



Miami-Dade  
Metropolitan Planning Organization



## SW 152nd Street Corridor Transportation Study

The  **Gannett Fleming** Team

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## Executive Summary

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The SW 152<sup>nd</sup> Street Corridor Study focuses on an approximately 7.5-mile long stretch of SW 152<sup>nd</sup> Street (also known as Coral Reef Drive and Zoo Boulevard) from SW 162<sup>nd</sup> Avenue to SW 89<sup>th</sup> Court, just east of US-1. The south-western area of Miami-Dade County (County) has witnessed considerable growth in the past few decades. During this period, SW 152<sup>nd</sup> Street has transformed from a predominantly rural roadway to an urban/suburban arterial carrying large amounts of vehicular traffic. The severity and duration of traffic congestion along this corridor has raised concerns about the comprehensive impact of committed and proposed developments along the corridor. The main goal of this study is to identify short (2010) and mid-term (2015) mobility alternatives for improving traffic flow along the SW 152<sup>nd</sup> Street Corridor. Other longer term improvements, beyond 2015, were also identified for further study.

An existing conditions analysis was conducted and projects in the County's 2030 Long-Range Transportation Plan (LRTP) as well as other projects being considered by agencies were further evaluated. To analyze the impact of new development in the area, a travel desire analysis was performed to determine where residents of the area are traveling from and to. In total, nearly 7,600 residential units, 370,000 sq. ft. of office and 430,000 sq. ft. of retail space is planned or proposed along the corridor, mainly west of the Homestead Extension of Florida's Turnpike (HEFT). The travel desire analysis indicated that this development is projected to have significant impact on the traffic patterns along and around the study corridor. The results of the analysis were also used to develop potential alternatives for further analysis.

The Miami Urban Area Transportation System (MUATS) travel demand model developed for the 2030 Miami-Dade Long Range Transportation Plan (LRTP) was used to test roadway and transit alternatives. Other improvements such as intersection improvements, transit facility, bicycle and pedestrian improvements were considered for all roadway and transit alternatives.

The following improvements are recommended for implementation.

### Short-term Improvements (2008-2010)

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- Intersection improvements along the SW 152<sup>nd</sup> Street Corridor at SW 137<sup>th</sup> Avenue, SW 117<sup>th</sup> Avenue, and US-1.
  - Intersection improvements at SW 177<sup>th</sup> Avenue, SW 162<sup>nd</sup> Avenue, and SW 157<sup>th</sup> Avenue are recommended if the proposed Parkland DRI is approved.
  - Intersection improvements at SW 124<sup>th</sup> Avenue are recommended if the proposed Miami Metro Zoo Entertainment Area DRI is approved.
- Access management related improvements, closing curb cuts for better traffic operations, are recommended between SW 112<sup>th</sup> Avenue and SW 107<sup>th</sup> Avenue.

- ✦ Transit stop infrastructure improvements are recommended at stops at major intersections (SW 162<sup>nd</sup> Avenue, SW 157<sup>th</sup> Avenue, SW 152<sup>nd</sup> Avenue, SW 147<sup>th</sup> Avenue, SW 142<sup>nd</sup> Avenue, SW 137<sup>th</sup> Avenue, SW 124<sup>th</sup> Avenue, SW 112<sup>th</sup> Avenue, SW 102<sup>nd</sup> Avenue, and US-1).
- ✦ Enhancements to the Park-and-Ride Lot at SW 117<sup>th</sup> Avenue and SW 152<sup>nd</sup> Street: For the eastbound Coral Reef Max service, left-turns are needed to enter and exit this lot. The County Public Works Department, Florida Department of Transportation (FDOT) and the Turnpike Enterprise are coordinating improvements at the intersection of SW 152<sup>nd</sup> Street and SW 117<sup>th</sup> Avenue. The plans should involve analysis of transit access to and from the park-and-ride lot at SW 152<sup>nd</sup> Avenue and SW 117<sup>th</sup> Avenue.

### Mid-term Improvements (2010-2015)

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- ✦ **Capacity Improvement Projects:** The planned improvements along SW 162<sup>nd</sup> Avenue and SW 157<sup>th</sup> Avenue should be supplemented by additional capacity improvements. The following roadway links should be widened to increase their capacity.
  - SW 162<sup>nd</sup> Avenue, between SW 152<sup>nd</sup> Street and SW 136<sup>th</sup> Street
  - SW 157<sup>th</sup> Avenue, between SW 120<sup>th</sup> Street and SW 184<sup>th</sup> Street

The SW 157<sup>th</sup> Avenue widening project between SW 184<sup>th</sup> and SW 152<sup>nd</sup> Street is already in the LRTP. However, if the committed and proposed developments are built by 2015, the planned widening project would not be sufficient to meet the projected demand. The widening of these two roadway links is recommended to be tied with the implementation of the development near the western terminus of the study corridor.

- ✦ **SW 152<sup>nd</sup> Street Widening:** The widening of SW 152<sup>nd</sup> Street from SW 117<sup>th</sup> Avenue to US-1 is the most effective alternative to relieving congestion along the study corridor. Currently this is a Priority 3 project and is programmed to be implemented between 2016 and 2020. This project should be moved up in Priority and funding identified as a part of the LRTP update process. The proposed widening project should include 5-foot wide on-street bicycle lanes.
- ✦ **Express Bus from the park-and-ride lot at the HEFT to FIU:** Express bus service on the HEFT to FIU is an attractive transit strategy to build overall transit system ridership. This express bus alternative is projected to generate significant ridership. The transit service along the HEFT can be more attractive by allowing the express bus to travel on existing shoulders along the HEFT, which can potentially reduce the on-board travel time. The service can originate from the park-and-ride lot at SW 117<sup>th</sup> Avenue or from SW 177<sup>th</sup> Avenue, if the Parkland DRI is approved.

- ✦ **Transportation Demand Management (TDM) Strategies:** Nearly 370,000 sq. ft. of office space and 430,000 sq. ft. of retail is committed or proposed along the corridor. The Miami Metro Zoo Entertainment Area is also likely to be a major employment hub along the corridor. Existing and future employers should be required to develop a carpool/vanpool strategy and/or other TDM strategies as part of the DRI approval process. This could include locating major transit stops or park-and-ride

facilities within their developments. TDM strategies should be coordinated with South Florida Commuter Services.

### **Long-term Improvements (2015-2030)**

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- **SW 136<sup>th</sup> Street Connection to SR-874:** SW 136<sup>th</sup> Street connection to SR-874 improves mobility in the study area which will provide significant indirect benefits to the study corridor. A limited-access facility along SW 136<sup>th</sup> Street should continue to be evaluated.
- **BRT along SW 152<sup>nd</sup> Street from SW 137<sup>th</sup>/177<sup>th</sup> Avenue to Dadeland South:** A BRT service on dedicated lanes can connect the County's western suburbs to the Downtown and west-central region. This BRT service would provide a transit connection to the existing Metrorail service and future SW 137<sup>th</sup> Avenue BRT or the HEFT/SW 107<sup>th</sup> Avenue BRT or Metrorail, if implemented as a part of the Kendall-Link Corridor.
- **Bicycle Facilities along SW 152<sup>nd</sup> Street:** On or off-road bicycle facilities from SW 162<sup>nd</sup> Avenue to the Metro Zoo entrance will connect residential areas to a major recreational facility (Metro Zoo) and are recommended to improve mobility along the corridor.

### **Policy Recommendations**

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- **Improve Network Connections to SW 177<sup>th</sup> Avenue:** A significant amount of traffic is going east-west to access major north-south facilities. It is recommended that this east-west traffic should be provided with an attractive "back-door" access through SW 177<sup>th</sup> Avenue. Therefore, major east-west arterials such as SW 152<sup>nd</sup> Street, SW 136<sup>th</sup> Street, SW 184<sup>th</sup> Street and SW 177<sup>th</sup> Avenue should be considered for more capacity beyond what is already planned in the LRTP to make this potential route more attractive.
- **Address Land Use-Transportation Nexus:** The ultimate goal of congestion relief in the long-term is expected to require planning and coordination with several agencies in short- and mid-term horizons. The intersections at US-1, SW 137<sup>th</sup> Avenue, and SW 117<sup>th</sup> Avenue should be developed into transit-oriented development nodes that can support premium-transit service.

# 1 Introduction

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The study focuses on an approximately 7.5-mile long stretch of SW 152<sup>nd</sup> Street (also known as Coral Reef Dr and Zoo Blvd) from SW 162<sup>nd</sup> Avenue to SW 89<sup>th</sup> Court (Exhibit 1). The south-western area of Miami-Dade County (County) has witnessed considerable growth in the past few decades. During this period, SW 152<sup>nd</sup> Street has transformed from a predominantly rural roadway to an urban/suburban arterial carrying large amounts of vehicular traffic. The severity and duration of traffic congestion along this corridor has raised concerns about the comprehensive impact of proposed new developments along the corridor. To address these concerns, the Miami-Dade Metropolitan Planning Organization (MPO) commissioned this study to identify potential mobility improvements measures.

## 1.1 Purpose

The goal of this study is to:

*Identify mobility alternatives for improving traffic flow along SW 152<sup>nd</sup> Street from SW 162<sup>nd</sup> Avenue to 89<sup>th</sup> Court, just east of US-1.*

The focus of the study is to identify measures for short-and mid-term mobility improvements including early implementation of proposed and planned transportation improvements along SW 152<sup>nd</sup> Street. In the process, some long-term improvements are also identified. The recommended alternatives could serve as the basis for the development or modification of work programs established by the Florida Department of Transportation (FDOT), Miami-Dade Transit (MDT), Miami-Dade Expressway Authority (MDX), and the Miami-Dade Public Works Department (PWD). In addition, some of these recommendations could be implemented as part of development approval process for various developments under consideration along or near the corridor.

## 1.2 Study Corridor Description

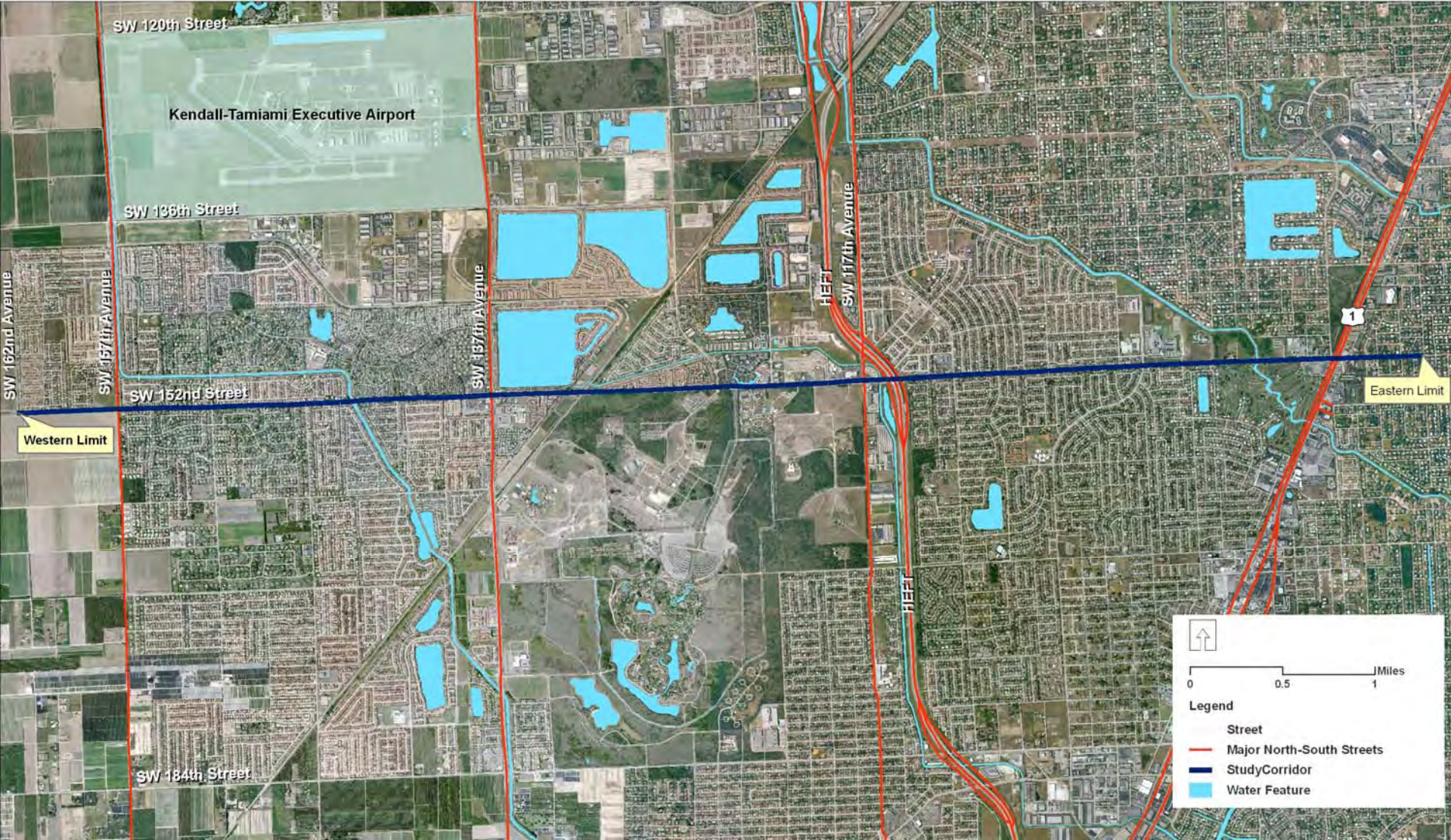
This 7.5-mile long study corridor is an east-west street that intersects with the Homestead Extension of the Florida Turnpike (HEFT)/SR-921, the MDT Busway, US-1, and CSX railroad tracks. Other major north-south streets intersecting the study corridor are:

- ↘ SW 117<sup>th</sup> Avenue
- ↘ SW 137<sup>th</sup> Avenue
- ↘ SW 157<sup>th</sup> Avenue

The study corridor has HEFT on- and off-ramps at SW 117<sup>th</sup> Avenue. The nearest HEFT interchanges to the north and south of the corridor are at SW 88<sup>th</sup> Street and SW 184<sup>th</sup> Street respectively (Exhibit 1). The 2.5-mile long stretch of SW 152<sup>nd</sup> Street between the HEFT and US-1 is State Road (SR-992) and the 2.2-mile long stretch between the HEFT and SW 162<sup>nd</sup> Avenue is a County Road.



Exhibit 1: Study Corridor





### 1.3 Associated Projects

The Miami-Dade 2030 Long Range Transportation Plan (LRTP) and the 2008 Transportation Improvement Program (TIP) were reviewed to obtain information regarding on-going and planned capacity improvement projects along the study corridor and nearby roadways. A summary of the TIP projects is provided in Table 1 and Exhibit 2 and LRTP projects in Table 2 and Exhibit 3.

**Table 1: Projects in the County's 2008 TIP**

Location	From	To	Improvement	Construction Year
SW 184 <sup>th</sup> Street	SW 147 <sup>th</sup> Avenue	SW 137 <sup>th</sup> Avenue	Widen from 2 to 4 lanes	2009-2010
SW 184 <sup>th</sup> Street	SW 137 <sup>th</sup> Avenue	SW 127 <sup>th</sup> Avenue	Widen from 2 to 4 lanes	Under construction
SW 160 <sup>th</sup> Street	SW 147 <sup>th</sup> Avenue	SW 137 <sup>th</sup> Avenue	New 4 lanes	2007-2008
SW 152 <sup>nd</sup> Street	SW 157 <sup>th</sup> Avenue	SW 147 <sup>th</sup> Avenue	Widen from 2 to 4 lanes	2010-2011
SW 136 <sup>th</sup> Street	SW 162 <sup>nd</sup> Avenue	SW 157 <sup>th</sup> Avenue	New 2 lanes	Private developer
SW 136 <sup>th</sup> Street	SW 149 <sup>th</sup> Avenue	SW 139 <sup>th</sup> Court	Widen from 2 to 4 lanes	2008-2009
SW 136 <sup>th</sup> Street	SW 127 <sup>th</sup> Avenue	HEFT	Widen from 2 to 4 lanes	2011-2012
SW 120 <sup>th</sup> Street	SW 157 <sup>th</sup> Avenue	SW 152 <sup>nd</sup> Avenue	Widen from 2 to 4 lanes	Private developer
SW 120 <sup>th</sup> Street	SW 137 <sup>th</sup> Avenue	SW 117 <sup>th</sup> Avenue	Widen from 4 to 6 lanes	2011-2012
SW 120 <sup>th</sup> Street			New 4 lane bridge over Black Creek Canal	Under construction
SW 162 <sup>nd</sup> Avenue	SW 136 <sup>th</sup> Street	RR right-of-way (ROW)	New 2 lanes	Private developer
SW 157 <sup>th</sup> Avenue	SW 184 <sup>th</sup> Street	SW 152 <sup>nd</sup> Street	Widen from 2 to 4 lanes	2008-2009
SW 157 <sup>th</sup> Avenue	SW 136 <sup>th</sup> Street	SW 120 <sup>th</sup> Street	New 4 lanes	2008-2009
SW 127 <sup>th</sup> Avenue	SW 88 <sup>th</sup> Street	SW 120 <sup>th</sup> Street	Widen to 4 lanes	2007-2008
SW 127 <sup>th</sup> Avenue	SW 136 <sup>th</sup> Street	SW 124 <sup>th</sup> Street	New 2 of future 4 lanes	Under construction
SW 117 <sup>th</sup> Avenue	SW 152 <sup>nd</sup> Street	SW 184 <sup>th</sup> Street	Widen from 2 to 4 lanes	Under construction
HEFT / SR-821	South of SW 117 <sup>th</sup> Avenue	S of SW 88 <sup>th</sup> Street	Widen from 10 to 12 lanes	2009-2010

Source: Miami-Dade Metropolitan Planning Organization, 2008 Transportation Improvement Program

Exhibit 2: Projects in the County's 2008 TIP



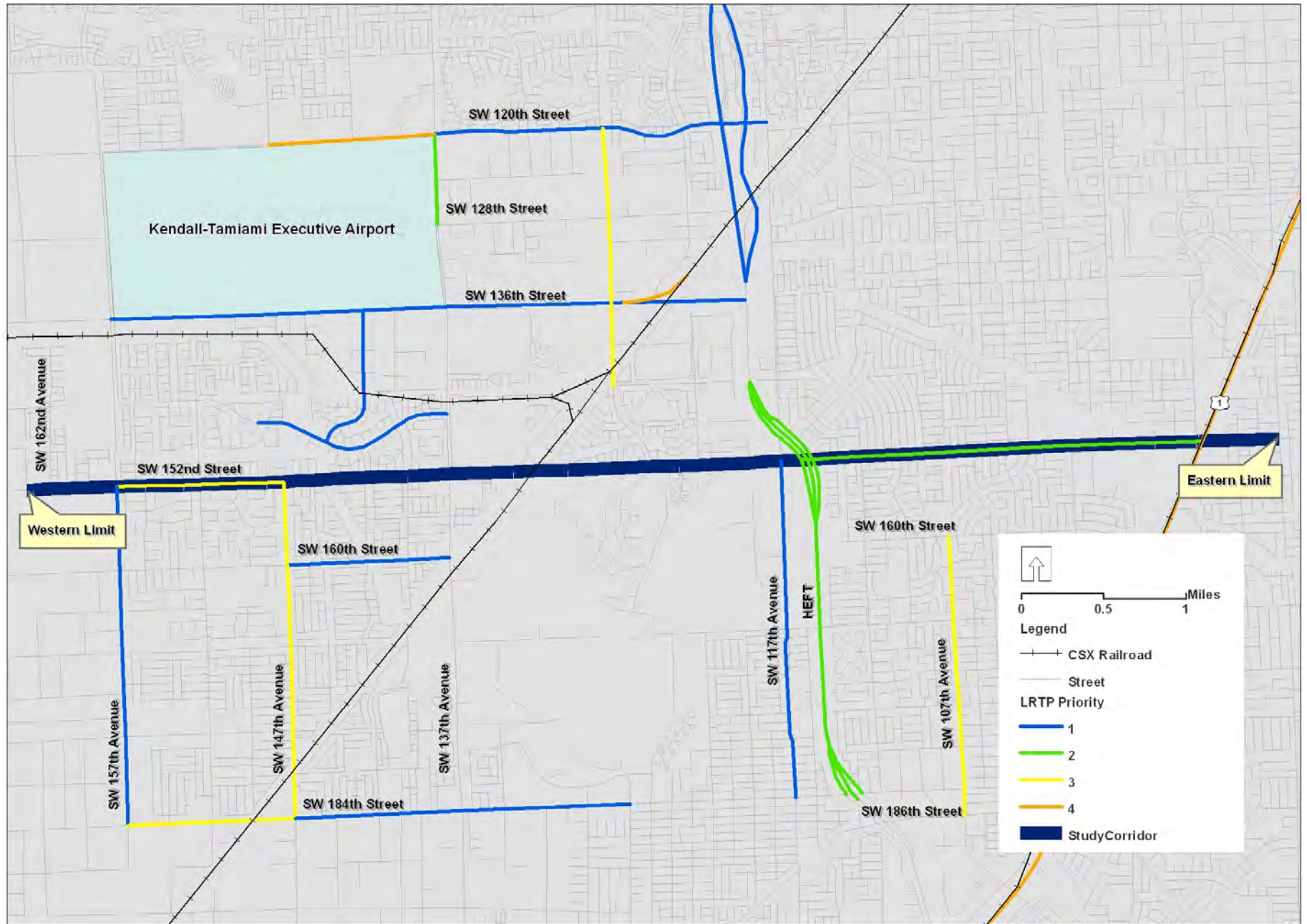


**Table 2: Projects in the County's 2030 LRTP**

Roadway/Transit	From	To	Improvement
<b>Priority 1 Projects (Funded by 2009)</b>			
SW 117 <sup>th</sup> Avenue	SW 184 <sup>th</sup> Street	SW 152 <sup>nd</sup> Street	Widen from 2 to 4 lanes
SW 157 <sup>th</sup> Avenue	SW 184 <sup>th</sup> Street	SW 152 <sup>nd</sup> Street	Widen from 2 to 4 lanes
SW 184 <sup>th</sup> Street	SW 147 <sup>th</sup> Avenue	SW 137 <sup>th</sup> Avenue	Widen from 2 to 4 lanes
SW 184 <sup>th</sup> Street	SW 137 <sup>th</sup> Avenue	SW 127 <sup>th</sup> Avenue	Widen from 2 to 4 lanes
SW 160 <sup>th</sup> Street	SW 147 <sup>th</sup> Avenue	SW 137 <sup>th</sup> Avenue	New 4 lanes
SW 120 <sup>th</sup> Street	SW 137 <sup>th</sup> Avenue	SW 117 <sup>th</sup> Avenue	Widen from 4 to 6 lanes
SW 136 <sup>th</sup> Street	SW 157 <sup>th</sup> Avenue	HEFT	Widen from 2 to 4 lanes
Country walk			Extension of SW 143 <sup>rd</sup> Terrace from RR to SW 136 <sup>th</sup> Street
HEFT	SW 117 <sup>th</sup> Avenue/SR-874	SW 88 <sup>th</sup> Street	12 lanes / + 3 lane CD / 8 lanes
<b>Priority 2 Projects (Funded between 2010 and 2015)</b>			
SW 152 <sup>nd</sup> Street	HEFT	US-1	ITS improvements
SW 177 <sup>th</sup> Avenue	SW 8 <sup>th</sup> Street	SW 136 <sup>th</sup> Street	Widen from 2 to 4 lanes
SW 177 <sup>th</sup> Avenue	SW 136 <sup>th</sup> Street	SW 296 <sup>th</sup> Street	Access management /Safety/ Trail
SW 137 <sup>th</sup> Avenue	SW 120 <sup>th</sup> Street	SW 128 <sup>th</sup> Street	ITS improvement
HEFT	N of Eureka Dr	N of SW 117 <sup>th</sup> Avenue	Widen to 12 lanes
<b>Priority 3 Projects (Funded between 2016 and 2020)</b>			
SW 147 <sup>th</sup> Avenue	SW 184 <sup>th</sup> Street	SW 152 <sup>nd</sup> Street	Add 2 lanes and resurface
SW 152 <sup>nd</sup> Street	HEFT	US-1	Widen from 4 to 6 lanes
SW 152 <sup>nd</sup> Street	SW 147 <sup>th</sup> Avenue	SW 157 <sup>th</sup> Avenue	Widen from 4 to 6 lanes
SW 127 <sup>th</sup> Avenue	SW 120 <sup>th</sup> Street	SW 144 <sup>th</sup> Street	New 4 lanes
SW 107 <sup>th</sup> Avenue	SW 160 <sup>th</sup> Street	SW 186 <sup>th</sup> Street	Widen from 2 to 4 lanes
SW 184 <sup>th</sup> Street	SW 157 <sup>th</sup> Avenue	SW 147 <sup>th</sup> Avenue	Widen from 2 to 4 lanes
<b>Priority 4 Projects (Funded between 2021 and 2030)</b>			
S Dade Corridor	Dadeland South	Florida City	Extension of Metrorail
SW 120 <sup>th</sup> Street	SW 147 <sup>th</sup> Avenue	SW 137 <sup>th</sup> Avenue	Widen from 4 to 6 lanes
SR-874	HEFT	SW 136 <sup>th</sup> Street	Provide Access Ramp

Source: Miami-Dade Planning Organization, Miami-Dade 2030 Long Range Transportation Plan

Exhibit 3: Projects in the County's 2030 LRTP



## 2 Existing Conditions

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### 2.1 Existing Roadway Characteristics

To identify potential mobility improvements along the corridor, an assessment of existing conditions was conducted. Several field reviews were conducted and documented for this assessment. The purpose of the field inspection was to observe the traffic flow, obtain field data, and identify potential conflict points along the corridor. The existing conditions information was obtained from the following sources:

- Miami-Dade MPO
- Miami-Dade Transit
- Miami-Dade Property Appraiser
- Crash Data from FDOT and Miami-Dade Police Department
- Miami-Dade Planning and Zoning
- Traffic counts conducted for study
- Previous studies along the corridor

#### 2.1.1 Functional Classification

The study corridor, between SW 137<sup>th</sup> Avenue and US-1, is classified as a Principal Arterial and between SW 157<sup>th</sup> Avenue and SW 137<sup>th</sup> Avenue as an Urban Collector. The HEFT and US-1, which intersect the study corridor, are classified as a Freeway Principal Arterial and Principal Arterial, respectively (Exhibit 4).

#### 2.1.2 Street Network

The study corridor is an integral part of the area street network and an improvement of the street network would also improve traffic conditions along the study corridor. As shown in Exhibit 5, there are several missing north-south links over long stretches along the corridor due to the presence of Metro Zoo and the Palmetto Golf Course on the south, and Kendall-Tamiami Executive Airport, C-100 Canal and water bodies on the north side of the corridor. Opportunities for improving the street network due to these conditions are severely limited. The following study corridor stretches have missing north-south links:

- 2-mile stretch between SW 157<sup>th</sup> Avenue and SW 137<sup>th</sup> Avenue from SW 136<sup>th</sup> Street to SW 120<sup>th</sup> Street due to the present of Kendall Tamiami Executive Airport
- 2-mile stretch between SW 137<sup>th</sup> Avenue and SW 117<sup>th</sup> Avenue from SW 184<sup>th</sup> Street to SW 152<sup>nd</sup> Street due to the presence of Miami Metro Zoo
- 2 mile stretch between SW 117<sup>th</sup> Avenue and SW 97<sup>th</sup> Avenue from SW 152<sup>nd</sup> Street to SW 136<sup>th</sup> Street due to the presence of C-100 canal. As will be discussed later in this report, a study found that bridges over the C-100 canal at SW 97<sup>th</sup> Avenue, SW 102<sup>nd</sup> Avenue, and SW 107<sup>th</sup> Avenue have drawbacks due to local traffic and community impacts.



Exhibit 4: Existing Roadway Functional Classification

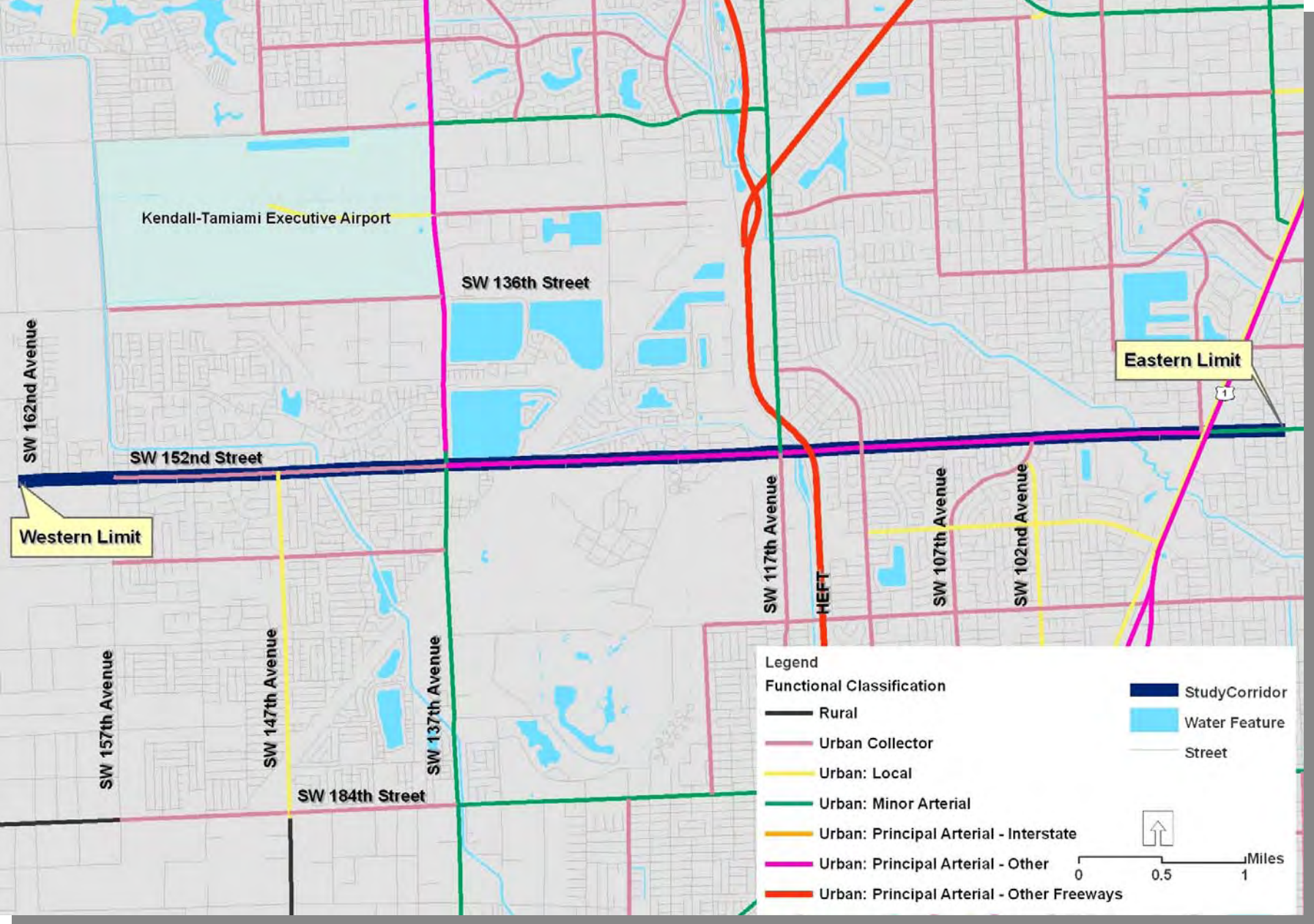
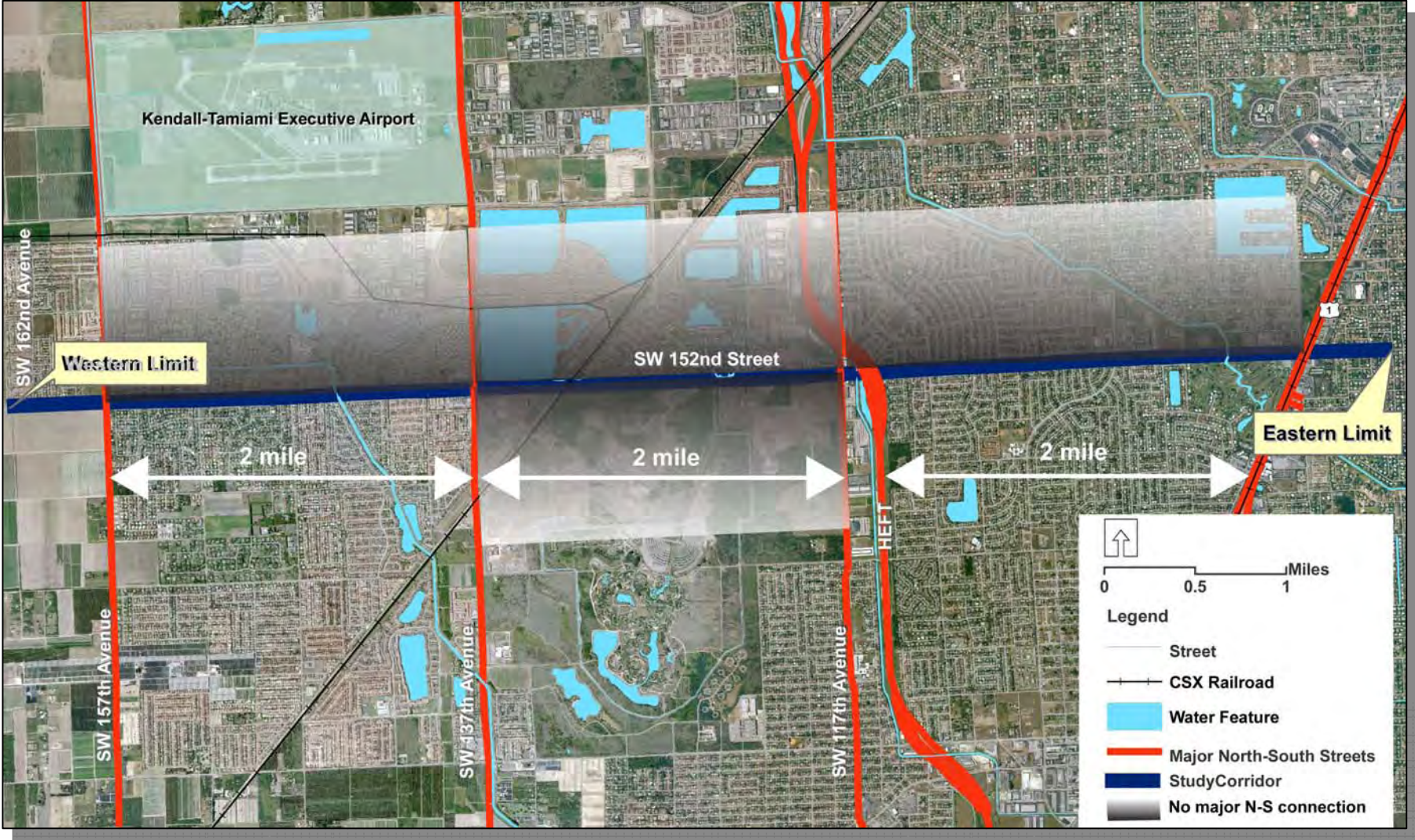




Exhibit 5: Missing North-South Links



### 2.1.3 Existing Typical Section

A preliminary assessment of the typical section along the corridor was conducted. Factors such as presence of a raised median, sidewalk, shoulder, bike lane, and provision for drainage were analyzed. The basic characteristics of the existing roadway typical sections are provided in Table 3. Photographs showing typical sections are included in Appendix A.

**Table 3: Existing SW 152<sup>nd</sup> Street Typical Section Characteristics**

Location/Link	# Lanes	Median
SW 162 <sup>nd</sup> Avenue to SW 147 <sup>th</sup> Court	2	Undivided
SW 147 <sup>th</sup> Court to SW 137 <sup>th</sup> Avenue	4	Undivided
SW 137 <sup>th</sup> Avenue to SW 124 <sup>th</sup> Avenue	6	Divided
SW 124 <sup>th</sup> Avenue to SW 117 <sup>th</sup> Avenue	6	Divided
SW 117 <sup>th</sup> Avenue to HEFT	4	Divided
HEFT to SW 112 <sup>th</sup> Avenue	4	Divided
SW 112 <sup>th</sup> Avenue to US-1	4	Divided

Source: Miami-Dade County Public Works Division and FDOT

### 2.1.4 Right-of-Way

According to the County Zoning Code, the minimum right-of-way for SW 152<sup>nd</sup> Street is 110 feet. The information from the Miami-Dade Property Appraiser was used to measure distances between property lines abutting the study corridor (Exhibit 6). Although this may not reflect actual right-of-way, it provides some useful information for planning purposes.

According to this information, the distances between property lines vary from 55 feet near the western limit of the corridor to 140 feet near SW 102<sup>nd</sup> Avenue. The corridor width reduces to 85 feet near the railroad crossing indicating potential right-of-way constraints.



Exhibit 6: Distances between Property Lines





### 2.1.5 Pedestrian and Bicycle Facilities

Currently there is a low amount of bicycle and pedestrian activity occurring along the study corridor which can be attributed to the scale, density, and urban design characteristics of adjacent development. Coral Reef Senior High School, a mega-magnet school located at the intersection of SW 99<sup>th</sup> Court and 152<sup>nd</sup> Street, has nearly 3,000 enrolled students (2005-06 data, Exhibit 7). Although there are sidewalks serving the school, there are no dedicated bicycle facilities.



**Exhibit 7: Coral Reef Senior High School**

Except along the south side of SW 152<sup>nd</sup> Street between SW 157<sup>th</sup> Avenue to 162<sup>nd</sup> Avenue (Exhibit 8), generally a 5-foot wide continuous sidewalk exists along both sides of the study corridor. However as seen in the Exhibit 8, the access to these sidewalks is only from the street intersections and there is no provision for direct access from adjacent residential developments.



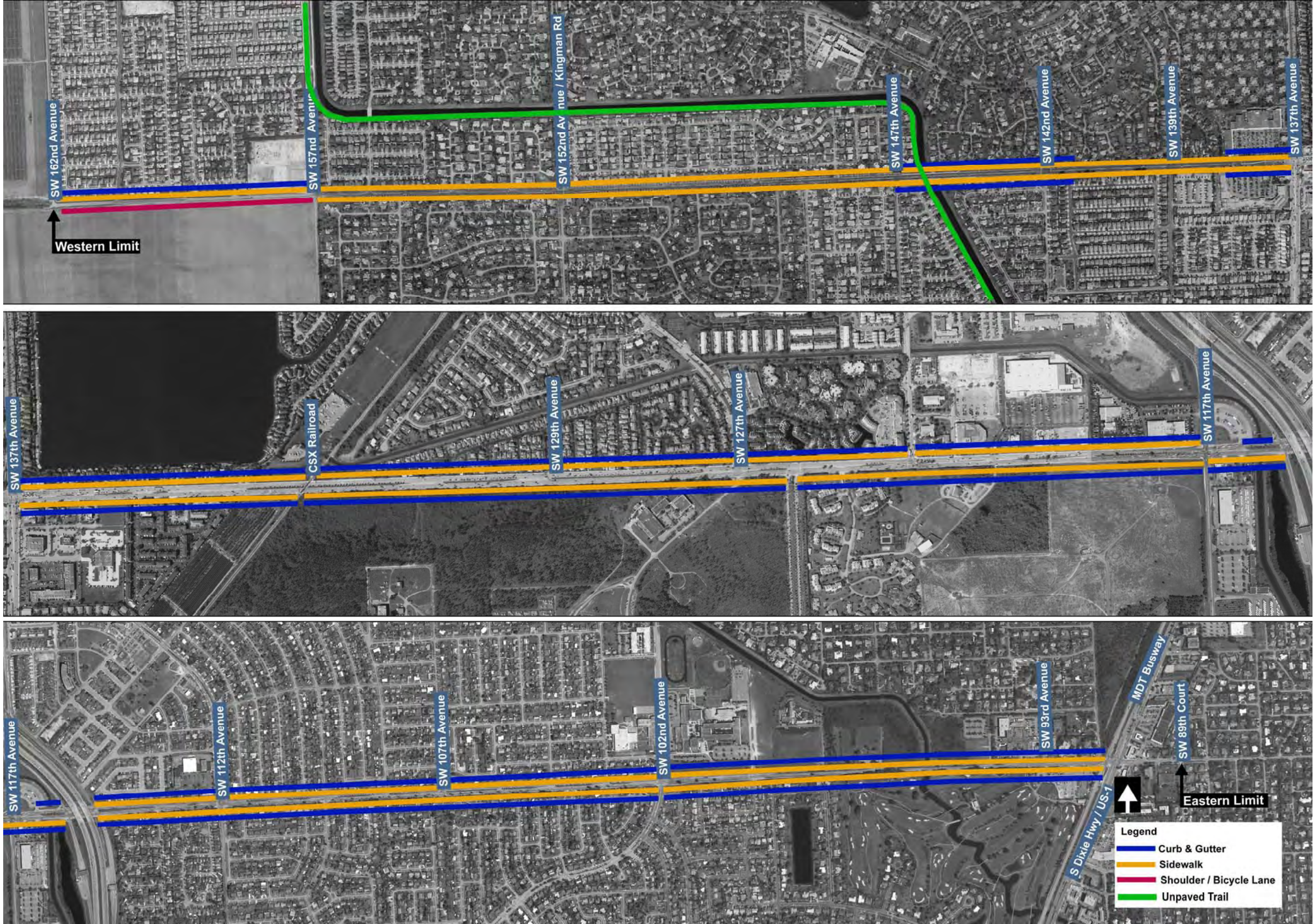
**Exhibit 8: Absence of Sidewalk between SW 157<sup>th</sup> Avenue and SW 162<sup>nd</sup> Avenue**

The initial assessment indicates that some parts of these sidewalks and transit facilities may not be in compliance with the requirements under the Americans with Disabilities Act (ADA). Elsewhere along the corridor, there is an unpaved Black Creek Trail along the C-1W canal (Exhibit 9).

The paved shoulder between SW 157<sup>th</sup> Avenue to 162<sup>nd</sup> Avenue can be used for bicycling purposes. A July 1995 Metro-Dade Facility Plan proposes short-range on-road bicycle facilities along SW 152<sup>nd</sup> Street from SW 157<sup>th</sup> Avenue to the Metro Zoo Entrance. The Miami-Dade MPO 2025 Bicycle Facilities Plan includes several Priority IV unfunded on-road bicycle projects along and near SW 152<sup>nd</sup> Street.



Exhibit 9: Sidewalks and Bicycle Lane/Shoulder





## 2.1.6 Speed Limit

The posted speed limit is 40 mph and 45 mph west and east of SW 117<sup>th</sup> Avenue, respectively.

## 2.1.7 Parking Facilities

There is no on-street parking along this corridor. A description of existing park-and-ride lots is provided in Section 2.1.8 Transit Services and Facilities.

## 2.1.8 Transit Services and Facilities

Currently MDT Route 252 Coral Reef MAX provides east-west connectivity along the study corridor. Route numbers 35 and 137 provide north-south connectivity. Given below is a general description of the existing routes serving the SW 152<sup>nd</sup> Street study area:

- **Route 252 Coral Reef MAX:** From SW 162<sup>nd</sup> Avenue via SW 152<sup>nd</sup> Street and MDT Busway to Dadeland South Metrorail Station (Exhibit 10). The exhibit also shows that the service route and service could be confusing for the potential users. Presently the eastbound service does not go to the existing park-and-ride lot at SW 117<sup>th</sup> Avenue and SW 152<sup>nd</sup> Street because the vehicle has to make left turns for getting in and out of the parking lot. The route also has several loops. The service schedule is included as Appendix B.
- **Route 35:** Connects Miami-Dade College Kendall Campus at northern end and Prime Outlets at southern end via Richmond Heights, Cutler Ridge, Southland Mall, and Homestead.
- **Route 137:** Connects Dolphin Mall at NW 17<sup>th</sup> Street to Southland Mall mainly via Sweetwater, Kendall, the Hammocks, and Cutler Bay. It has a stop at SW 152<sup>nd</sup> Street and 137<sup>th</sup> Avenue.

In addition to the above, route numbers 31, 38, 52, 137, 287 are currently operating along the MDT Busway and have stops along SW 152<sup>nd</sup> Street. All existing transit service and facilities along the corridor are depicted in Exhibit 11.

