

Southeast Florida TOD Inventory and Map

The overall purpose of the TOD inventory and map is to share information. Many different partner agencies and organizations each develop a variety of plans and other documents that are related to TOD and station area planning. It is nearly impossible for a planner to keep track of all the TOD-related documents. FDOT has funded the creation of an inventory and map to be a resource where planners and other interested stakeholders can find many of the TOD-related documents that exist in one place.

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With the multitude of agency partners and documents that exist, the TOD inventory and map needs frequent input from the various partners to ensure that the information within it stays up to date. Its relevance and accuracy depends on others providing information on a consistent basis.

The inventory and online map include any corridor and/or station location that the agency partners feel is relevant and worth including. The inventory is simply a compilation and display of information as it is available. This information can function as a foundation for continuing efforts toward the goal of expanding TOD throughout the region. The inventory and online map also serve as an ideal starting point for gathering the necessary documents to perform an assessment of a station area's readiness for TOD.

[Southeast Florida TOD Inventory Map](#)

[TOD Readiness Tool](#)

ABOUT

The TOD Inventory is a robust database of transit stations, services, and their associated plans in the three-county region. The inventory is not an inclusive database of every transit project, service, or location, but is a living document that will be updated on a regular basis. For the most part, the terminology and definitions used in the TOD inventory are based on those used by the respective transit agency, Metropolitan Planning Organization, or other entity. Other general terminology and guidance for preparing the inventory and map is based on the [Framework for TOD in Florida](#) and the [Florida TOD Guidebook](#). The status of individual stations and transit services that are not yet under construction or existing are based on each project manager's discretion for each project.

DEFINITIONS

Region – Broward, Miami-Dade, and Palm Beach counties.

Stations (See the section on [Non-Existing Transit Services](#) for more information on how these corridors and stations were selected)

- Existing and Under Construction Transit Services – All stations for existing and under construction premium transit, local bus hubs, and park and ride facility with amenities, as shown in each transit agency's Transit Development Plan (TDP) or website.
- Non-Existing Transit Services – The stations as shown in the most up-to-date planning document for the transit service (the "source" document) or as requested by the transit service's project manager.

Transit Types – The definitions below are from the [Framework for TOD in Florida](#) and the [Florida TOD Guidebook](#). The transit type assigned to each transit service in the map and inventory was derived from the respective agency's own classification, where available. When not specified, the most appropriate transit type from those listed below was assigned.

- *Premium Transit* – Includes fixed-rail modes (e.g., heavy rail, commuter rail, intercity passenger rail, light rail, streetcar), other fixed-guideway modes (e.g., bus rapid transit), and high frequency local/express bus.
 - *Heavy Rail* – A rail-based technology consisting of large, high passenger capacity cars and typically realizes operational efficiency through large passenger volumes. This transit types operate along exclusive, dedicated rail right-of-way. Peak hour frequencies are ideally between 5 and 10 minutes. An examples is MDT's Metrorail.
 - *Commuter Rail* – A rail-based technology consisting of large, high passenger capacity cars and typically realizes operational efficiency through large passenger volumes. This transit types operate along exclusive, dedicated rail right-of-way. The travel shed is regional in nature, spanning many miles, and stations tend to be located farther apart. Peak hour frequencies are ideally between 20 and 30 minutes. An example is SFRTA's Tri-Rail.
 - *Intercity Passenger Rail* – A high passenger volume, sometimes high speed service, located in dedicated rail right-of-way connecting centers of population and employment located approximately 80 to 500 miles or further apart. An example is FECI's All Aboard Florida.
 - *Light Rail* – A rail-based technology consisting of smaller cars with lower passenger capacity compared to heavy rail and commuter rail. Light rail can operate in dedicated rail or shared right of way. The optimal travel shed is typically less than then commuter rail travel shed. Peak hour frequencies are ideally between 5 and 30 minutes.
 - *Streetcar* – An electric vehicle based technology that runs on rails typically located in existing rights of way. Modern streetcars typically operate as urban circulators oriented towards shorter trips. Stations are located close together with a heavy emphasis on walk access.

Streetcar alignments are often located in shared traffic lanes but can also be located in dedicated rail right-of-way. Service frequencies tend to range from 8 to 15 minutes. An example is the WAVE.

