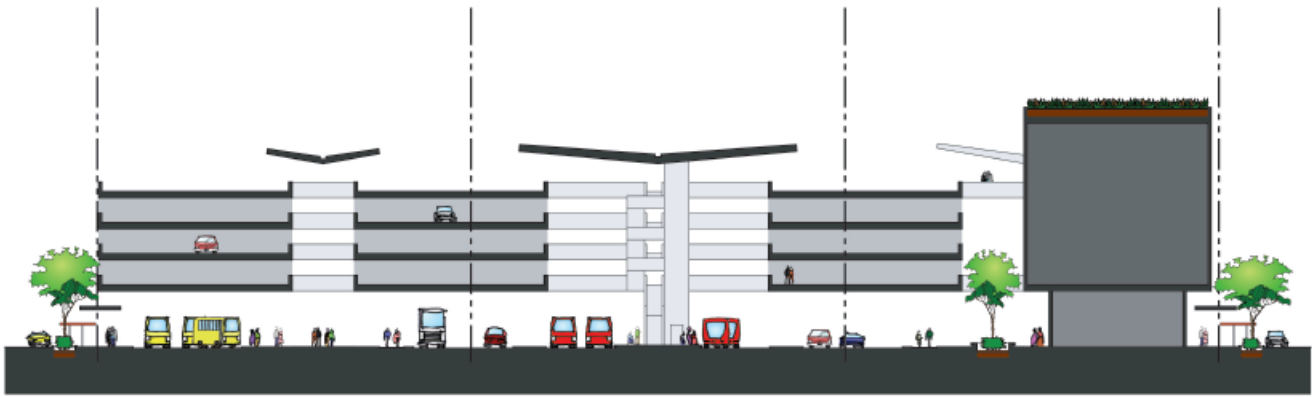
### **The Livability Planning Initiative connects communities through transportation choices.**

Focusing multi-jurisdictional studies around a specific set of issues can create working relationships that lead to collaboration on further issues.

### **The 2035 LRTP has changed the expectations for future Livability Studies.**

Since the MPO adopted the 2035 LRTP in late 2009, the MPO staff worked with the FAU team to seize the opportunity to make mid-course corrections to the Northern Broward County Livability Study. They incorporated the framework of the Cost Feasible Transit Plan into the planning and design tasks, but had less flexibility in adjusting the project timeline based on coursework during consecutive FAU semesters. It became necessary to revise the approach to future Livability Studies.

At this time, the MPO is linking the Livability Planning Initiative with the Congestion Management Process to increase the efficiency of data gathering and analysis tasks, and to set the stage for Alternatives Analyses and capital-intensive efforts. The expectation is that the combined efforts will result in coordinated strategies to address near-term needs while not precluding long-term solutions.



Conceptual cross-section of an intermodal transit transfer facility architecturally integrated with parking, commercial, and office uses. Source: FAU Broward Community Design Collaborative: Anthony Abbate, Alex McManus (2010).

## GLOSSARY

This report and appendices contains many acronyms. Here is a compilation for easy reference:

AASHTO American Association of State Highway and Transportation Officials	ITE Institute of Transportation Engineers
BCDC Broward Community Design Collaborative	LAC Local Activity Center
BCLUP Broward County Land Use Plan	LDR Land Development Regulations
BCT Broward County Transit	LEED Leadership in Energy and Environmental Design
BCTD Broward County Transportation Department	LRT Light Rail Transit
BOCC Broward County Board of County Commissioners	L RTP Long Range Transportation Plan
BRT Bus Rapid Transit	MPO Metropolitan Planning Organization
CDSI College for Design and Social Inquiry (FAU)	MSA Metropolitan Statistical Area
CDBG Community Development Block Grant	NTC Neighborhood Transit Center
CDG Broward County County-wide Community Design Guidebook	PIP Public Involvement Plan
CIP Capital Improvement Project	RAC Regional Activity Center
CRA Community Redevelopment Agency	ROW Right of Way
CSD Context Sensitive Design	SF Square Feet, Area
CSS Context Sensitive Solutions	SFRPC South Florida Regional Planning Council
DCA Florida Department of Community Affairs	SOV Single Occupancy Vehicle
DRC Development Review Committee	SR7 State Road 7 (US 441)
DRI Development of Regional Impact	SSU Subtropical Sustainable Urbanism
EPA Environmental Protection Agency	TAZ Traffic Analysis Zone
FAR Floor Area Ratio (equals the total building area divided by the land area)	TCRPC Treasure Coast Regional Planning Council
FAU Florida Atlantic University	TIF Tax Increment Financing
FDOT Florida Department of Transportation	TIP Transportation Improvement Program
FHWA Federal Highway Administration	TMA Transportation Management Association
FTA Federal Transit Administration	TOC Transit Oriented Corridor
GFA Gross Floor Area	TOD Transit Oriented Design; Transit Oriented Development
GHG Greenhouse Gas	ULDC Broward County Unified Land Development Code
GLA Gross Leasable Area	USDOT United States Department of Transportation
	VUA Vehicular Use Area



# **ACKNOWLEDGEMENTS**

## **Broward Metropolitan Planning Organization (MPO) Board Members**

*City of Coconut Creek*

*City of Coral Springs*  
*City of Coral Springs Community Redevelopment Agency*

*City of Margate*  
*City of Margate Community Redevelopment Agency*

*City of Parkland*

*Broward County Environmental Protection and Growth  
Management Department*

*Broward County Transportation Department*

*Florida Department of Transportation-District IV*

### **Project Research Team**

Florida Atlantic University

Broward Community Design Collaborative at the College for Design and Social Inquiry

*FAU School of Architecture*

*FAU School of Social Work*

*FAU School of Urban and Regional Planning*

### **Interactive Tool Development**

*Place Design Pty. Ltd.*