**Exhibit 10: Route 252 Coral Reef MAX Alignment**

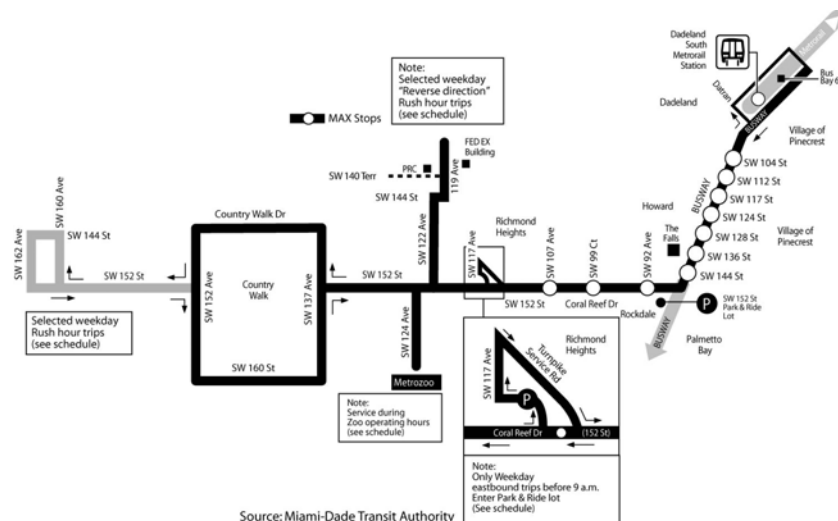
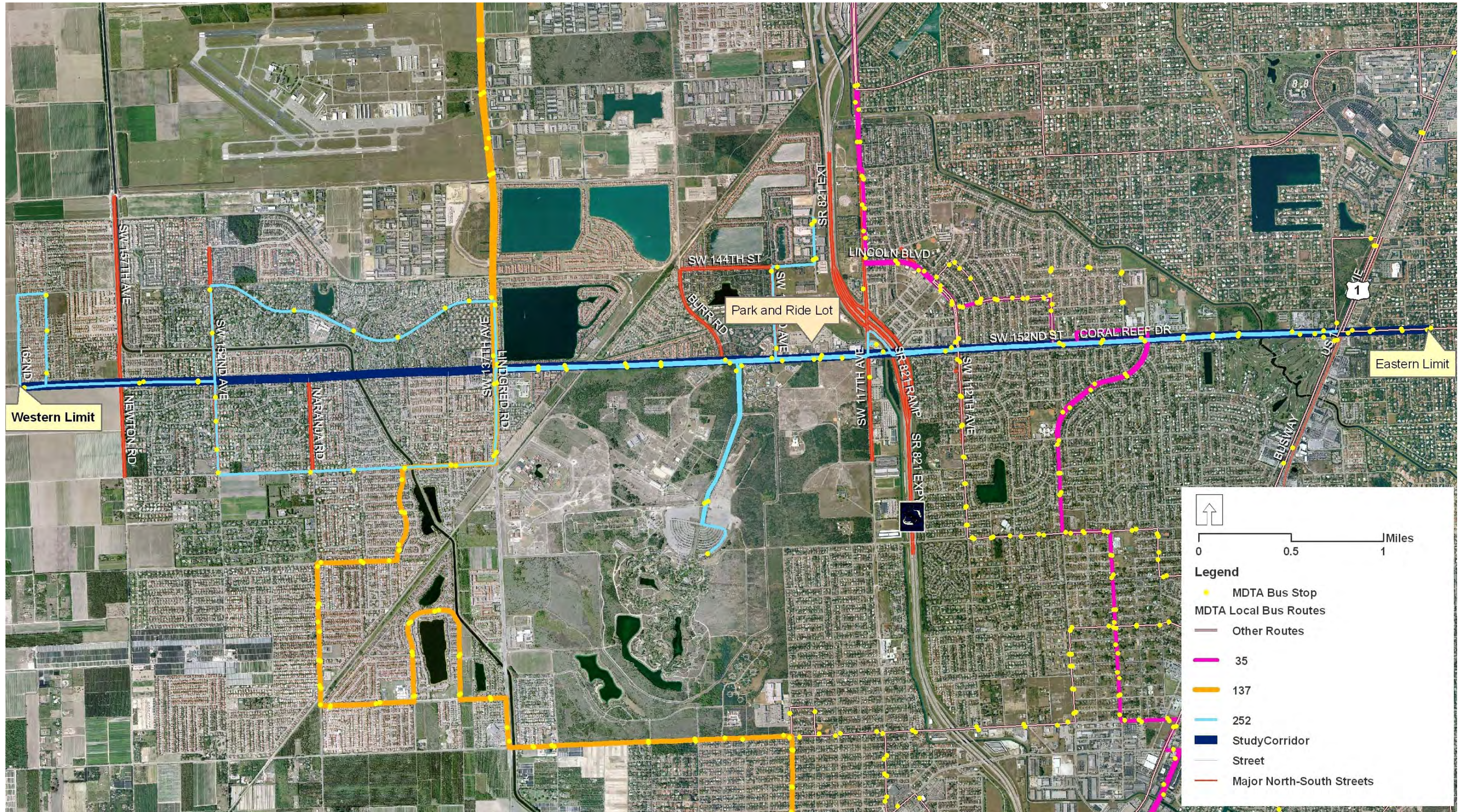




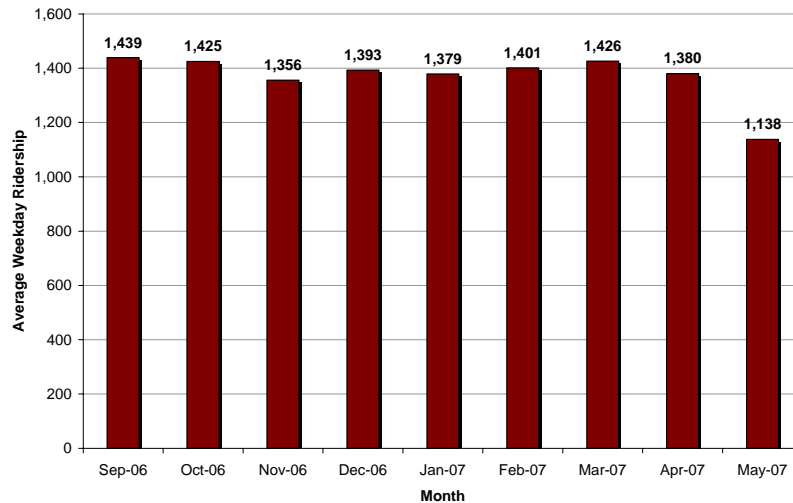
Exhibit 11: Transit Routes and Facilities





As shown in Exhibit 12, except for May 2007, the ridership of the 252 Coral Reef Max has remained consistent. There has been no change in the service in 2007 and according to MDT and there are no plans to improve headways in the near future.

**Exhibit 12: MDT Route 252 Coral Reef MAX Ridership**



The travel time and ridership for MDT Route 252 service along the corridor was measured on a typical weekday during morning peak. As shown in Table 4, it takes approximately 35 minutes to travel the 7.5-mile long corridor. In July 2007, an on-board ridership count was conducted on a typical weekday during the morning peak-hour and the ridership was low on the day of the survey (Table 4).

**Table 4: Transit Travel Time**

	Eastbound	Ons	Offs
8:04 AM	SW 162 <sup>nd</sup> Avenue & SW 152 <sup>nd</sup> Street		
8:05 AM	SW 152 <sup>nd</sup> Avenue & SW 152 <sup>nd</sup> Street		
8:07 AM	SW 152 <sup>nd</sup> Avenue & SW 160 <sup>th</sup> Street		
8:07 AM	SW 152 <sup>nd</sup> Avenue & SW 160 <sup>th</sup> Street		
8:08 AM	SW 142 <sup>nd</sup> Avenue & SW 160 <sup>th</sup> Street		
8:10 AM	SW 137 <sup>th</sup> Avenue & SW 160 <sup>th</sup> Street		
8:12 AM	SW 137 <sup>th</sup> Avenue & SW 152 <sup>nd</sup> Street	2	
8:14 AM	SW 133 <sup>rd</sup> Avenue & SW 152 <sup>nd</sup> Street		
8:16 AM	SW 124 <sup>th</sup> Avenue & SW 152 <sup>nd</sup> Street	1	
8:17 AM	SW 122 <sup>nd</sup> Avenue & SW 152 <sup>nd</sup> Street		
8:24 AM	SW 117 <sup>th</sup> Avenue & SW 152 <sup>nd</sup> Street	5	
8:28 AM	SW 107 <sup>th</sup> Avenue & SW 152 <sup>nd</sup> Street		
8:29 AM	SW 99 <sup>th</sup> Court & SW 152 <sup>nd</sup> Street		
8:31 AM	SW 92 <sup>nd</sup> Avenue & SW 152 <sup>nd</sup> Street		
8:33 AM	Busway & SW 144 <sup>th</sup> Street	1	1
8:37 AM	Busway & SW 136 <sup>th</sup> Street		

Existing household and employment densities, which are often used to measure the potential for transit ridership, are also low along the study corridor. This information was compared with transit corridors proposed in the People's Transportation Plan (PTP) (Exhibit 13). As shown in Exhibit 14, household density within 1-mile of the corridor is close to 2 dwelling units per acre which is lower than most PTP transit corridors.

**Exhibit 13: Densities: Comparison with PTP Corridors**

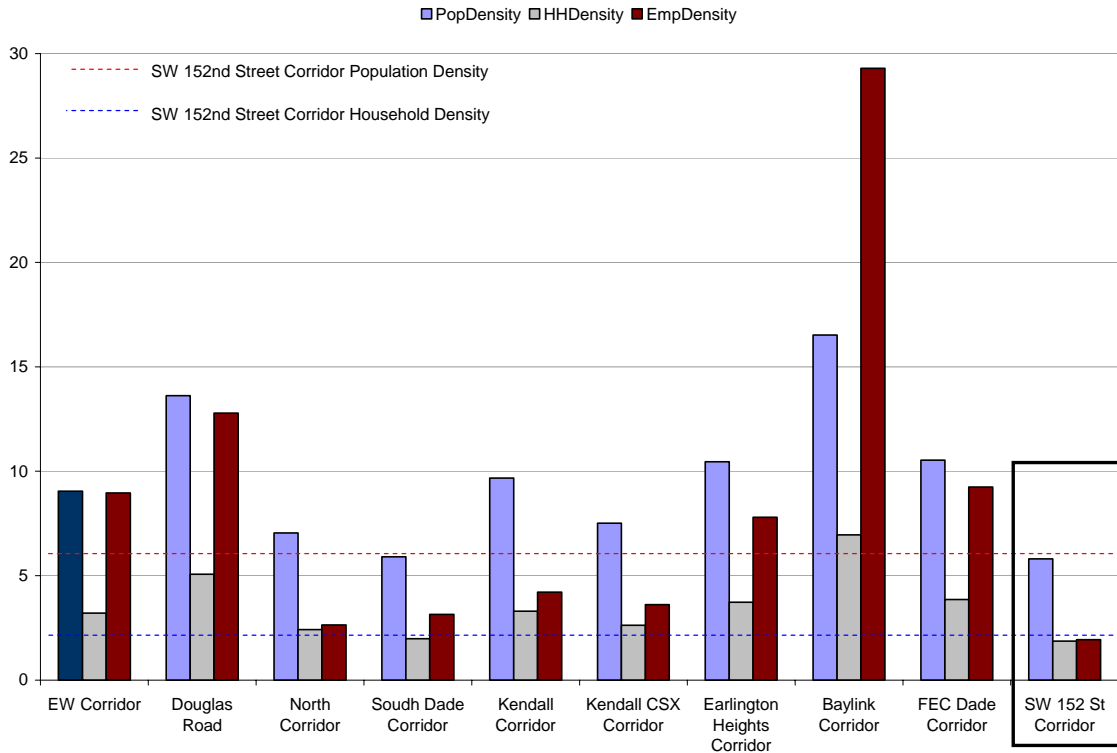
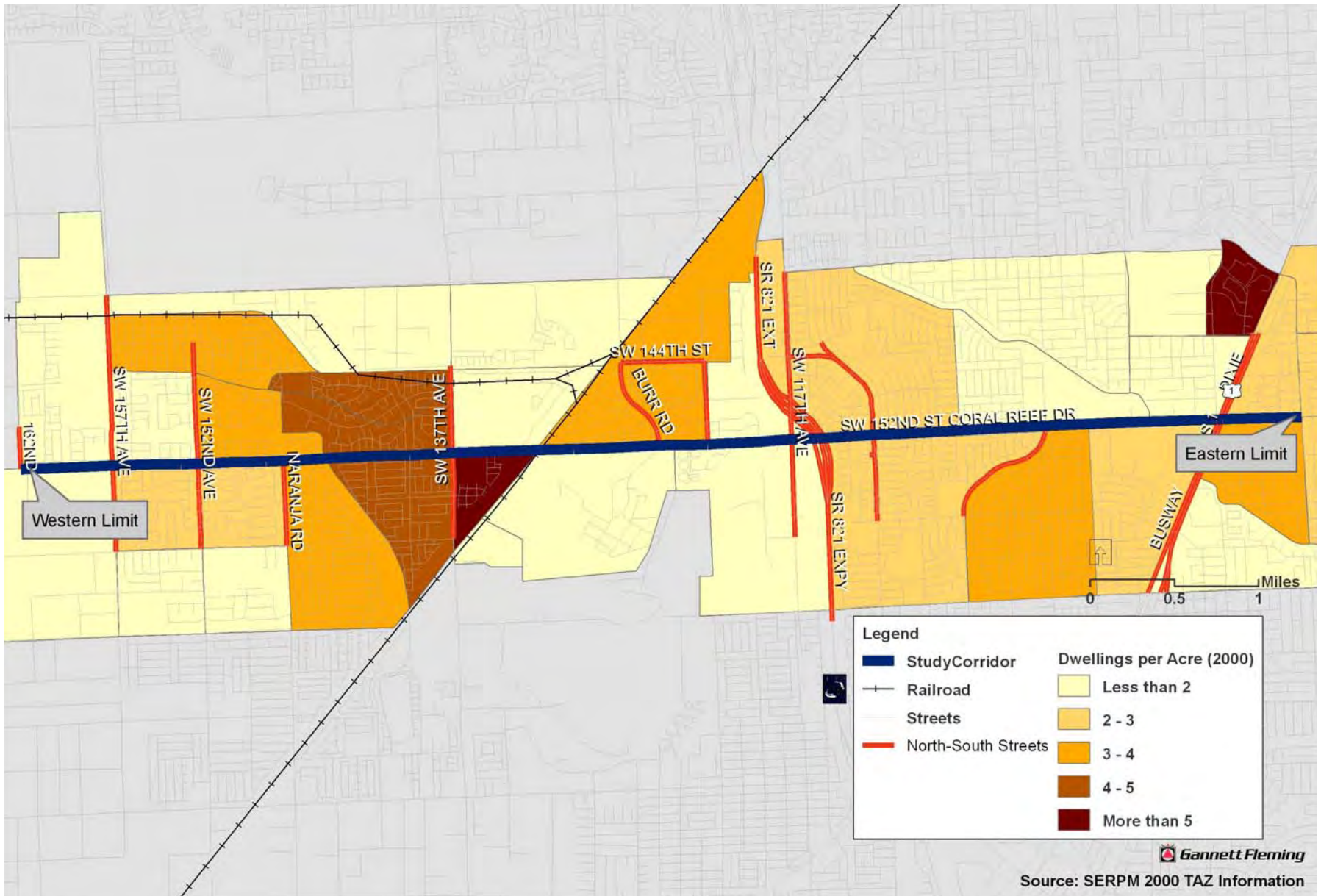
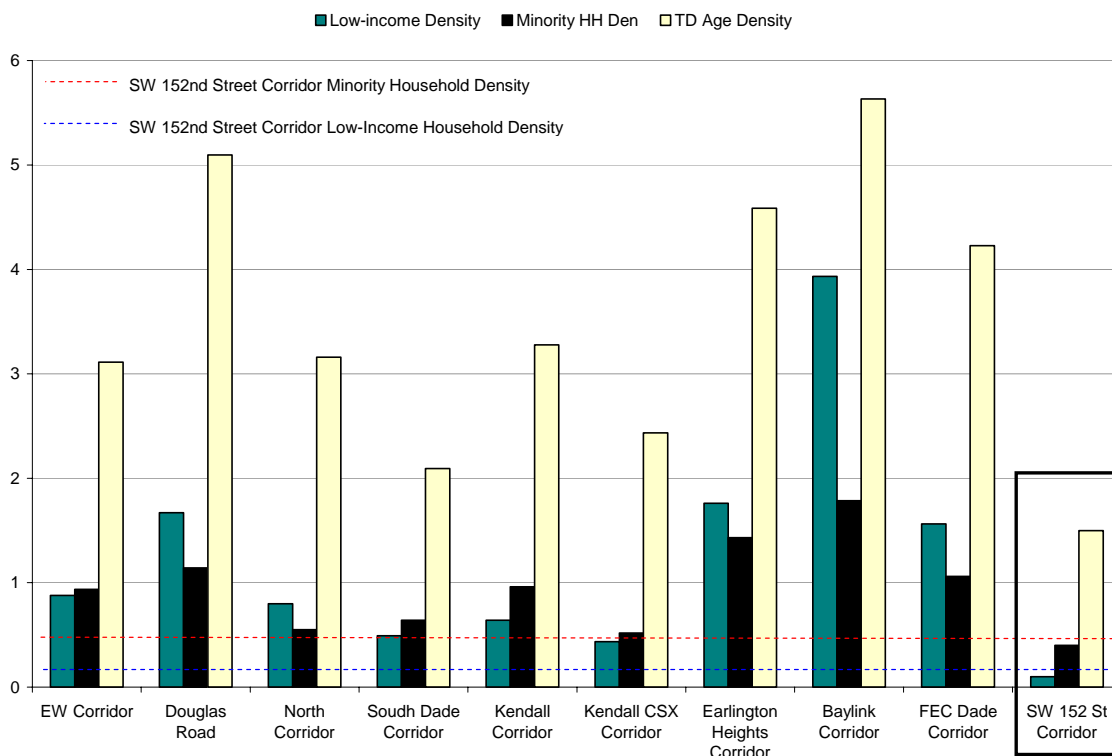


Exhibit 14: Dwelling Unit Density within 1-mile



Demographic groups such as low-income households, minority households, and population under the age of 15 and above 65 are considered transit-dependent populations for the purpose of transit ridership analysis. The 2000 Census data was used to analyze densities and transit-dependent groups in the study corridor. As shown in Exhibit 15, compared to the PTP transit corridors, the study corridor does not have a high concentration of transit-dependent populations.

**Exhibit 15: Transit-dependent Population Densities: Comparison with PTP Corridors**



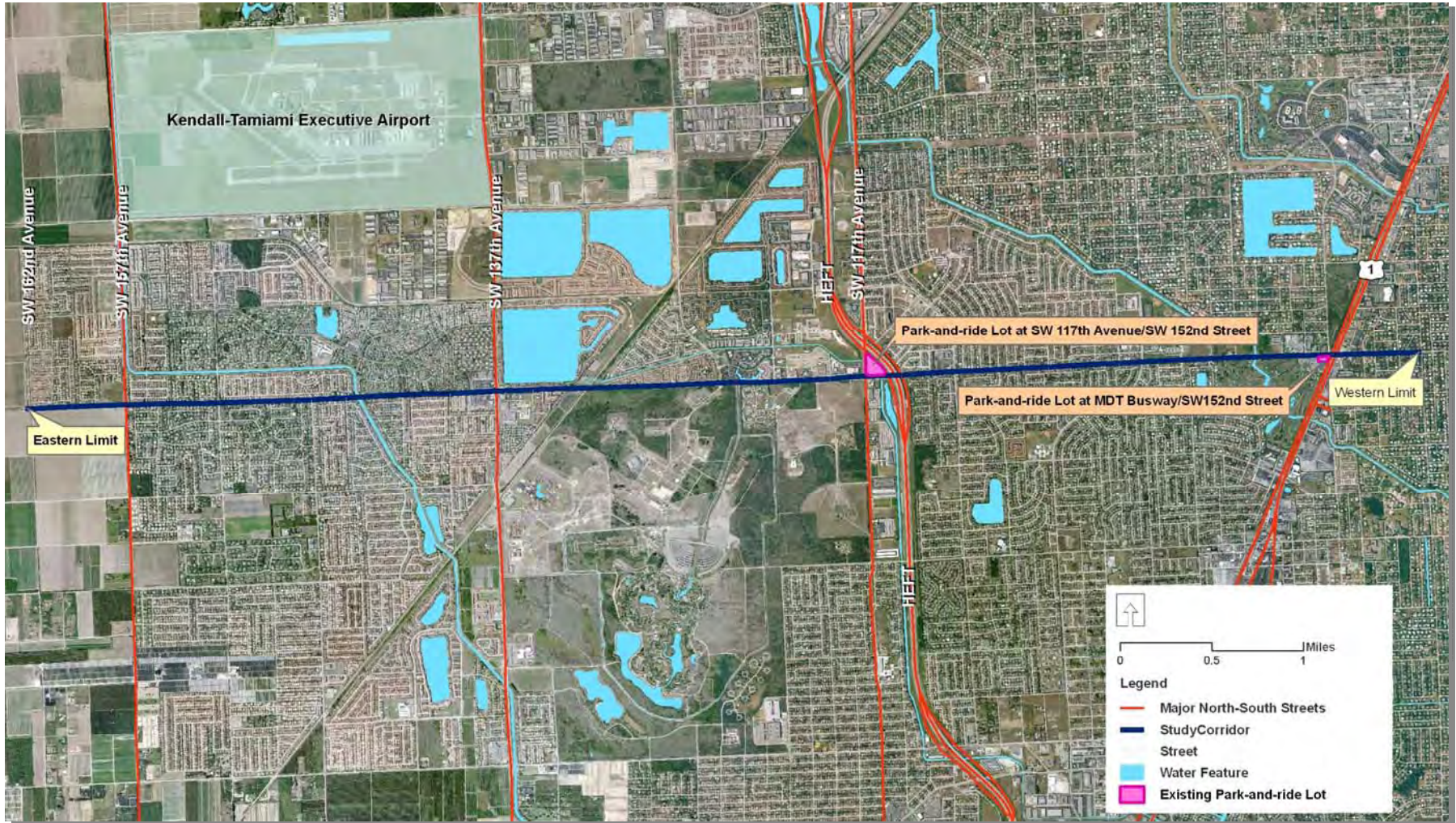
This analysis indicates that just improved local bus service along this corridor would not attract significant ridership. However, premium transit service that provides travel time savings such as BRT may be needed to attract vehicle owners.

**Transit Facilities:** There are two park-and-ride facilities along the study corridor (Exhibit 16). According to the FDOT's 2007 Park-and-Ride (P&R) Inspection report, the facility at SW 152<sup>nd</sup> Street and the Busway is in good condition. The facility has a capacity of 121 vehicles and had 99% occupancy rate at the time of inspection (Exhibit 17). This facility mainly serves commuters using the MDT Busway service.

Another park-and-ride facility exists on SW 152<sup>nd</sup> Street at the SW 117<sup>th</sup> Street/HEFT (Exhibit 18). This facility has a capacity of 126 vehicles and had a relatively low occupancy rate (40%). This facility serves local bus routes and according to the Park and Rider Inspection Report, is also in need of some repair and maintenance. Opportunities for maximizing the use of this lot should be explored.



Exhibit 16: Existing Park-and-ride Facilities





**Exhibit 17: P&R Lot at Busway**



**Exhibit 18: P&R Lot at HEFT**



**Proposed Transit Projects:** The MPO is conducting a transit feasibility study, the Kendall Link, which identifies potential transit service along SW 88<sup>th</sup> Street/Kendall Drive and could potentially impact traffic conditions along the SW 152<sup>nd</sup> Street Study Corridor. The study's alternatives include exclusive BRT, Metrorail and Diesel Light Rail (DLRT) technologies. The DLRT alternative is being considered along the CSX railroad right-of-way and, portions parallel to the SW 152<sup>nd</sup> Street Corridor. According to the June 2007 public meeting presentation; it includes service along the CSX east-west spur parallel to SW 143<sup>rd</sup> Terrace.

An alternative analysis study of the South Dade Corridor was also recently completed by the MPO. The study examined the feasibility of potential transit improvements including enhancements of the South Dade Busway. The Locally Preferred Alternative (LPA) included grade-separation at the Busway and the SW 152<sup>nd</sup> Street Intersection by elevating the Busway.

Both these studies identified long-term strategies that may impact SW 152<sup>nd</sup> Street. However, there is no funding identified for these transit projects.

### 2.1.9 Crash Data

Traffic delays related to crashes also contribute to congestion. To assess whether any potential improvements could relieve congestion related to crashes, FDOT crash data compiled along a segment of the study corridor (SW 117<sup>th</sup> Avenue to US-1) was analyzed. Between 2003 and 2005, a total 471 crash cases were reported along this segment. During this three year period, there has been an increase in the number of crashes (Table 5).

**Table 5: Number of Crashes**

Year	Number of Crashes	Fatalities	Injuries
2003	132	0	162
2004	168	1	183
2005	171	1	166

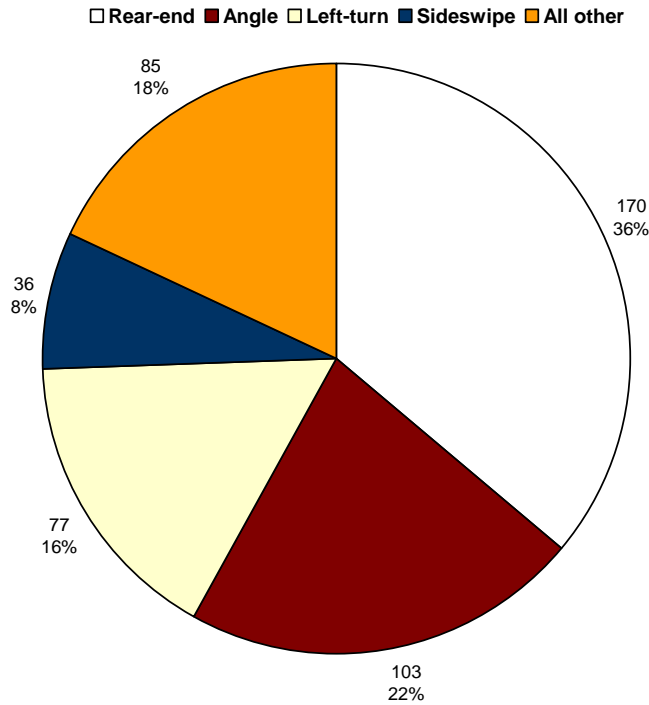
Source: FDOT

**Number of Crashes by Harmful Events:** Crashes were analyzed by “Harmful Event” to determine the predominant event. Like most suburban conditions, rear-end, angle, and left-turn crashes account for more than two-thirds of the total crashes (Table 6). Exhibit 19 shows the top four crash events.

**Table 6: Crashes by Harmful Events**

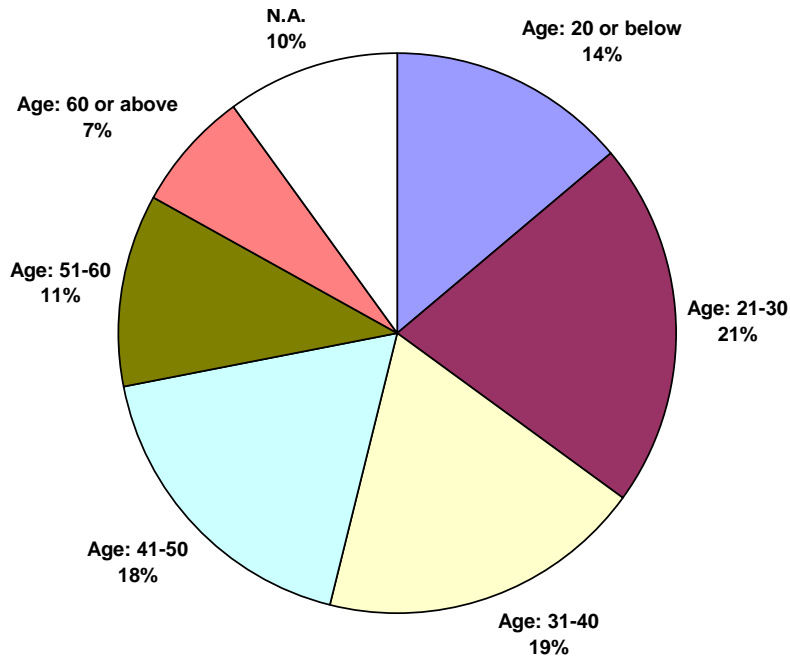
Harmful Event	Number of Crashes				% of Total
	2003	2004	2005	Total	
Rear-end	52	49	69	170	36.1
Angle	25	41	37	103	21.9
Left-turn	23	24	30	77	16.3
Sideswipe	6	16	14	36	7.6
Other	11	12	6	29	6.2
Unknown/not coded	3	4	4	11	2.3
Right-turn	3	2	4	9	1.9
Utility/light pole	1		4	5	1.1
Hit another fixed object	1	3		4	0.8
Hit tree or shrubbery	1	2	1	4	0.8
Backed into	1	1	1	3	0.6
Coll w/bicycle		3		3	0.6
Coll. w/fixed object above road	1	2		3	0.6
Head-on	1	1	1	3	0.6
Coll. W/ MV on other roadway	1	1		2	0.4
Coll. w/ parked car	1	1		2	0.4
Coll. w/ pedestrian		2		2	0.4
Coll. w/ moveable object on road		1		1	0.2
Collision with animal		1		1	0.2
Hit concrete barrier wall		1		1	0.2
Hit sign/sign post		1		1	0.2
Overtuned	1			1	0.2

**Exhibit 19: Crashes by Harmful Events**



**Number of Crashes by Age:** The number of crashes were analyzed by age groups. A total 21 percent of total crashes involved drivers in the age group 21 to 30 (Exhibit 20).

**Exhibit 20: Number of Crashes by Age**



**Number of Crashes by Control Type:** Number of crashes were analyzed by control type. No traffic control and failure to yield accounted for more than two-thirds of total crashes (Table 7). This may indicate that additional traffic control devices may be warranted at certain intersections.

**Table 7: Crashes by Control Type**

Control Type	Number of Crashes				% of Total
	2003	2004	2005	Total	
No Control	50	76	41	167	35
Yield Sign	57	51	54	162	34
Traffic Signal	13	18	55	86	18
Flashing Light	8	14	14	36	8
Stop Sign	1	3	2	6	1
All Other		3	2	5	1
School Zone	2	2	1	5	1
Officer / Guard / Flagman	1	1	1	3	1
No Passing Zone			1	1	0

### 2.1.10 Intersection and Signalization

There are 17 signalized intersections along the study corridor. Table 8 summarizes some of the characteristics of the signalized intersections.

**Table 8: Characteristics of Signalized Intersections**

Intersection	Intersection Type
SW 152 <sup>nd</sup> Avenue / Kingman Road	4-leg intersection
SW 147 <sup>th</sup> Court	3-leg intersection
SW 138 <sup>th</sup> Block	3-leg intersection
SW 137 <sup>th</sup> Avenue	4-leg intersection
SW 133 <sup>rd</sup> Avenue	3-leg intersection
SW 127 <sup>th</sup> Avenue	4-leg intersection
SW 124 <sup>th</sup> Avenue	3-leg intersection
SW 122 <sup>nd</sup> Avenue	3-leg intersection
SW 117 <sup>th</sup> Avenue	4-leg intersection
HEFT S ramp	4-leg intersection
HEFT N ramp	4-leg intersection
SW 112 <sup>th</sup> Avenue	4-leg intersection
SW 107 <sup>th</sup> Avenue	3-leg intersection
SW 102 <sup>nd</sup> Avenue	4-leg intersection
SW 99 <sup>th</sup> Court	3-leg intersection,
Busway	4-leg intersection
US-1	4-leg intersection

Note: A fire station East of SW 134<sup>th</sup> Court has an emergency signal that is not included in this list.

### 2.1.11 Access Management

Existing spacing of intersections, median openings, and driveways was looked at to identify any critical access management issues. As discussed previously, there is no one roadway classification for this study corridor. The FDOT Access Management classifies SW 152<sup>nd</sup> Street (SR-992) as an Access Class 5 roadway which was used for reference purposes only (Table 9).

**Table 9: Access Standards for Class 5 Roadway**

Access Class	Facility Design Feature	Minimum Dimensions in Feet			
		Connection spacing	Dir Median Opening	Full Median Opening	Minimum Signal Spacing
<b>5</b>	Restrictive	245	660	1320	1320

For the purpose this analysis, only median openings and signal spacing were analyzed. There are a total of 38 median openings (east bound and west bound) and 17 signalized intersections. Spacing between six signalized intersections and several median openings may not meet FDOT's Access Class criteria. Exhibit 21 illustrates openings by travel direction (Table 10).



Exhibit 21: Median Openings





Table 10: Median Openings (Eastbound)

Intersection (From)	Intersection (To)	Control Type	Approx Dist. (ft.)	Signal Distance
SW 162 <sup>nd</sup> Avenue	SW 160 <sup>th</sup> Avenue	Stop Sign	707	
SW 160 <sup>th</sup> Avenue	SW 158 <sup>th</sup> Court	Stop Sign	1,278	
SW 158 <sup>th</sup> Court	SW 157 <sup>th</sup> Avenue	Stop Sign	862	
SW 157 <sup>th</sup> Avenue	SW 155 <sup>th</sup> Avenue-N	Stop Sign	595	
SW 155 <sup>th</sup> Avenue-N	SW 155 <sup>th</sup> Avenue-S	Stop Sign	342	
SW 155 <sup>th</sup> Avenue-S	SW 153 <sup>rd</sup> Place	Stop Sign	571	
SW 153 <sup>rd</sup> Place	SW 153 <sup>rd</sup> Avenue	Stop Sign	651	
SW 153 <sup>rd</sup> Avenue	SW 152 <sup>nd</sup> Avenue / Kingman Rd	Stop Sign	532	
SW 152 <sup>nd</sup> Avenue / Kingman Rd	SW 149 <sup>th</sup> Avenue	Signal	1,157	2,366
SW 149 <sup>th</sup> Avenue	SW 148 <sup>th</sup> Court	Stop Sign	337	
SW 148 <sup>th</sup> Court	SW 147 <sup>th</sup> Place	Stop Sign	644	
SW 147 <sup>th</sup> Place	SW 147 <sup>th</sup> Court	Stop Sign	228	
SW 147 <sup>th</sup> Court	SW 147 <sup>th</sup> Avenue / Naranja Rd	Signal	319	4,027
SW 147 <sup>th</sup> Avenue / Naranja Rd	SW 146 <sup>th</sup> Avenue	Stop Sign	327	
SW 146 <sup>th</sup> Avenue	SW 144 <sup>th</sup> Court	Stop Sign	667	
SW 144 <sup>th</sup> Court	SW 142 <sup>nd</sup> Avenue	Stop Sign	1,627	
SW 142 <sup>nd</sup> Avenue	SW 140 <sup>th</sup> Avenue	Stop Sign	715	
SW 140 <sup>th</sup> Avenue	SW 139 <sup>th</sup> Avenue	Stop Sign	652	
SW 139 <sup>th</sup> Avenue	SW 138 <sup>th</sup> Block	Stop Sign	720	
SW 138 <sup>th</sup> Block	SW 137 <sup>th</sup> Avenue	Signal	646	646
SW 137 <sup>th</sup> Avenue	SW 134 <sup>th</sup> Place	Signal	1,082	2,047
SW 134 <sup>th</sup> Place	SW 134 <sup>th</sup> Court	Stop Sign	184	
SW 134 <sup>th</sup> Court	SW 133 <sup>rd</sup> Avenue	Stop Sign	781	
SW 133 <sup>rd</sup> Avenue	Railroad Track	Signal	550	4,418
Railroad Track	SW 130 <sup>th</sup> Place	Stop Sign	1,197	
SW 130 <sup>th</sup> Place	SW 129 <sup>th</sup> Avenue	Stop Sign	961	
SW 129 <sup>th</sup> Avenue	SW 127 <sup>th</sup> Avenue	Stop Sign	1,710	
SW 127 <sup>th</sup> Avenue	SW 124 <sup>th</sup> Avenue	Signal	471	471
SW 124 <sup>th</sup> Avenue	SW 123 <sup>rd</sup> Avenue	Signal	438	1062
SW 123 <sup>rd</sup> Avenue	SW 122 <sup>nd</sup> Avenue	Stop Sign	624	
SW 122 <sup>nd</sup> Avenue	SW 121 <sup>st</sup> Avenue-N	Signal	381	2,627
SW 121 <sup>st</sup> Avenue-N	SW 121 <sup>st</sup> Avenue-S	Stop Sign	363	
SW 121 <sup>st</sup> Avenue-S	SW 120 <sup>th</sup> Avenue	Stop Sign	857	
SW 120 <sup>th</sup> Avenue	SW 117 <sup>th</sup> Avenue	Stop Sign	1,026	
SW 117 <sup>th</sup> Avenue	HEFT S ramp	Signal	681	681
HEFT S ramp	HEFT N ramp	Signal	359	359

Intersection (From)	Intersection (To)	Control Type	Approx Dist. (ft.)	Signal Distance
HEFT N ramp	SW 113 <sup>th</sup> Avenue	Signal	767	1,532
SW 113 <sup>th</sup> Avenue	SW 112 <sup>th</sup> Avenue	Stop Sign	765	
SW 112 <sup>th</sup> Avenue	Harrison Street	Signal	765	2,703
Harrison Street	Polk Street	Stop Sign	514	
Polk Street	Buchanan Street	Stop Sign	744	
Buchanan Street	SW 107 <sup>th</sup> Avenue	Stop Sign	680	
SW 107 <sup>th</sup> Avenue	SW 104 <sup>th</sup> Avenue	Signal	1,354	2,705
SW 104 <sup>th</sup> Avenue	SW 103 <sup>rd</sup> Avenue	Stop Sign	681	
SW 103 <sup>rd</sup> Avenue	SW 102 <sup>nd</sup> Avenue	Stop Sign	670	
SW 102 <sup>nd</sup> Avenue	SW 99 <sup>th</sup> Court	Signal	1,128	1,128
SW 99 <sup>th</sup> Court	SW 94 Avenue	Signal	2,909	4,337
SW 94 <sup>th</sup> Avenue	SW 93 Avenue	Stop Sign	669	
SW 93 <sup>rd</sup> Avenue	Busway	Stop Sign	759	
Busway	US-1	Signal	126	126
US-1	SW 89 Court	Signal	789	

## 2.2 Land Use and Cultural Features

Land use characteristics along the study corridor vary from predominantly low-density residential between SW 137<sup>th</sup> Avenue and SW 162<sup>nd</sup> Avenue, to institutional (Jackson South Memorial Hospital and Coral Reef High School) and recreational (Miami Metro Zoo). Miami-Dade County’s GIS Information was used to analyze the land use distribution along the corridor. As indicated in Exhibit 22, single family residential comprises 43% of the total land use and nearly half of the total usable land uses (excluding streets, utilities, and water) within 1-mile of study corridor (Exhibit 23).

**Exhibit 22: Land Use Distribution**

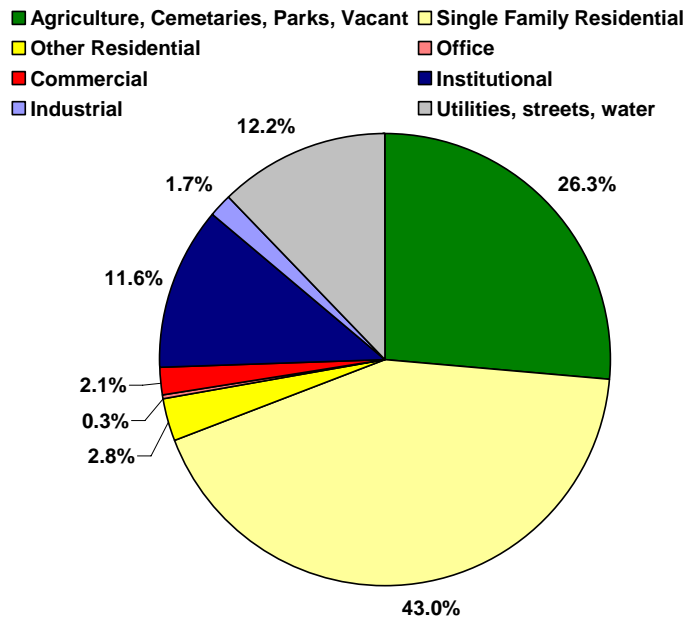
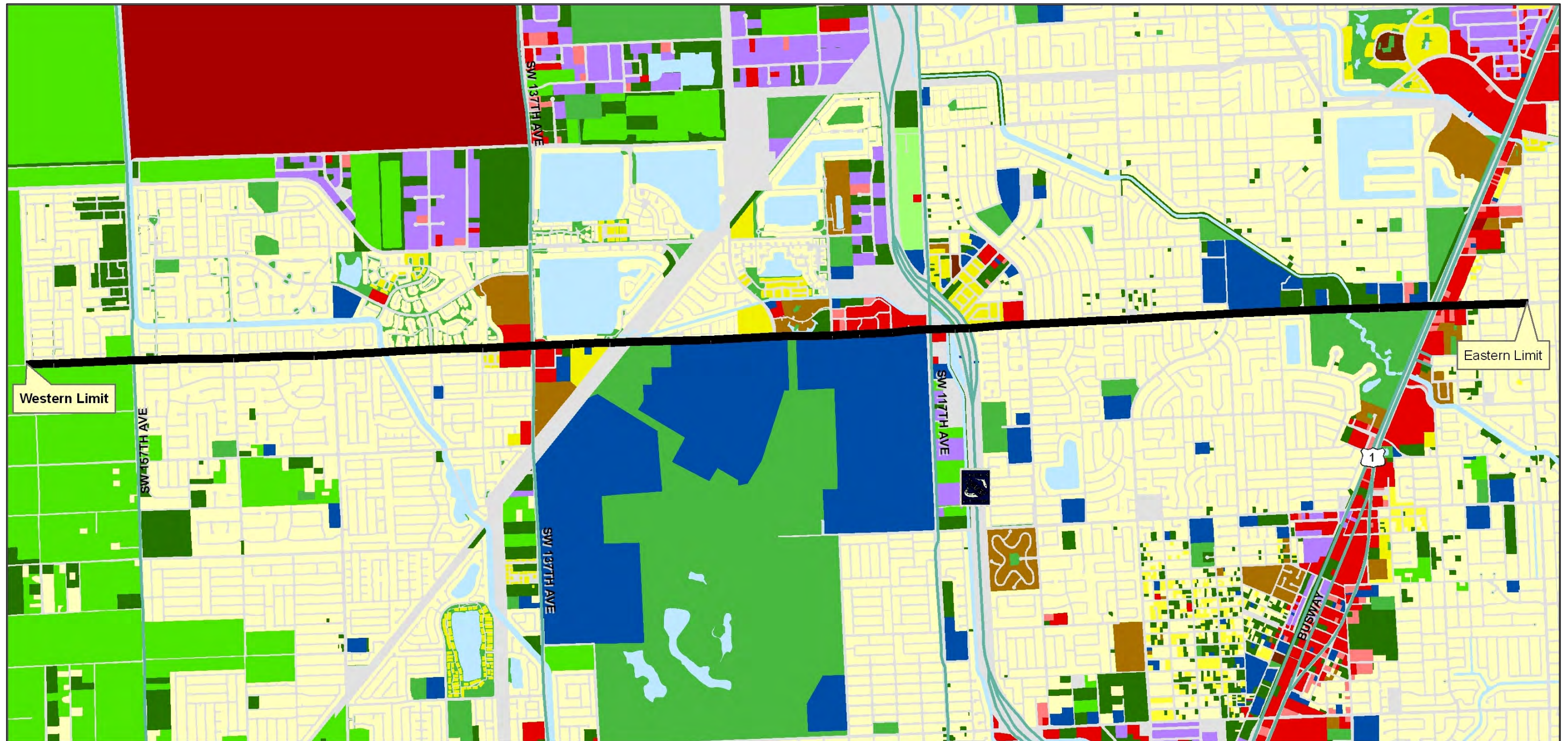


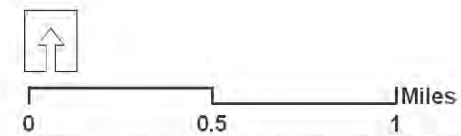


Exhibit 23: Land Use within 1-mile (2003)



**Legend**

Study Corridor	Cemeteries	Single-Family	Low-Density Multi-Family	Commercial
Major North-South Streets	Agriculture	Two-Family (Duplexes)	Multi-Family	Hotels/Motels
Water; Water Conservation Areas	Parks	Townhouses	Institutional	Airports/Ports
	Vacant	Mobile Home Parks	Office	Industrial



Source: 2003 Landuse, Miami-Dade County GIS



As indicated previously, there is a significant amount of development occurring along the corridor. The Miami Metro Zoo and Tamiami Airport Runway Extension are existing Developments of Regional Impact (DRI). Other proposed developments along and near the study corridor are listed in Table 11. In total, nearly 7,600 residential units, 370,000 sq. ft. of office and 430,000 sq. ft. of retail space is committed or proposed, mainly west of the HEFT. This development will significantly impact the traffic patterns along and around the study corridor.