- *Automated Guideway Transit (Automated People Mover)* - An electric railway (single or multi-car trains) of guided transit vehicles operating without an onboard crew¹. Typically functions as urban circulators oriented towards shorter trips. An example is MDT's Metromover.
- *Bus Rapid Transit (BRT)* – A rubber wheel-based technology that operates in mixed traffic/shared lanes or in dedicated right-of-way. Operational efficiency is maximized in dedicated right-of-way operation, but transit signal priority and other means can assist travel speeds when operated in mixed traffic. Service frequencies tend to range from 8 to 20 minutes. Examples include the I-95 Express services offered by BCT and MDT.
- *Express Bus or Limited Stop Bus* – A rubber wheel-based technology that operates in mixed traffic/shared lanes that bypasses a number of stops that are served by the local bus services. Express Bus may also refer to commuter buses servicing suburban park and ride facilities and downtown central business districts. These services utilize managed lanes on the interstates.
- *Local Bus* - A rubber wheel-based technology that operates in mixed traffic/shared lanes with numerous stops.
- *Shuttle* - A rubber wheel-based technology that operates in mixed traffic/shared lanes and is limited to a small geographic area or to short-distance trips². This service typically provides connections between several, well defined locations such as with a commuter rail station, business park, or downtown. Examples include the Biscayne Miami Trolley and the Delray Downtown Roundabout Trolley.

Station Area – The one-half mile radius, or approximately 500 acres, surrounding a transit station composed of the transit core and transit neighborhood. The benefits of TOD and planning for TOD do not necessarily stop at this one-half mile radius. However, the one-half mile radius is a well-established length corresponding to the distance people are willing to walk to access premium transit.

Status

- *Existing* – The service is in-place and operational.
- *Under Construction* – The facility is currently being built.
- *For those stations and transit services that are not yet under construction or existing* - the status reflects the project manager's description of the station or services progress at the time of the

¹ <http://www.apta.com/resources/statistics/Pages/glossary.aspx#8>

² Ibid

inventory's last update. Further clarification is offered by the project's prioritization its respective Long Range Transportation Plan (LRTP).

Transit Providers – The region is served by a number of transit agencies and other entities that operate transit services. The transit providers include:

- o [Broward County Transit](#) (BCT)
- o [Miami-Dade Transit](#) (MDT)
- o [Palm Tran](#)
- o [South Florida Regional Transportation Authority](#) (SFRTA)
- o [Florida East Coast Industries](#) (All Aboard Florida)
- o Local Cities – Shuttles and community buses

Lead Agencies – Many plans are produced through collaboration and coordination amongst and between numerous planning partners and entities. The lead agency for the purpose of the inventory, is the planning partner for which the plan was produced on behalf of.

THE MAP

The TOD Map presents the data in the TOD Inventory as an easy-to-use, graphical interface. Each Transit Station is represented as a point on the map. The rail-based premium transit corridors and BRT corridors are shown on the map as lines representing their route. The plans contained within the livable communities' database are also shown on the map as transparent polygons. Clicking on any of these features opens a popup box with further information on that feature. The TOD Map was created in ArcGIS and is hosted online on ArcGIS Online as a web map application. The map application provides several tools for analysis and measurement, is searchable by station name, and has multiple base map options to choose from.

NON-EXISTING TRANSIT SERVICES

Through the review of plans and partner websites and input received from planning partners, the project team identified several non-existing corridors to potentially add to the map, including Oakland Park Boulevard, Central Broward East-West, and the Miami Streetcar, and the Beach Connection (fka Baylink), among others.

The project team contact the NEPA project manager for each potential corridor to understand how far along in the planning process each potential corridor was and to gauge the project managers' comfort level in showing the corridor and/or station locations on a map. Some project managers said they are comfortable adding in the corridor and/or station locations. Others voiced their approval given certain conditions. Others were unsure, and requested that they be able view a revised version of the map to see which other corridors were included, so they could propose any additional corridors to be consistent. Based on the project team's brief research on the status of the potential corridors to add, including correspondence with agency representatives

who are closely involved in the planning projects for these corridors, the following corridors and station locations have been included in the inventory and map:

