



Chapter 3

INNOVATION

3. Innovation

In addition to emphasizing certain types of transportation modes versus others, a secondary challenge for Broward County is the integration of transportation and land use objectives. Transportation planning has too often evaluated transportation investments independent from land use goals. By prioritizing transportation capital investments that promote other modes of transportation over single-occupant vehicles, a different development pattern is encouraged that is more compatible with established land use policies. Exhibit 14 illustrates the transportation innovation projects and how modes interact for the 2035 LRTP.

Transportation innovation provides the principles upon which the recommended 2035 LRTP is based.

Exhibit 14–2035 LRTP Improvements



3.1 Mobility Hubs Concept

The experience of traveling along a route does not characterize a trip entirely. People travel between places. A transit place considers form in addition to function, as well as the social relevance of the place within a community. The nexus between transportation and land use elements of the urban planning practice are fully addressed in the 2035 LRTP through the concept of building Mobility Hubs.

Mobility Hubs have been identified as the places where a majority of people would interact with the proposed multi-modal transportation system. A Mobility Hub is defined as a transit access point with frequent transit service, high development potential, and a critical point for trip generation or transfers within the transit system. They are places of connection for walking, biking, park-n-ride, transit, carpooling, and, depending on the type of Mobility Hub, can also provide direct connections to concentrated activities such as housing, commercial, office, and entertainment.

Exhibit 15—Mobility Hub Concept



This concept also presents an incremental method of improving both the transportation and land use components within communities in a manageable and focused way.

Several types of Mobility Hubs have been identified for the 2035 LRTP and are described on the following pages.

Mobility Hubs are where people connect to:

- Transit;
- Carpool/vanpool;
- Taxis;
- Bikeshare;
- Carshare;
- Traveler information centers;
- Bicycle/pedestrian/greenway paths; and
- Each other.



Gateway Hub Concept

An element of the Gateway Hub concept is to create gathering places for people to access transit and other amenities.



Anchor Hub Concept

Anchor Hubs may feature stations that are partially enclosed structures.

3.1.1 Gateway Hubs

Characteristics that define Gateway Hubs are as follows:

- Exhibit high forecast boardings and alightings (greater than 2,200) within the future 2035 transit network;
- An area surrounded by higher density mixed use developments including downtown areas, transit oriented corridors (TOCs), and transit oriented developments (TODs) defined in the Broward County Future Land Use Plan; and
- Provide connections for two or more high capacity (BRT, Rail) lines.

Strategies for Gateway Hubs include:

- Enclosed shelters for travelers;
- Real-time passenger information systems;
- Unique architecture and signage;
- Surface or structured parking as appropriate;
- Integration with surrounding development;
- Pedestrian linkage improvements within a half-mile radius;
- Bicycle linkage improvements within a two-mile radius;
- Restrooms and community spaces as appropriate;
- Public art;
- Access priority to bike/pedestrian and transit patrons over other modes;
- Secure and weather protected waiting areas;
- Accommodations for potential bikeshare/carshare programs;
- Pre-board ticketing options; and
- Taxi bays.

3.1.2 Anchor Hubs

Characteristics that define Anchor Hubs are as follows:

- Exhibit moderate to high forecast boardings and alightings (1,500 to 2,200) within the future 2035 overall transit network;
- An area served by at least one high capacity transit line (such as BRT or LRT); and
- Located near major institutions, employment centers, town centers, and regional shopping centers that are similar to the local activity centers (LACs) and/or regional activity centers (RACs). These are identified by various local jurisdictions in Broward County and have the potential to accommodate new transit and pedestrian oriented development.

Strategies for Anchor Hubs include:

- Enclosed or partially-enclosed shelters for travelers;
- Real-time passenger information systems;
- Unique architecture and signage;
- Surface or structured parking as appropriate;
- Integration with surrounding development;
- Pedestrian linkage improvements within a quarter-mile radius;
- Bicycle linkage improvements within a one-mile radius
- Access priority to bike/pedestrian and transit patrons over other modes;
- Lighted waiting areas;
- Accommodations for potential bikeshare programs;
- Pre-board ticketing;
- Free phone for taxi services; and
- Kiss-n-ride and taxi areas.



Community Hub Concept
Community Hubs are designed to be identifiable locations that complement the neighborhood.

3.1.3 Community Hubs

Characteristics that define Community Hubs are as follows:

- Area served by Rapid Bus services; and
- Attract more local trips than regional trips.

Strategies for Community Hubs include:

- Partially-enclosed shelters for travelers;
- Real-time passenger information systems (in locations where the infrastructure is readily available);
- Pedestrian linkage improvements within a quarter-mile radius;
- Bicycle linkage improvements within a one-mile radius;
- Lighted waiting areas; and
- Timed transfers for connecting to transit services.

3.2 Premium Transit Service

Two types of Premium Transit service were defined during the 2035 LRTP process to prioritize investments based on exhibited future demand for service—Premium High Capacity and Premium Rapid Bus. Both would offer high frequencies, modern vehicles, streamlined ticketing, and passenger information services. Premium Transit investments provide a balanced approach to more widespread and timely improvements to address different levels of mobility solutions, and to enhance the supporting local bus network. A description of each type follows.



Bus Rapid Transit is typically separated from traffic.



Rapid Bus features Traffic Signal Priority.

3.2.1 Characteristics of Premium High Capacity

Premium High Capacity transit service would include Light Rail Transit (LRT), Streetcar, People Mover, Bus Rapid Transit (BRT) or Commuter Rail Transit (CRT) technologies with all or part of the alignment operating in a fixed guideway (dedicated transit lanes) requiring more costly construction of new infrastructure. Specific features of Premium High Capacity are as follows:

- At least 50% of the project includes a fixed guideway or dedicated transit lane;
- Peak/Off-peak headway is 5/7.5 minutes;
- Includes transit signal priority;
- Off-board fare collection system;
- Articulated low-floor transit vehicles;
- Real-time passenger information;
- Qualifies for FTA New Starts funding (50% or more fixed guideway during all periods; > \$250 million project); and
- Qualifies for FTA Small Starts funding (at least 50% fixed guideway during peak; <=\$250 million project).

3.2.2 Characteristics of Premium Rapid Bus

Premium Rapid Bus transit service with the addition of traffic signal priority, would operate high frequency service with modern, distinctive vehicles in mixed traffic, and would enhance the supporting bus network to provide connections to Premium High Capacity transit. Specific features of Premium Rapid Bus include:

- Operates in mixed traffic;
- Peak/Off-peak headway is 10/15 minutes;
- Includes transit signal priority;
- Off-board fare collection system;
- Articulated low-floor transit vehicles;
- Real-time passenger information; and
- Qualifies for FTA Very Small Starts funding (<\$50 million per project).



Universal Card Fare

The Mobility Hubs Concept utilizes Universal Card Fare to be used for all transit and amenities.