**Table 11: Committed and Proposed Major Developments**

<b>Development Title</b>	<b>Number</b>
<b>Coral Reef Medical Plaza</b>	128,075 sq. ft. medical offices
<b>Parkland (Proposed)</b>	2,100 single-family, 2,100 townhouses, 2000 condominiums, 200,00 sq. ft. retail space, 100,000 sq. ft. of office use, two schools (1,600-student high school and 3,200-student K-8 school), a 50,000 sq. ft. community center, and 46-acre park.
<b>South Dade Commercial Park</b>	76,500 sq. ft. retail and 92,000 sq. ft. office
<b>Miami Metro Zoo Entertainment Area (Proposed)</b>	50,000 sq. ft. Museum, 20,000 sq. ft. themed retail, 600 sq. ft. restaurant, 200 hotel rooms, 75,000 sq. ft. entertainment center, 200 seat family center food service facility, water park for 2,500 visitors and 150 seat water park food service.
<b>Corsica Square</b>	84,079 sq. ft. retail
<b>Crestview West</b>	114 single-family units
<b>Luxor Estates</b>	163 condominiums and townhomes
<b>The University of Miami South Village (Proposed)</b>	40 single-family units, 890 townhomes, 290 apartments, 50,000 sq. ft. retail, 50,000 sq. ft. medical office, 18,000 health/fitness, high school for 1,350 students, 17,400 sq. ft. library

In addition, there are two fire stations, 14 schools (Table 12), and several other social and cultural features within 1-mile of the study corridor that may have special mobility needs. Exhibit 24 shows planned and proposed developments, fire stations, and social and cultural features along the corridor.

**Table 12: Schools within 1-mile of the Study Corridor**

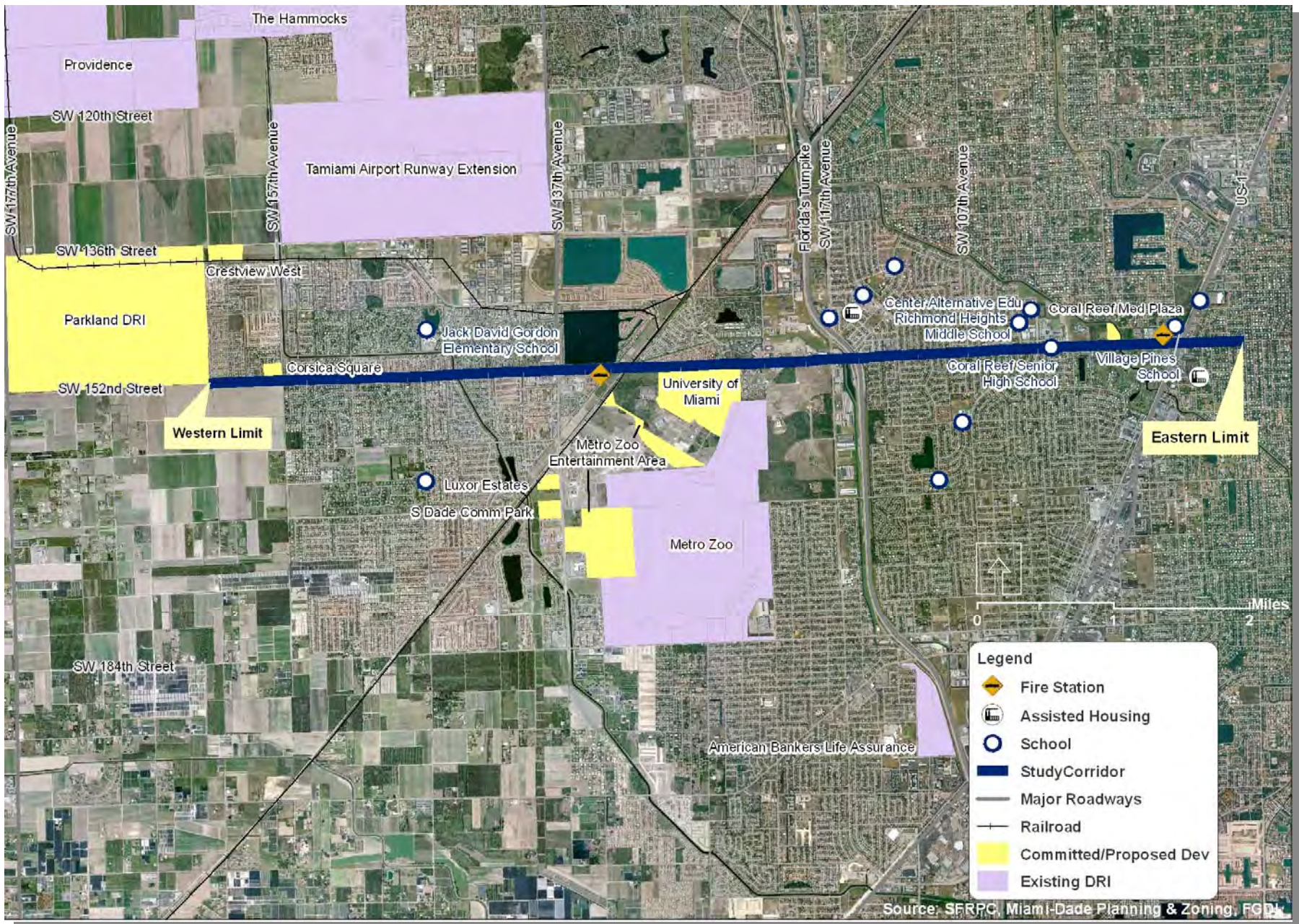
<b>Name</b>	<b>Public / Pvt</b>	<b>Enrollment</b>	<b>Grade-From</b>	<b>Grade-To</b>
<b>Coral Reef Senior High School</b>	Public	2,779	09	12
<b>Southwood Middle School</b>	Public	1,873	06	08
<b>Jack David Gordon Elementary School</b>	Public	1,795	PK	05
<b>Richmond Heights Middle School</b>	Public	1,625	06	08
<b>Coral Reef Elementary School</b>	Public	853	PK	05
<b>Frank C. Martin Elementary School</b>	Public	822	PK	05
<b>Pine Lake Elementary School</b>	Public	809	PK	05

<b>Colonial Drive Elementary School</b>	Public	455	PK	05
<b>Rem Learning Center</b>	Private	189	PK	1
<b>Village Pines School</b>	Private	176	PK	6
<b>Center Alternative Education</b>	Public	147	06	12
<b>Whole Word Christian Academy</b>	Private	136	PK	6
<b>Glendale Christian Academy</b>	Private	NA	KG	12
<b>University High School</b>	Private	NA	PK	05

Source: Miami-Dade County



Exhibit 24: DRIs, Social and Cultural Features





### 3 Existing Traffic Conditions

This section summarizes existing traffic conditions along the study corridor. Data from previous studies conducted along the study corridor were also obtained and analyzed.

#### 3.1 Previous Traffic Studies

The following studies were consulted for this analysis:

➤ **Coral Reef Medical Plaza Traffic Impact Study:** The 2007 study made the following observations and recommendations:

- During the field review, traffic flowed without slowdowns or delays in both directions on SW 152<sup>nd</sup> Street between US-1 and SW 117<sup>th</sup> Avenue/HEFT.
- Congestion was observed at the intersection of SW 152<sup>nd</sup> Street and SW 102<sup>nd</sup> Avenue which is adjacent to Coral Reef Senior High School between 7am to 7:20am.
- The study found that there the potential bridge crossings at SW 97<sup>th</sup> Avenue, SW 102<sup>nd</sup> Avenue, and SW 117<sup>th</sup> Avenue have drawbacks in terms of traffic impacts and community impacts.

➤ **Miami Metro Zoo Entertainment Area CDMP Amendment Transportation Analysis:** This study was completed as part of the proposal for the County Comprehensive Development Master Plan (CDMP) Amendment and will be referred to as “the Metro Zoo DRI Study”.

#### 3.2 Existing Traffic Conditions and LOS

Volume-to-Capacity (V/C) ratio is a standard measure of congestion. A V/C of 1.0 indicates a maximum use of capacity and can be considered Level of Service (LOS) “F”. LOS ranges from “A” which is free flow conditions to “F” which are congested conditions. Table 13 indicates LOS for the different segments of the study corridor. All segments appear to currently be operating at acceptable levels.

**Table 13: SW 152<sup>nd</sup> Existing Street Level of Service (LOS)**

To	From	Functional Class	Lanes	LOS
SW 162 <sup>nd</sup> Avenue	SW 147 <sup>th</sup> Place	Urban Collector / NA	2UD	
SW 147 <sup>th</sup> Avenue	SW 137 <sup>th</sup> Avenue	Urban Collector	4UD	C (07)
SW 137 <sup>th</sup> Avenue	W 124 <sup>th</sup> Avenue	Urban Principal Arterial	6DV	C (07)
SW 124 <sup>th</sup> Avenue	SW 117 <sup>th</sup> Avenue	Urban Principal Arterial	6DV	C (07)
SW 117 <sup>th</sup> Avenue	HEFT	Urban Principal Arterial	4DV	D (05)
HEFT	SW 112 <sup>th</sup> Avenue	Urban Principal Arterial	4DV	C (05)
SW 112 <sup>th</sup> Avenue	US-1	Urban Principal Arterial	4DV	C (07)

DV= Divided roadway; UD= Undivided roadway. Source: Miami-Dade County PWD and FDOT, Traffic Counts



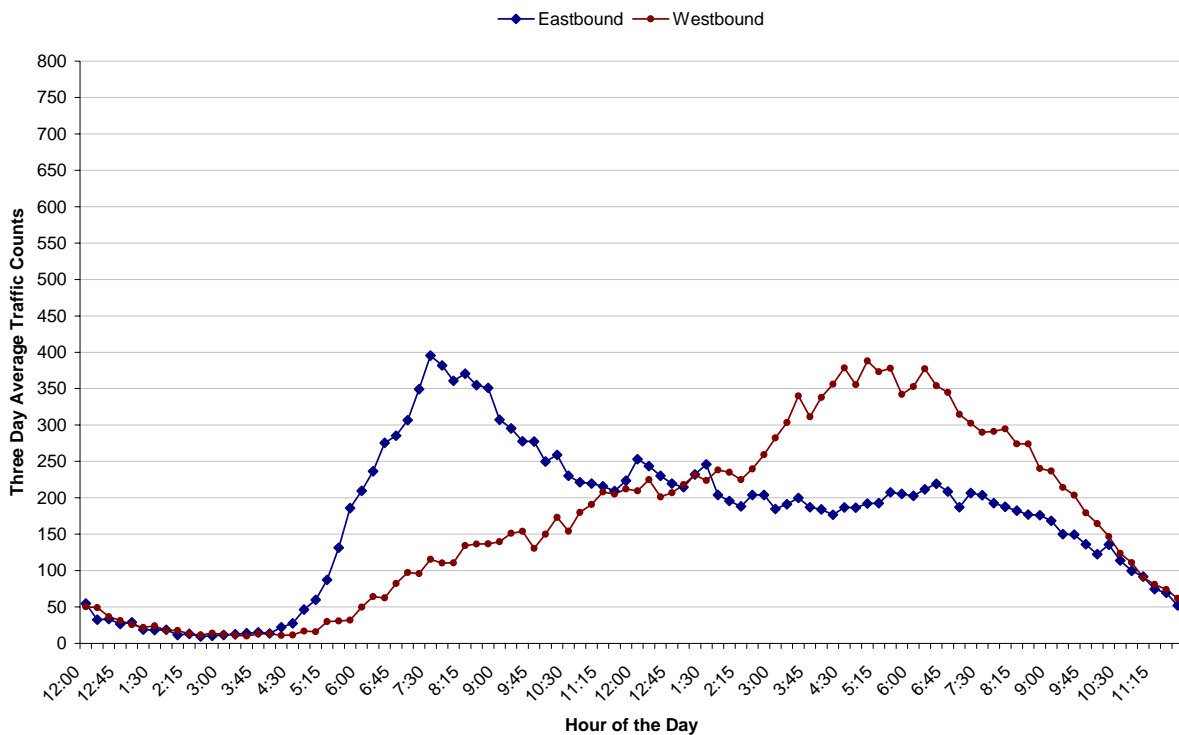
### 3.3 AADT and Turning Movement Counts

For this study, additional 72-hour machine link counts were collected along the corridor at the following three locations:

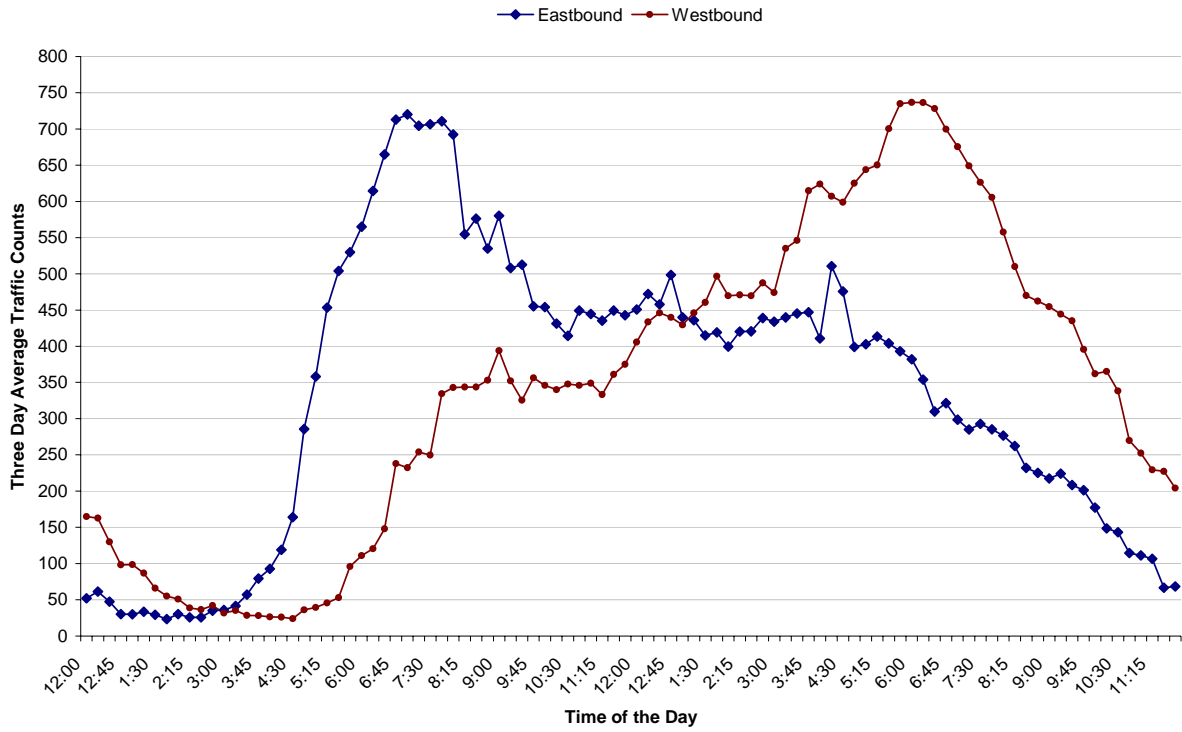
- ↘ Between SW 157<sup>th</sup> Avenue and 137<sup>th</sup> Avenue
- ↘ Between SW 137<sup>th</sup> Avenue and 117<sup>th</sup> Avenue
- ↘ Between SW 112<sup>th</sup> Avenue and US-1

Exhibits 25 to 27 show the average traffic for the 72-hour counts. The link volumes between SW 137<sup>th</sup> and SW 117<sup>th</sup> Aves show significantly high morning and evening peak hour volume compared to the other two locations. It should be noted that the data was collected in July 2007 when the Coral Reef Senior High School did not have regular classes. Nevertheless, considerable mid-day traffic volume was noticeably high at all three locations. An analysis of counts obtained for the Coral Reef Medical Plaza Study confirms high mid-day traffic volume in this corridor. The turning movement counts are included in Appendix C.

**Exhibit 25: 72-hour Machine Count between SW 157<sup>th</sup> Avenue and SW 137<sup>th</sup> Avenue**



**Exhibit 26: 72-hour Machine Count between SW 137<sup>th</sup> Avenue and SW 117<sup>th</sup> Avenue**



**Exhibit 27: 72-hour Machine Count between SW 112<sup>th</sup> Avenue and US-1**

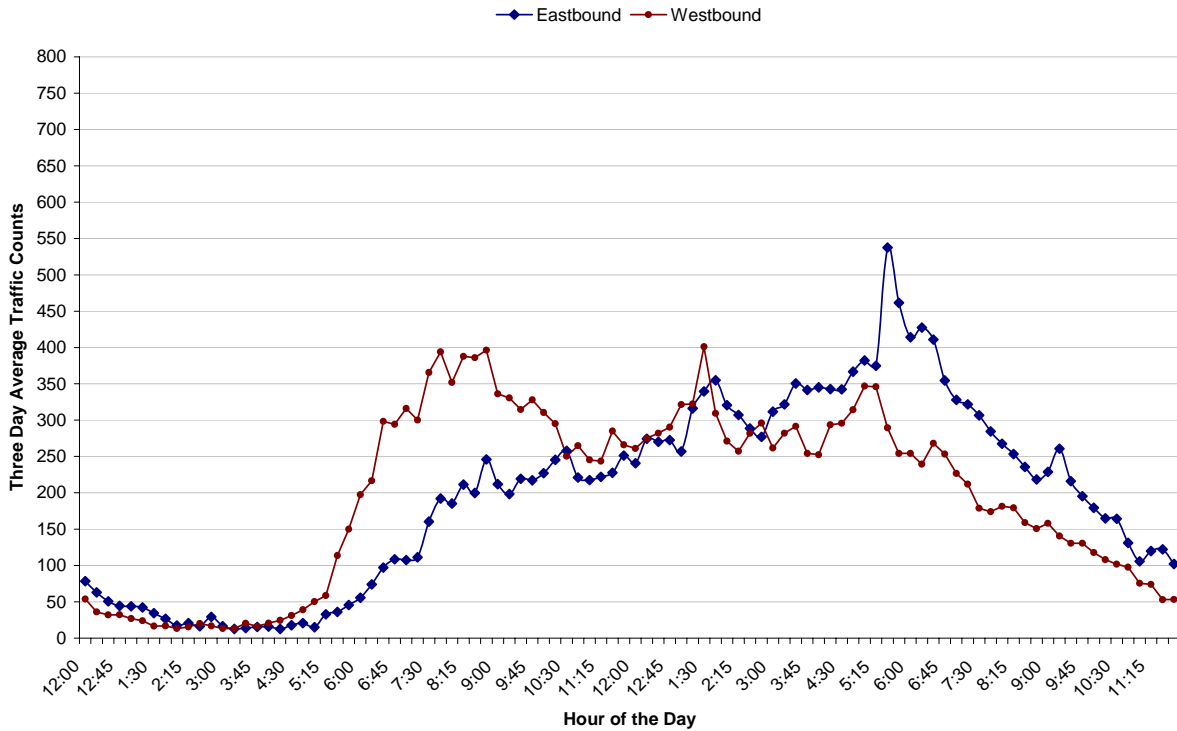


Table 14 Summarizes traffic counts obtained from various sources. Along SW 152<sup>nd</sup> Street, there has been considerable growth in traffic volume near SW 112<sup>th</sup> and 117<sup>th</sup> Avenue intersections. There has been significant increase in traffic volume along SW 137<sup>th</sup> Avenue, south and north of SW 152<sup>nd</sup> Street.

**Table 14: Traffic Counts**

Month-Year	2001	2002	2003	2004	2005	2006	Jul-07	Apr-07	Sept-06
<b>SW 152<sup>nd</sup> Street (E/W)</b>									
US-1	37,500	34,000	39,000	43,500	34,500	37,500			
SW 92 <sup>nd</sup> Avenue									29,184
SW 112 <sup>th</sup> Avenue, E of	35,000	33,500	38,000	41,000	39,000	38,000	37,993		
SW 117 <sup>th</sup> , W of	61,963	65,936	66,516	67,860	66,516	66,516	65,274	66,482	
SW 137 <sup>th</sup> Avenue, W of	43,073	47,993	46,360	54,770	50,220	42,096	32,440		
SW 142 <sup>nd</sup> Avenue, E of								32,792	
SW 147 <sup>th</sup> Avenue, E of								28,397	
SW 137 <sup>th</sup> Avenue, E of								9,590	
<b>SW 137<sup>th</sup> Avenue (N/S)</b>									
152 <sup>nd</sup> Street, S of	29,740	30,783	41,496	48,790	48,790	44,513			
<b>SW 117<sup>th</sup> Avenue (N/S)</b>									
152 <sup>nd</sup> Street, N of	29,436	27,416	24,186	29,540	24,496	30,943			
152 <sup>nd</sup> Street, S of	21,446	21,576	23,596	22,560	23,893	23,150			
<b>US-1 (N/S)</b>									
152 <sup>nd</sup> Street, N of	72,500	75,000	74,000	77,000	77,000	77,000			
152 <sup>nd</sup> Street, S of	62,500	71,000	71,000	74,000	70,000	69,000			

Source: 1. Jul-07: 72-hour traffic counts collected as a part of this study  
 2. Apr-07: CMDP Amendment Study conducted by Cathy Sweetapple and Associates, Inc.  
 3. Sept-06: Coral Reef Medical Plaza Study  
 4. 2001-2006: FDOT and MD AADT

Twelve (12)-hour (6:30am to 6:30pm) turning movement counts were also collected at the following intersections:

- SW 137<sup>th</sup> Avenue
- SW 117<sup>th</sup> Avenue
- HEFT on and off ramps
- SW 112<sup>th</sup> Avenue
- US-1

The traffic counts are included in Appendix D.

## 4 Alternative Analysis Development

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The main goal of this task was to identify and define general concepts and scope of the best improvement strategies and/or alternatives to meet the future (2015) mobility needs along the SW 152<sup>nd</sup> Street corridor based on existing conditions analysis and review of related information. Although the focus was on improvements that can be implemented by 2015, alternatives that should be further studied for implementation beyond 2015 are also presented. The process for identifying mobility improvement strategies was to look at two scenarios: (1) 2015 without committed and proposed DRIs; (2) committed and proposed DRIs. Total nine roadway, transit, and roadway and transit improvement alternatives were tested for Scenario 2. This strategy identified the cumulative impacts of committed and proposed development along the study corridor. At the request of the MPO's Transportation Planning Technical Advisory Committee (TPTAC), Scenario 3 without the Proposed Parkland Development but with all other committed developments and Metro Zoo DRI was tested.

The alternatives were defined based on travel patterns identified for the year 2015, an analysis of the existing conditions highlighted in previous sections, and input from elected officials and the MPO staff. Alternatives were also developed to compliment planned or under consideration roadway and transit improvements. The conceptual-level physical and operational characteristics of each strategy are defined to support the decision-making process through the differentiation of the individual qualities and attributes of each competing improvement strategy. The purpose is not to necessarily analyze the performance of an alternative or a set of alternatives but to identify their relative effectiveness in relieving congestion along the study corridor.

The benefits and mobility impacts of each alternative concept were defined to inform decision-makers of the tradeoffs of each strategy and how they may best be implemented in consideration of initial physical, environmental, financial, public input, land use and community development factors. Furthermore, sufficiently detailed definitions of alternatives and their characteristics are needed to allow for the defensible identification of the next steps for short- to mid-term improvements.

### 4.1 Evaluation Criteria

Based on the study purpose (Section 1.1), the following criteria were used to evaluate the relative benefits of each alternative or strategy:

#### 1: Mobility and access for personal travel

- Improve efficiency of the existing roadway network
- Expand roadway capacity and transit options to accommodate future travel demand in the corridor
- Identify improvements that can be supported by existing and future land use

#### 2: Improvements that can be implemented by 2015

- Identify short- and mid- and long-term improvements



### **3: Coordinate study corridor transportation investments to contribute to a seamless, integrated regional multimodal transportation network**

- ✎ Provide access to regional freeway and regional transit system (MDT South Dade Busway, and MDT Metrorail) facilities
- ✎ Provide for seamless connections to all modes of transportation including, bicycle and pedestrian facilities

### **4: Minimize adverse impacts to the community and local businesses**

- ✎ Minimize or mitigate adverse local traffic, parking, and safety impacts
- ✎ Minimize adverse right-of-way and physical impacts to established communities and businesses<sup>1</sup>

## **4.2 Basis of Alternatives Development**

Two key outputs of the Miami Urban Area Transportation System (MUATS) model were used to develop alternatives:

- ✎ The 2015 “desire for travel” (desire line maps)
- ✎ Level of Service (LOS) along corridors serving the “desire for travel” patterns

### **4.2.1 The Desire for Travel**

The desire line travel analysis reflects destinations and sub-regional travel markets that are attracting a significant amount of traffic from and to the study corridor. For this analysis, the county was divided into the following 14 zones, roughly along the lines of the major transportation corridors.

#### **Along the SW 152<sup>nd</sup> Street Corridor**

- ✎ Zone 1: West of SW 157<sup>th</sup> Avenue
- ✎ Zone 2: Between SW 157<sup>th</sup> Avenue and SW 137<sup>th</sup> Avenue
- ✎ Zone 3: Between SW 137<sup>th</sup> Avenue and HEFT
- ✎ Zone 4: Between HEFT and SW 107<sup>th</sup> Avenue
- ✎ Zone 5: Between SW 107<sup>th</sup> Avenue and US-1
- ✎ Zone 6: East of US-1

#### **Outside the SW 152<sup>nd</sup> Street Corridor**

- ✎ Zone 7: West of US-1
- ✎ Zone 8: East of US-1
- ✎ Zone 9: West of SR-874 and south of SR-836

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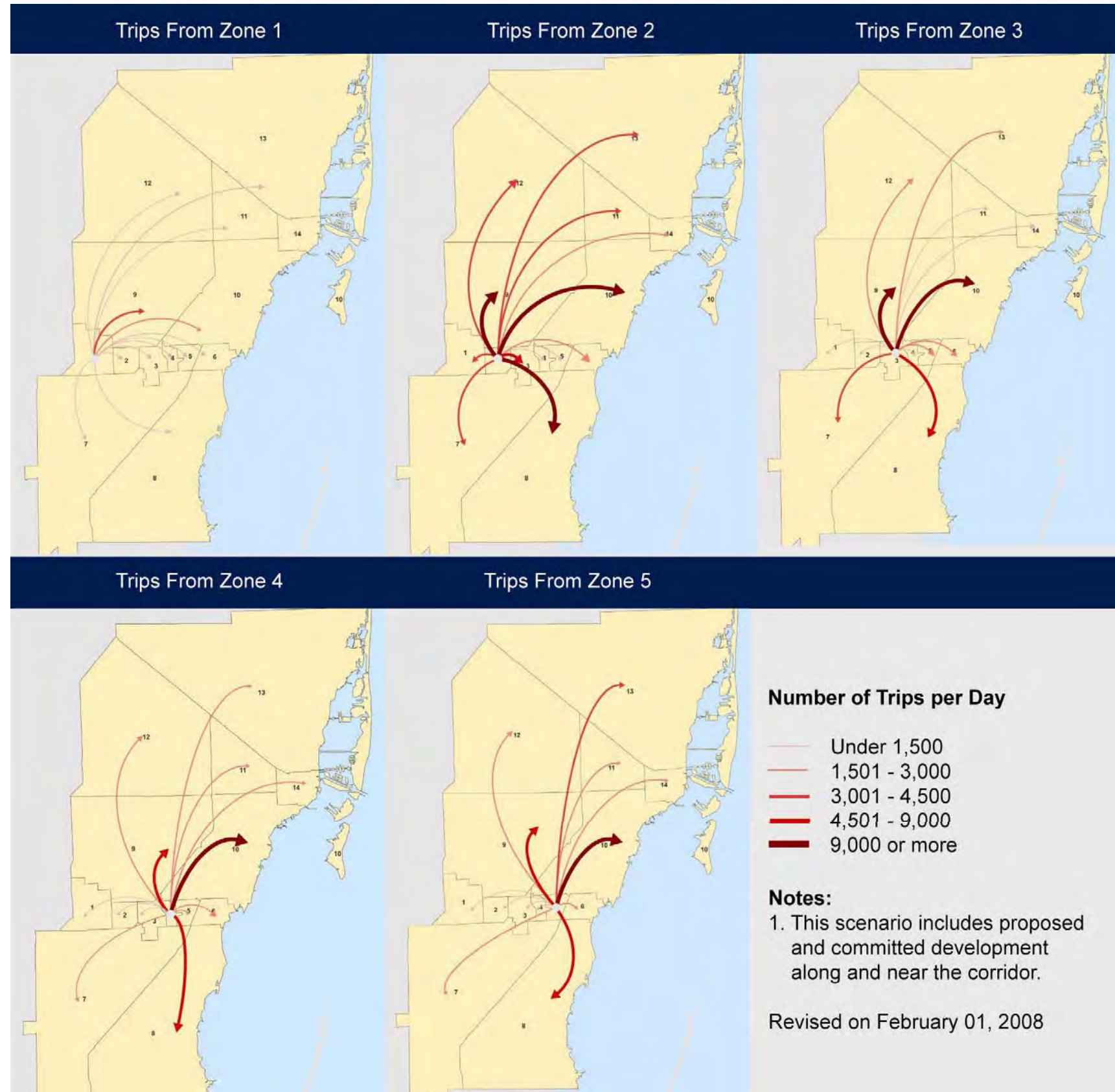
<sup>1</sup> The alternatives were developed based on readily available information. More detailed analysis of all types of physical, social, and environmental impacts is recommended.

- Zone 10: East of SR-874 and south of SR-836
- Zone 11: East of SR-826 and south of Okeechobee Rd
- Zone 12: West of SR-826 and south of Okeechobee Rd
- Zone 13: North of Okeechobee Rd
- Zone 14: The City of Miami Downtown

A review of travel desire patterns yielded the following conclusions (Exhibit 28):

- According to information included in the Parkland DRI proposal, mixed-use development, office and commercial land uses are proposed. As a result of this proposed development, Zone 1 is projected to have a significant number of trips. There is also a significant increase in trips from Zone 1 to Zone 2. It should be noted that adjacent to the proposed Parkland DRI, the land use is predominantly low-density single family residential. Therefore, a high-number of trips within Zone 1 potentially indicates that the model is underestimating inter-zonal trips.
- The majority of the trips to and from Zones 2 and 3 are to and from Zones 9, 10, and Zone 8. This confirms that the E-W movement along the corridor is mainly accessing N-S roadways (HEFT, SW 107<sup>th</sup> Avenue, and US-1) and transit services (South Dade Busway) for travel to the center and eastern end of the corridor. Therefore, alternatives were developed to satisfy this travel desire.

Exhibit 28: 2015 Trips Productions (Scenario: with committed and proposed development)



### **4.2.2 Level of Service (LOS)**

The MUATS model was used to determine future LOS for the study corridor. The 2015 roadway LOS in the study corridor area is shown in Exhibit 29 without the committed and proposed developments. The link between the HEFT and US-1 is projected to be operating above its capacity. The link from SW 107<sup>th</sup> Avenue to SW 137<sup>th</sup> Avenue is also projected to be operating at or near capacity.

### **4.3 Strategy/Alternatives Identification**

Mobility needs for the study corridor were identified at the sketch planning level by analysis of the general travel patterns for the year 2015. Traffic congestion along the corridor indicated the need for additional capacity in both scenarios. As previously indicated, transit along the corridor, MDT's Coral Reef Max service, is operating below its capacity (Section 2.1.8). However, as identified in the desire for travel analysis, there is a strong travel market in areas along US-1 and the HEFT. The low ridership of the existing local transit service potentially indicates a need for premium (high-speed) transit service that provides an attractive alternative to auto trips. Therefore, premium transit improvements were also considered. The following strategies were used to define alternatives:

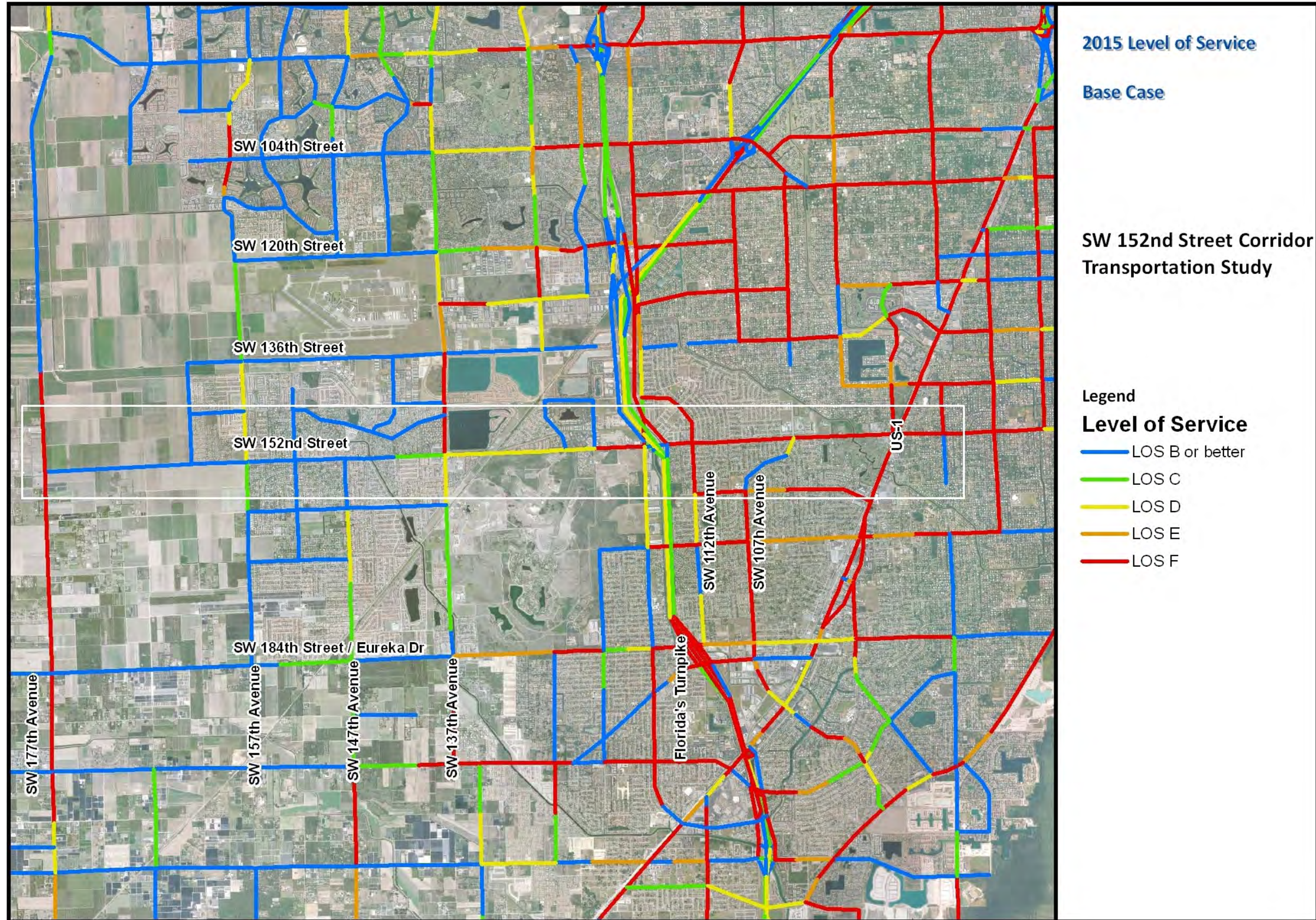
- ✎ No-build / Transportation Systems Management
- ✎ Roadway Improvements Only
- ✎ Transit Improvements Only
- ✎ Roadway and Transit Improvements
- ✎ Other Improvements (e.g. transit facilities, intersections, bicycle and pedestrian improvements)

### **4.4 Alternatives Definition**

An alternative is defined as a unique combination of an alignment, mode (auto or transit), and service need. The length and diversity of land uses along the study corridor presents a unique challenge for developing alternatives. As indicated in the following analysis, there are a number of distinct but overlapping travel patterns along the east-west and north-south axis of the corridor oriented towards multiple activity and employment centers. Study efforts were organized to provide sufficient focus on these sub-corridor travel markets while simultaneously ensuring that corridor-length travel patterns and potential synergies were also captured through analysis.



Exhibit 29: Scenario 1 - 2015 Level of Service





#### 4.4.1 Alignments

The alignments used to build the alternatives tested were generally defined to meet the 2015 service needs due to the committed and proposed DRIs. The future year travel patterns and roadway LOS were overlapped with the existing and planned/proposed freeway and transit project alignments. The following alignments were identified for roadway and transit improvements.

##### E-W alignments

- ↘ SW 152<sup>nd</sup> Street
- ↘ SW 136<sup>th</sup> Street

##### N-S alignments

- ↘ The CSX rail corridor
- ↘ SW 137<sup>th</sup> Avenue
- ↘ SW 107<sup>th</sup> Avenue/HEFT

#### 4.4.2 Mode

An urban transport mode is defined by a combination of three basic characteristics: right-of-way, technology and service. Auto mode, as included in the County's MUATS model will be considered for roadway improvements. Since auto mode has no technological variation, the discussion in this subsection focuses on various transit technologies which can be divided into the following three categories:

1. **Street Transit**, consisting of modes operating in a mixed traffic environment at commercial speeds lower than that of surrounding traffic due to time lost at passenger stops. The MDT operates street transit in the form of regular bus service. Since one of the goals of the study is to identify implementable projects by 2015, only bus transit modes were considered for alternatives along this corridor.
2. **Semi-Rapid Transit**, consisting of modes operating mostly in exclusive or semi-exclusive rights-of-way at commercial speeds. The South Dade Busway (BRT) is a regional example of semi-rapid transit. Along SW 152<sup>nd</sup> Street, both BRT and LRT can provide almost equal time-savings benefit. However, due to the fact that MDT has a BRT system in operation that links to the corridor, thereby affording a maximum advantage in operational synergies, only BRT was considered for further analysis.
3. **Rapid Transit**, consisting of modes operating in exclusive rights-of-way and exhibiting high speed, capacity, reliability and safety. MDT's Metrorail is a local example of rapid transit. Rapid transit modes require significant funding commitments and high density land uses to support it. Due to its high cost rapid transit alternatives are not implementable by 2015 and were eliminated from consideration. Moreover, low density single-family development along the study corridor (see Section 2.2) would not readily support a premium transit mode like Metrorail.

Therefore, the two transit modal technologies considered applicable to test along the corridor were:

- ↘ Regular bus and express bus service, a limited or skip-stop variation of regular bus service (improvements to existing service)
- ↘ Bus Rapid Transit (BRT) on exclusive rights-of-way or travel lane

## **4.5 Alternatives Considered**

A two part process was used to develop and analyze the alternatives. In the first part, a broad range of alternatives were considered for each identified strategy (Table 15). This included projects in the County's TIP/LRTP, improvements under project definition stage, and the applicable alternatives of the Kendall-Link Transit Study. These alternatives were then compared against the evaluation criteria listed in Section 4.1 and alternatives with fatal flaws were removed from further consideration.

Table 15: Alternatives Considered

Strategy	Alternative				Basis for Consideration	Mobility	Implement	Multimodal	No Impact	Remarks		
	Type/Alignment	From	To	Improvement								
Roadway Improvements	1	SW 152 <sup>nd</sup> Street	HEFT	US-1	Widening – 4 to 6 lanes	L RTP Priority 3	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	The funding for this project is not expected to be available until 2016. However, this roadway link connects to arterials of regional importance and is projected to be operating above capacity in 2015. Therefore, this improvement was evaluated as an alternative.	
	2	SW 152 <sup>nd</sup> Street	SW 157 <sup>th</sup> Avenue	SW 147 <sup>th</sup> Avenue	Widening – 4-6 lanes	L RTP Priority 3	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	According to the County's 2030 L RTP, this facility will be constructed in 2010/11. Also, this facility is projected to be operating at LOS B or better in 2015 and therefore was not considered for further analysis.	
	3	HEFT/SW 152 <sup>nd</sup> Street			NB HEFT ramp from EB SW 152 <sup>nd</sup> Street/SW 118 <sup>th</sup> Avenue	MPO Grade Separation Study	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	There is no funding available for this project. However, the MPO Grade Separation Study (June 2005), which considered safety and physical impacts, recommended this project for further evaluation. This alternative was considered to further examine its effectiveness in improving traffic flow along the study corridor.	
	4	CSX Railroad	SR-874	SW 152 <sup>nd</sup> Street	New 4-lane roadway	Input on existing conditions report	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	The CSX railroad corridor alignment connecting SR-874 and SW 152 <sup>nd</sup> Street was suggested for further evaluation and was considered as an alternative.	
	5	SW 136 <sup>th</sup> Street			SR-874 ramp from SW 136 <sup>th</sup> Street	Input; MDX TIP 2008-12	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	This improvement was suggested for further evaluation and therefore was considered as an alternative.	
	6	SW 136 <sup>th</sup> Street	SW 177 <sup>th</sup> Avenue	SR-874	Limited-access arterial	MDX Trans. Plan	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	This improvement was suggested for further evaluation and therefore was considered as an alternative.	
Transit Improvements	7	SW 152 <sup>nd</sup> Street	SW 137 <sup>th</sup> Avenue	S Dadeland Metrorail Station via US-1	BRT on exclusive lanes	Analysis of existing conditions and travel desire analysis	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	There is no readily available funding for this project. However, this transit route can connect with a regional premium transit service. This service can also benefit from an underutilized park-and-ride lot at the HEFT/SW 117 <sup>th</sup> Avenue and can potentially relieve congestion along SW 152 <sup>nd</sup> Street. As shown in Figure 5, except a few constrained areas, right-of-way is available for most part of this corridor. Therefore, this was considered for further evaluation.	
	8	SW 152 <sup>nd</sup> Street	SW 177 <sup>th</sup> Avenue	S Dadeland Metrorail Station via US-1	BRT on exclusive lanes	Analysis of existing conditions	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	This transit service connects a proposed major DRI and the western most parts of the county with a regional premium transit service. Compared to the existing MDT local bus service, this service provides significant time savings to users. This improvement was considered for further analysis.	
	9	HEFT	SW 152 <sup>nd</sup> Street / 117 <sup>th</sup> Avenue	Florida International University (FIU)	Metrorail	Alternative B1 of Kendall-Link Study	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	According to the Kendall-Link Study, this premium transit service can potentially serve 12,000 daily riders in 2030. However, this project requires significant funding (approximate \$1.68B) and relies on very competitive grants from FTA. Also, this project may involve the HEFT - a Strategic Intermodal System (SIS) facility, which may require additional coordination with the Turnpike Enterprise. All these factors are highly likely to take the implementation beyond the 2015 horizon. Therefore, this alternative is removed from further consideration. However, to evaluate the impact of this Kendall-Link study alignment on the study corridor, an express bus service on the HEFT from the park-and-ride lot at SW 117 <sup>th</sup> Avenue to the FIU was considered for further evaluation.	
	10	CSX Railroad	Metro Zoo	MIC	DMU	Alternative C2 - C4 of Kendall-Link Study	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	The implementation of this alternative is expected to require negotiations with the CSX Railroad Corporation and building community support. These tasks are expected to take significant amount of time and resources and therefore this alternative is removed from further consideration.	
	9	SW 137 <sup>th</sup> Avenue / SW 152 <sup>nd</sup> Street / SW 152 <sup>nd</sup> Street	FIU 117 <sup>th</sup> Avenue		BRT	Alt D1Kendall-Link	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	This 13-mile long corridor will require significant changes in roadway sections to accommodate BRT. However, to help answer the question – does this Kendall-Link Corridor benefit SW 152 <sup>nd</sup> Street? This alternative was considered.	
Other Improvements	11	Intersections				Analysis of existing conditions	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Intersection improvements such as auxiliary right-turn lanes and additional capacity for left-turn lanes can provide immediate, but often temporary, relief from congestion. These improvements can potentially maximize capacity of the study corridor therefore were considered for further evaluation. 12-hour turning movement counts and right-of-way information were used to identify potential improvements at conceptual-level.	
	12	Bus bays				Far-side bus bays at SW 99 <sup>th</sup> Court and other locations	Analysis of existing conditions	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Bus bays can increase through-movement capacity of a roadway link and, at the same time, provide greater convenience and comfort for transit users. This alternative was considered and potential candidates for bus bay facilities were identified based on the analysis of existing conditions
	13	Access Management				Existing conditions	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	As discussed in Section 2.1.11, segments of the study corridor can be improved to meet the standards for an Access Class 5 facility. Therefore this alternative was considered for further evaluation.	
	14	Bike-Pedestrian				Existing conditions	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	As discussed in Section 2.2, there are 14 schools and several other cultural and recreational facilities (e.g. Miami Metro Zoo) near the study corridor. Pedestrian and bicycle improvements can also support the existing and future transit service therefore these alternative was considered for further evaluation.	
	15	SW 152 <sup>nd</sup> Street	HEFT	US-1	ITS improvements	L RTP Priority II project	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	ITS improvements along SW 152 <sup>nd</sup> Street are included in the County's 2030 L RTP. ITS improvements can improve traffic flow in a short-term and can be considered along with other transit or roadway improvements.	