- **Oakland Park Boulevard** (Source: [Oakland Park Boulevard Alternatives Analysis Final Report](#)) – Khalilah Ffrench, FDOT NEPA project manager, recommends showing the corridor alignment of the recommended build alternative, which is a Business Access and Transit (BAT) lane with bus or streetcar, and the mobility hubs (from the Broward MPO 2035 LRTP) that are located along the corridor alignment.
- **Central Broward East-West** (Source: [Locally Preferred Alternative Selection Report, Part 1](#)) - Khalilah Ffrench, FDOT NEPA project manager, recommends showing the corridor alignment of the LPA, which is a mix of premium bus and modern streetcar, and the 2035 mobility hubs that are located along the corridor alignment. This alignment includes an extension of the Wave streetcar.
- **Tri-Rail (Northern Jupiter) Extension** – Joe Quinty, SFRTA, recommended showing the corridor alignment of the Northwood Connection and new Tri-Rail service from West Palm Beach to Jupiter along the FEC railroad tracks, and future Tri-Rail service at the three initial stations listed in the cost feasible 2040 Regional LRTP (Jupiter/Toney Penna Dr, Palm Beach Gardens/PGA Blvd, and St Mary’s Medical Center/45th St).
- **Glades Road Tri-Rail Station** - Joe Quinty, SFRTA, recommended showing the location of a new Tri-Rail station to be located along the CSX railroad at Glades Road in Boca Raton.
- **Beach Connection (fka Baylink)** (Source: Beach Corridor Transit Connection Study Final Report, dated June 2015) – Wilson Fernandez, Miami-Dade MPO, recommended including the “Direct Connection” alternative alignment from the report, which shows the alignment and 15 station locations. The Beach Connection corridor is included in the Miami-Dade MPO’s 2040 LRTP as a partially funded project, and was ranked “medium-high” in the Regional LRTP’s list of unfunded needs.
- **Tri-Rail Coastal Link** (Source: [Station Refinement Report](#), Appendix 6 to the Tri-Rail Coastal Link Study Preliminary Project Development Report, dated April 2014) – The Tri-Rail Coastal Link corridor and stations have received a significant level of planning effort. Amie Goddeau, FDOT Tri-Rail Coastal Link Project Manager, requested that the third tier ‘future evaluation’ stations be removed from the TOD map and that she and her consultants review the corridor and stations show on the map prior to its public release.
- **Miami-Dade Bus Rapid Transit along Four Transit Corridors: NW 27th Ave, W Flagler St, Kendall Dr, and Douglas Rd** (Source: [Bus Rapid Transit Implementation Plan along Transit Corridors](#), dated April 2015) – Wilson Fernandez, Miami-Dade MPO, noted that there are many BRT studies underway in Miami-Dade County. The newly released Bus Rapid Transit Implementation Plan outlines BRT recommendations along four transit corridors. The recommendations within this report are comparable to the recommendations for the Oakland Park Boulevard and Central Broward East-West corridors to be shown in Broward County.

The following corridors and station locations were not included in the map. However, the relevant planning documents are included in the plans inventory.

- **Miami Streetcar** – The Miami DDA's [interactive transportation map](#) includes an alignment for the Miami Streetcar, and the project is included in the Miami-Dade MPO's 2040 LRTP as an unfunded need. The Miami Streetcar project is also included in the Miami DDA's June 2015 Market Insights report. However, multiple alignments exist in other planning documents (including the DDA's [2025 Downtown Miami Master Plan](#) from 2009 and the [City of Miami Initial Streetcar Corridor Feasibility Study Final Report](#) from 2005) that differ from the alignment in the DDA interactive map.
- **Metromover Expansion** (Source: [Metromover System Expansion Study](#), dated September, 2014) – Wilson Fernandez, Miami-Dade MPO, noted that many other transit projects, including the countywide BRT system, will likely receive funding before the Metromover expansion.

FUTURE IMPROVEMENTS

The TOD Inventory and Map will be updated on a regular basis. The updates will include adding stations and premium transit services that were not included in early versions of the inventory and map. The project team welcomes suggestions on data to add and can incorporate existing GIS shapefiles provided by planning partners. The livable communities database will be updated at the end of 2015. As ESRI Online offers new services, the TOD Map can incorporate the additional functionality.