Meet Criteria  Does not meet criteria  Not applicable/detailed evaluation required



## 4.6 Alternatives Evaluated

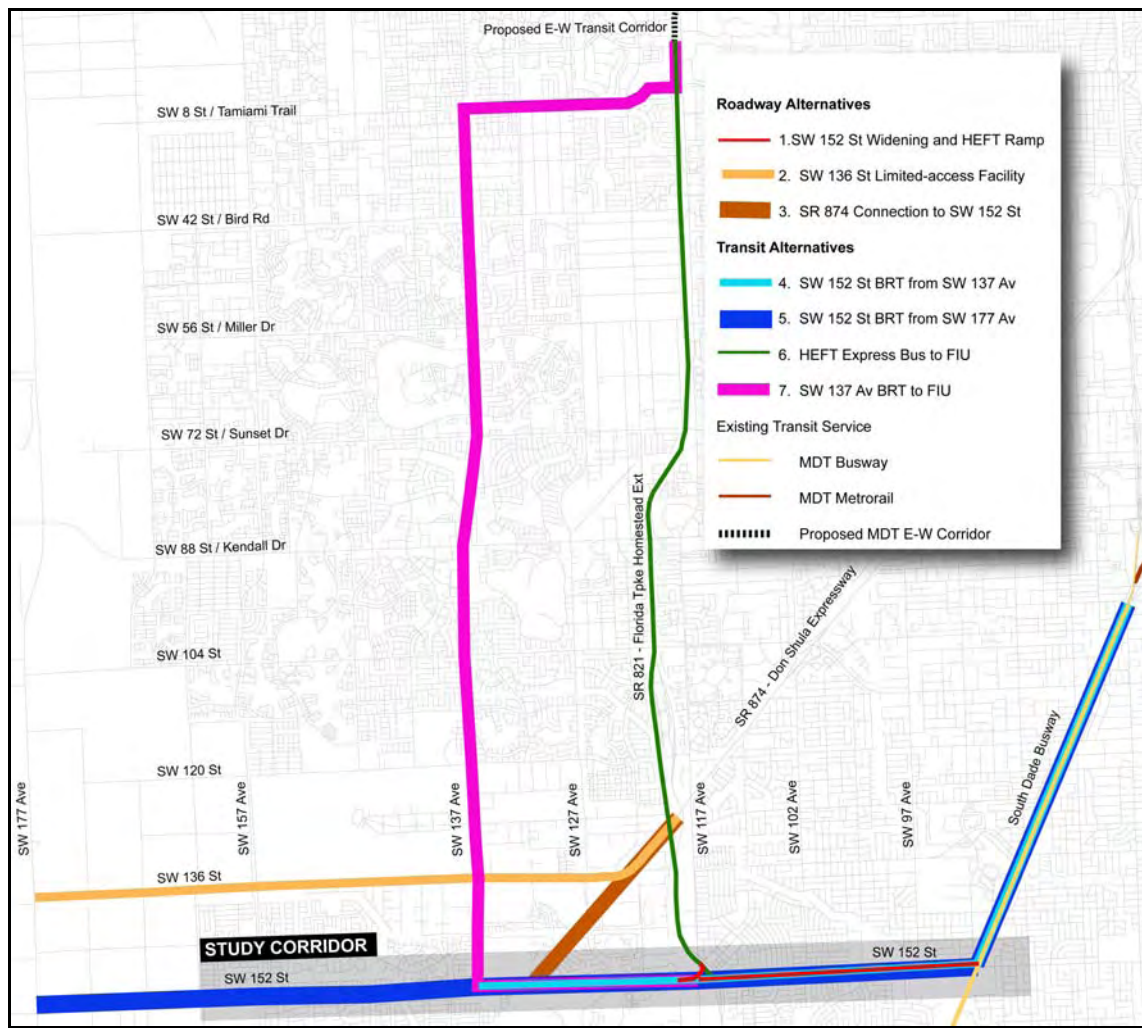
Based on the information in Table 15, total seven roadway and transit alternatives were further analyzed along with intersection and, bicycle and pedestrian improvements. Two alternatives with combination of roadway and transit improvements were also considered.

### 4.6.1 No-build / TSM Alternative

Typically, the no-build and TSM alternatives are two distinct strategies/alternatives. The no-build strategy includes maintaining current roadway capacity and transit service to future year while the no-build/TSM alternative includes improvements that require relatively less investment. For the study corridor, the County's LRTP includes Intelligent Transportation System (ITS) improvements along SW 152<sup>nd</sup> Street from the HEFT to US-1. As this improvement is already planned, the no-build and TSM strategies are effectively the same. An improved, more frequent transit service was considered for the TSM alternative but was subsequently eliminated due to the limited market for the current street (local bus) transit service.

### 4.6.2 Roadway and Transit Alternatives

Exhibit 30: Transit and Roadway Alternatives



**Alternative 1: SW 152<sup>nd</sup> Street Widening and NB HEFT Ramp**

**E-W Alignment:** SW 152<sup>nd</sup> Street

**Western End Point:** SW 117<sup>th</sup> Avenue/HEFT

**Eastern End Point:** US-1

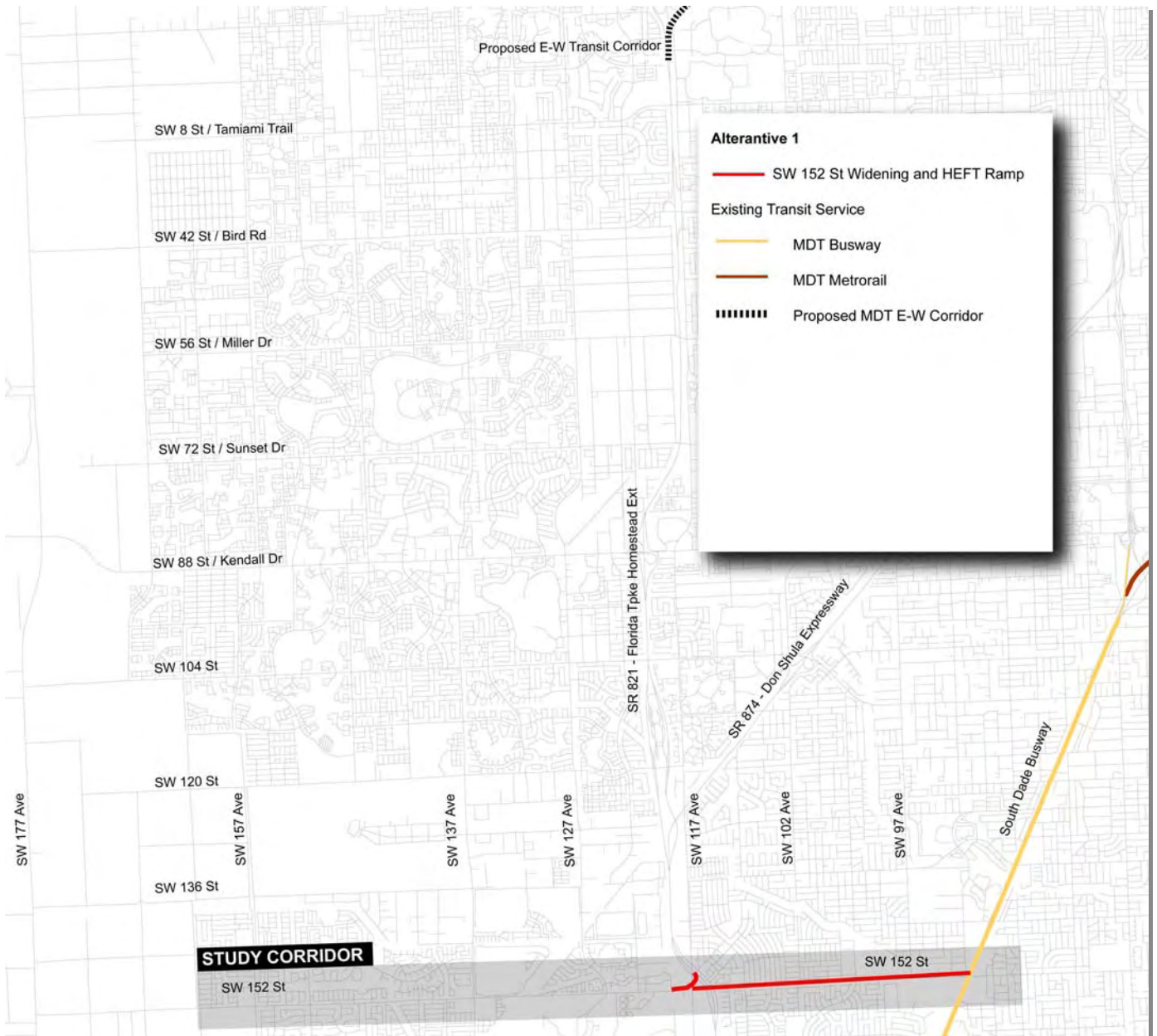
**Improvement:** Widening 4 to 6 lanes

**Focus:** Traffic from/to the HEFT going east or west, through movement on SW 152<sup>nd</sup> Street

**Intermediate Developments:** Jackson South Hospital

**Approx Length:** 2.5 miles

**Exhibit 31: Alternative 1 – SW 152nd Street Widening and NB HEFT Ramp**





**Exhibit 32: Illustration 1: Alternative 1 – SW 152<sup>nd</sup> Street Widening and NB HEFT Ramp**



**Exhibit 33: Illustration 2: Alternative 1 – SW 152<sup>nd</sup> Street Widening and NB HEFT Ramp**





**Alternative 2: SW 136<sup>th</sup> Street Limited-access Facility**

**E-W Alignment** SW 136<sup>th</sup> Street

**Western End Point:** SW 177<sup>th</sup> Avenue

**Eastern End Point:** SR-874

**Improvement:** A 4-lane limited-access facility, one-way frontage roads on both sides

**Focus:** Connection to SR-874, an attractive mobility option for E-W travel in SW Dade

**Intermediate Developments:** Travel markets south and north of SW 136<sup>th</sup> Street, Tamiami Airport

**Approx Length:** 6.0 miles

**Exhibit 34: Alternative 2 – SW 136<sup>th</sup> Street Limited-access Facility**

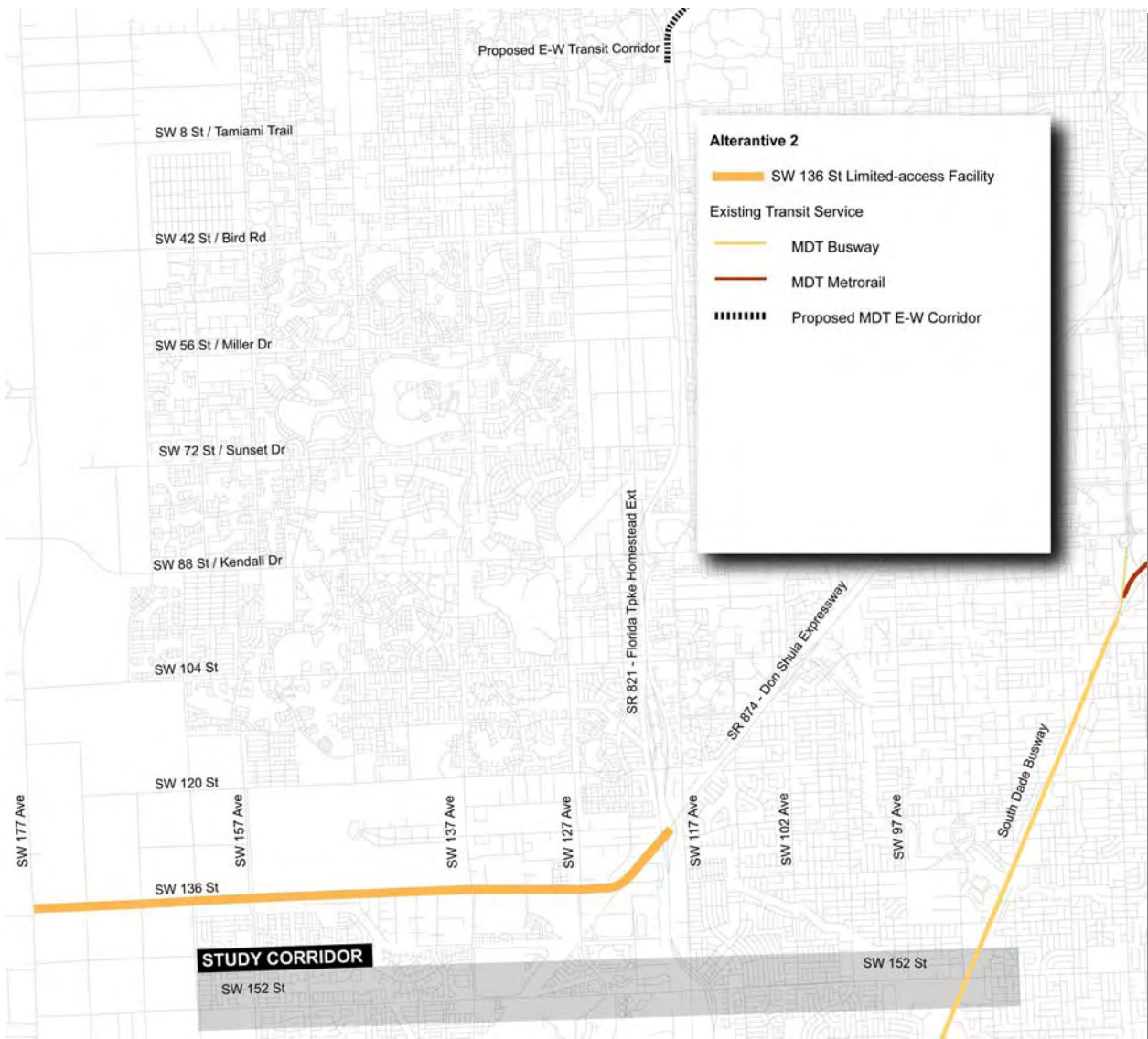




Exhibit 35: Illustration 1: Alternative 2 – SW 136<sup>th</sup> Street Limited-access Facility

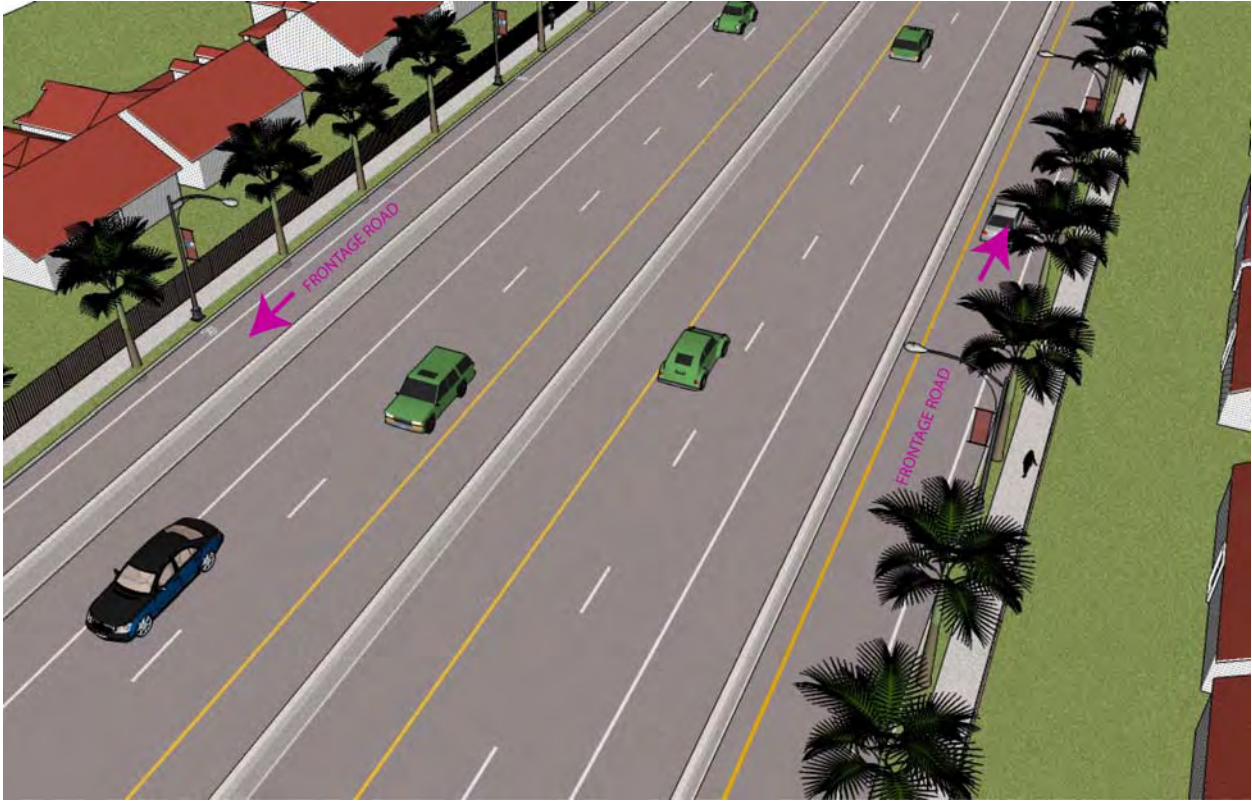


Exhibit 36: Illustration 2: Alternative 2 – SW 136<sup>th</sup> Street Limited-access Facility



**Alternative 3: SR-874 Connection to SW 152<sup>nd</sup> Street**

**N-S Alignment:** CSX Railroad

**Southern End Point:** SW 152<sup>nd</sup> Street

**Northern End Point:** SR-874

**Improvement:** A 4-lane facility and a ramp to SR-874

**Focus:** Capture E-W traffic going north, reduce through traffic causing congestion between the HEFT and US-1

**Intermediate Developments:** Miami Metro Zoo, University of Miami DRI, proposed Parkland DRI

**Approx Length:** 2.0 miles

**Exhibit 37: Alternative 3 – SR-874 Connection to SW 152<sup>nd</sup> Street**





**Exhibit 38: Illustration 1: Alternative 3 – SR-874 Connection to SW 152<sup>nd</sup> Street**



**Exhibit 39: Illustration 2: Alternative 3 – SR-874 Connection to SW 152<sup>nd</sup> Street**





**Alternative 4: SW 152<sup>nd</sup> Street BRT from SW 137<sup>th</sup> Avenue**

**N-S Alignment** MDT Busway

**E-W Alignment** SW 152<sup>nd</sup> Street

**Southern End Point:** 137<sup>th</sup> Avenue and SW 152<sup>nd</sup> Street

**Northern End Point:** Dadeland South Metrorail Station (via MDT Busway)

**Improvement:** Two BRT-only lanes (instead of widening) and feeder express buses from SW 177<sup>th</sup> Avenue

**Focus:** E-W traffic on SW 152<sup>nd</sup> Street going north or south, regional transit connectivity via Metrorail

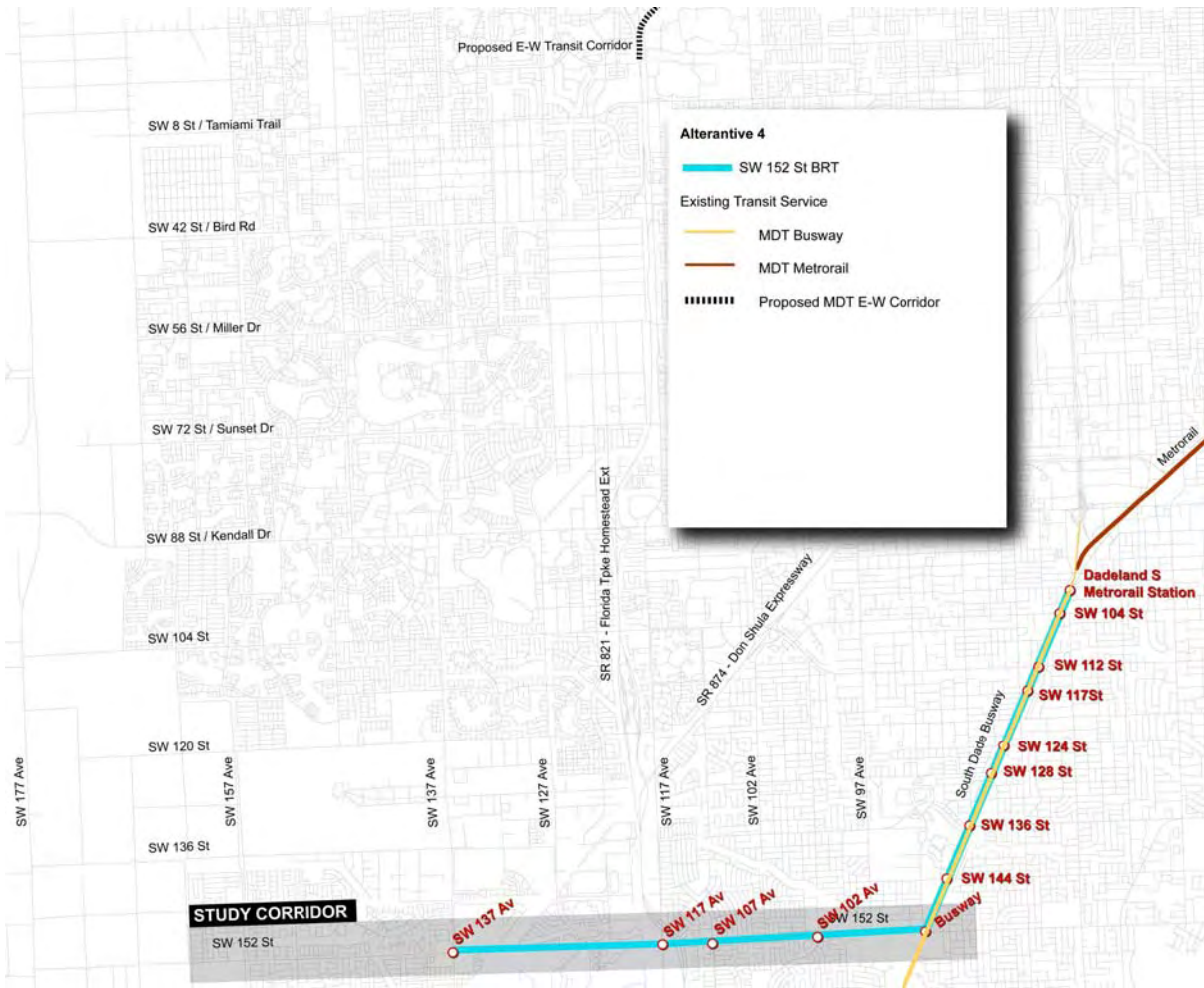
**Intermediate Developments:** Jackson South Hospital, a proposed DRI, single-family residential developments

**Approx Length:** Total 7.0 miles, 2.5 miles excluding MDT Busway part

**Assumptions:** BRT and express bus headway – 10 min peak / 20 min off-peak; BRT Speed – 30 mph; BRT Fare – Same as Busway, use of existing park-and-ride lots

**Number of Stops:** Total 13 stops, 5 stops from SW 137<sup>th</sup> Avenue to Busway

**Exhibit 40: Alternative 4 – SW 152<sup>nd</sup> Street BRT from SW 137<sup>th</sup> Avenue**





**Exhibit 41: Illustration1: Alternative 4 – SW 152<sup>nd</sup> Street BRT from SW 137<sup>th</sup> Avenue**



**Exhibit 42: Illustration 2: Alternative 4 – SW 152<sup>nd</sup> Street BRT from SW 137<sup>th</sup> Avenue**



**Alternative 5: SW 152<sup>nd</sup> Street BRT from SW 177<sup>th</sup> Avenue**

**N-S Alignment** MDT Busway

**E-W Alignment** SW 152<sup>nd</sup> Street

**Eastern End Point:** SW 177<sup>th</sup> Avenue

**Northern End Point:** Dadeland South Metrorail Station (via MDT Busway)

**Improvement:** Two BRT-only lanes

**Focus:** E-W traffic on SW 152<sup>nd</sup> Street going north or south, regional transit connectivity via Metrorail

**Intermediate Developments:** Jackson South Hospital, committed and proposed development, existing single-family residential developments

**Approx Length:** Total 13.1 miles, 8.6 miles excluding MDT Busway part

**Assumptions:** Headway – 10 min peak / 20 min off-peak; Speed – 30 mph; Fare – Same as Busway, use of existing park-and-ride lots

**Number of Stops:** Total 19 stops, 5 stops from SW 137<sup>th</sup> Avenue to Busway

**Exhibit 43: Alternative 5 – SW 152<sup>nd</sup> Street BRT from SW 177<sup>th</sup> Avenue**

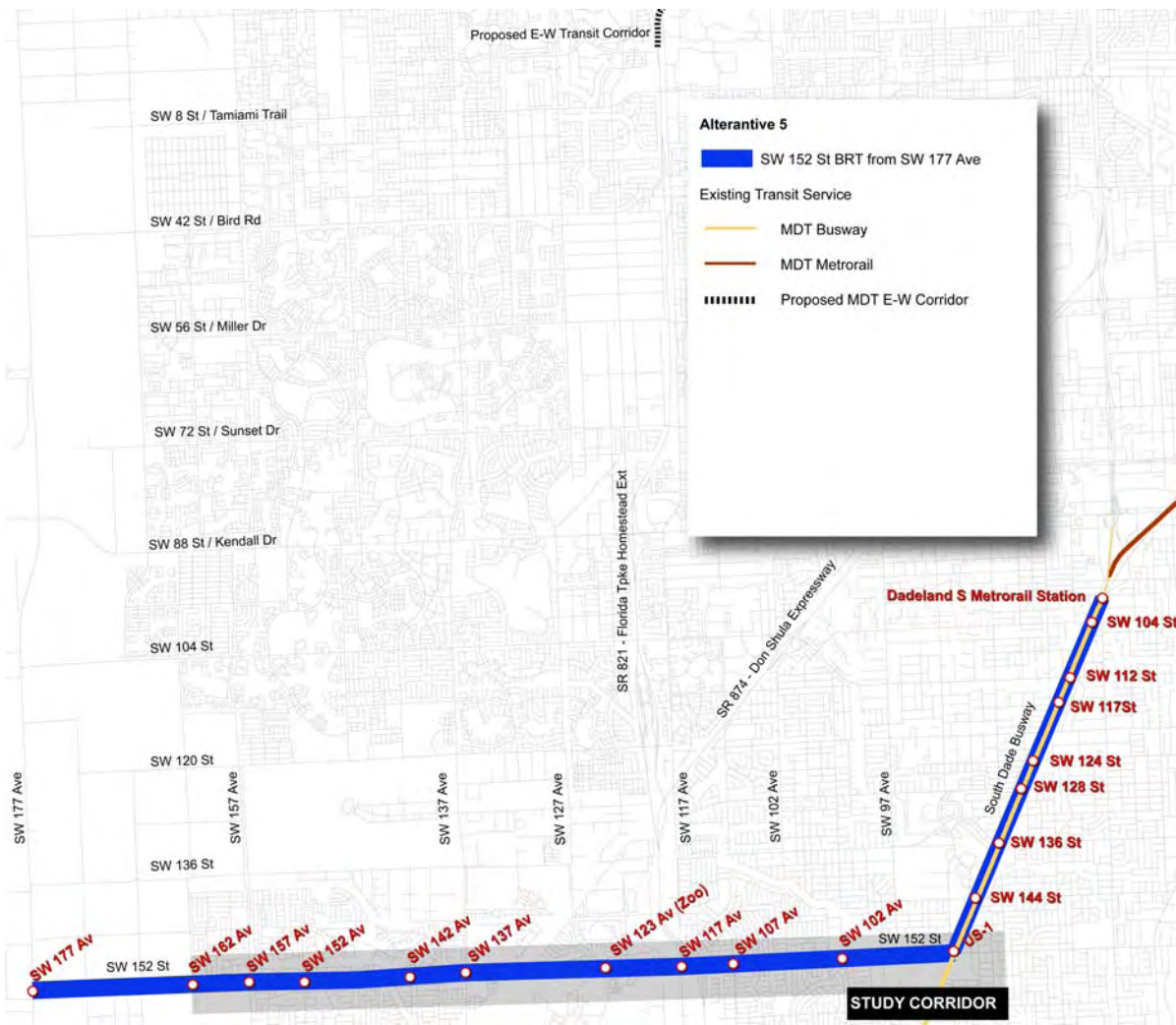




Exhibit 44: Illustration: Alternative 5 – SW 152<sup>nd</sup> Street BRT from SW 177<sup>th</sup> Avenue



**Alternative 6: HEFT Express Bus to Florida International University (FIU)**

**N-S Alignment** HEFT (travel lane or shoulder)

**Southern End Point:** Park-and-ride lot at SW 117<sup>th</sup> Avenue / SW 152<sup>nd</sup> Street

**Northern End Point:** FIU

**Improvement:** Express bus service, feeder express bus service from SW 177<sup>th</sup> Avenue

**Focus:** Evaluate impact of this Kendall-Link alignment on traffic along SW 152<sup>nd</sup> Street

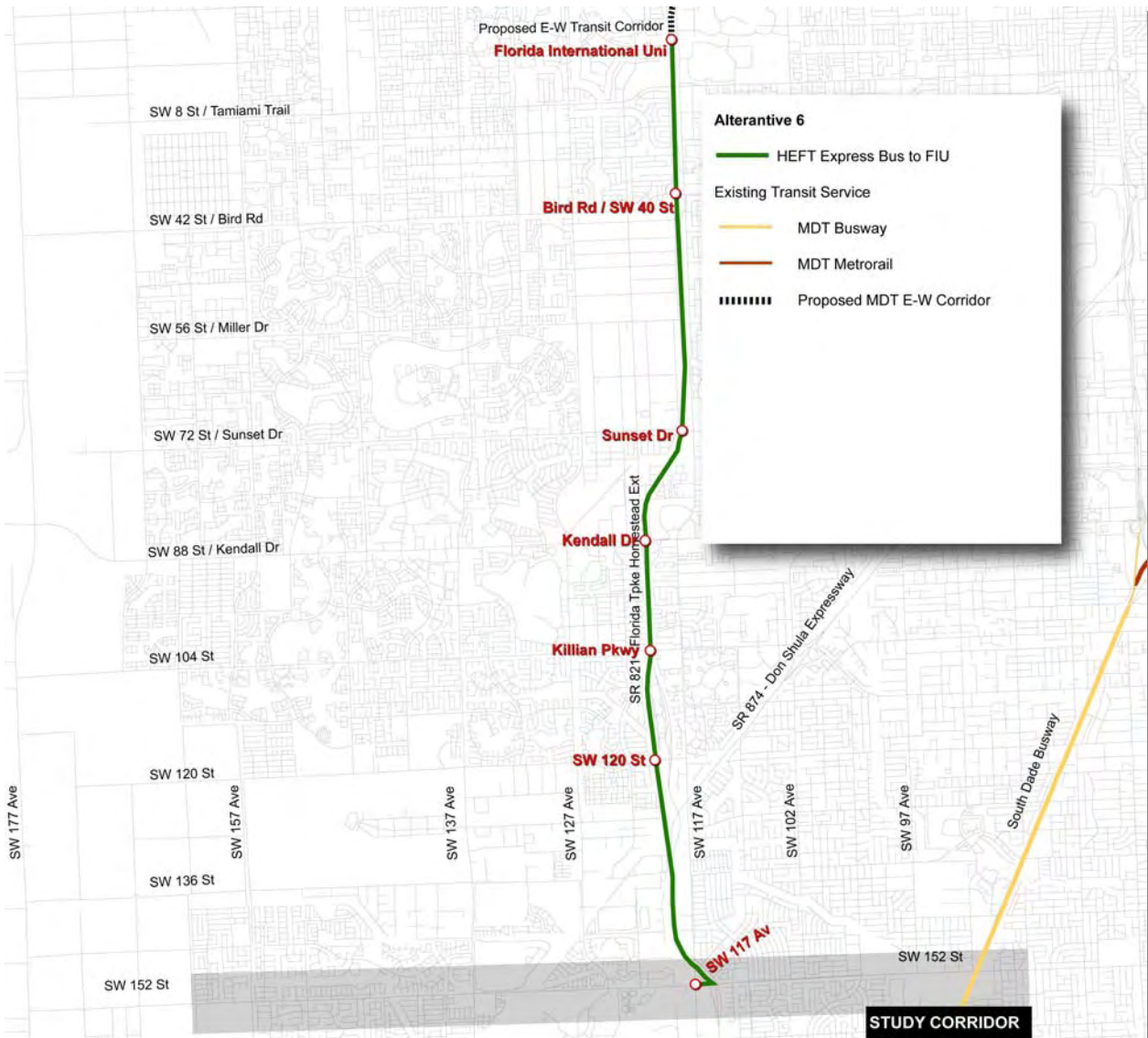
**Intermediate Developments:** Residential areas in SW Dade, Florida International University South

**Approx Length:** 9.0 miles

**Assumptions:** HEFT and feeder bus – Headway – 10 min peak/20 min off-peak; Park-and-ride at SW 117<sup>th</sup> Avenue, SW 88<sup>th</sup> Street, and FIU

**Number of Stops:** 7

**Exhibit 45: Alternative 6 – HEFT Express Bus to FIU**





**Exhibit 46: Alternative 6 – HEFT Express Bus to FIU**



An example of MDT bus on shoulder

**Alternative 7: SW 137<sup>th</sup> Avenue BRT to FIU**

**N-S Alignment** SW 137<sup>th</sup> Avenue

**Southern End Point:** Park-and-ride lot at SW 117<sup>th</sup> Avenue / SW 152<sup>nd</sup> Street

**Northern End Point:** Proposed FIU Metrorail Station

**Improvement:** BRT on exclusive bus lanes, feeder express bus service from SW 177<sup>th</sup> Avenue

**Focus:** Evaluate impact of this Kendall-Link alternative on traffic along SW 152<sup>nd</sup> Street

**Intermediate Developments:** Residential areas in SW Dade, Florida International University South

**Approx Length:** 13 miles

**Assumptions:** BRT and express bus - Headway – 10 min peak / 20 min off-peak; Speed – 30 mph; Fare – Same as Busway, Park-and-ride at SW 117<sup>th</sup> Avenue, SW 88<sup>th</sup> Street, and FIU

**Number of Stops:** 13

**Exhibit 47: Alternative 7 – SW 137<sup>th</sup> Avenue BRT**

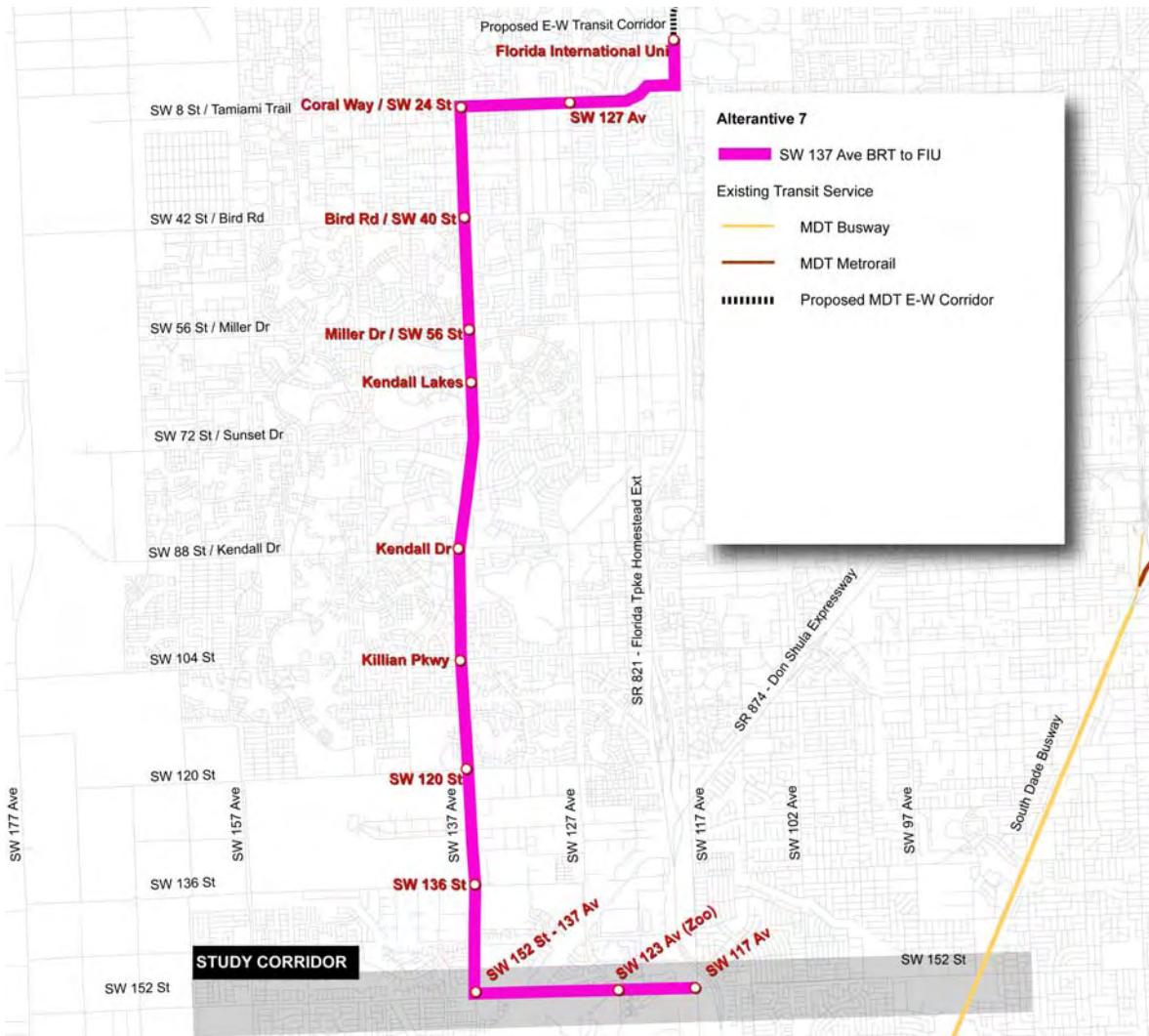




Exhibit 48: Illustration Alternative 7 – SW 137<sup>th</sup> Avenue BRT to FIU



### Alternative 8: SR-874 Connection to SW 152<sup>nd</sup> Street and SW 152<sup>nd</sup> Street BRT

Combination of roadway and transit improvement (Alternatives 3 and 4)

Different combinations of the above-mentioned roadway and transit alternatives can be implemented. A combination of alternative 3 and alternative 4 was tested. The alternative 3, SR-874 ramp to SW 152<sup>nd</sup> Street, was expected to reduce east-west traffic accessing SR-874. Similarly, a BRT service on SW 152<sup>nd</sup> Street was expected to further relieve east-west congestion.

#### Exhibit 49: Alternative 8 – SR-874 Connection to SW 152<sup>nd</sup> Street and SW 152<sup>nd</sup> Street BRT



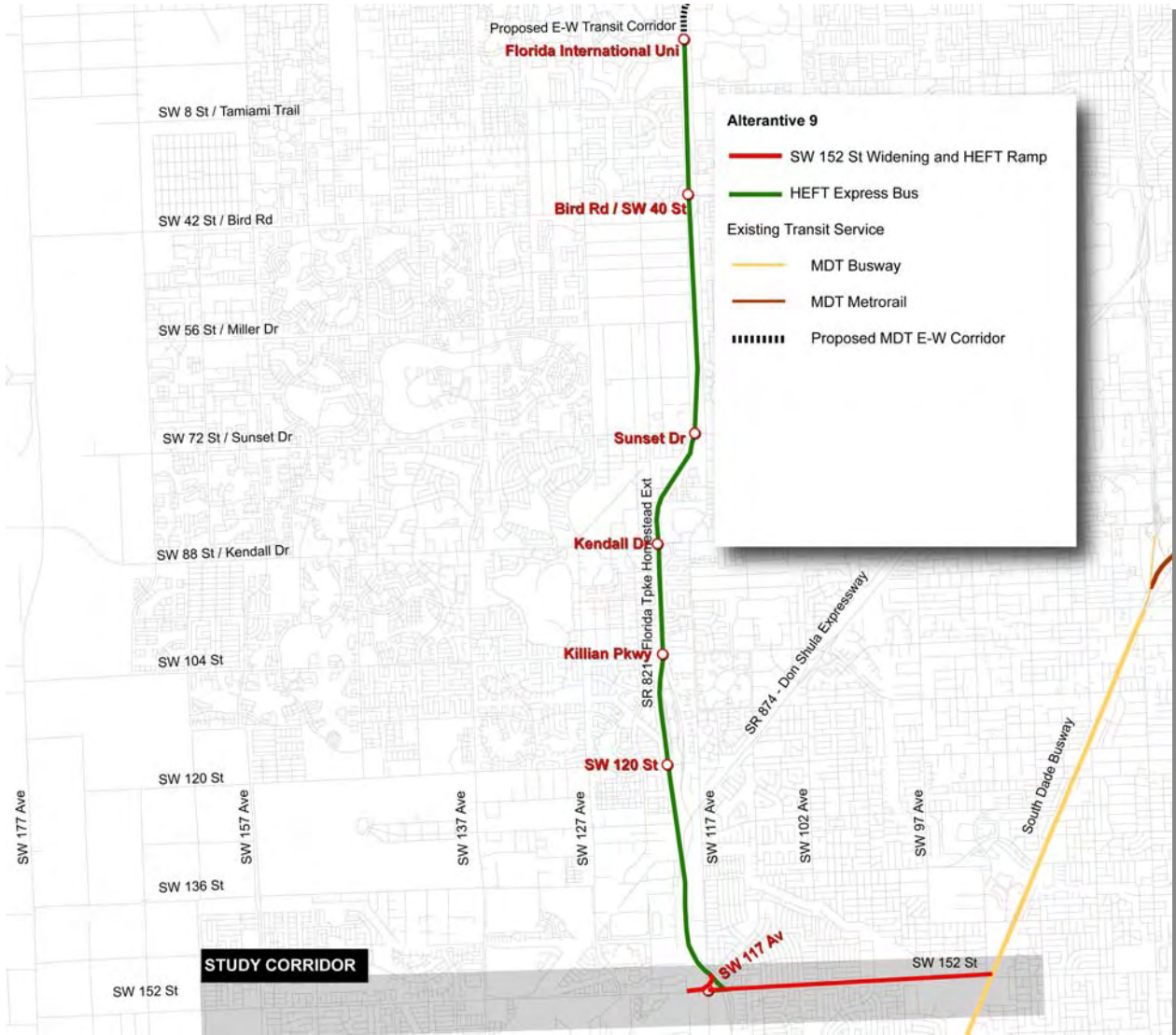


**Alternative 9: SW 152<sup>nd</sup> Street Widening, HEFT NB Ramp and HEFT Express Bus**

Combination of roadway and transit improvements (Alternatives 1 and 5)

A combination of alternatives 1 and 6 was tested. This alternative is expected to reflect traffic conditions if transit service along the HEFT alignment (shoulder or travel lane) is implemented as a part of the Kendall-Link study and roadway improvements are made along SW 152<sup>nd</sup> Street.

**Exhibit 50: Alternative 9 – SW 152<sup>nd</sup> Street Widening, HEFT NB ramp and HEFT Express Bus**



**4.6.3 Other Improvements**

Other improvements such as intersection improvements, bus bay improvements, bicycle-pedestrian access improvements, and access management improvements were not tested in the model but are recommended regardless of alternative and correspond to TSM type improvements highlighted in Section 6.

## 5 Alternative Analysis and Recommendations

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### 5.1 Results of Alternative Analysis

The MUATS travel demand model developed for the 2030 Miami-Dade LRTP was used to test the roadway and transit alternatives. For transit alternatives, the assumptions related to fare, speed, park-and-ride lots are provided along with the description of alternatives in Section 4.6.2. The model simulates a “typical” 24-hour weekday in the peak season in Miami-Dade County and provides an assessment of congestion along major roadways.

Volume to capacity ratios and ridership for transit alternatives were identified for the Scenario 2 which includes the committed and proposed developments along and near the corridor. Three roadway capacity improvement projects and four transit improvement projects were tested for this scenario.

The MUATS travel demand model was adapted and utilized to simulate travel conditions in the future year (2015). For scenario 2, the status of committed and proposed DRIs and zoning changes was discussed with the County’s planning staff. It was determined that the current model did not reflect all committed developments shown in Table 11. Therefore, the socio-economic data was updated to include all the committed and proposed development projects. A roadway link, SW 152<sup>nd</sup> Street between SW 177<sup>th</sup> Avenue was added to the network based on the application for the Parkland DRI. Planning-level assumptions were made based on available information such as number of residential units, commercial and retail square footage, school enrollment, etc.

For modeling purposes, the study area was established from SW 104<sup>th</sup> Street on the North to SW 184<sup>th</sup> Street on the South and the east-west extent was from SW 177<sup>th</sup> Avenue to US-1. This area includes the study corridor, SW 136<sup>th</sup> Street, HEFT, and others.

Volume to capacity ratios were identified for the above scenario and alternatives. Table 16 summarizes the 2015 V/C ratios for the entire county, study area, and the study corridor. The study area LOS includes the HEFT. It should be noted that the numbers represent average LOS for the study corridor and the study area and do not reflect link-specific LOS which could be higher or lower. A discussion on link-specific LOS is provided immediately after this sub-section (Section 5.1.1).

Based on Table 16 information, it is evident that the committed and proposed major development projects have a significant impact on the V/C ratios along the study corridor. The average LOS for the entire corridor (which does not reflect link-specific LOS which could be higher or lower), increases by 5%.

Among the roadway improvements alternatives tested, Alternative 2 is the best alternative as the V/C ratios for the study area and the study corridor are significantly less than the V/C ratios for the other alternatives. The widening of SW 152<sup>nd</sup> Street from 4 to 6 lanes is also expected to improve traffic conditions along the study corridor. The link-specific VC ratio and related discussion is provided in the following section.



**Table 16: Area-wide V/C Ratios and Transit Ridership**

		V/C Ratio		
		Study Area	152nd Street	Ridership
<b>Scenario 1</b>	2015 no-build	0.81	0.87	N/A
<b>Scenario 2</b>	2015 with committed and proposed DRIs	0.82	0.92	N/A
<b>Roadway Capacity Improvements</b>				
<b>Alternative 1</b>	SW 152 <sup>nd</sup> Street widening	0.81	0.90	N/A
<b>Alternative 2</b>	SW 136 <sup>th</sup> Street Limited-access Facility	0.77	0.88	N/A
<b>Alternative 3</b>	SR-874 to SW 152 <sup>nd</sup> Street	0.81	0.91	N/A
<b>Transit Improvements</b>				
<b>Alternative 4</b>	SW 152 <sup>nd</sup> Street BRT from SW 137 <sup>th</sup> Avenue	0.82	0.92	2,100
<b>Alternative 5</b>	SW 152 <sup>nd</sup> Street BRT from SW 177 <sup>th</sup> Avenue	0.82	0.92	3,400
<b>Alternative 6</b>	HEFT Express Bus to FIU	0.82	0.92	2,600
<b>Alternative 7</b>	SW 137 <sup>th</sup> Avenue BRT to FIU	0.82	0.92	3,100
<b>Roadway and Transit Improvements</b>				
<b>Alternative 8</b>	Alternatives 3 and 4	0.81	0.91	3,200
<b>Alternative 9</b>	Alternatives 1 and 6	0.81	0.90	2,600

Among the transit alternatives, SW 137<sup>th</sup> BRT, a Kendall-link study alternative performs well. As will be discussed later in this section, the express bus on HEFT alternative requires considerably low capital investment and attracts considerable ridership. Therefore it provides the most value for the money. It should also be noted that alternatives 6 and 7 assume that the East-West Corridor will not be in operation and therefore the ridership numbers reflect conservative estimates which can be expected to increase if the East-West Corridor becomes operational. The transit alternatives do not change the projected average V/C ratios for the study corridor and the study area which potentially indicates that there is an unmet demand from captive riders.

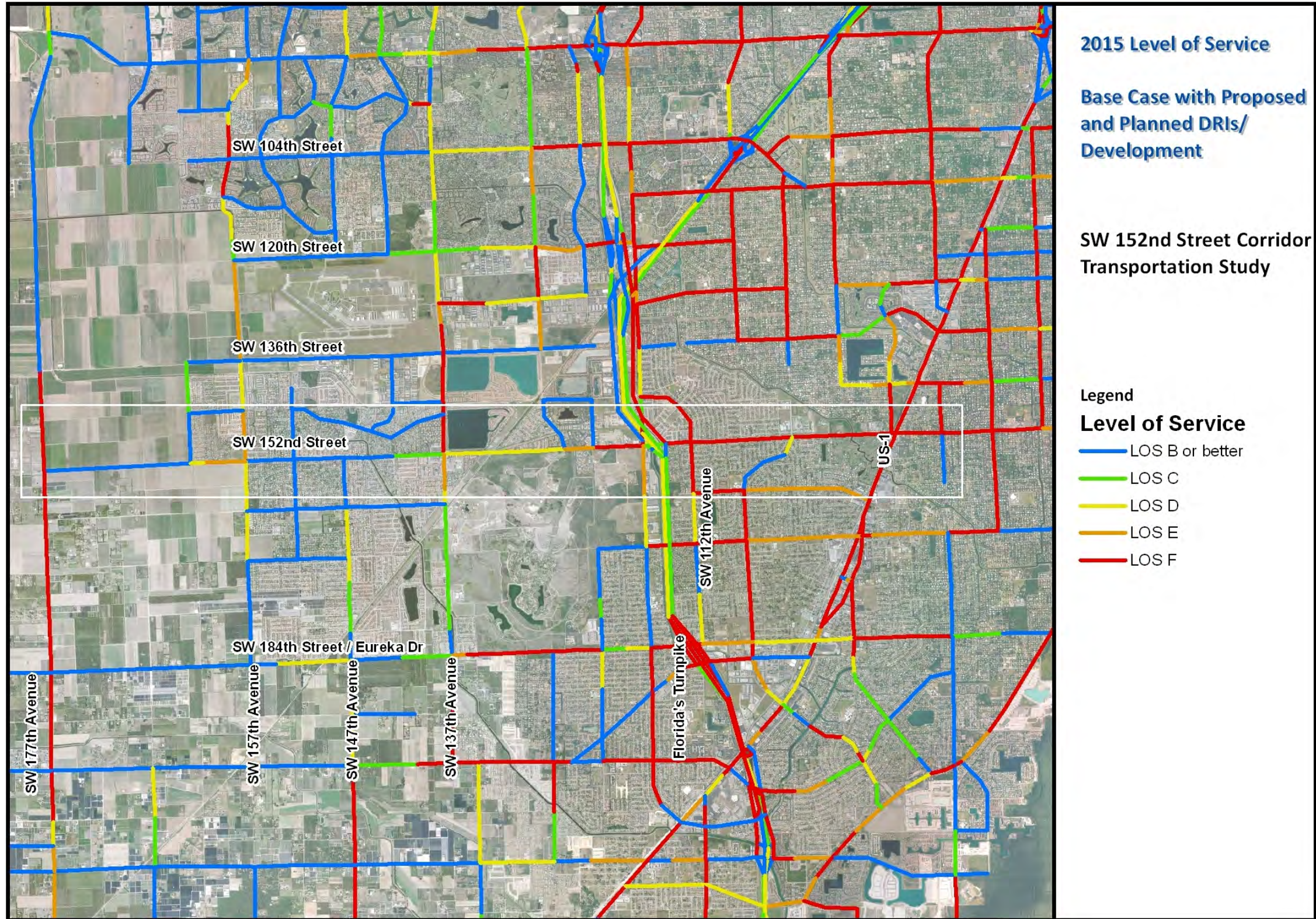
### 5.1.1 The Study Corridor Link-specific LOS

Exhibits 51 through 60 show LOS plots that provide link-specific LOS information for the 2015 scenario with proposed DRIs, and related roadway and transit alternatives.

After the initial model runs described above, based on the input from the MPO's TPTAC, another scenario without the proposed Parkland Development but with all other planned and proposed developments was tested. The TPTAC also recommended three changes to roadway network: 1. Delete SW 152<sup>nd</sup> Street link between SW 177<sup>th</sup> Avenue and SW 162<sup>nd</sup> Avenue; 2. Modify alignment of SW 157<sup>th</sup> Avenue north of SW 136<sup>th</sup> Street; 3. Changes to the Turnpike links based on input from the Turnpike Enterprise. Based on input from the TPTAC, Alternatives 1, 3, 4, 6, and 7 were tested. Exhibit 61 through 66 show LOS plots for the Scenario 3.



Exhibit 51: Scenario 2 - Committed and Proposed Development– 2015 V/C Ratio



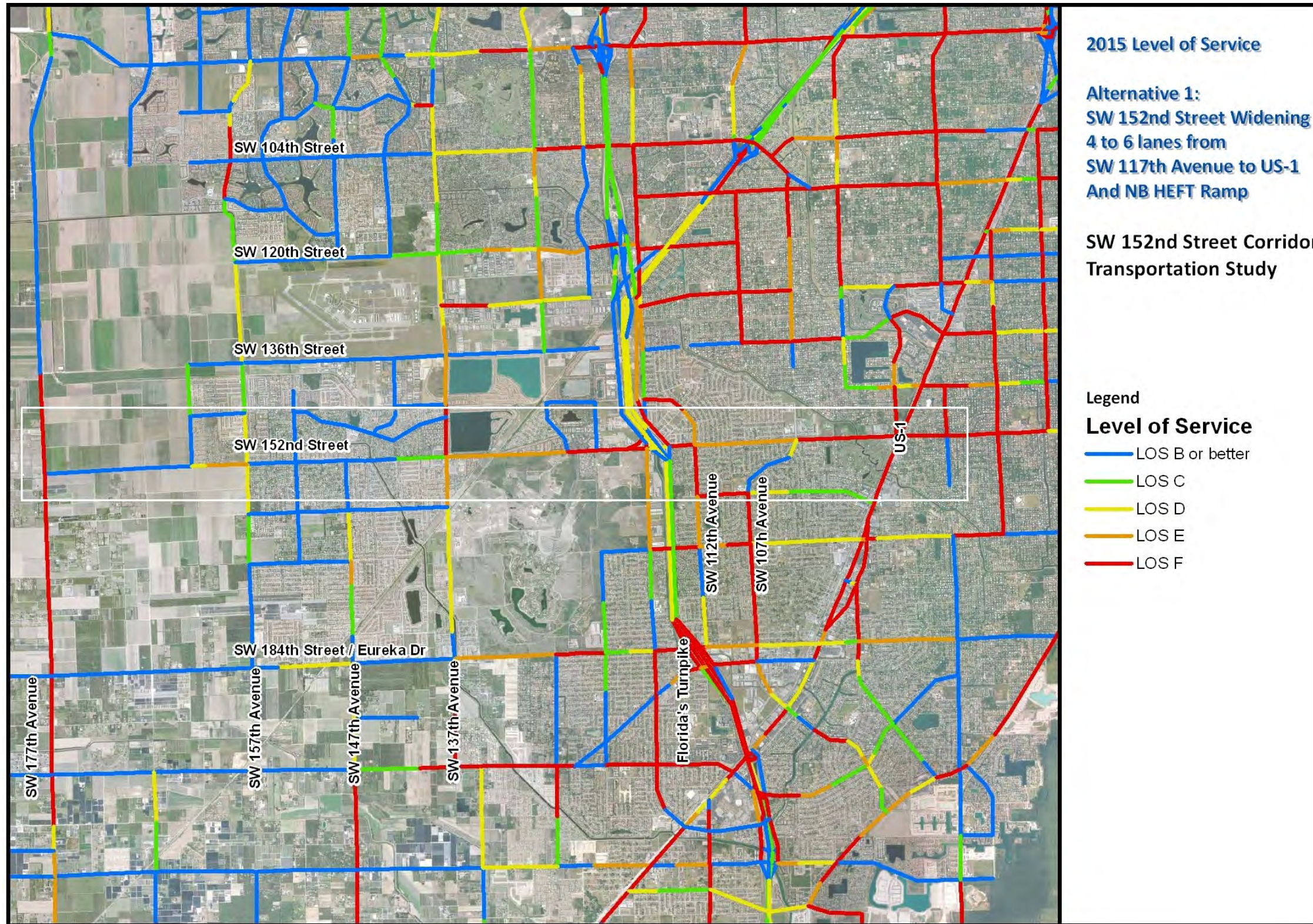
This scenario reflects committed and proposed developments along and near SW 152<sup>nd</sup> Street. The roadway links east of HEFT are projected to be operating at LOS F. The links between SW 177<sup>th</sup> Avenue and SW 162<sup>nd</sup> Avenue show a 13% increase in the amount of traffic (Exhibit 51) over the scenario 1 reflecting the impact of the proposed Parkland DRI. The most visible impact is on the SW 152<sup>nd</sup> Street link between SW 162<sup>nd</sup> Avenue and SW 157<sup>th</sup> Avenue as there is a 42% increase in traffic volume and the level of service drops from B to D and E.

Similarly, there is an average 11% increase in traffic along SW 152<sup>nd</sup> Street between SW 157<sup>th</sup> Avenue and SW 137<sup>th</sup> Avenue. The LOS for SW 162<sup>nd</sup> Avenue north of SW 152<sup>nd</sup> Street, SW 157<sup>th</sup> Avenue north and south of SW 152<sup>nd</sup> Street, and SW 137<sup>th</sup> Avenue mainly north of SW 152<sup>nd</sup> Street deteriorates significantly. This could mainly be attributed to the proposed Parkland DRI which is proposed between SW 177<sup>th</sup> Avenue and SW 162<sup>nd</sup> Avenue. The information from the County's planning department indicates that the Parkland DRI proposal includes mixed-use development. Given the nature of adjacent land use which is predominately residential, the high number of inter-zonal trips potentially indicates that the travel model is underestimating the number of external trips from this DRI and the actual traffic volume will be much higher.

To mitigate deterioration of LOS in the immediate vicinity of SW 152<sup>nd</sup> Street Corridor as a result of the proposed and committed development, roadway capacity of SW 152<sup>nd</sup> Street, east of SW 137<sup>th</sup> Avenue, SW 162<sup>nd</sup> Avenue, SW 157<sup>th</sup> Avenue, and SW 137<sup>th</sup> Avenue should be improved.



Exhibit 52: Scenario 2: Alternative 1 - SW 152<sup>nd</sup> Street Widening and HEFT Ramp – 2015 V/C Ratio



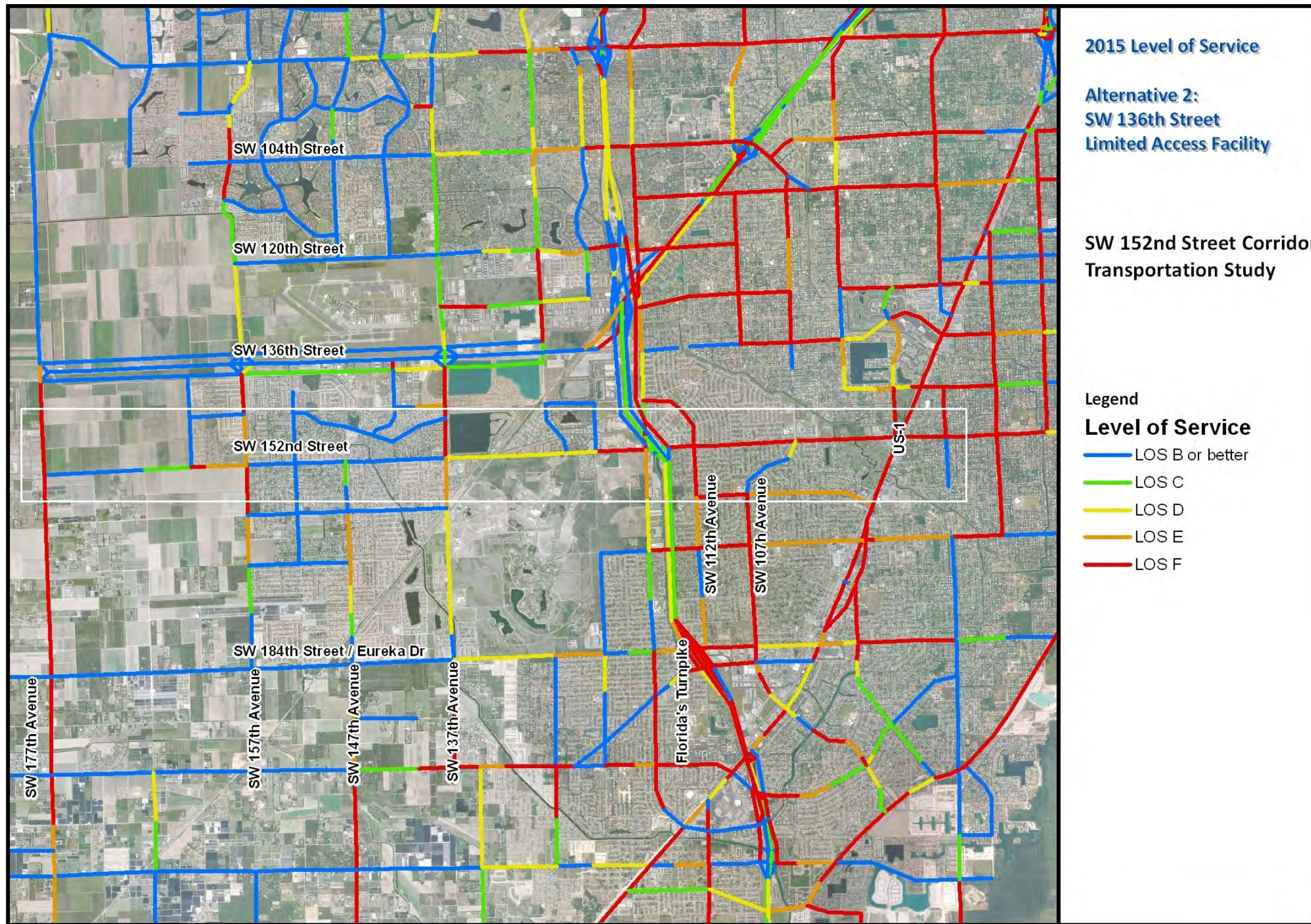
This alternative included widening SW 152<sup>nd</sup> Street from SW 117<sup>th</sup> Avenue to US-1. Among all alternatives this improvement provides a significant congestion relief along the most congested roadway links between the HEFT and US-1. There is a net decrease of 13% in total traffic volume on the SW 152<sup>nd</sup> Street link between SW 112<sup>th</sup> Avenue and SW 102<sup>nd</sup> Avenue.

Despite a roadway capacity improvement, the link between SW 102<sup>nd</sup> Avenue and US-1 is projected to be operating above capacity indicating limitations due to limited left- and right-turn capacity at the US-1 intersection (Exhibit 52). Therefore the widening project should consider additional left-turn storage capacity and auxiliary right turn lanes at US-1. Based on these results, an intersection improvement at US-1 along with the widening of SW 152<sup>nd</sup> Street is recommended as a mid-term improvement project.

This alternative also improves northbound HEFT LOS potentially indicating the benefits due to northbound HEFT ramp included in this alternative. However, a detailed LOS analysis also indicates that a northbound ramp improvement may attract more traffic from west of SW 117<sup>th</sup> Avenue and therefore this HEFT access improvement should be implemented with the necessary capacity or intersection improvements between SW 137<sup>th</sup> Avenue and SW 117<sup>th</sup> Avenue. This ramp alternative holds potential to relieve congestion along the HEFT and should be analyzed in greater detail to include planned and proposed improvements to the HEFT.



Exhibit 53: Scenario 2: Alternative 2 - SW 136<sup>th</sup> Limited Access Facility – 2015 V/C Ratio

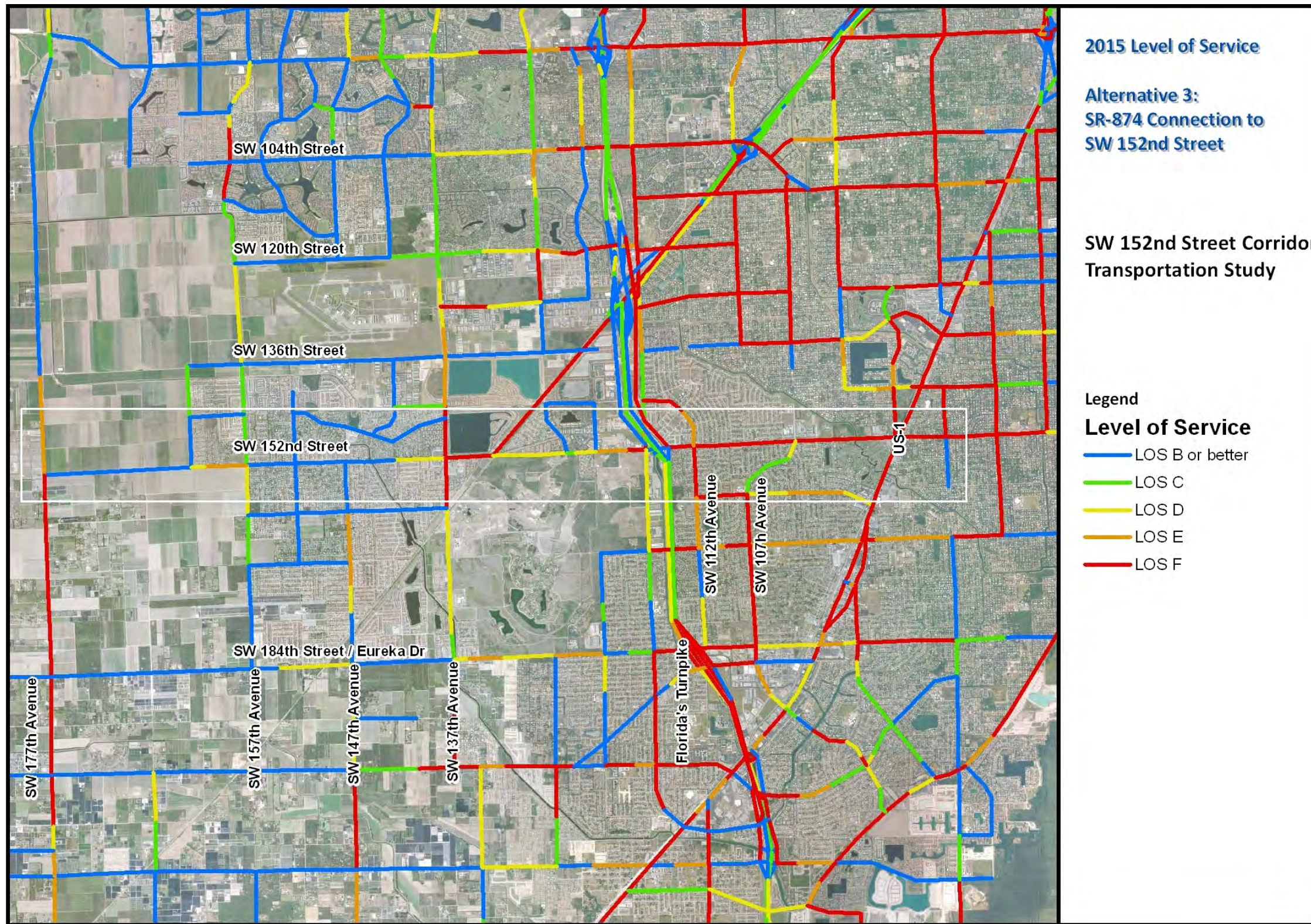


This alternative included converting SW 136<sup>th</sup> Street into a 4-lane limited access facility and providing a connection to SR-874. It was assumed that one-way frontage roads will be maintained to provide access to adjacent properties.

This is projected to be the most effective alternative in improving the LOS in the entire study area and bus has limited impact on the SW 152<sup>nd</sup> Street Corridor. The northbound and southbound traffic movement on the HEFT significantly benefits from this improvement (Exhibit 53). Except for a few links on SW 152<sup>nd</sup> Street, the overall traffic volume on SW 152<sup>nd</sup> Street is projected to decrease by 4%. Due to the high cost of this project, which is discussed later in this section, this is a potential candidate for long-term improvement.



Exhibit 54: Scenario 2: Alternative 3 – SR-874 Connection to SW 152<sup>nd</sup> Street – 2015 V/C Ratio



**2015 Level of Service**

**Alternative 3:  
SR-874 Connection to  
SW 152nd Street**

**SW 152nd Street Corridor  
Transportation Study**

**Legend**

**Level of Service**

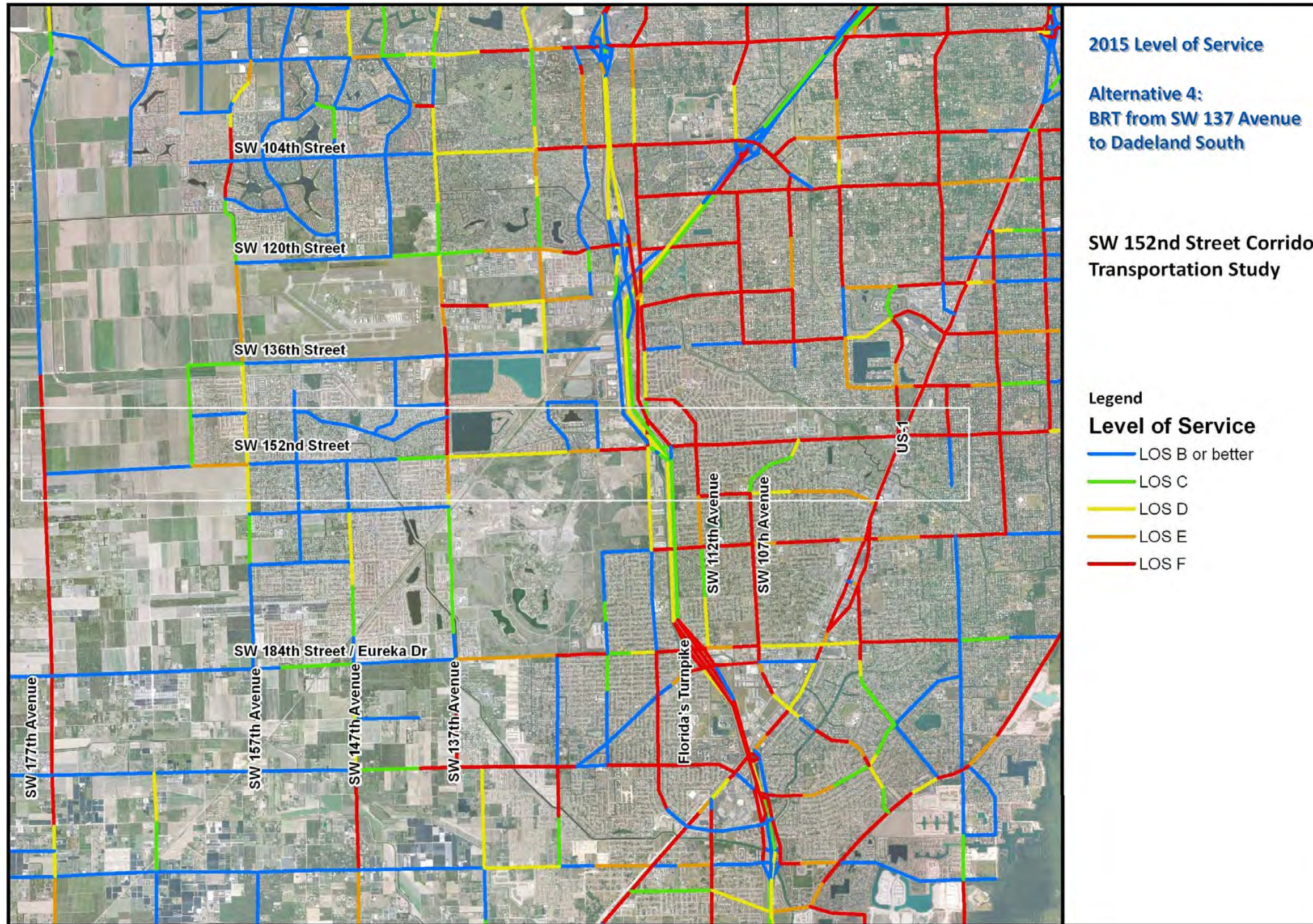
- LOS B or better
- LOS C
- LOS D
- LOS E
- LOS F

This alternative included a 4-lane arterial connection to SR-874 from SW 152<sup>nd</sup> Street along the CSX Railroad alignment. The link between SW 137<sup>th</sup> Avenue and the CSX Railroad alignment is projected to be operating at or above its capacity indicating that, due to the higher access, more trips will be attracted via this route (Exhibit 54).

This alternative does not appear to have significant positive impact on traffic along the SW 152<sup>nd</sup> Street links between the HEFT and US-1. Also, this improvement does not provide considerable improvement in the area-wide LOS.



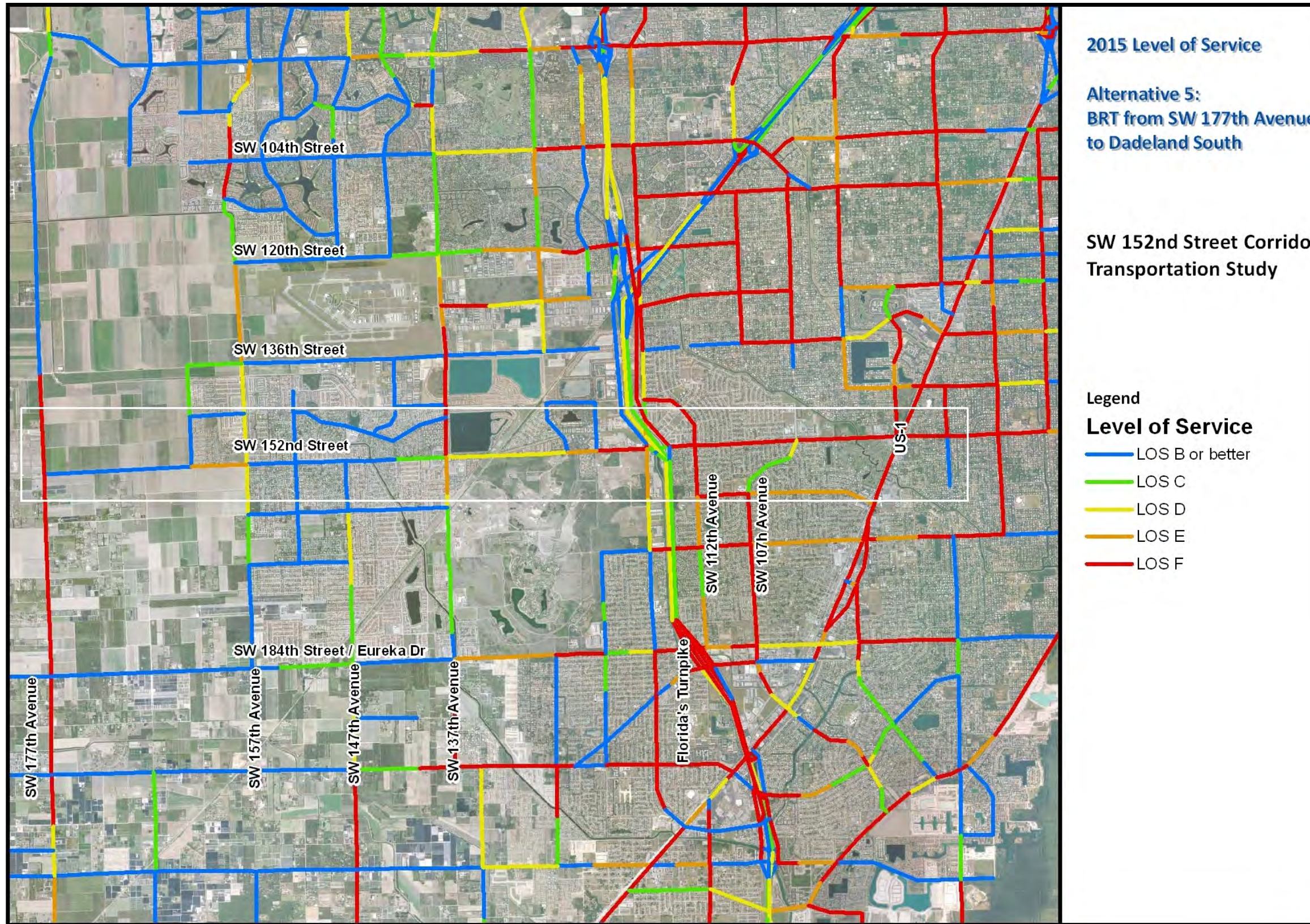
Exhibit 55: Scenario 2: Alternative 4 - SW 152<sup>nd</sup> Street BRT from SW 137<sup>th</sup> Avenue – 2015 V/C Ratio



This alternative included a BRT service on exclusive right-of-way from SW 137<sup>th</sup> Avenue to Dadeland South Metrorail Station. SW 152<sup>nd</sup> Street, between the HEFT and US-1, is planned to be widened from 4 lanes to a 6-lane roadway. This alternative assumes that the two additional lanes proposed as a part of the widening between the HEFT and US-1 will be used for a premium transit service. This improvement is expected to result in new 2,100 daily boardings. As shown in Exhibit 55, this premium transit service is not expected to provide significant relief from congestion between the HEFT and US-1 and therefore, it can be assumed that the ridership mainly reflects captive riders. However, with the projected increase in residential development, it would be important to support transit alternatives.



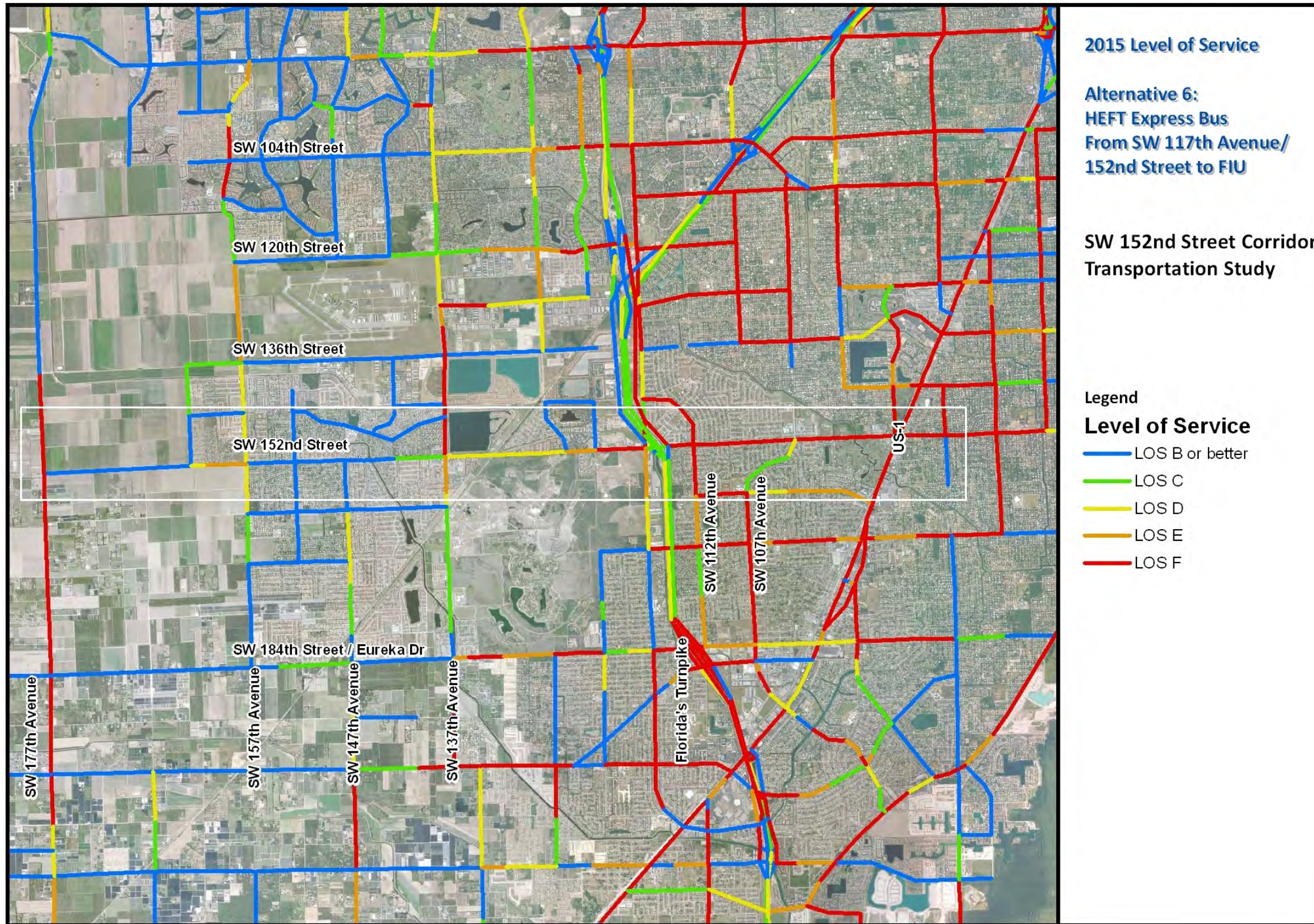
Exhibit 56: Scenario 2: Alternative 5 - SW 152<sup>nd</sup> Street BRT from SW 177<sup>th</sup> Avenue – 2015 V/C Ratio



This alternative included a BRT service on exclusive right-of-way from SW 177<sup>th</sup> Avenue to Dadeland South Metrorail Station. Major development projects are planned near the western limits of the study corridor and this alternative seeks to identify unmet transit demand in 2015 as a result of the committed and proposed development. This transit alternative is expected to attract nearly 3,400 daily boardings. As shown in Exhibit 56, this premium transit service is not expected to provide significant relief from congestion along the corridor therefore; it can be assumed that the ridership mainly reflects captive riders. However, with any increase in residential development, it would be important to support transit alternatives. This alternative connects the communities near the western end of the study corridor to the downtown through Metrorail and to the west-central part of the county through Kendall-Link transit alternatives.



Exhibit 57: Scenario 2: Alternative 6 - HEFT Express Bus – 2015 V/C Ratio

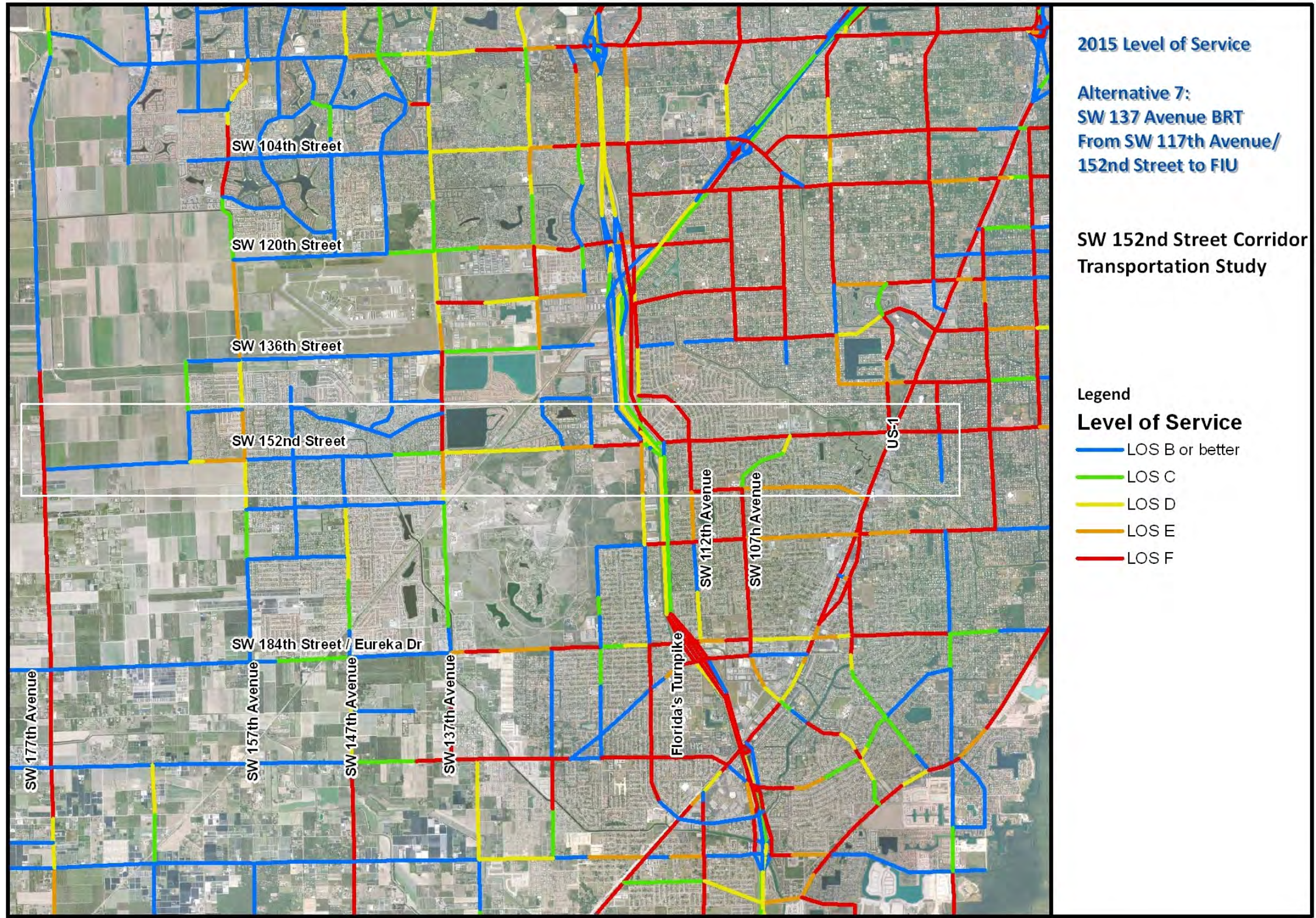


This alternative reflects an express bus service from the park-and-ride lot at SW 117<sup>th</sup> Avenue and SW 152<sup>nd</sup> Street to FIU. This transit improvement is projected to attract nearly 2,600 daily boardings. It should be noted that this ridership number reflects a conservative estimate and does not include a connection to the proposed MDT East-West Corridor. The ridership can be expected to significantly increase if a Metrorail connection at FIU becomes available.

This transit improvement is projected to alleviate traffic congestion on the HEFT, north of SW 152<sup>nd</sup> Street (Exhibit 57). This alternative included a feeder bus service from SW 177<sup>th</sup> Avenue to the park-and-ride lot at SW 117<sup>th</sup> Avenue. If the Parkland DRI is approved, an express service from SW 117<sup>th</sup> Avenue to FIU via SW 152<sup>nd</sup> Street and the HEFT can also be implemented. As will be discussed later in this section, for the amount of capital investment required, this alternative performs well in terms of ridership and is recommended as a short-term improvement until one of the north-south alternatives of the Kendall-Link Study is implemented.



Exhibit 58: Scenario 2: Alternative 7 - SW 137<sup>th</sup> Avenue BRT – 2015 V/C Ratio

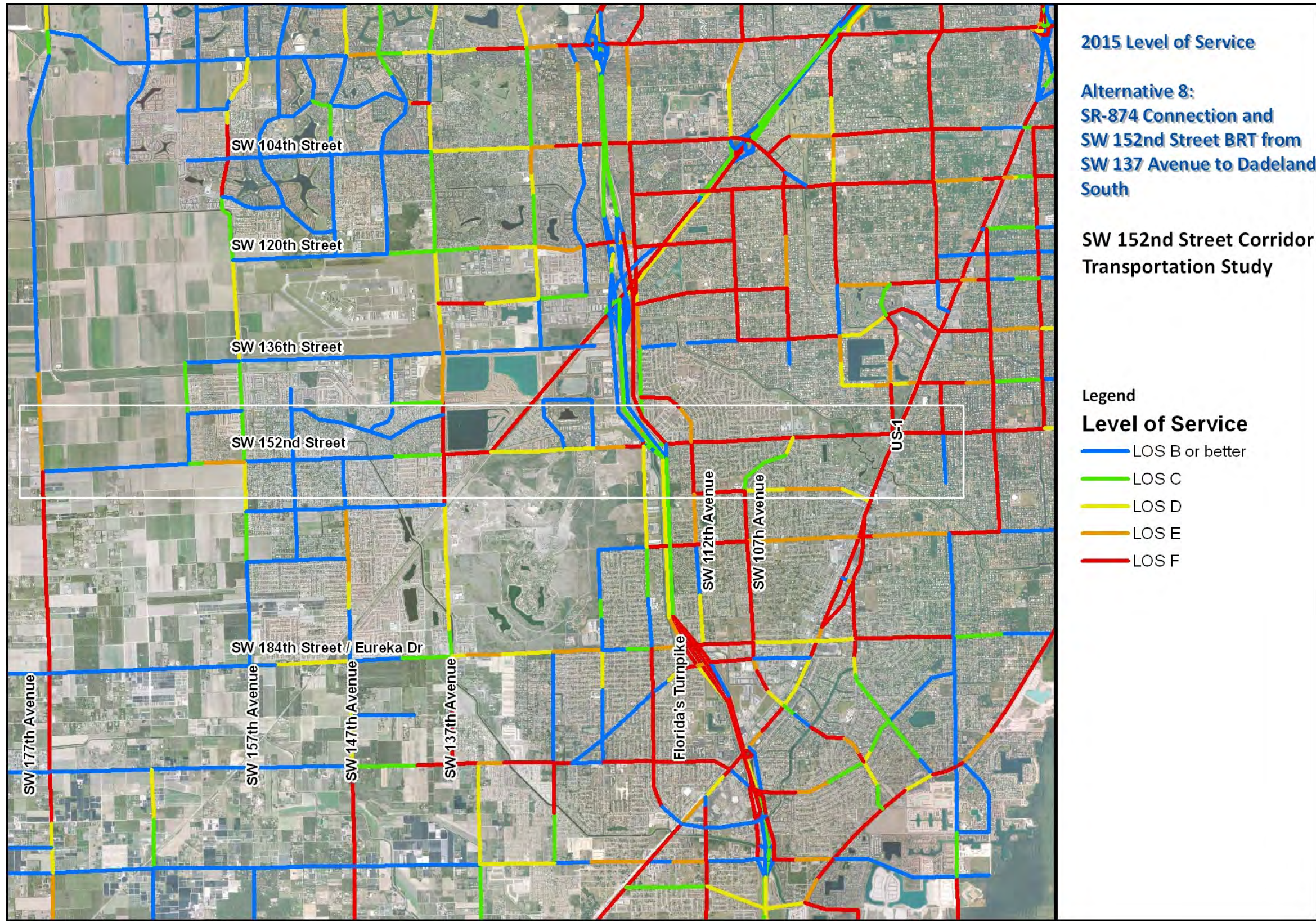


This alternative reflects a BRT service on exclusive bus lanes from the park-and-ride lot at SW 117<sup>th</sup> Avenue and SW 152<sup>nd</sup> Street to FIU along SW 137<sup>th</sup> Avenue. This transit improvement reflects a Kendall-Link Study alternative and helps answer an important question – “what will be the impact of this Kendall Corridor alternative on SW 152<sup>nd</sup> Street mobility?” The transit service on SW 137<sup>th</sup> Avenue to FIU is projected to attract nearly 3,100 daily boardings. It should be noted that this is a conservative ridership estimate as it does not assume a connection to the proposed MDT East-West Corridor. The ridership can be expected to significantly increase if a Metrorail connection at FIU becomes available.

A more detailed examination of LOS along the SW 137<sup>th</sup> Avenue links indicates that compared to Scenario 2 base, there is significant improvement in LOS along SW 137<sup>th</sup> Avenue north of SW 152<sup>nd</sup> Street. This alternative also improves the LOS on the northbound HEFT (Exhibit 58). This transit improvement, if implemented as the preferred alternative of the Kendall-Link, should be supported by east-west transit connectivity improvements along the SW 152<sup>nd</sup> Street Corridor. Potential transit improvements along the study corridor to compliment this potential transit improvement are discussed as implementation strategies later in this section.



Exhibit 59: Scenario 2: Alternative 8 - SR-874 Connection to SW 152<sup>nd</sup> Street and SW 152<sup>nd</sup> Street BRT – 2015 V/C Ratio



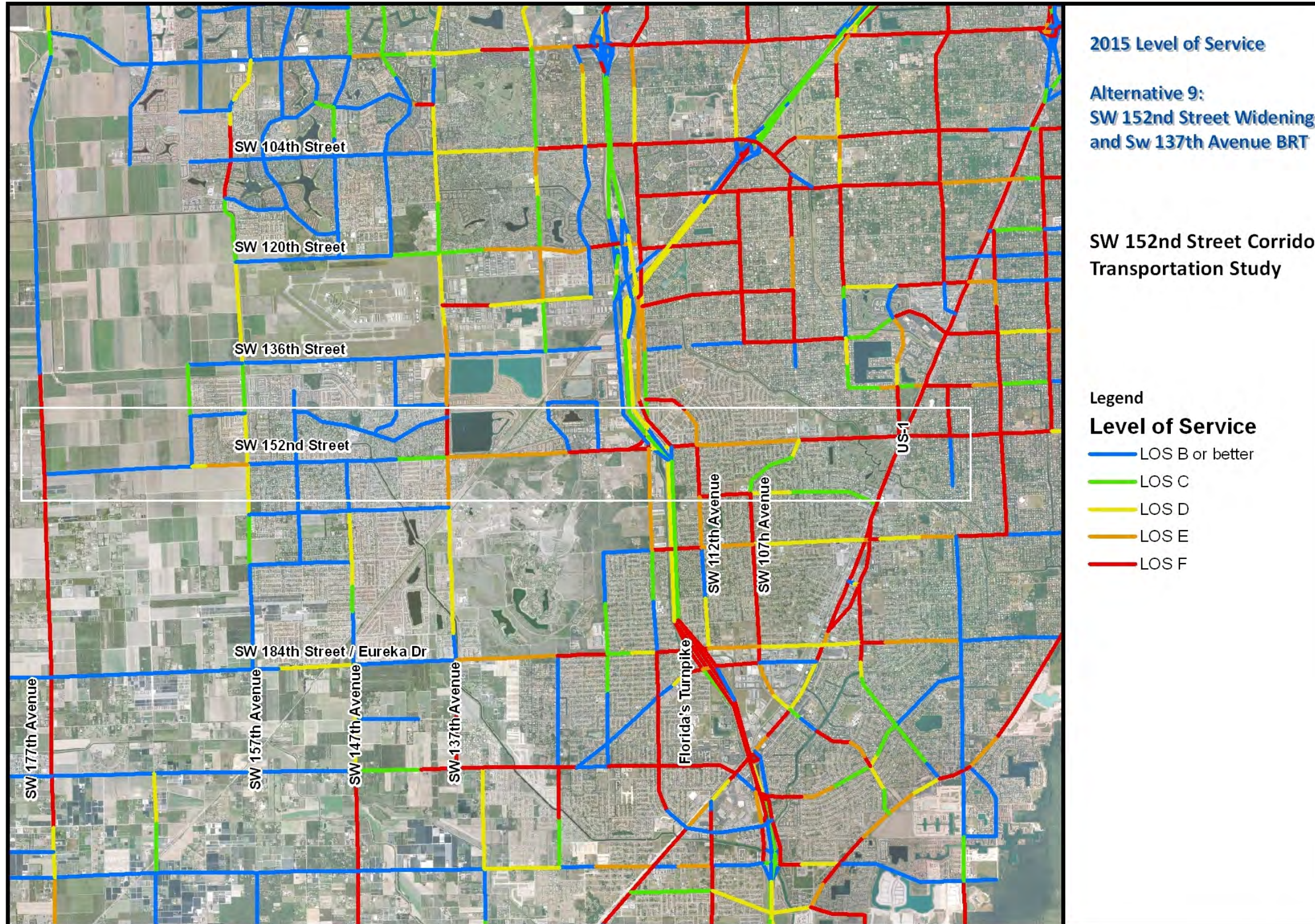
A combination of roadway and transit alternatives was tested to observe the unique effects of simultaneously improving east-west and north-south mobility. This alternative reflects a combination of alternative 3, SR-874 connection to SW 152<sup>nd</sup> Street along the CSX alignment and alternative 4, BRT along SW 152<sup>nd</sup> Street from SW 137<sup>th</sup> Avenue.

With this alternative the LOS east of the CSX railroad alignment has lower volume-to-capacity ratio than Scenario 2 but this improvement appears to be attracting additional traffic and deteriorating LOS of the SW 152<sup>nd</sup> Street links west of CSX railroad alignment (Exhibit 59). The BRT service is expected to attract nearly 3,200 daily boardings.

There appears to be no significant additional benefits of combining these two projects. Also, as discussed previously for alternative 3, the SR-874 connection to the study corridor is eliminated from further consideration for this study.



Exhibit 60: Scenario 2: Alternative 9 - SW 152<sup>nd</sup> Street Widening and HEFT Express Bus – 2015 V/C Ratio



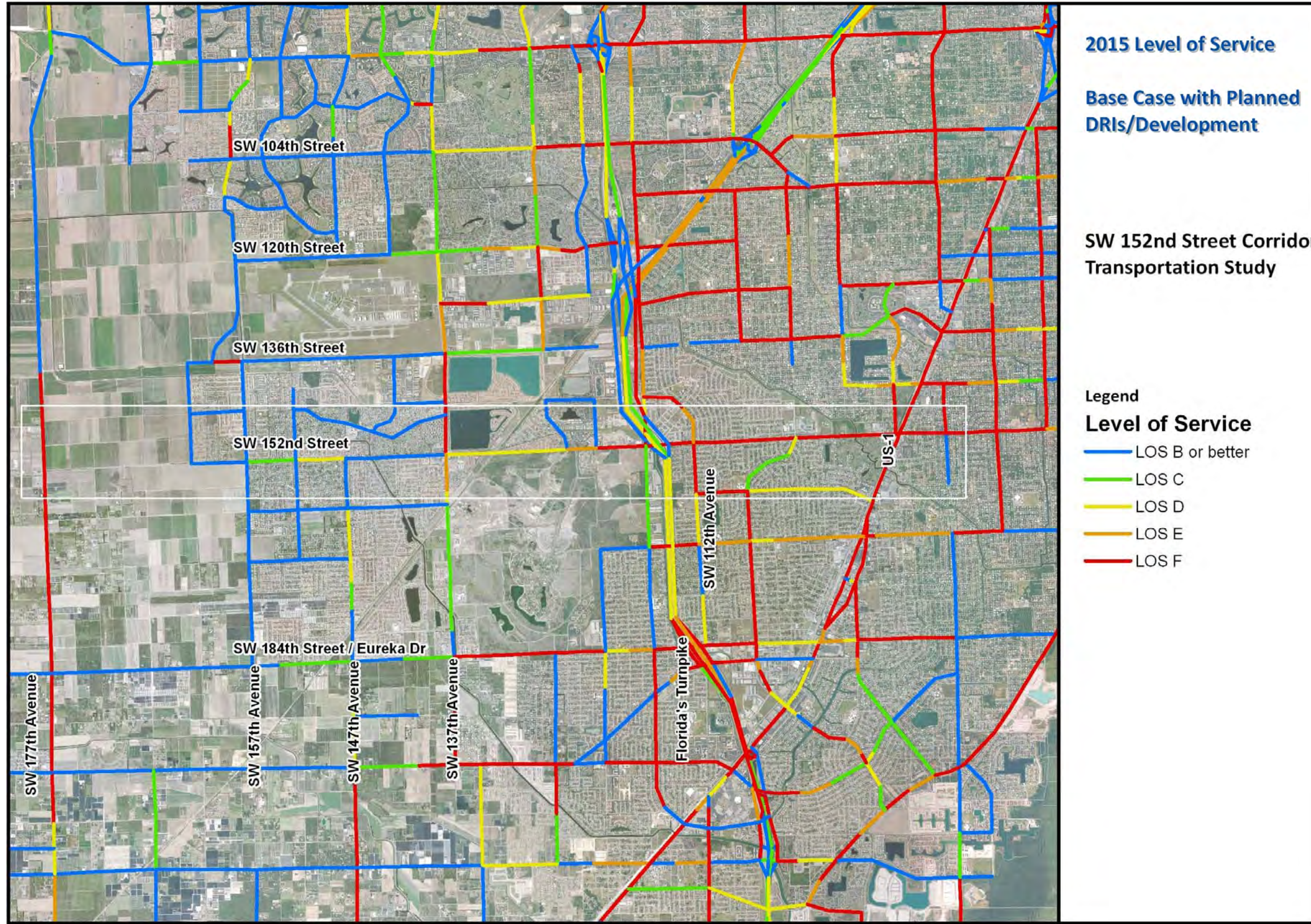
A combination of roadway and transit alternatives was tested to observe the unique effects of simultaneously improving east-west and north-south mobility. This alternative reflects a combination of alternative 1, SW 152<sup>nd</sup> Street widening from SW 117<sup>th</sup> Avenue to US-1 and alternative 6, express bus along the HEFT.

Alternatives 1 and 6 perform well, individually and together and therefore should be considered for further evaluation. These results (Exhibit 60) confirm that SW 152<sup>nd</sup> Street widening from SW 117<sup>th</sup> Avenue (HEFT) to US-1 is the best alternative to relieve congestion along the study corridor in the mid-term. The express bus service, as found in the LOS results for alternative 6, improves LOS on the HEFT, north of SW 152<sup>nd</sup> Street. Also, as will be seen in the following section, the HEFT express bus service provides the most value for the money by attracting considerable ridership for a relatively small investment.

The deterioration of roadway LOS on the SW 152<sup>nd</sup> Street link between SW 137<sup>th</sup> Avenue and SW 127<sup>th</sup> Avenue, as discussed previously, is probably because of additional traffic from nearby neighborhoods to access the northbound HEFT ramp. The northbound HEFT ramp should be analyzed in detail with consideration of planned and proposed improvements along HEFT.



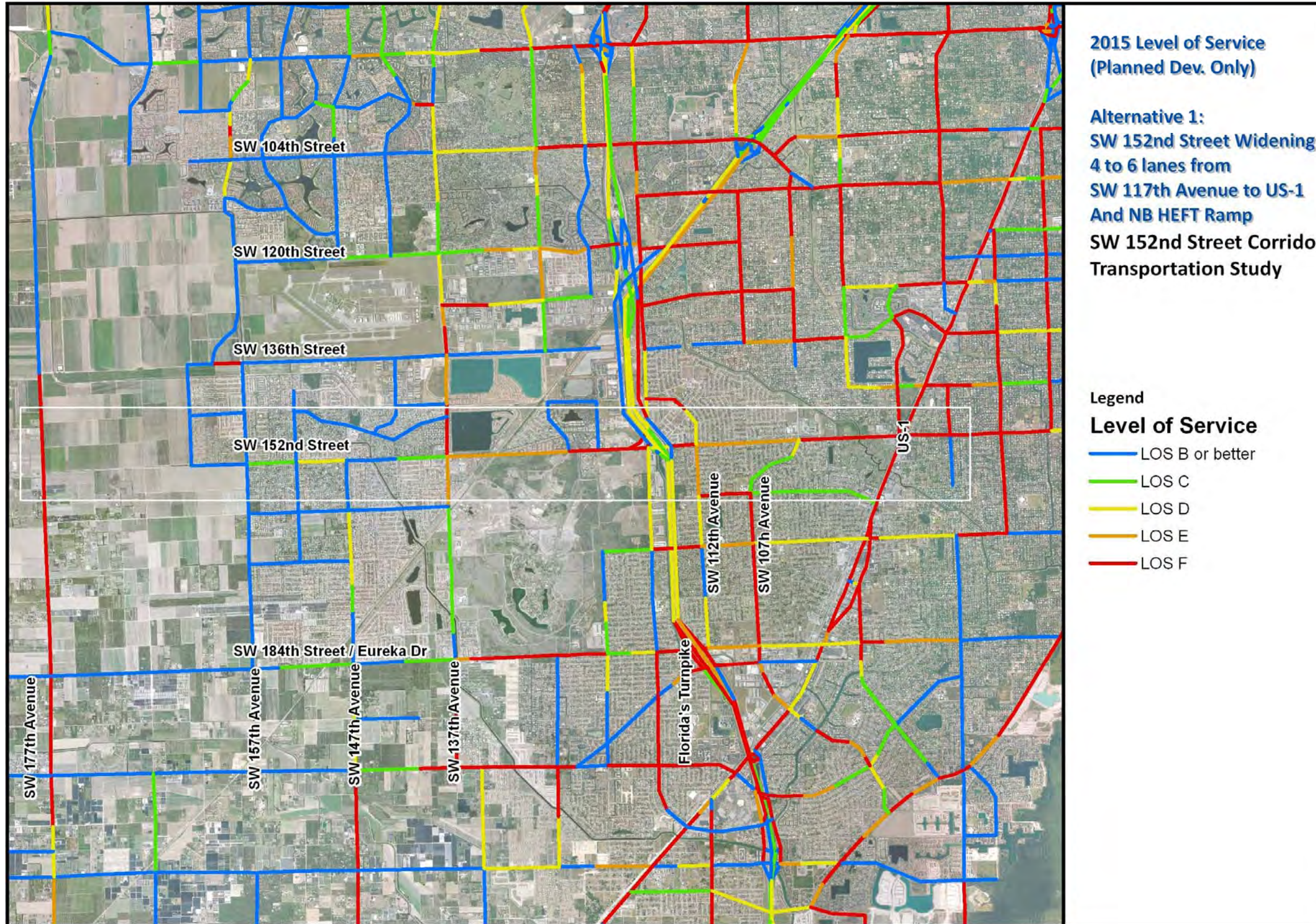
Exhibit 61: Scenario 3: Committed and Metro Zoo Development – 2015 V/C Ratio



As mentioned previously, at the request of the MPO's TPTAC, Scenario 3 without the proposed Parkland DRI but with all other committed and proposed development was tested. The results show that, compared to Scenario 2 base, this scenario has significant better LOS along SW 152<sup>nd</sup> Street, west of SW 137<sup>th</sup> Avenue. Similarly, compared to Scenario 2 base, LOS along SW 162<sup>nd</sup> Avenue and SW 157<sup>th</sup> Avenue is also better (Exhibit 61).



Exhibit 62: Scenario 3: Alternative 1 - SW 152<sup>nd</sup> Street Widening and HEFT Ramp – 2015 V/C Ratio

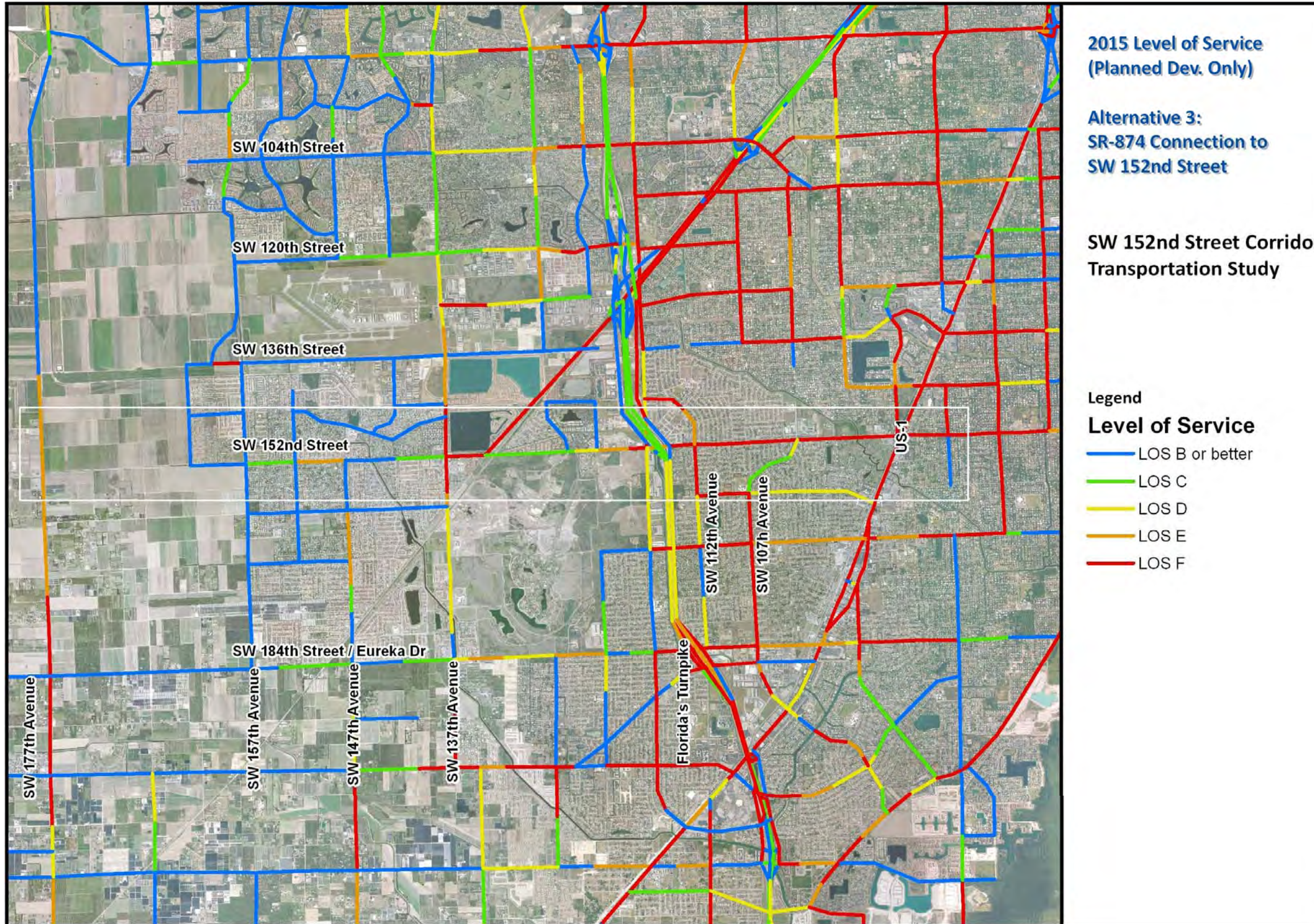


This alternative included widening of SW 152<sup>nd</sup> Street from SW 117<sup>th</sup> Avenue to US-1. Similar to the results for this improvement under Scenario 2, this alternative provides a significant congestion relief along the most congested roadway links between the HEFT and US-1 (Exhibit 62).

SW 152<sup>nd</sup> Street links between SW 162<sup>nd</sup> Avenue and SW 147<sup>th</sup> Avenue and, SW 157<sup>th</sup> Avenue also show significant improvement compared to the results for this alternative for Scenario 2.



Exhibit 63: Scenario 3: Alternative 3 – SR-874 Connection to SW 152<sup>nd</sup> Street – 2015 V/C Ratio

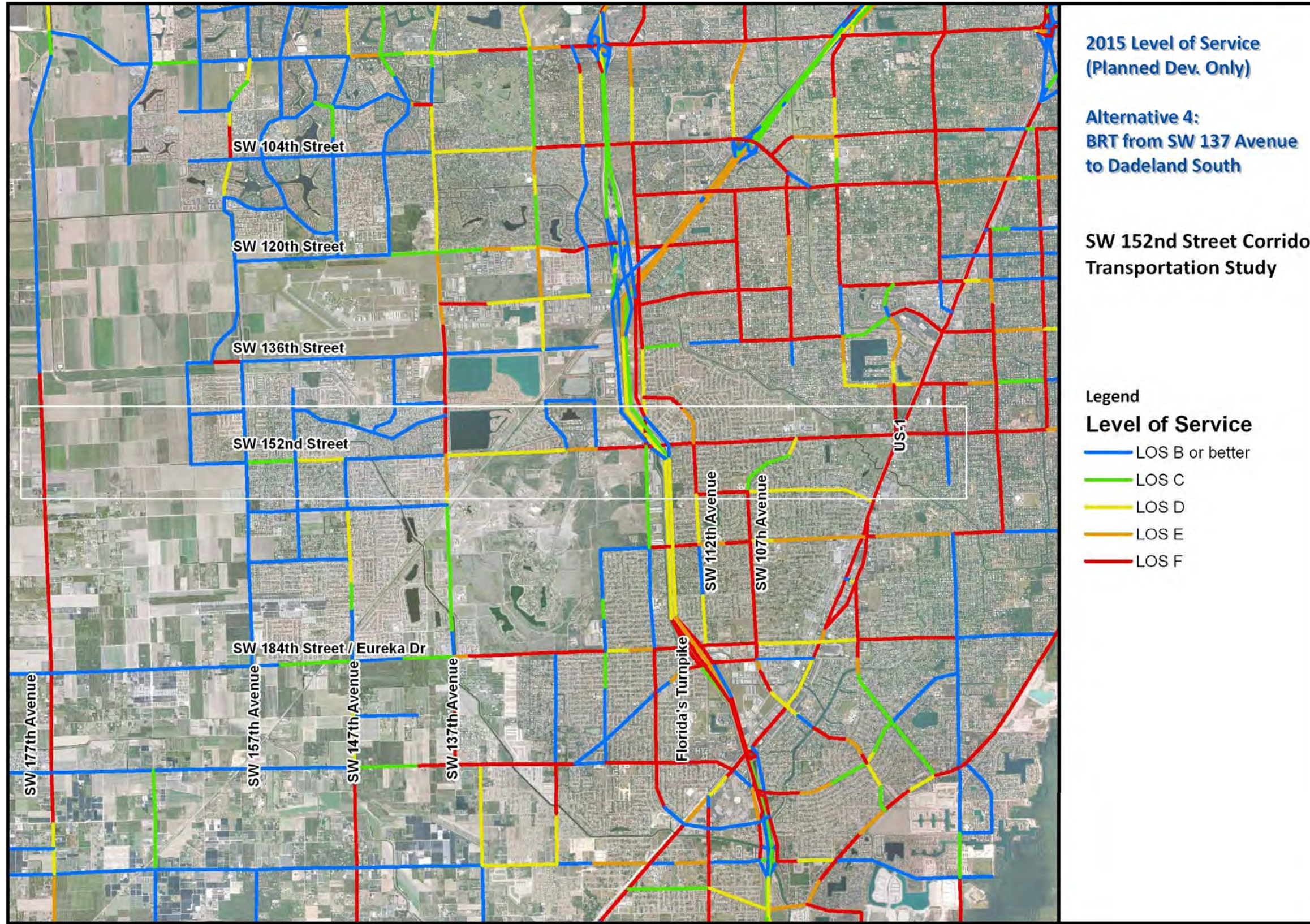


This alternative included a 4-lane arterial connection to SR-874 from SW 152<sup>nd</sup> Street along the CSX Railroad alignment. Similar to the results for this alternative for Scenario 2, traffic along SW 152<sup>nd</sup> Street is projected to worsen between SW 137<sup>th</sup> Avenue and SW 117<sup>th</sup> Avenue. It is also projected to worsen congestion along SW 137<sup>th</sup> Avenue (Exhibit 63).

The results for this scenario further confirm results for this alternative for Scenario 2 that this alternative does not have a significant positive impact on corridor or areawide LOS.



Exhibit 64: Scenario 3: Alternative 4 - SW 152<sup>nd</sup> Street BRT from SW 137<sup>th</sup> Avenue – 2015 V/C Ratio

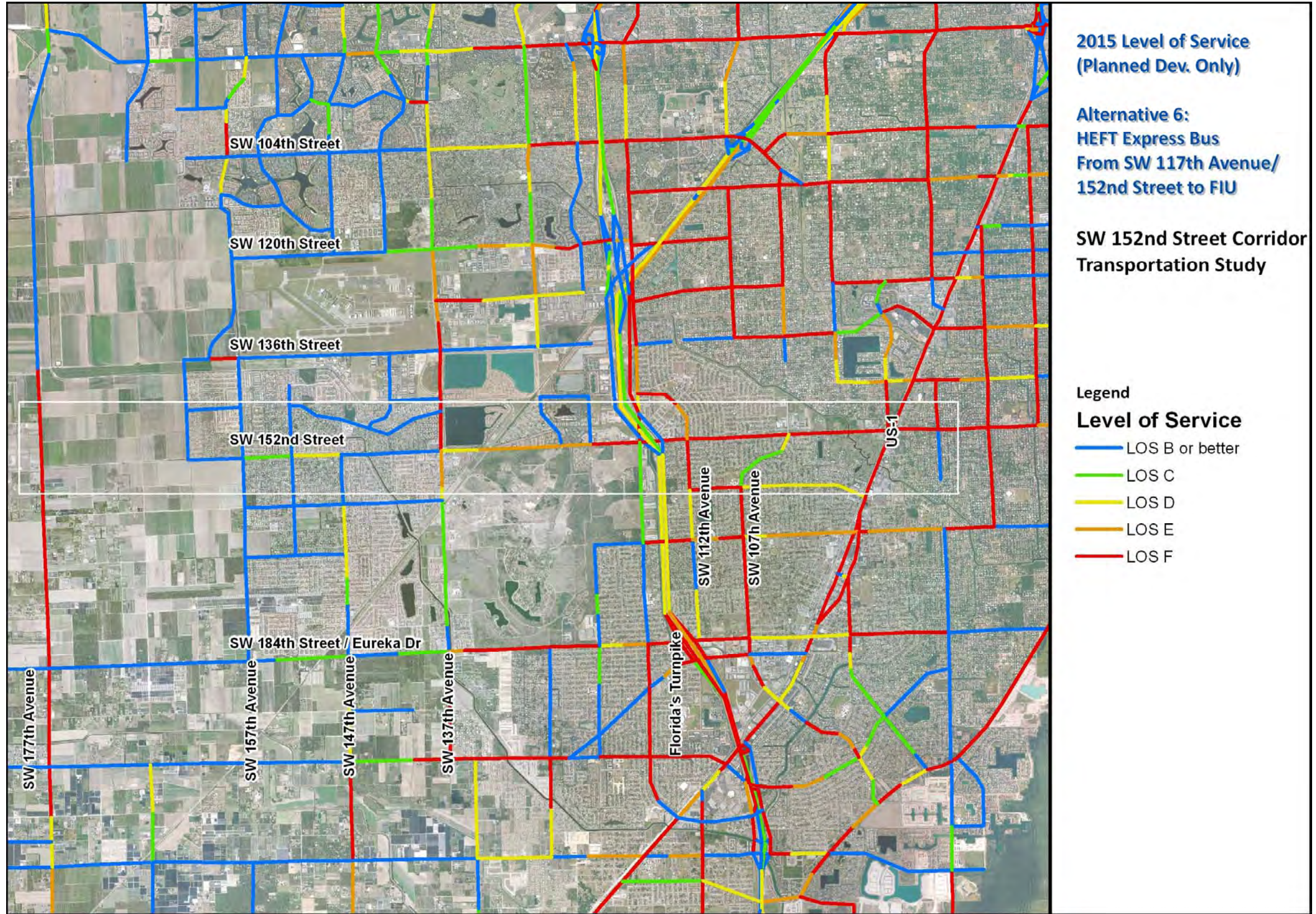


This alternative included a BRT service on exclusive right-of-way from SW 137<sup>th</sup> Avenue to Dadeland South Metrorail Station. SW 152<sup>nd</sup> Street, between the HEFT and US-1, is planned to be widened from 4 lanes to a 6-lane roadway. This alternative assumes that the two additional lanes proposed as a part of the widening between the HEFT and US-1 will be used for a premium transit service. This improvement is expected result in a net 2,300 increase in daily systemwide boardings. Similar to the results for this alternative for Scenario 2, this premium transit service is not expected to provide significant relief from congestion between the HEFT and US-1 (Exhibit 64) and therefore, it can be assumed that the ridership mainly reflects captive riders.

The LOS along SW 152<sup>nd</sup> Street, west of SW 137<sup>th</sup> Avenue and LOS along SW 157<sup>th</sup> Avenue are significantly better compared to the results for this alternative for Scenario 2.



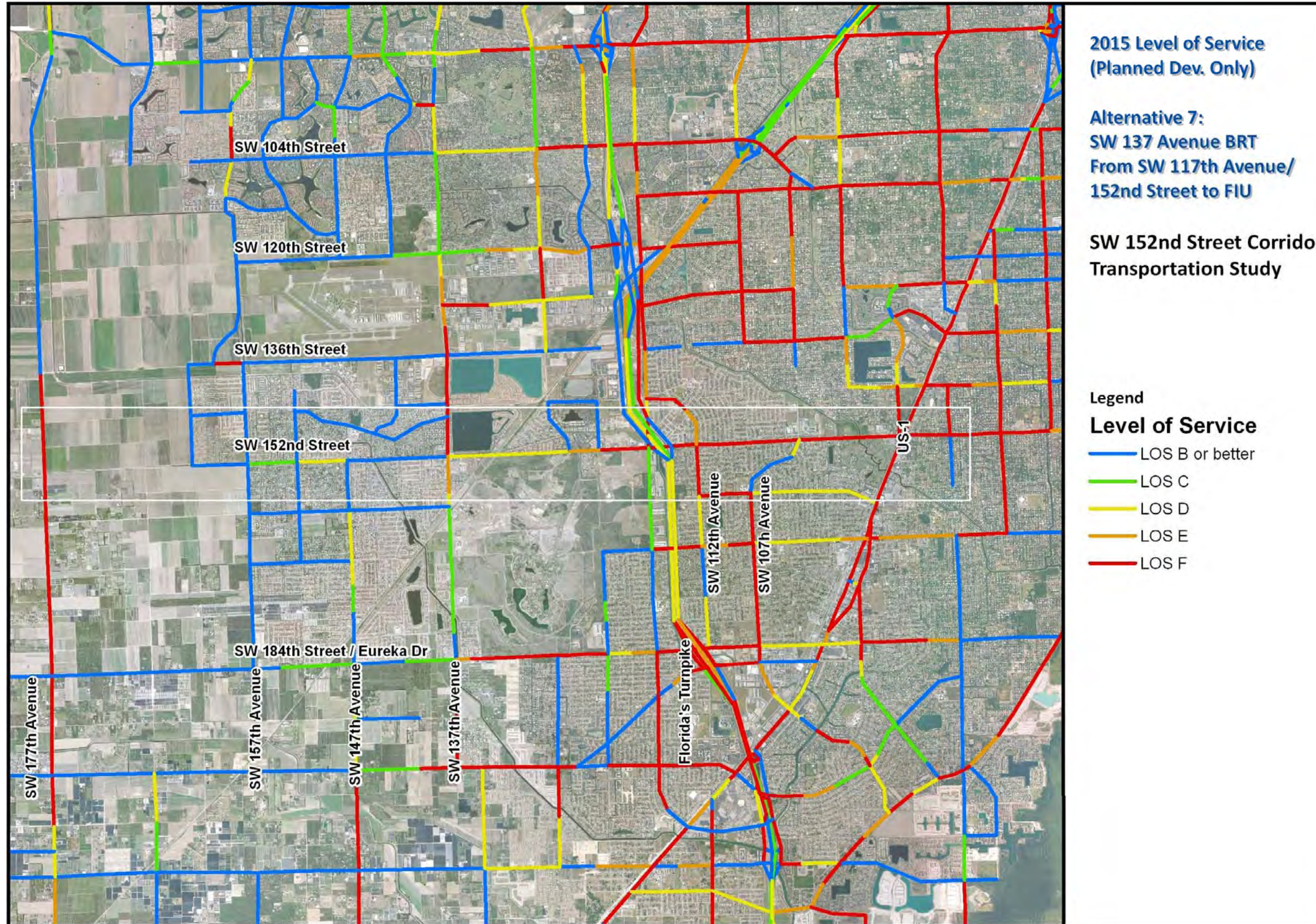
Exhibit 65: Scenario 3: Alternative 6 - HEFT Express Bus – 2015 V/C Ratio



This alternative reflects an express bus service from the park-and-ride lot at SW 117<sup>th</sup> Avenue and SW 152<sup>nd</sup> Street to FIU. This transit improvement is projected to result in a net 1,800 increase in daily systemwide boardings. Similar to other alternatives for Scenario 3, LOS along SW 152<sup>nd</sup> Street, west of SW 137<sup>th</sup> Avenue and LOS along SW 157<sup>th</sup> Avenue is significantly better compared to Scenario 2 (Exhibit 65).



Exhibit 66: Scenario 3: Alternative 7 - SW 137<sup>th</sup> Avenue BRT – 2015 V/C Ratio



This alternative includes a BRT service on exclusive lanes from the park-and-ride lot at SW 117<sup>th</sup> Avenue and SW 152<sup>nd</sup> Street to FIU along SW 137<sup>th</sup> Avenue. This transit improvement reflects a Kendall-Link Study alternative and helps answer an important question – “what will be the impact of this Kendall-Link Study Corridor alternative on SW 152<sup>nd</sup> Street?” This improvement is projected to add net 2,300 daily boardings to the countywide transit system. Compared to the results for this alternative for Scenario 2, LOS along SW 137<sup>th</sup> Avenue does not significantly change (Exhibit 66). Similar to other alternatives for Scenario 3, LOS along SW 152<sup>nd</sup> Street, west of SW 137<sup>th</sup> Avenue and LOS along SW 157<sup>th</sup> Avenue is significant better compared to Scenario 2.



## 5.2 Preliminary Cost Estimates

Preliminary planning-level cost estimates were prepared based on the FDOT Statewide Average Unit Prices for 2006, adjusted for the year 2008, cost estimates of the Kendall-Link Study alternatives, and National Transit Database and New Starts Information. The cost estimates for roadway projects include 15% construction contingency, 5% initial contingency, and maintenance of traffic (MOT) plan but do not include cost for signalization, drainage, utilities, and right-of-way acquisition, if required. The cost estimates for transit alternatives do not include the cost of developing park-and-ride facilities. It is advised that these planning-year cost estimates should only be used to compare the order of magnitude of required capital investment for different alternatives.

#	Alternatives	Preliminary Cost Estimate (in millions of U.S. dollars)
<b>Roadway Improvements</b>		
1	SW 152 <sup>nd</sup> Street widening (4 to 6 lane) from SW 117 <sup>th</sup> Avenue to US-1 and NB HEFT ramp (2.5 miles and a new ramp)	44.7
2	SW 136 <sup>th</sup> Street, 4-lane limited access facility from SW 177 <sup>th</sup> Avenue to SR-874 (6 miles and a new ramp)	206.6
3	SR-874 connection to SW 152 <sup>nd</sup> Street along CSX railroad alignment (2.1 miles and ramp improvements)	38.1
<b>Transit Improvements</b>		
4	SW 152 <sup>nd</sup> Street BRT from SW 117 <sup>th</sup> Avenue (2.5 miles)	78.4
5	SW 152 <sup>nd</sup> Street BRT from SW 177 <sup>th</sup> Avenue (8.6 miles)	270.2
6	HEFT Express Bus to FIU (9 miles)	*
7	SW 137 <sup>th</sup> Avenue BRT to FIU (13 miles)	407.9

\* Note: The cost is expected to be less than \$10 million dollars if no major design or alignment issues are found.

## 5.3 Recommendations

Based on the research, technical analysis and input from the MPO's TPTAC, the following roadway and transit improvement projects, related strategies, and time table for implementation were identified.

### 5.3.1 Short-term Improvements (2008-2010)

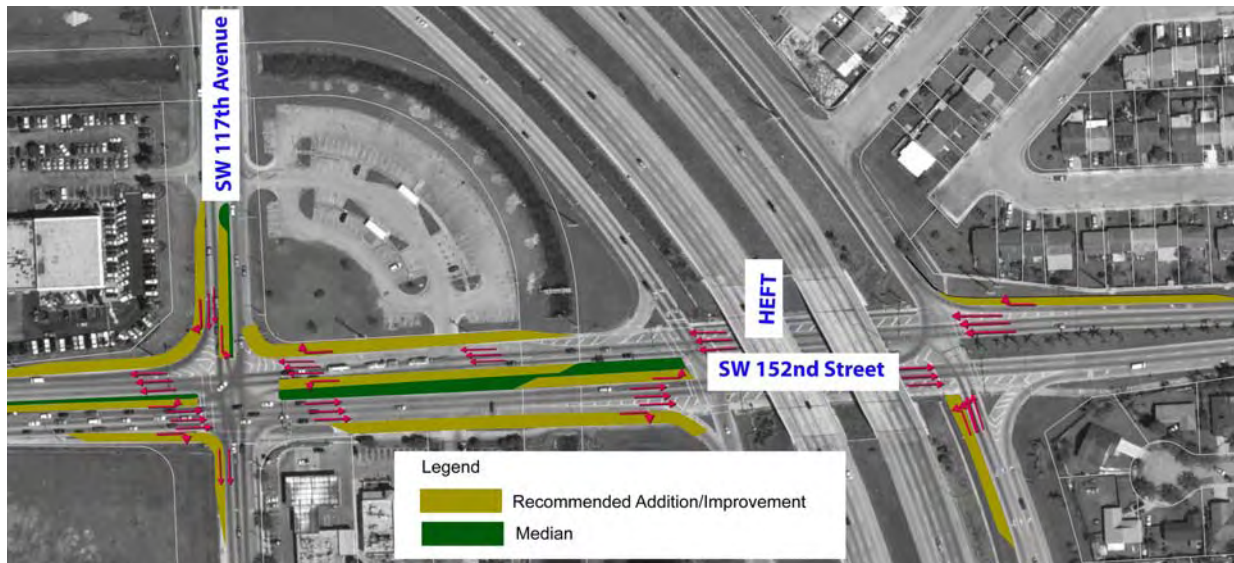
**Recommendation 1 - Intersection Improvements:** Intersection improvements can provide immediate, although temporary, congestion relief. Intersection improvements maximize the benefits from existing roadway capacity and therefore, should be priority projects. Auxiliary right lanes ensure that right-turn traffic is not blocking the through-movement and at the same time, on green, maximum traffic passes through the intersection. Similarly, sufficient storage capacity of left-turn lanes ensures that the left-turn overflow is not blocking through-movements. This planning study identifies intersections which can be improved upon detailed operational analysis. The conceptual preliminary layouts are provided in Exhibits 67-69. The detailed intersection improvement layouts should be based on detailed intersections analysis (e.g. including considerations for available and potential acquisition of right-of-way, location of utilities, access to adjacent properties, signal timing) and be coordinated with a complimentary signal optimization plan. The intersections at US-1 and SW 117<sup>th</sup> Avenue are recommended to be implemented prior to SW



152<sup>nd</sup> Street widening from SW 117<sup>th</sup> Avenue to US-1, a recommended mid-term improvement discussed later in this section.

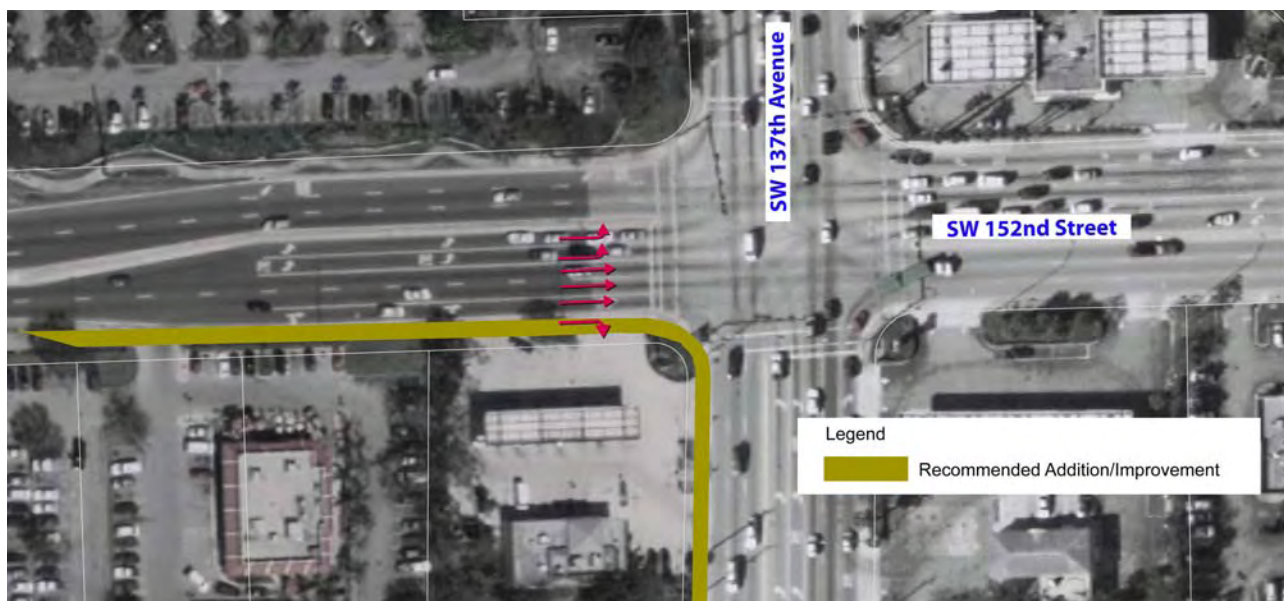
A. At SW 117<sup>th</sup> Avenue, HEFT and SW 152<sup>nd</sup> Street: The roadway section narrows from 6-lanes to 4-lanes. As shown in Exhibit 67, eastbound and westbound auxiliary right-turn lanes can be added to SW 152<sup>nd</sup> Street. The capacity of the eastbound SW 152<sup>nd</sup> Street left-turn lane can be increased. It is recommended that on southbound SW 117<sup>th</sup> Avenue the capacity of the left-turn lane should be increased and an auxiliary right-turn lane should be added.

**Exhibit 67: Intersection Improvements – SW 117<sup>th</sup> Avenue/HEFT and SW 152<sup>nd</sup> Street**



B. At SW 137<sup>th</sup> Avenue and SW 152<sup>nd</sup> Street: At SW 137<sup>th</sup> Avenue, going eastbound, SW 152<sup>nd</sup> Street section widens from 4 lanes to 6 lanes. The recommended improvements are shown in Exhibit 68.

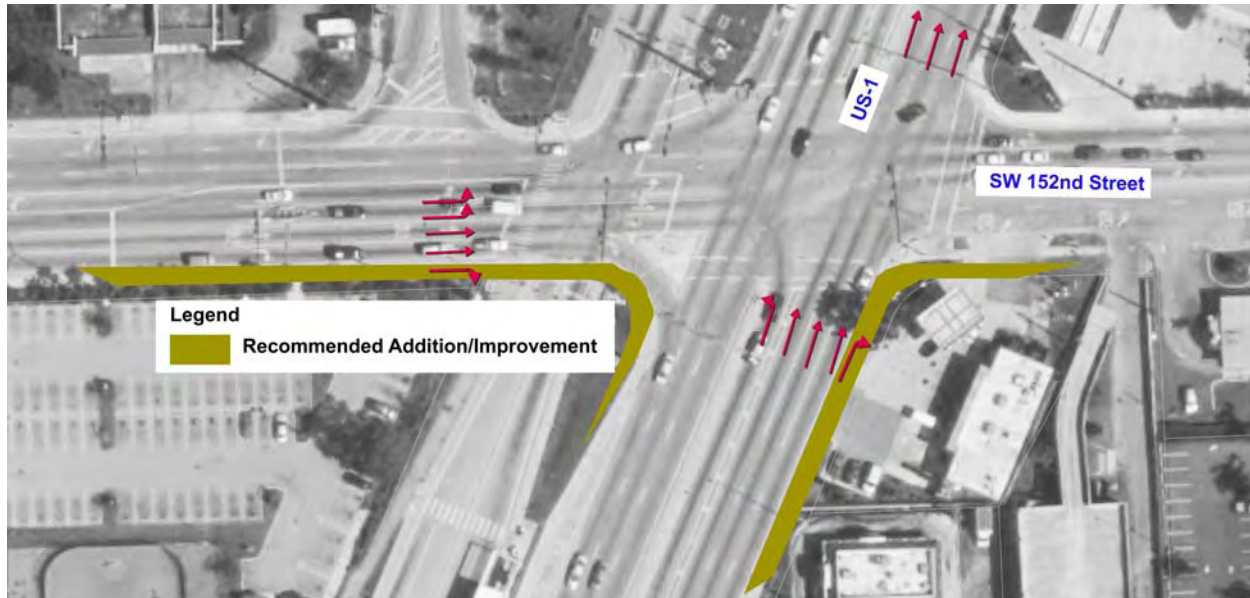
**Exhibit 68: Intersection Improvements – SW 137<sup>th</sup> Avenue and SW 152<sup>nd</sup> Street**





C. At US-1 and SW 152<sup>nd</sup> Street: It is recommended that an auxiliary right-turn lane be added to eastbound SW 152<sup>nd</sup> Street to increase capacity of traffic accessing southbound US-1 (Exhibit 69). Also, an auxiliary right-turn lane should be added to US-1 to permit free flow movement for traffic going east on SW 152<sup>nd</sup> Street.

**Exhibit 69: Intersection Improvements – US-1 and SW 152<sup>nd</sup> Street**



*Implementation Strategy:* These intersection improvements are recommended to be implemented by 2010. Coordination with the County’s Public Works Department is recommended. Funding from the Public Transportation Program (PTP) is a potential source to prioritize implementation of these intersection improvements. Similarly, some of these intersection improvements can be built by the proposed developments along the corridor.

D. At Miami Metro Zoo: If the Miami Metro Zoo DRI amendment is approved, the left-turn lane capacity along SW 152<sup>nd</sup> Street at SW 124<sup>th</sup> Avenue should be increased. This improvement should be implemented before the completion of the proposed entertainment area.

*Implementation Strategy:* The detailed layouts, number of right and left-turn auxiliary lanes, and signalization plan should be developed based on the nature of approved development and any roadway improvements committed by the developer. These intersection improvements should be implemented in close coordination with the proposed developer before the completion of the proposed entertainment area.

E. *Other Intersection Improvements:* In addition to the above, if the proposed Parkland DRI is approved, improvements are recommended at the following intersections:

- SW 177<sup>th</sup> Avenue and SW 152<sup>nd</sup> Street
- SW 162<sup>nd</sup> Avenue and SW 152<sup>nd</sup> Street
- SW 157<sup>th</sup> Avenue and SW 152<sup>nd</sup> Street



*Implementation Strategy:* The detailed layouts, number of right and left-turn auxiliary lanes, and signalization plan should be developed based on the nature of approved development and any roadway improvements committed by the developer. These intersection improvements should be implemented in close coordination with the proposed developer before the completion of the proposed mixed-used DRI.

Bicycle facility improvements are recommended to be incorporated in the above recommended intersection improvement projects. All right-turn lanes should ultimately accommodate 4 feet wide bicycle lanes. Bicycle facilities through intersections at SW 137<sup>th</sup> Avenue, SW 117<sup>th</sup> Avenue, and US-1 are included in the County's 2025 Bicycle Facilities Plan Priority IV unfunded projects.

**Recommendation 2 - Access Management Improvements:** There are several full openings along the corridor. Overall, 16% of all crashes are left-turn crashes. U-turns are not prohibited at most of these median openings. As shown in Exhibit 70, the median openings between SW 112<sup>th</sup> Avenue and SW 107<sup>th</sup> Avenue should be closed and through-movements should be given clear preference at minor intersections. Openings should comply with FDOT Access Management Standards.

*Implementation Strategy:* This improvement should be implemented by 2010 before the recommended widening of SW 152<sup>nd</sup> Street to provide immediate relief to through-traffic between the HEFT and US-1.

**Recommendation 3 –Transit Service and Stop Infrastructure improvements:** It is recommended that to provide better connectivity to the Metrorail, Coral Reef Max should be on SW 152<sup>nd</sup> Street and should not make loops to minimize on-board travel time. The service headway and infrastructure should be improved. Connectivity and transfers to Route 137 should also be improved. Stop infrastructure such as landing pads, trash cans, shelter, and bench (e.g. Exhibit 71) should be provided at stops major intersections (SW 162<sup>nd</sup> Avenue, SW 157<sup>th</sup> Avenue, SW 152<sup>nd</sup> Avenue, SW 147<sup>th</sup> Avenue, SW 142<sup>nd</sup> Avenue, SW 137<sup>th</sup> Avenue, SW 124<sup>th</sup> Avenue, SW 112<sup>th</sup> Avenue, SW 102<sup>nd</sup> Avenue, and US-1).

*Implementation Strategy:* These improvements should be implemented by 2010 and all future roadway improvement projects should include transit stop infrastructure improvements. These improvements should be coordinated with the MDT and can be implemented by the developers along the corridor.

**Exhibit 70: An Example of Bus Stop with Amenities**





Exhibit 71: Access Management Improvements





**Recommendation 4 - Enhancements to the Park-and-Ride Lot at SW 117<sup>th</sup> Avenue and SW 152<sup>nd</sup> Street:** For the eastbound Coral Reef Max service, two left-turns are needed to access this lot. The County PWD, FDOT, and the Turnpike Enterprise are coordinating improvements at the intersection of SW 152<sup>nd</sup> Street and SW 117<sup>th</sup> Avenue. Miami-Dade County is currently constructing a widening improvement on SW 117<sup>th</sup> Avenue that includes improvements and additional lanes at the intersection with SW 152<sup>nd</sup> Street. The Turnpike Enterprise is completing design plans which include improvements to the southbound exist tramp from the HEFT to SW 152<sup>nd</sup> Street. The plans for SW 152<sup>nd</sup> Street and SW 117<sup>th</sup> Avenue intersection improvement should involve analysis of transit access to and from the park-and-ride lot at SW 152<sup>nd</sup> Avenue and SW 117<sup>th</sup> Avenue.

### 5.3.2 Mid-Term Improvements (2010 – 2015)

#### **Recommendation 5 – Capacity Improvement**

**Projects:** If the proposed Parkland DRI is approved, the planned improvements along SW 162<sup>nd</sup> Avenue and SW 157<sup>th</sup> Avenue should be supplemented by additional capacity improvements (Exhibit 72). The following roadway links should be widened to increase the capacity.

- SW 162<sup>nd</sup> Avenue, between SW 152<sup>nd</sup> Street and SW 136<sup>th</sup> Street
- SW 157<sup>th</sup> Avenue, between SW 120<sup>th</sup> Street and SW 184<sup>th</sup> Street

*Implementation Strategy:* SW 157<sup>th</sup> Avenue widening project between SW 184<sup>th</sup> and SW 152<sup>nd</sup> Street is in the LRTP. However, if the committed and proposed developments are built by 2015, the planned widening project would not be sufficient to meet the projected demand. The widening of these two roadway links is recommended to be tied with the implementation of the development near the western terminus of the study corridor.

#### **Recommendation 6 – SW 152<sup>nd</sup> Street Widening:**

The widening of SW 152<sup>nd</sup> Street from SW 117<sup>th</sup> Avenue to US-1 is the most effective alternative to relieve congestion along the study corridor. This could be a mid-term strategy to improve mobility along the corridor. Currently this is a Priority 3 project and is programmed to be implemented between 2016 and

**Exhibit 72: Recommended Improvements**

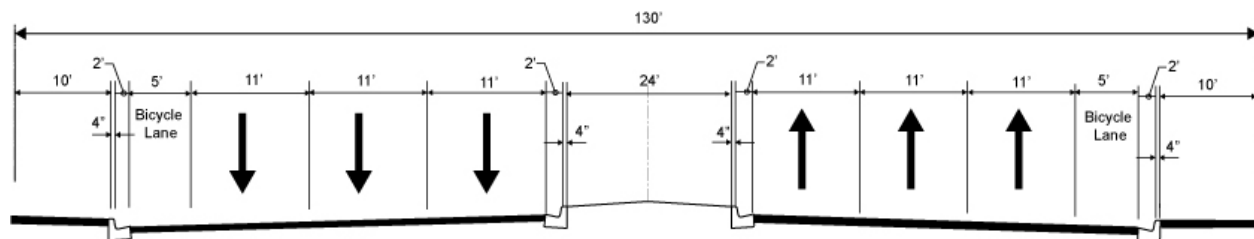




2020. It should be considered as a Priority 2 project. The availability of right-of-way should facilitate and expedite implementation of this widening project. If feasible, this widening project should include 5 foot wide bicycle lanes in both directions. Exhibit 73 shows a recommended typical section for this section. Please note that right-of-way constraints will have to be examined in more detail. This project is included in the County's 2025 Bicycle Facilities Plan as a Priority IV unfunded project. Also, in the LRTP, the project's western boundary is the HEFT which should be moved to just east of SW 117<sup>th</sup> Avenue intersection.

*Implementation Strategy:* It is recommended that this project is be implemented between 2010 and 2015, depending on availability of funding and status of the proposed developments, to address projected congestion in the future year (2015). The planned ITS improvements, a Priority 2 project, should be done along with the recommended widening.

**Exhibit 73: Recommended SW 152<sup>nd</sup> Street Typical Section**

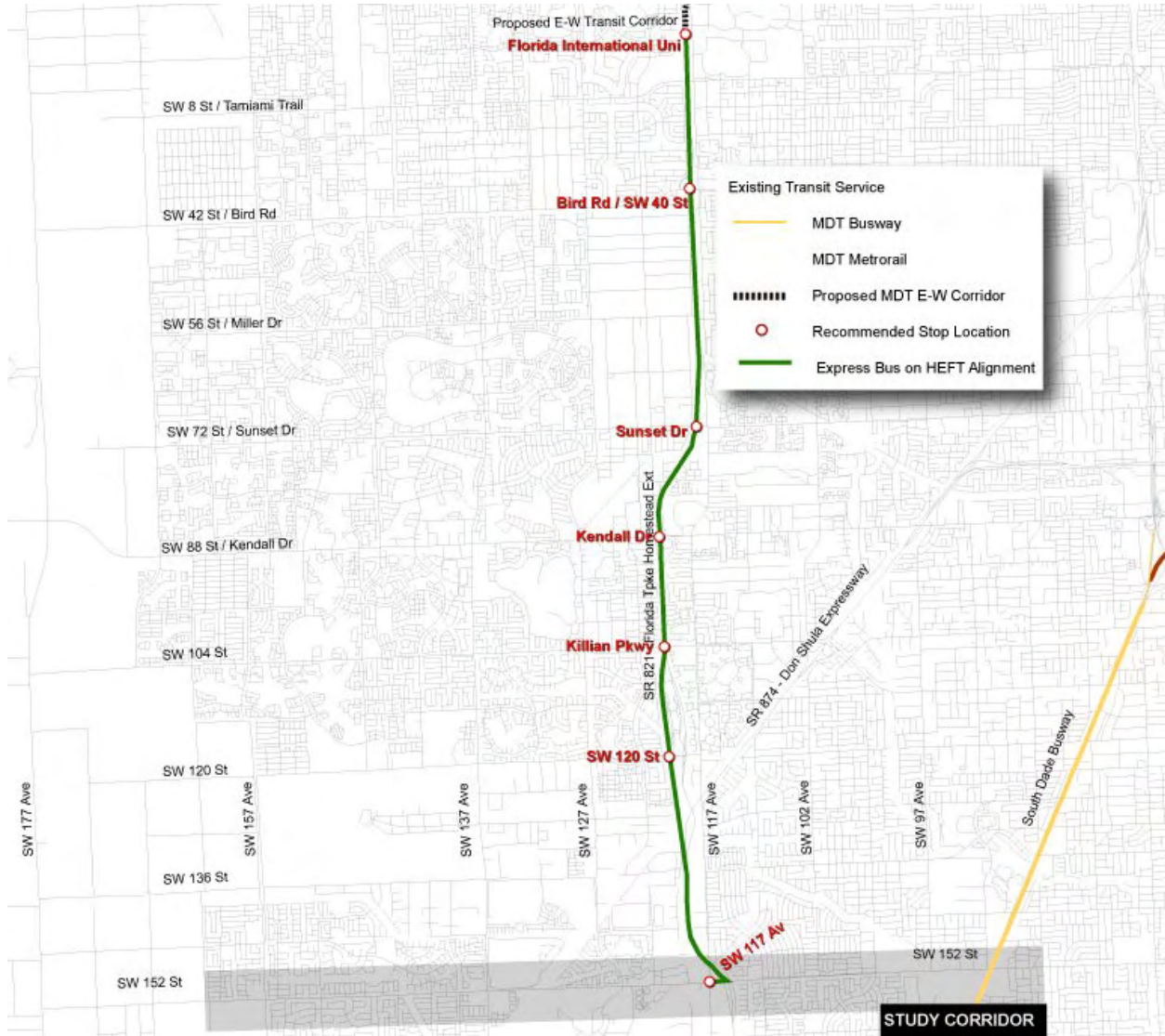


**Recommendation 7 – Express Bus on HEFT to FIU:** Express bus service on the HEFT to FIU (Exhibit 74) is an attractive transit strategy to build overall transit system ridership. This alternative provides a unique opportunity to establish a north-south transit connection and provide access to regional activity centers. This express bus alternative is projected to generate significant ridership. This service can also start building future ridership for the Kendall Corridor HEFT alternative. The under-utilized park-and-ride lot at SW 117<sup>th</sup> Avenue and SW 152<sup>nd</sup> Street provides ready infrastructure as a route origination or transfer point. The County has successfully implemented “Bus on Shoulders” program (Exhibit 75). The transit service along the HEFT can be more attractive by allowing the express bus on HEFT to run on the shoulder, as required, which can potentially reduce the on-board travel time. The express bus on shoulders may require shoulder improvements on the HEFT and should be coordinated with the Turnpike Enterprise. As a part of this improvement, feeder bus service should be provided at all stop locations.

*Implementation Strategy:* The southern termini should be decided in close coordination with the proposed development. It is recommended that the proposed developments include small parking facilities and provide stop side infrastructure for this transit service. The service can originate from the park-and-ride lot at SW 117<sup>th</sup> Avenue or from SW 177<sup>th</sup> Avenue, if the Parkland DRI is approved. Similar implementation strategies for this service along the HEFT should also be examined.



### Exhibit 74: Express Bus on HEFT Alignment and Stop Locations



### Exhibit 75: Express Bus on Shoulders





**Recommendation 8 – Transportation Demand Management (TDM) Strategies:** Nearly 370,000 sq. ft. of office space and 430,000 sq. ft. of retail space is committed or proposed along the corridor. The Miami Metro Zoo Entertainment Area is also likely to be a major employment hub along the corridor. The future major employers should be required and existing major employers should be encouraged to develop a carpool/vanpool strategy and other TDM strategies. This could include locating major transit stops or park-and-ride facilities within their developments. TDM strategies should be coordinated with South Florida Commuter Services.

### 5.3.3 Long-Term Improvements (2015 – 2030)

**Recommendation 9 – SW 136<sup>th</sup> Street Connection to SR-874:** SW 136<sup>th</sup> Street connection to SR-874 improves mobility in the study area which will provide significant indirect benefits to the study corridor. A limited-access facility along SW 136<sup>th</sup> Street should continue to be evaluated.

*Implementation Strategy:* MDX is planning to study SW 136<sup>th</sup> Street connection to SR-874 and improvement along SW 136<sup>th</sup> Street, east of SW 137<sup>th</sup> Avenue. It is recommended that the north-south roadways (e.g. SW 137<sup>th</sup> Avenue, SW 147<sup>th</sup> Avenue) are developed to provide the most effective connections to this limited access facility in the future. Any development along SW 136<sup>th</sup> Street should be carefully evaluated to avoid the need for right-of-acquisition, if any, in future. The access to all future development and the development of the Kendall Tamiami Airport should accommodate the needs for this limited-access facility.

**Recommendation 10 – BRT along SW 152<sup>nd</sup> Street from SW 137<sup>th</sup>/177<sup>th</sup> Avenue to Dadeland South:** A BRT service on dedicated lanes can connect the County’s western suburbs to the Downtown and west-central region. This BRT service would provide a transit connection to the existing Metrorail service and future SW 137<sup>th</sup> Avenue BRT or the HEFT/SW 107<sup>th</sup> Avenue BRT or Metrorail, if implemented as a part of the Kendall-Link Corridor.

*Implementation Strategy:* This alternative should be implemented if the Parkland DRI is approved. If the Parkland DRI is not approved, the western termini of this BRT service can be SW 137<sup>th</sup> Avenue or SW 117<sup>th</sup> Avenue, depending on the southern termini of the Kendall-Link project.

**Recommendation 11 – Bicycle Facilities along SW 152<sup>nd</sup> Street:** On or off-road bicycle facilities from SW 162<sup>nd</sup> Avenue to the Metro Zoo entrance will connect residential areas to a major recreational facility (Metro Zoo).

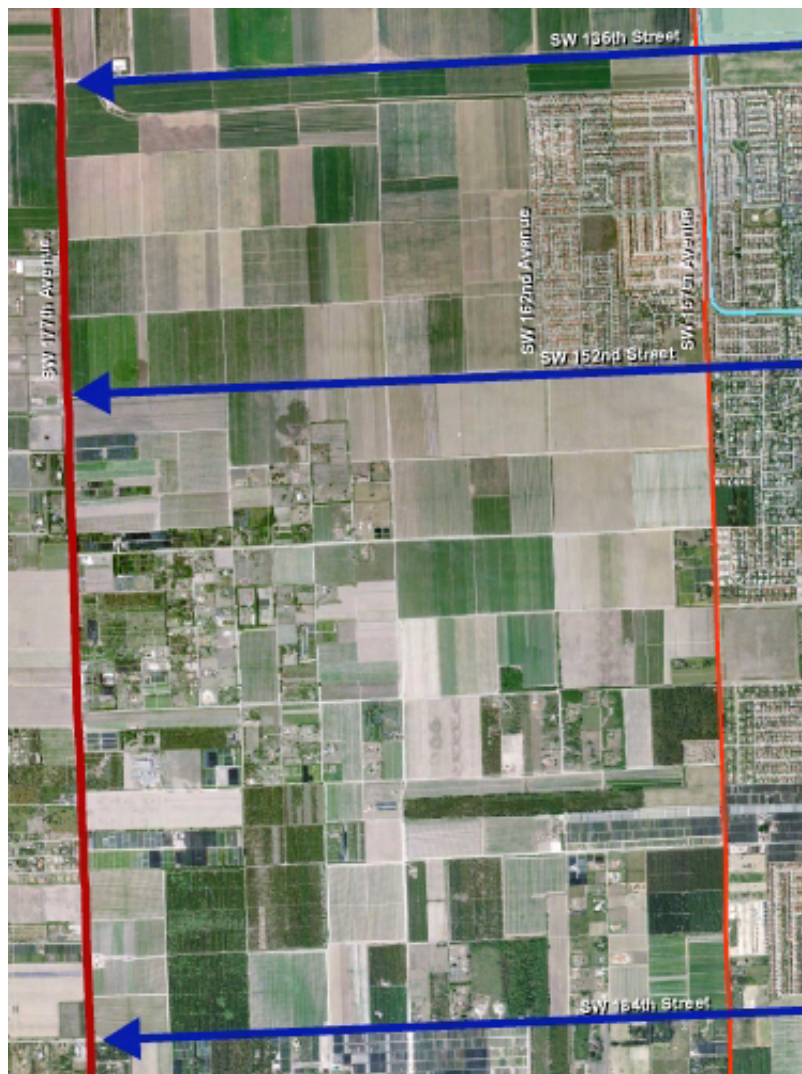
*Implementation Strategy:* This facility should be included in all roadway improvements projects between SW 162<sup>nd</sup> Avenue and Metro Zoo Entrance. Alternatively, the existing sidewalk can be converted into a shared-use path consistent with guidance provided by Florida Bicycle Facilities Planning and Design Handbook.



### 5.3.4 Policy Recommendations

**Recommendation 12 - Improve Network Connections to SW 177<sup>th</sup> Avenue:** As discussed previously in the report, a significant amount of traffic is going east-west to access major north-south facilities. It is recommended that this east-west traffic should be provided with an attractive “back-door” access through SW 177<sup>th</sup> Avenue. Therefore, major east-west arterials such as SW 152<sup>nd</sup> Street, SW 136<sup>th</sup> Street, SW 184<sup>th</sup> Street and SW 177<sup>th</sup> Avenue should be considered for more capacity beyond what is already planned in the LRTP to make this potential route more attractive (Exhibit 76). If the proposed major developments near the western termini of the project are approved and implemented, this strategy would provide even more significant mobility benefits.

**Exhibit 76: Network Connections to SW 177<sup>th</sup> Street**



**Recommendation 13 - Address Land Use-Transportation Nexus:** The ultimate goal of congestion relief in the long-term is expected to require planning and coordination with several agencies in short- and mid-term horizons. The intersections at US-1, SW 137<sup>th</sup> Avenue, and SW 117<sup>th</sup> Avenue should be developed into transit-oriented nodes that can support premium-transit service.



The study corridor is an example of complexities resulting from an undesirable land use-transportation nexus. The land use along the study corridor is not readily conducive for a premium transit service. Compared to PTP corridors, the study corridor does not have significant population densities. Another major constraint is that a significant part of the study area is already developed. However, there are several large vacant parcels that can be developed into high-density pedestrian- and transit-friendly developments. Coordination with the County planning staff should facilitate development of high-density transit-friendly nodes.



**Appendix A: Photographs of SW 152<sup>nd</sup> Street**



**2-lane Undivided**  
(Between SW 162<sup>nd</sup> Avenue and SW 147<sup>th</sup> Court)



**4-lane Undivided**  
(Between SW 147<sup>th</sup> Court and SW 137<sup>th</sup> Avenue)



**6-lane Divided**  
(Between SW 137<sup>th</sup> Avenue and SW 124<sup>th</sup> Avenue)



**4-lane Divided**  
(Between SW 117<sup>th</sup> Avenue and the HEFT)





## **Appendix B: Coral Reef Max Service Schedule**





252 CORAL REEF MAX SCHEDULE

SERVICE: WEEKDAY

DIRECTION: EASTBOUND

SW 152 St & 162 Ave	SW 152 St & 152 Ave	SW 152 St & 137 Ave	Metro Zoo	SW 140 Tr & 119 Ave	Park & Ride	SW 152 St & 117 Ave	SW 136 St & Busway Station	Dadeland South Station
05:36AM	05:38AM	05:45AM	:	:	05:50AM	:	05:59AM	06:09AM
:	05:50AM	05:57AM	:	:	06:06AM	:	06:20AM	06:30AM
06:07AM	06:10AM	06:17AM	:	:	06:26AM	:	06:40AM	06:50AM
:	06:31AM	06:38AM	:	:	06:47AM	:	07:04AM	07:15AM
06:41AM	06:44AM	06:51AM	:	:	07:02AM	:	07:19AM	07:30AM
07:00AM	07:03AM	07:11AM	:	:	07:22AM	:	07:39AM	07:50AM
07:20AM	07:23AM	07:31AM	:	:	07:42AM	:	07:59AM	08:10AM
:	07:43AM	07:51AM	:	:	08:02AM	:	08:19AM	08:30AM
08:00AM	08:03AM	08:11AM	:	:	08:22AM	:	08:39AM	08:50AM
:	08:23AM	08:31AM	:	:	08:42AM	:	08:59AM	09:10AM
08:43AM	08:46AM	08:54AM	:	:	09:05AM	:	09:19AM	09:30AM
:	09:05AM	09:12AM	09:18AM	:	:	09:25AM	09:39AM	09:50AM
:	09:25AM	09:32AM	09:38AM	:	:	09:45AM	09:59AM	10:10AM
:	09:55AM	10:02AM	10:08AM	:	:	10:15AM	10:29AM	10:40AM
:	10:25AM	10:32AM	10:38AM	:	:	10:45AM	10:59AM	11:10AM
:	10:55AM	11:02AM	11:08AM	:	:	11:15AM	11:29AM	11:40AM
:	11:25AM	11:32AM	11:38AM	:	:	11:45AM	11:59AM	12:10PM
:	11:55AM	12:02PM	12:08PM	:	:	12:15PM	12:29PM	12:40PM
:	12:25PM	12:32PM	12:38PM	:	:	12:45PM	12:59PM	01:10PM
:	12:55PM	01:02PM	01:08PM	:	:	01:15PM	01:29PM	01:40PM
:	01:25PM	01:32PM	01:38PM	:	:	01:45PM	01:59PM	02:10PM
:	01:55PM	02:02PM	02:08PM	:	:	02:15PM	02:29PM	02:40PM
:	02:25PM	02:32PM	02:38PM	:	:	02:45PM	02:59PM	03:10PM
:	02:55PM	03:02PM	03:08PM	:	:	03:15PM	03:29PM	03:40PM
:	03:20PM	03:27PM	03:33PM	03:38PM	:	03:45PM	03:59PM	04:10PM
:	03:39PM	03:46PM	03:52PM	03:57PM	:	04:04PM	04:19PM	04:30PM
:	03:57PM	04:05PM	04:12PM	04:17PM	:	04:24PM	04:39PM	04:50PM
:	04:17PM	04:25PM	04:32PM	04:37PM	:	04:44PM	04:59PM	05:10PM
04:34PM	04:37PM	04:45PM	04:52PM	04:57PM	:	05:04PM	05:19PM	05:30PM
:	04:57PM	05:05PM	05:12PM	05:17PM	:	05:24PM	05:39PM	05:50PM
05:14PM	05:17PM	05:25PM	05:32PM	05:37PM	:	05:44PM	05:59PM	06:10PM
05:39PM	05:42PM	05:50PM	:	05:57PM	:	06:04PM	06:19PM	06:30PM
05:59PM	06:02PM	06:10PM	:	06:17PM	:	06:24PM	06:39PM	06:50PM
06:21PM	06:24PM	06:32PM	:	06:39PM	:	06:46PM	07:01PM	07:10PM
:	06:45PM	06:53PM	:	:	:	:	:	:
06:46PM	06:49PM	06:57PM	:	07:04PM	:	07:09PM	07:21PM	07:30PM
07:15PM	07:17PM	07:24PM	:	:	:	07:29PM	07:41PM	07:50PM
07:24PM	07:26PM	07:33PM	:	:	:	:	:	:
:	07:50PM	07:57PM	:	:	:	08:02PM	08:14PM	08:23PM
:	08:13PM	08:20PM	:	:	:	:	:	:
:	09:03PM	09:10PM	:	:	:	:	:	:

CLOSE WINDOW



## **Appendix C: 12-hour Turning Movement Count**



Advanced Transportation  
Engineering Consultants, Inc  
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Miami, Florida 33175  
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SW 152 St & SW 137 Ave

12 Hours TMC

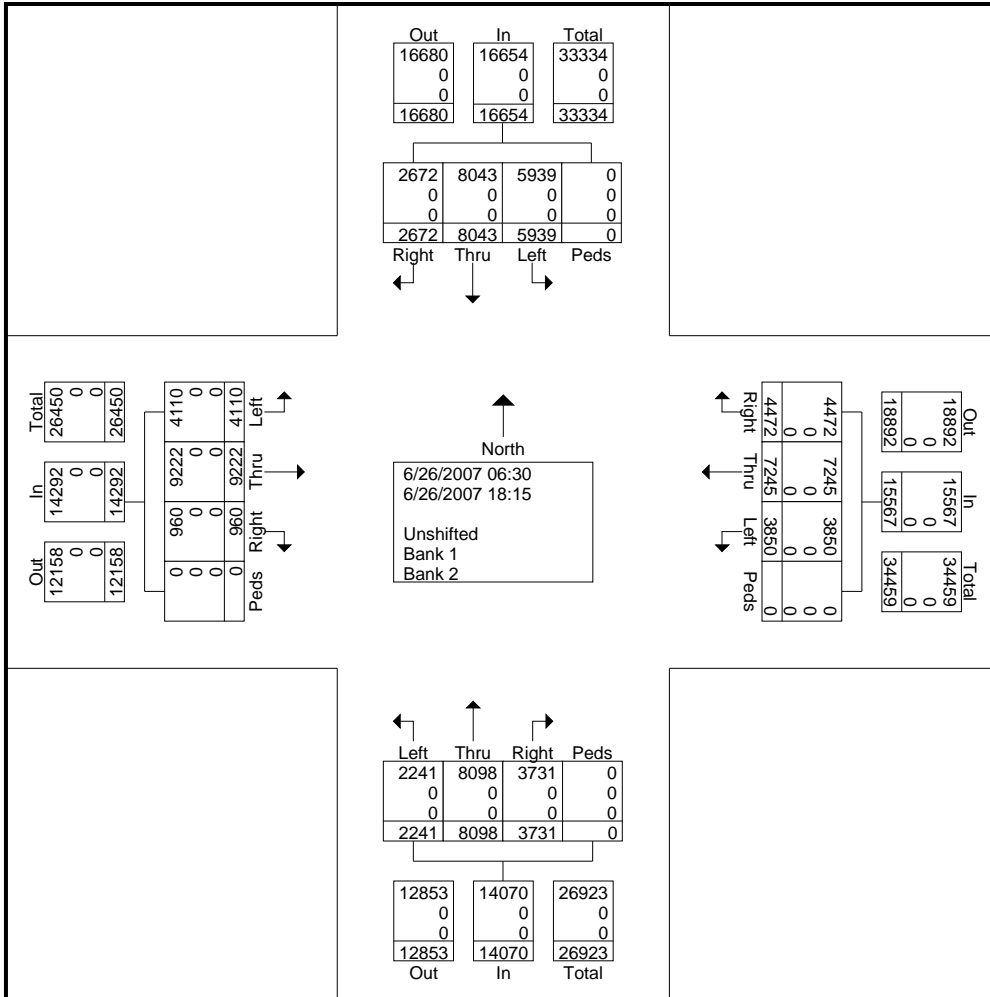
File Name : SW634F~1  
Site Code : 00000261  
Start Date : 6/26/2007  
Page No : 1

**Groups Printed- Unshifted - Bank 1 - Bank 2**

Start Time	From North					From East					From South					From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
06:30	8	116	78	0	202	69	33	26	0	128	167	232	5	0	404	11	194	73	0	278	1012
06:45	15	105	58	0	178	78	49	10	0	137	167	276	12	0	455	6	245	74	0	325	1095
Total	23	221	136	0	380	147	82	36	0	265	334	508	17	0	859	17	439	147	0	603	2107
07:00	10	104	98	0	212	87	47	25	0	159	154	198	44	0	396	2	280	97	0	379	1146
07:15	20	104	102	0	226	61	39	15	0	115	155	239	27	0	421	14	284	85	0	383	1145
07:30	27	154	115	0	296	83	57	26	0	166	147	282	31	0	460	7	312	114	0	433	1355
07:45	23	156	108	0	287	125	77	43	0	245	182	282	27	0	491	15	292	129	0	436	1459
Total	80	518	423	0	1021	356	220	109	0	685	638	1001	129	0	1768	38	1168	425	0	1631	5105
08:00	22	132	90	0	244	122	80	29	0	231	142	244	15	0	401	14	321	120	0	455	1331
08:15	42	149	148	0	339	112	94	43	0	249	129	242	19	0	390	11	287	126	0	424	1402
08:30	26	113	97	0	236	127	95	58	0	280	136	245	38	0	419	13	267	146	0	426	1361
08:45	32	138	136	0	306	138	110	40	0	288	124	222	34	0	380	17	303	130	0	450	1424
Total	122	532	471	0	1125	499	379	170	0	1048	531	953	106	0	1590	55	1178	522	0	1755	5518
09:00	50	134	156	0	340	150	80	61	0	291	127	198	36	0	361	12	229	82	0	323	1315
09:15	19	134	169	0	322	121	90	49	0	260	99	164	28	0	291	21	219	113	0	353	1226
09:30	35	127	119	0	281	83	138	45	0	266	93	184	38	0	315	16	248	84	0	348	1210
09:45	38	127	98	0	263	76	88	48	0	212	68	182	40	0	290	19	221	90	0	330	1095
Total	142	522	542	0	1206	430	396	203	0	1029	387	728	142	0	1257	68	917	369	0	1354	4846
10:00	30	106	119	0	255	79	76	55	0	210	50	123	29	0	202	14	198	71	0	283	950
10:15	53	103	111	0	267	45	76	39	0	160	57	133	28	0	218	37	164	83	0	284	929
10:30	33	102	119	0	254	36	70	66	0	172	53	113	41	0	207	32	139	71	0	242	875
10:45	30	117	104	0	251	23	84	66	0	173	49	93	36	0	178	17	169	59	0	245	847
Total	146	428	453	0	1027	183	306	226	0	715	209	462	134	0	805	100	670	284	0	1054	3601
11:00	41	129	106	0	276	19	51	43	0	113	14	98	32	0	144	14	186	73	0	273	806
11:15	51	122	124	0	297	11	78	53	0	142	37	116	65	0	218	12	150	56	0	218	875
11:30	34	121	114	0	269	28	114	53	0	195	41	128	62	0	231	10	167	63	0	240	935
11:45	62	177	137	0	376	51	120	49	0	220	37	161	60	0	258	14	168	35	0	217	1071
Total	188	549	481	0	1218	109	363	198	0	670	129	503	219	0	851	50	671	227	0	948	3687
12:00	40	160	143	0	343	38	113	52	0	203	50	155	45	0	250	10	160	63	0	233	1029
12:15	45	151	153	0	349	123	149	69	0	341	67	147	67	0	281	18	186	82	0	286	1257
12:30	56	150	123	0	329	122	159	81	0	362	99	157	74	0	330	29	168	110	0	307	1328
12:45	70	143	132	0	345	118	150	81	0	349	83	147	59	0	289	32	187	84	0	303	1286
Total	211	604	551	0	1366	401	571	283	0	1255	299	606	245	0	1150	89	701	339	0	1129	4900
13:00	74	172	158	0	404	143	159	107	0	409	92	150	62	0	304	23	192	110	0	325	1442
13:15	69	181	131	0	381	159	164	123	0	446	69	190	46	0	305	21	163	107	0	291	1423
13:30	63	147	125	0	335	134	152	91	0	377	98	180	53	0	331	21	214	93	0	328	1371
13:45	73	163	139	0	375	116	181	106	0	403	82	171	50	0	303	19	175	109	0	303	1384
Total	279	663	553	0	1495	552	656	427	0	1635	341	691	211	0	1243	84	744	419	0	1247	5620
14:00	55	172	135	0	362	130	157	75	0	362	68	183	68	0	319	18	176	92	0	286	1329
14:15	68	154	128	0	350	115	184	123	0	422	60	172	52	0	284	46	121	64	0	231	1287
14:30	55	163	170	0	388	131	164	116	0	411	74	160	51	0	285	15	164	72	0	251	1335
14:45	65	178	133	0	376	98	184	93	0	375	62	178	46	0	286	21	162	59	0	242	1279
Total	243	667	566	0	1476	474	689	407	0	1570	264	693	217	0	1174	100	623	287	0	1010	5230







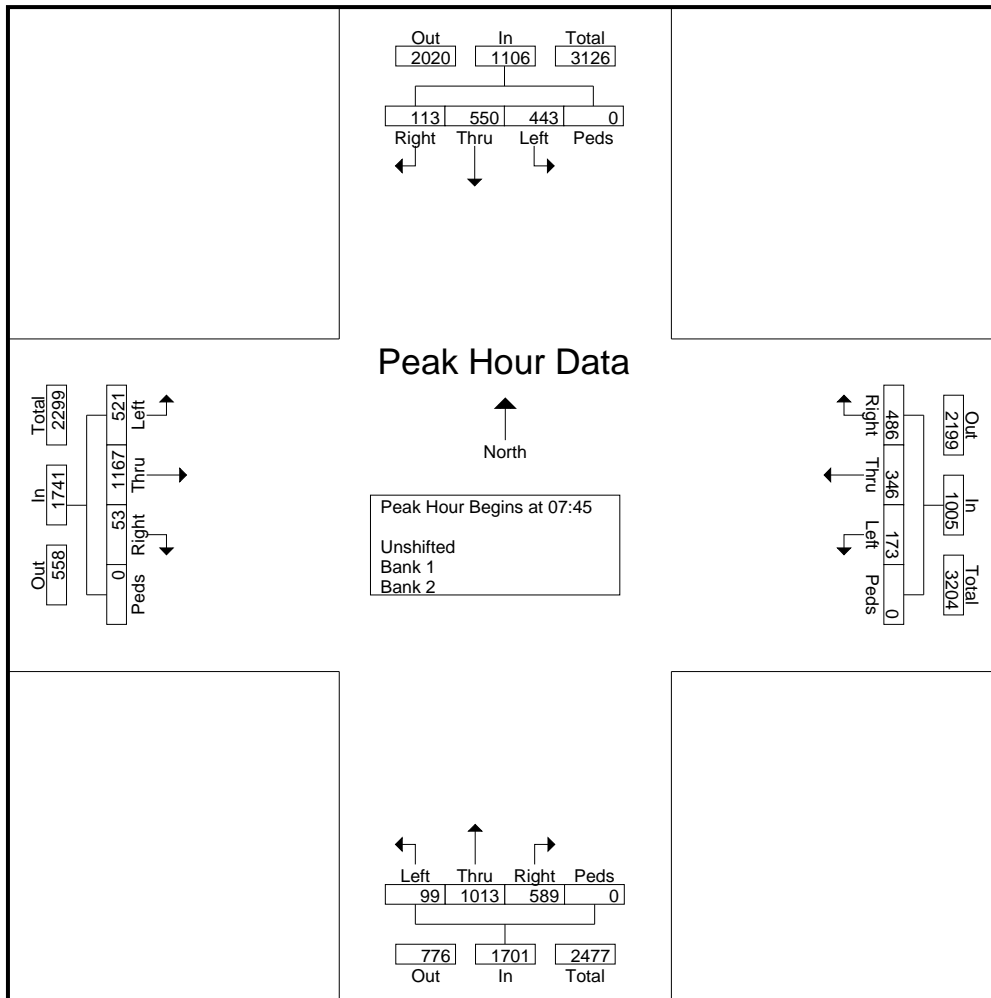
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 Engineering Consultants, Inc  
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 Miami, Florida 33175  
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SW 152 St & SW 137 Ave

12 Hours TMC

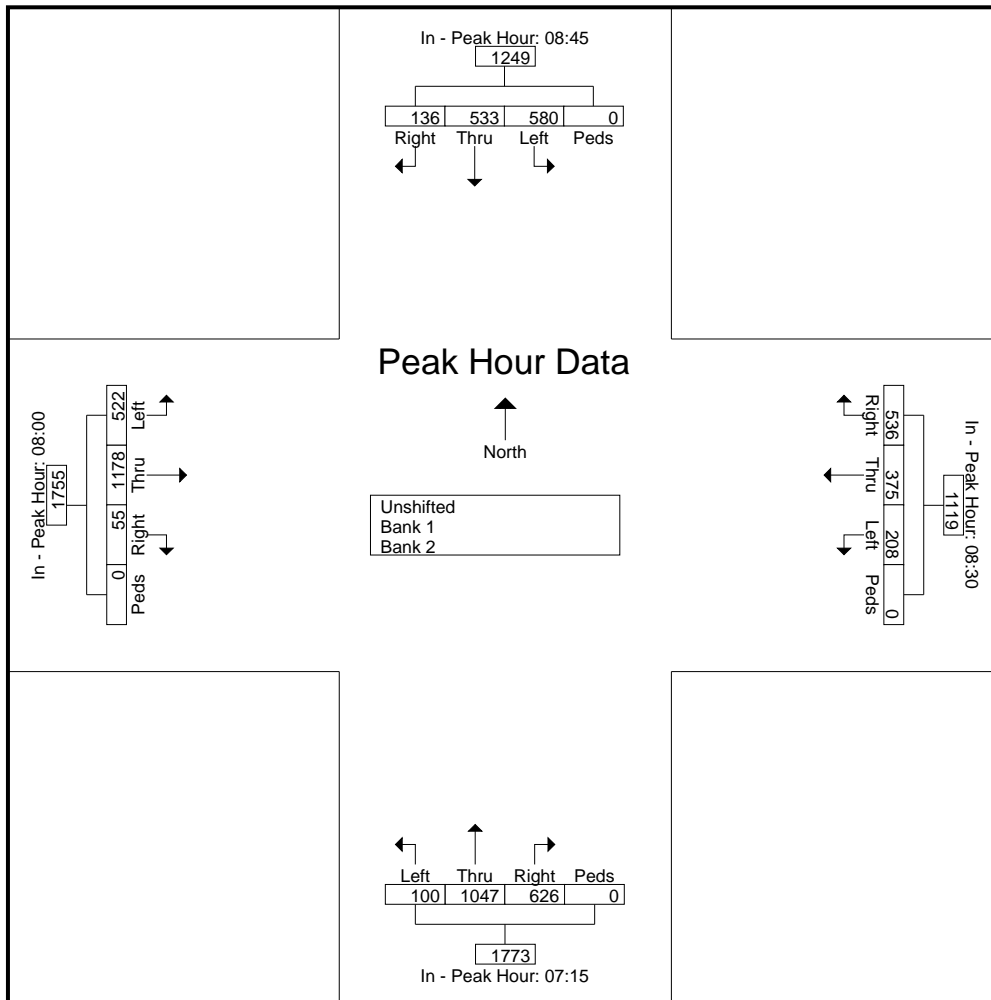
File Name : SW634F~1  
 Site Code : 00000261  
 Start Date : 6/26/2007  
 Page No : 4

Start Time	From North					From East					From South					From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 06:30 to 09:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:45																					
07:45	23	156	108	0	287	125	77	43	0	245	182	282			491	15					1459
08:00	22	132	90	0	244	122	80	29	0	231	142	244	15	0	401	14	321	120	0	455	1331
08:15	42		148		339	112	94	43	0	249	129	242	19	0	390	11	287	126	0	424	1402
08:30	26	113	97	0	236	127	95	58		280	136	245	38	0	419	13	267	146			
Total Volume	113	550	443	0	1106	486	346	173	0	1005	589	1013	99	0	1701	53	1167	521	0	1741	5553
% App. Total	10.2	49.7	40.1	0		48.4	34.4	17.2	0		34.6	59.6	5.8	0		3	67	29.9	0		
PHF	.673	.881	.748	.000	.816	.957	.911	.746	.000	.897	.809	.898	.651	.000	.866	.883	.909	.892	.000	.957	.952





	From North					From East					From South					From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 06:30 to 09:45 - Peak 1 of 1																					
Peak Hour for Each Approach Begins at:																					
	08:45					08:30					07:15					08:00					
+0 mins.	32	138	136	0	306	127	95	58	0	280	155	239	27	0	421	14	321	120	0	455	
+15 mins.	50				340	138	110				182	282	31	0	460	11	287	126	0	424	
+30 mins.	19	134	169			150	80	61		291	182				491	13	267	146			
<b>+45 mins.</b>	<b>35</b>	<b>127</b>	<b>119</b>	<b>0</b>	<b>281</b>	<b>121</b>	<b>90</b>	<b>49</b>	<b>0</b>	<b>260</b>	<b>142</b>	<b>244</b>	<b>15</b>	<b>0</b>	<b>401</b>	<b>17</b>	<b>303</b>	<b>130</b>	<b>0</b>	<b>450</b>	
Total Volume	136	533	580	0	1249	536	375	208	0	1119	626	1047	100	0	1773	55	1178	522	0	1755	
% App. Total	10.9	42.7	46.4	0		47.9	33.5	18.6	0		35.3	59.1	5.6	0		3.1	67.1	29.7	0		
PHF	.680	.966	.858	.000	.918	.893	.852	.852	.000	.961	.860	.928	.806	.000	.903	.809	.917	.894	.000	.964	



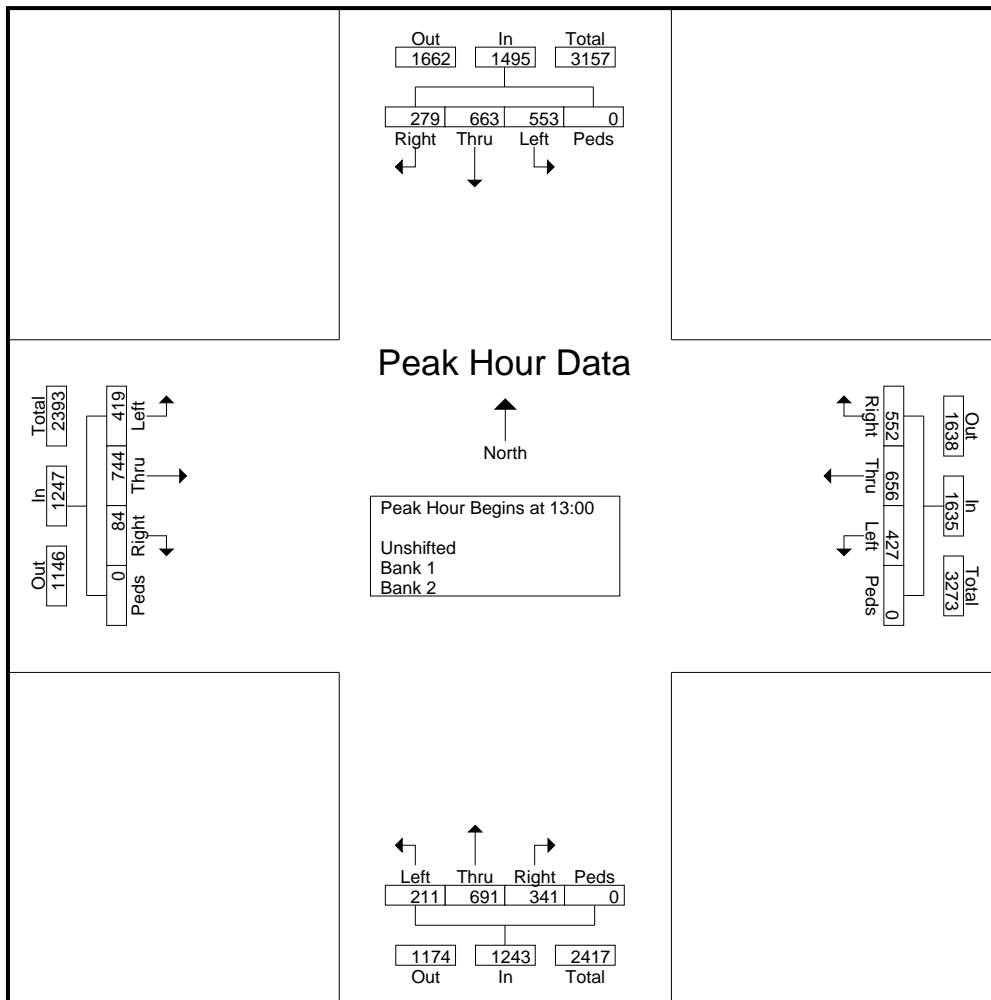
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 Engineering Consultants, Inc  
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 Miami, Florida 33175  
 (305) 480-9938 Office  
 (305) 480-9964 Fax

SW 152 St & SW 137 Ave

12 Hours TMC

File Name : SW634F~1  
 Site Code : 0000261  
 Start Date : 6/26/2007  
 Page No : 6

Start Time	From North					From East					From South					From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 10:00 to 13:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 13:00																					
13:00	74		158		404	143	159	107	0	409	92	150	62	0	304	23		110			1442
13:15	69	181	131	0	381	159	164	123		446	69	190			331	21	214	93	0	328	1371
13:30	63	147	125	0	335	134	152	91	0	377	98	180	53	0	331						
13:45	73	163	139	0	375	116	181														
Total Volume	279	663	553	0	1495	552	656	427	0	1635	341	691	211	0	1243	84	744	419	0	1247	5620
% App. Total	18.7	44.3	37	0		33.8	40.1	26.1	0		27.4	55.6	17	0		6.7	59.7	33.6	0		
PHF	.943	.916	.875	.000	.925	.868	.906	.868	.000	.916	.870	.909	.851	.000	.939	.913	.869	.952	.000	.950	.974





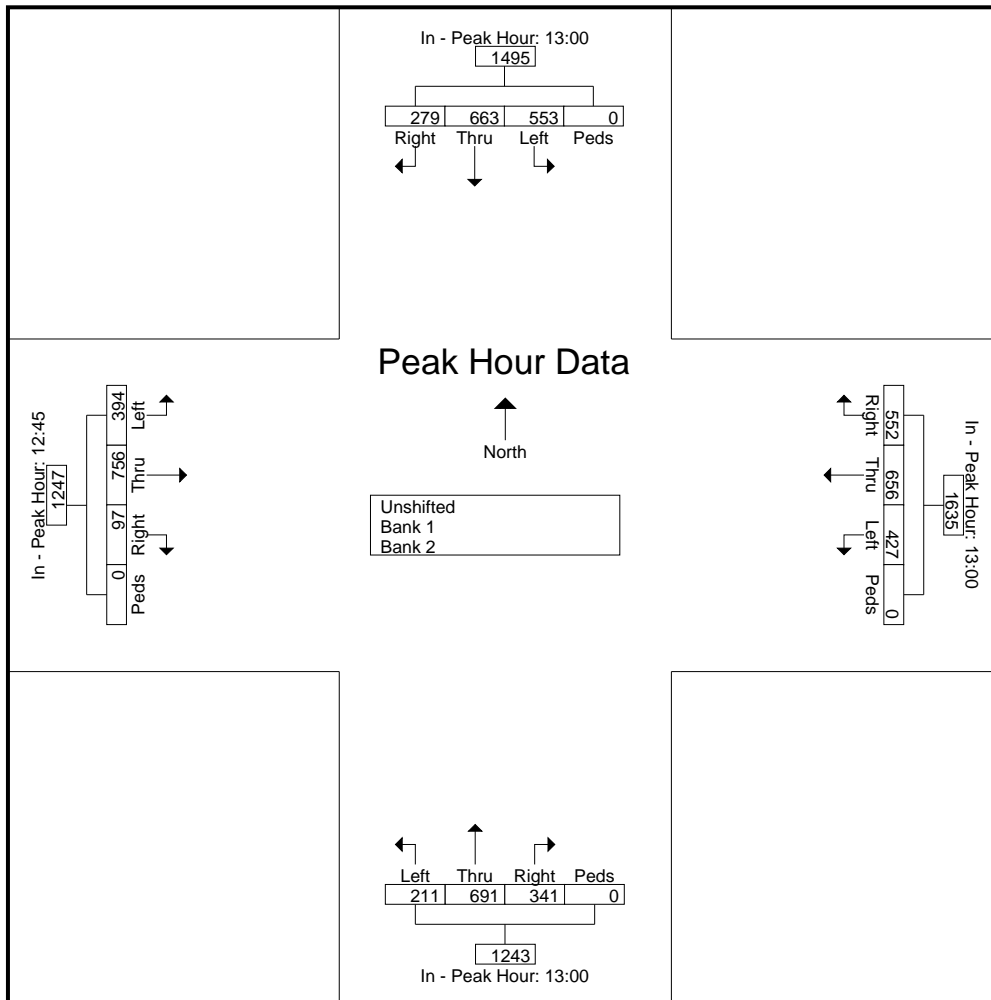
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 (305) 480-9938 Office  
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SW 152 St & SW 137 Ave

12 Hours TMC

File Name : SW634F~1  
 Site Code : 00000261  
 Start Date : 6/26/2007  
 Page No : 7

Start Time	From North					From East					From South					From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 10:00 to 13:45 - Peak 1 of 1																					
Peak Hour for Each Approach Begins at:																					
	13:00					13:00					13:00					12:45					
+0 mins.	74		158		404	143	159	107	0	409	92	150	62	0	304	32					
+15 mins.	69	181	131	0	381	159	164	123	0	446	69	190	46	0	305	23	192	110	0	325	
+30 mins.	63	147	125	0	335	134	152	91	0	377	98	180	53	0	331	21	163	107	0	291	
+45 mins.	73	163	139	0	375	116	181									214	93	0	328		
Total Volume	279	663	553	0	1495	552	656	427	0	1635	341	691	211	0	1243	97	756	394	0	1247	
% App. Total	18.7	44.3	37	0		33.8	40.1	26.1	0		27.4	55.6	17	0		7.8	60.6	31.6	0		
PHF	.943	.916	.875	.000	.925	.868	.906	.868	.000	.916	.870	.909	.851	.000	.939	.758	.883	.895	.000	.950	



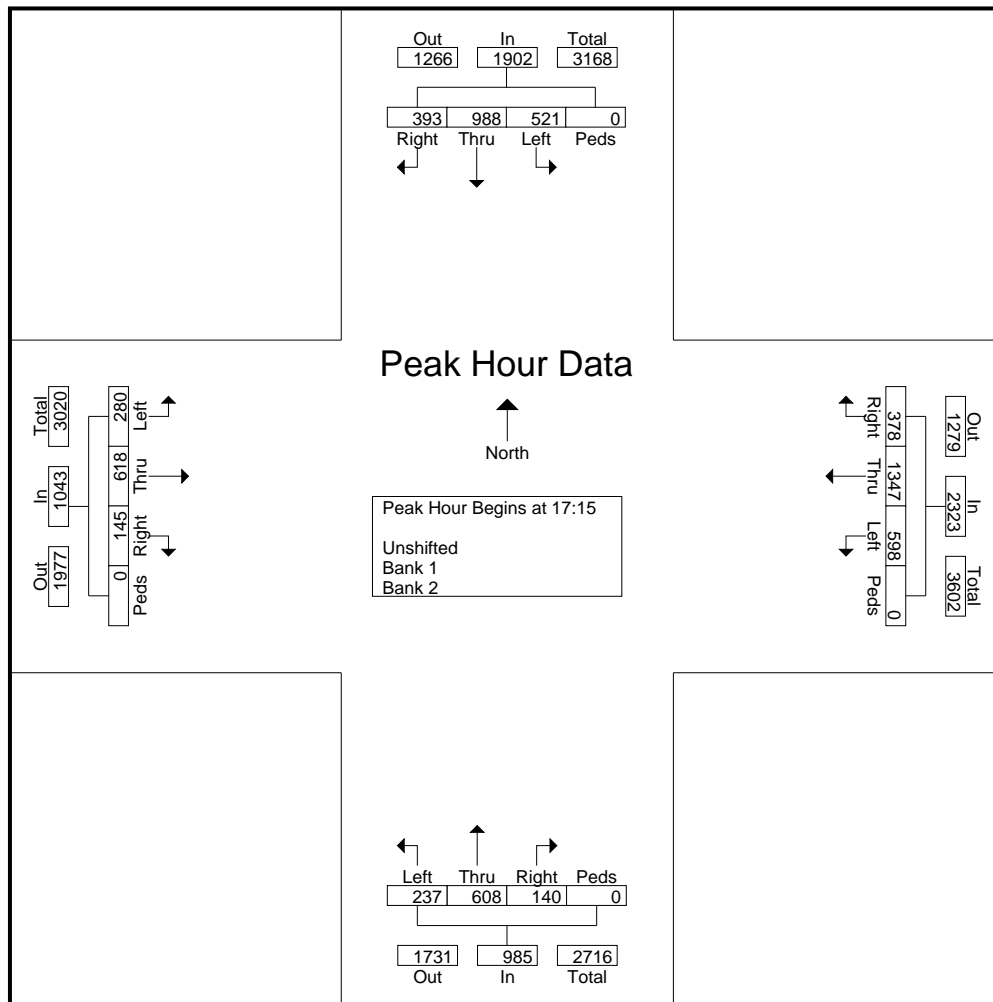
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 Miami, Florida 33175  
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SW 152 St & SW 137 Ave

12 Hours TMC

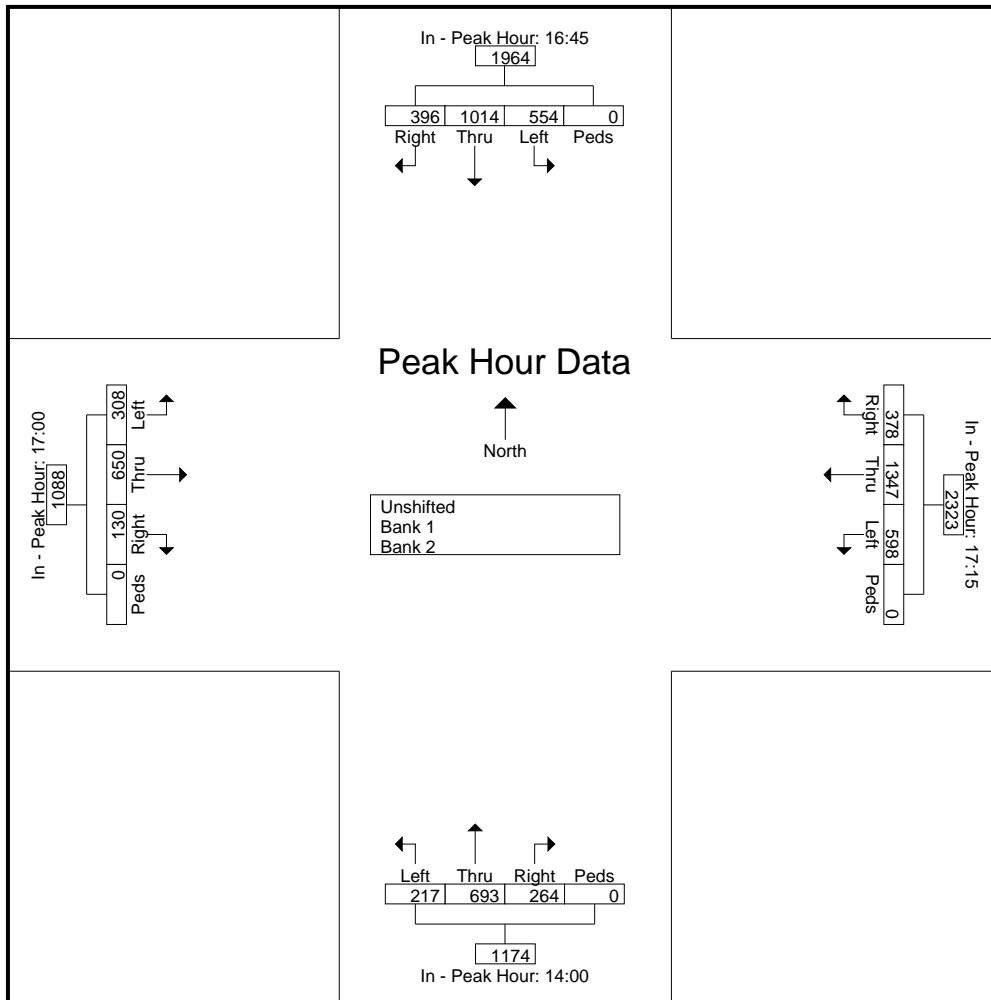
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 Site Code : 0000261  
 Start Date : 6/26/2007  
 Page No : 8

Start Time	From North					From East					From South					From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 14:00 to 18:15 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 17:15																					
17:15	86	207	128	0	421	80	343	127	0	550	31	141	54	0	226	53	170	95	0	304	1501
17:30	127	287	148	0	562	85	255	108	0	448	29	158	57	0	244	31	170	37	0	238	1492
17:45	96	239	135	0	470	81	363	159	0	603	26	148	89	0	263	26	134	72	0	232	1568
18:00	84	255	110	0	449	132	386	204	0	722	54	161	0	0	0	0	0	0	0	0	1692
Total Volume	393	988	521	0	1902	378	1347	598	0	2323	140	608	237	0	985	145	618	280	0	1043	6253
% App. Total																					
PHF	.774	.861	.880	.000	.846	.716	.872	.733	.000	.804	.648	.944	.666	.000	.936	.684	.909	.737	.000	.858	.924





Start Time	From North					From East					From South					From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 14:00 to 18:15 - Peak 1 of 1																					
Peak Hour for Each Approach Begins at:																					
	16:45					17:15					14:00					17:00					
+0 mins.	86	263	122	0	471	80	343	127	0	550	68	183	68	0	319	20	190	104		314	
+15 mins.	97	257	156			81	363	159	0	603	74	160	51	0	285	53	170	37	0	238	
<b>+30 mins.</b>	<b>86</b>	<b>207</b>	<b>128</b>	<b>0</b>	<b>421</b>	<b>81</b>	<b>363</b>	<b>159</b>	<b>0</b>	<b>603</b>	<b>74</b>	<b>160</b>	<b>51</b>	<b>0</b>	<b>285</b>	<b>31</b>	<b>170</b>	<b>37</b>	<b>0</b>	<b>238</b>	
<b>+45 mins.</b>	<b>127</b>	<b>287</b>	<b>148</b>	<b>0</b>	<b>562</b>	<b>132</b>	<b>386</b>	<b>204</b>	<b>0</b>	<b>722</b>	<b>62</b>	<b>178</b>	<b>46</b>	<b>0</b>	<b>286</b>	<b>26</b>	<b>134</b>	<b>72</b>	<b>0</b>	<b>232</b>	
Total Volume	396	1014	554	0	1964	378	1347	598	0	2323	264	693	217	0	1174	130	650	308	0	1088	
% App. Total																					
PHF	.780	.883	.888	.000	.874	.716	.872	.733	.000	.804	.892	.947	.798	.000	.920	.613	.855	.740	.000	.866	



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SW 152 St & SW 117 Ave

12 Hours TMC

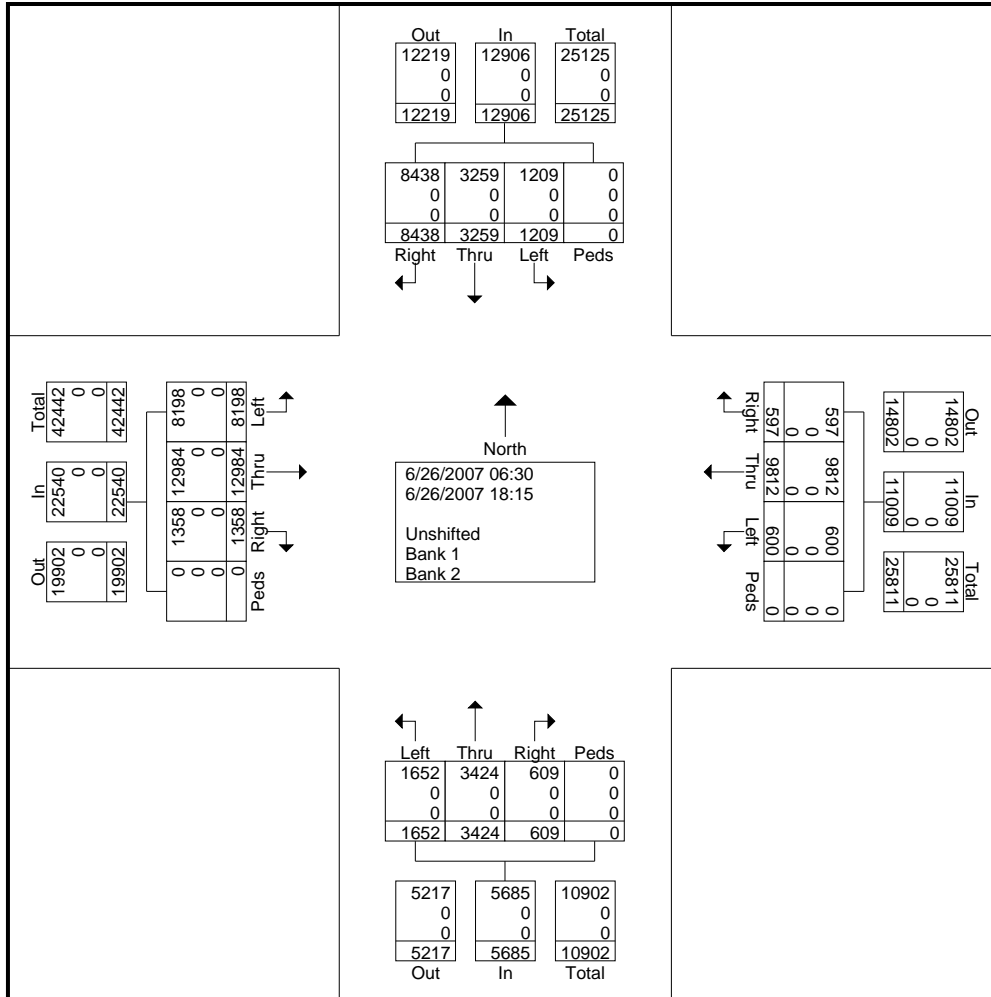
File Name : SW152S~2  
Site Code : 0000026  
Start Date : 6/26/2007  
Page No : 1

**Groups Printed- Unshifted - Bank 1 - Bank 2**

Start Time	From North					From East					From South					From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
06:30	57	49	18	0	124	12	130	14	0	156	7	74	21	0	102	8	249	276	0	533	915
06:45	67	52	16	0	135	9	112	15	0	136	7	63	20	0	90	15	250	310	0	575	936
<b>Total</b>	<b>124</b>	<b>101</b>	<b>34</b>	<b>0</b>	<b>259</b>	<b>21</b>	<b>242</b>	<b>29</b>	<b>0</b>	<b>292</b>	<b>14</b>	<b>137</b>	<b>41</b>	<b>0</b>	<b>192</b>	<b>23</b>	<b>499</b>	<b>586</b>	<b>0</b>	<b>1108</b>	<b>1851</b>
07:00	60	37	21	0	118	19	116	5	0	140	6	84	23	0	113	18	349	314	0	681	1052
07:15	81	52	17	0	150	14	110	9	0	133	7	85	13	0	105	18	298	331	0	647	1035
07:30	87	55	17	0	159	8	196	4	0	208	8	68	19	0	95	20	329	351	0	700	1162
07:45	99	78	32	0	209	12	164	11	0	187	6	91	26	0	123	28	331	305	0	664	1183
<b>Total</b>	<b>327</b>	<b>222</b>	<b>87</b>	<b>0</b>	<b>636</b>	<b>53</b>	<b>586</b>	<b>29</b>	<b>0</b>	<b>668</b>	<b>27</b>	<b>328</b>	<b>81</b>	<b>0</b>	<b>436</b>	<b>84</b>	<b>1307</b>	<b>1301</b>	<b>0</b>	<b>2692</b>	<b>4432</b>
08:00	83	57	22	0	162	13	179	13	0	205	2	65	25	0	92	25	341	326	0	692	1151
08:15	102	58	23	0	183	8	160	10	0	178	10	88	27	0	125	22	322	265	0	609	1095
08:30	105	62	31	0	198	9	186	8	0	203	6	61	26	0	93	22	363	322	0	707	1201
08:45	96	57	22	0	175	10	200	18	0	228	12	55	38	0	105	25	313	243	0	581	1089
<b>Total</b>	<b>386</b>	<b>234</b>	<b>98</b>	<b>0</b>	<b>718</b>	<b>40</b>	<b>725</b>	<b>49</b>	<b>0</b>	<b>814</b>	<b>30</b>	<b>269</b>	<b>116</b>	<b>0</b>	<b>415</b>	<b>94</b>	<b>1339</b>	<b>1156</b>	<b>0</b>	<b>2589</b>	<b>4536</b>
09:00	83	77	21	0	181	11	179	17	0	207	10	94	38	0	142	27	282	156	0	465	995
09:15	97	42	24	0	163	10	177	17	0	204	11	77	28	0	116	36	275	231	0	542	1025
09:30	117	56	13	0	186	12	176	10	0	198	14	92	35	0	141	8	305	208	0	521	1046
09:45	103	52	30	0	185	19	124	9	0	152	17	51	26	0	94	17	319	194	0	530	961
<b>Total</b>	<b>400</b>	<b>227</b>	<b>88</b>	<b>0</b>	<b>715</b>	<b>52</b>	<b>656</b>	<b>53</b>	<b>0</b>	<b>761</b>	<b>52</b>	<b>314</b>	<b>127</b>	<b>0</b>	<b>493</b>	<b>88</b>	<b>1181</b>	<b>789</b>	<b>0</b>	<b>2058</b>	<b>4027</b>
10:00	119	51	22	0	192	17	127	9	0	153	20	65	27	0	112	18	275	218	0	511	968
10:15	128	53	44	0	225	12	153	10	0	175	14	65	38	0	117	11	249	166	0	426	943
10:30	144	53	29	0	226	10	159	17	0	186	15	64	29	0	108	36	228	191	0	455	975
10:45	148	50	27	0	225	12	165	11	0	188	10	58	36	0	104	45	222	163	0	430	947
<b>Total</b>	<b>539</b>	<b>207</b>	<b>122</b>	<b>0</b>	<b>868</b>	<b>51</b>	<b>604</b>	<b>47</b>	<b>0</b>	<b>702</b>	<b>59</b>	<b>252</b>	<b>130</b>	<b>0</b>	<b>441</b>	<b>110</b>	<b>974</b>	<b>738</b>	<b>0</b>	<b>1822</b>	<b>3833</b>
11:00	151	54	35	0	240	11	154	8	0	173	12	84	33	0	129	19	204	160	0	383	925
11:15	136	45	23	0	204	6	95	7	0	108	11	57	33	0	101	27	231	172	0	430	843
11:30	159	53	29	0	241	14	148	9	0	171	16	46	35	0	97	29	263	168	0	460	969
11:45	150	59	32	0	241	6	174	22	0	202	11	51	31	0	93	32	224	148	0	404	940
<b>Total</b>	<b>596</b>	<b>211</b>	<b>119</b>	<b>0</b>	<b>926</b>	<b>37</b>	<b>571</b>	<b>46</b>	<b>0</b>	<b>654</b>	<b>50</b>	<b>238</b>	<b>132</b>	<b>0</b>	<b>420</b>	<b>107</b>	<b>922</b>	<b>648</b>	<b>0</b>	<b>1677</b>	<b>3677</b>
12:00	170	76	26	0	272	14	153	8	0	175	25	86	47	0	158	40	223	138	0	401	1006
12:15	167	56	32	0	255	8	203	15	0	226	11	50	38	0	99	43	270	158	0	471	1051
12:30	126	70	34	0	230	12	179	21	0	212	9	61	42	0	112	37	204	150	0	391	945
12:45	123	54	34	0	211	4	173	19	0	196	18	85	61	0	164	28	236	142	0	406	977
<b>Total</b>	<b>586</b>	<b>256</b>	<b>126</b>	<b>0</b>	<b>968</b>	<b>38</b>	<b>708</b>	<b>63</b>	<b>0</b>	<b>809</b>	<b>63</b>	<b>282</b>	<b>188</b>	<b>0</b>	<b>533</b>	<b>148</b>	<b>933</b>	<b>588</b>	<b>0</b>	<b>1669</b>	<b>3979</b>
13:00	106	84	38	0	228	3	214	15	0	232	17	69	54	0	140	16	238	153	0	407	1007
13:15	142	55	35	0	232	27	206	22	0	255	16	80	32	0	128	29	205	140	0	374	989
13:30	95	68	24	0	187	5	232	18	0	255	18	76	52	0	146	19	247	141	0	407	995
13:45	129	72	34	0	235	5	215	15	0	235	9	69	44	0	122	18	238	148	0	404	996
<b>Total</b>	<b>472</b>	<b>279</b>	<b>131</b>	<b>0</b>	<b>882</b>	<b>40</b>	<b>867</b>	<b>70</b>	<b>0</b>	<b>977</b>	<b>60</b>	<b>294</b>	<b>182</b>	<b>0</b>	<b>536</b>	<b>82</b>	<b>928</b>	<b>582</b>	<b>0</b>	<b>1592</b>	<b>3987</b>
14:00	123	67	30	0	220	10	221	13	0	244	9	71	48	0	128	28	195	137	0	360	952
14:15	120	72	29	0	221	9	206	24	0	239	8	58	38	0	104	33	202	126	0	361	925
14:30	137	73	28	0	238	7	222	13	0	242	12	82	40	0	134	24	200	132	0	356	970
14:45	186	88	30	0	304	3	195	10	0	208	15	82	62	0	159	24	200	113	0	337	1008
<b>Total</b>	<b>566</b>	<b>300</b>	<b>117</b>	<b>0</b>	<b>983</b>	<b>29</b>	<b>844</b>	<b>60</b>	<b>0</b>	<b>933</b>	<b>44</b>	<b>293</b>	<b>188</b>	<b>0</b>	<b>525</b>	<b>109</b>	<b>797</b>	<b>508</b>	<b>0</b>	<b>1414</b>	<b>3855</b>
15:00	229	84	27	0	340	3	215	14	0	232	11	73	28	0	112	22	192	115	0	329	1013
15:15	262	90	27	0	379	16	222	10	0	248	10	48	30	0	88	34	236	131	0	401	1116
15:30	268	85	23	0	376	8	256	11	0	275	25	123	38	0	186	25	232	124	0	381	1218
15:45	308	74	25	0	407	7	222	11	0	240	16	76	43	0	135	34	263	105	0	402	1184
<b>Total</b>	<b>1067</b>	<b>333</b>	<b>102</b>	<b>0</b>	<b>1502</b>	<b>34</b>	<b>915</b>	<b>46</b>	<b>0</b>	<b>995</b>	<b>62</b>	<b>320</b>	<b>139</b>	<b>0</b>	<b>521</b>	<b>115</b>	<b>923</b>	<b>475</b>	<b>0</b>	<b>1513</b>	<b>4531</b>









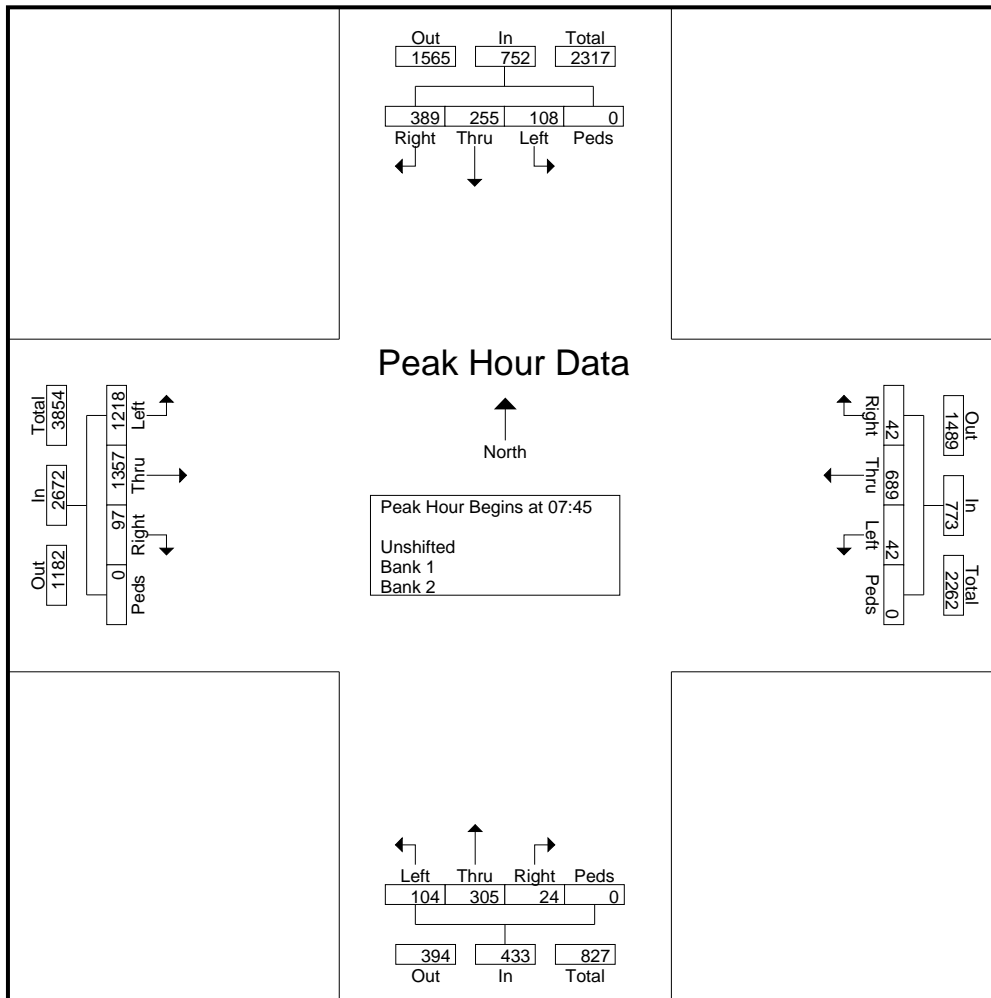
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 Engineering Consultants, Inc  
 12905 SW 42 Street, Suite 208  
 Miami, Florida 33175  
 (305) 480-9938 Office  
 (305) 480-9964 Fax

SW 152 St & SW 117 Ave

12 Hours TMC

File Name : SW152S~2  
 Site Code : 00000026  
 Start Date : 6/26/2007  
 Page No : 4

Start Time	From North					From East					From South					From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 06:30 to 09:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:45																					
07:45	99	78	32		209	12	164	11	0	187	6	91			28						
08:00	83	57	22	0	162	13	179	13	0	205	2	65	25	0	92	25	341	326	0	692	1151
08:15	102	58	23	0	183	8	160	10	0	178	10	88	27	0	125	22	322	265	0	609	1095
08:30	105						186										363	322	0	707	1201
Total Volume	389	255	108	0	752	42	689	42	0	773	24	305	104	0	433	97	1357	1218	0	2672	4630
% App. Total																					
PHF	.926	.817	.844	.000	.900	.808	.926	.808	.000	.943	.600	.838	.963	.000	.866	.866	.935	.934	.000	.945	.964



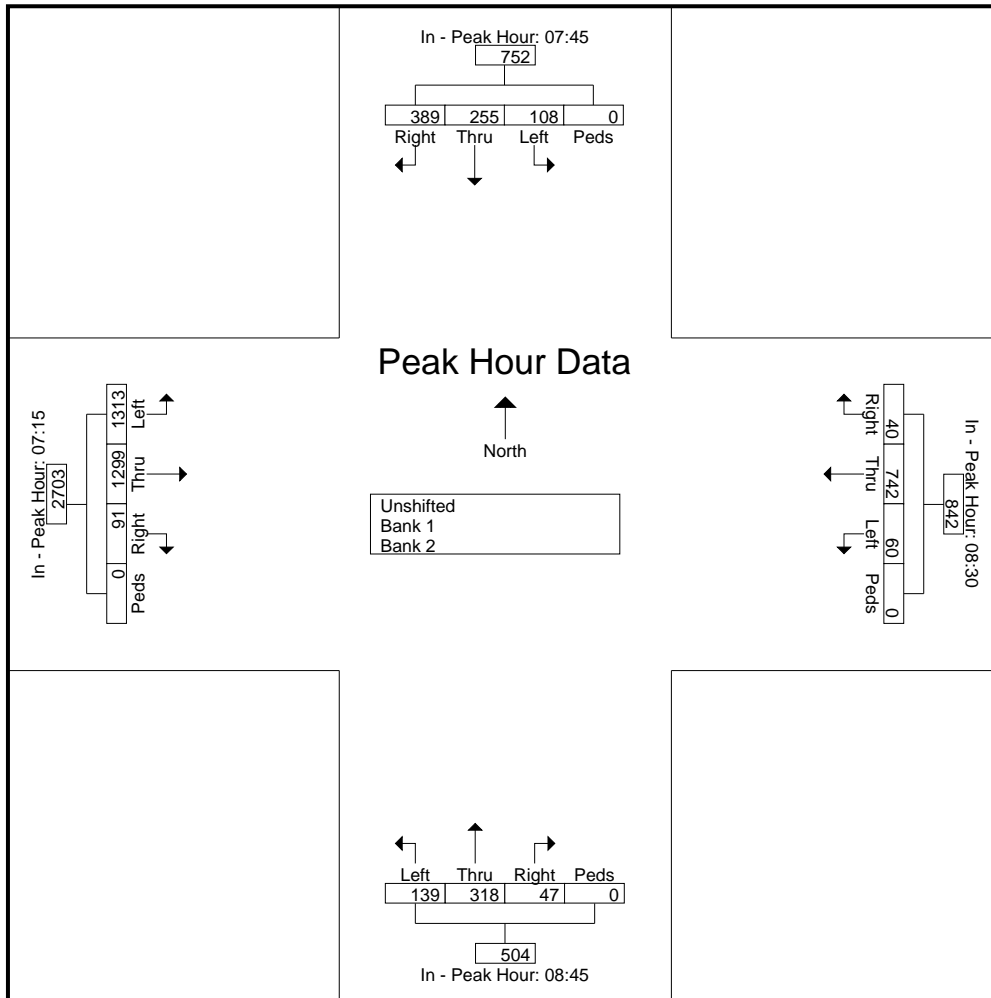
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SW 152 St & SW 117 Ave

12 Hours TMC

File Name : SW152S~2  
 Site Code : 0000026  
 Start Date : 6/26/2007  
 Page No : 5

Start Time	From North					From East					From South					From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 06:30 to 09:45 - Peak 1 of 1																					
Peak Hour for Each Approach Begins at:																					
	07:45					08:30					08:45					07:15					
+0 mins.	99	78	32		209	9	186	8	0	203	12	55	38	0	105	18	298	331	0	647	
+15 mins.	83	57	22	0	162	10	200	18		228	10	94		142	20	329	351		700		
+30 mins.	102	58	23	0	183	11	179	17	0	207	11	77	28	0	116	28					
<b>+45 mins.</b>	<b>105</b>	<b>62</b>	<b>31</b>	<b>0</b>	<b>198</b>	<b>10</b>	<b>177</b>	<b>17</b>	<b>0</b>	<b>204</b>	<b>14</b>	<b>92</b>	<b>35</b>	<b>0</b>	<b>141</b>	<b>25</b>	<b>341</b>	<b>326</b>	<b>0</b>	<b>692</b>	
Total Volume	389	255	108	0	752	40	742	60	0	842	47	318	139	0	504	91	1299	1313	0	2703	
% App. Total																					
PHF	.926	.817	.844	.000	.900	.909	.928	.833	.000	.923	.839	.846	.914	.000	.887	.813	.952	.935	.000	.965	





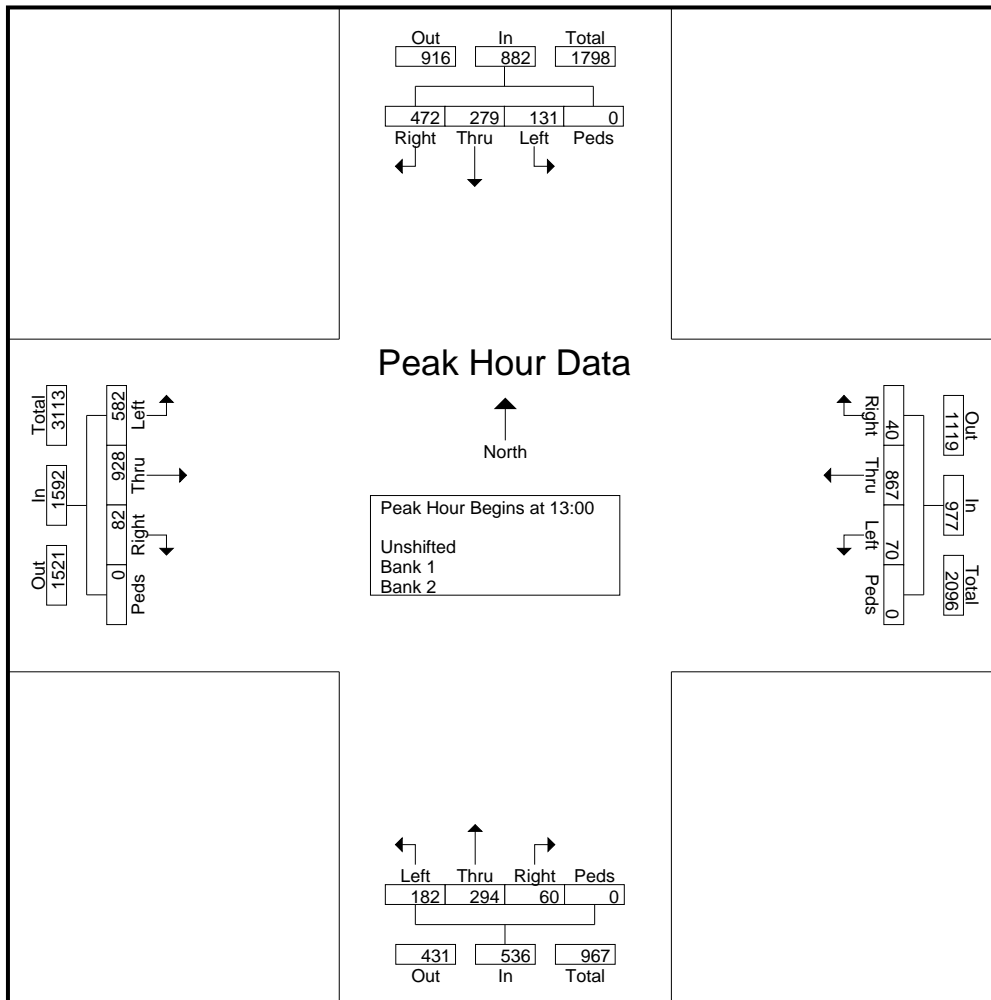
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SW 152 St & SW 117 Ave

12 Hours TMC

File Name : SW152S~2  
 Site Code : 00000026  
 Start Date : 6/26/2007  
 Page No : 6

Start Time	From North					From East					From South					From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 10:00 to 13:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 13:00																					
13:00	106	84	38			27	206	22	0	255	16	80	54	0	140	16	238	153	0	407	1007
13:15	142					5	232	18	0	255	18	76	52	0	146	29	247	141	0	407	995
13:30	95	68	24	0	187	5	215	15	0	235	9	69	44	0	122	18	238	148	0	404	996
13:45	129	72	34	0	235	5	215	15	0	235	9	69	44	0	122	18	238	148	0	404	996
Total Volume	472	279	131	0	882	40	867	70	0	977	60	294	182	0	536	82	928	582	0	1592	3987
% App. Total	53.5	31.6	14.9	0		4.1	88.7	7.2	0		11.2	54.9	34	0		5.2	58.3	36.6	0		
PHF	.831	.830	.862	.000	.938	.370	.934	.795	.000	.958	.833	.919	.843	.000	.918	.707	.939	.951	.000	.978	.990



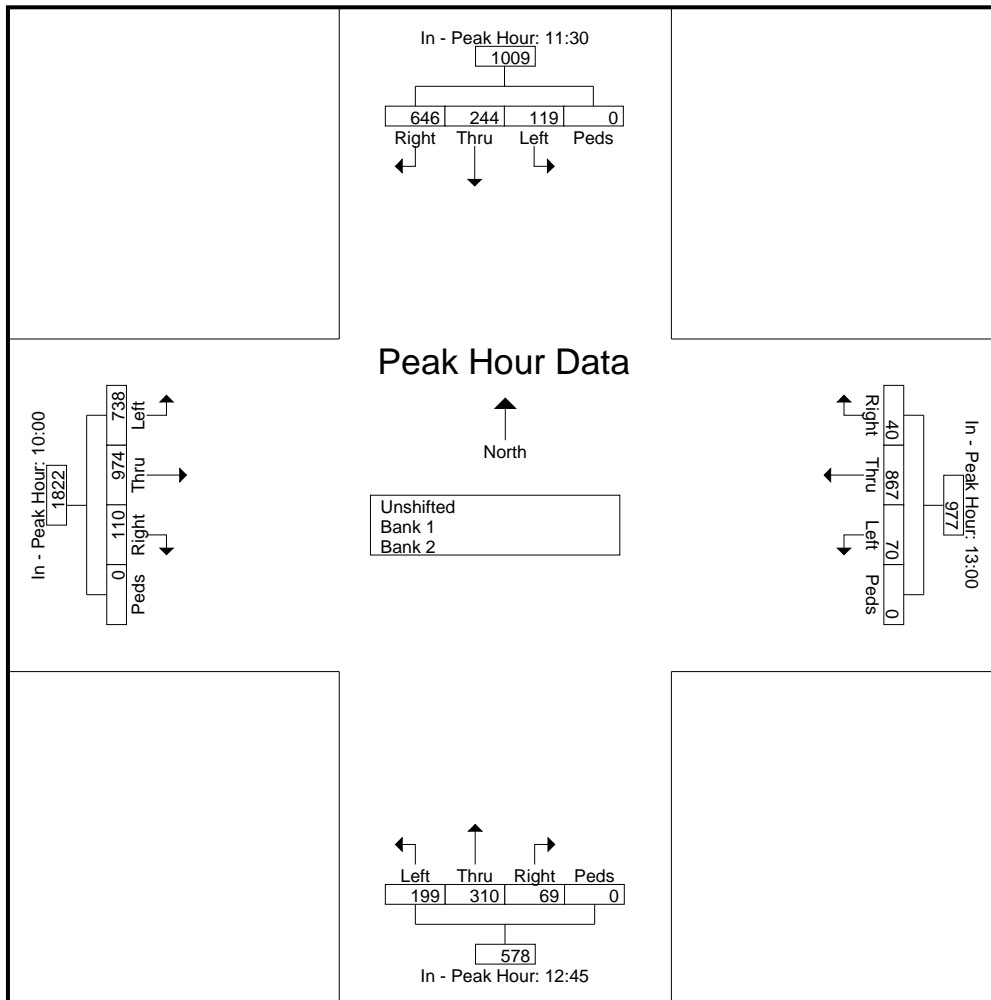
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SW 152 St & SW 117 Ave

12 Hours TMC

File Name : SW152S~2  
Site Code : 00000026  
Start Date : 6/26/2007  
Page No : 7

Start Time	From North					From East					From South					From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 10:00 to 13:45 - Peak 1 of 1																					
Peak Hour for Each Approach Begins at:																					
	11:30					13:00					12:45					10:00					
+0 mins.	159	53	29	0	241	3	214	15	0	232	18	85	61	0	164	18	275	218	0	511	
+15 mins.	150	59	32	0	241	27	206	22	0	255	17	69	54	0	140	11	249	166	0	426	
+30 mins.	170	76	26	0	272	5	232	15	0	235	18	76	52	0	146	45	222	163	0	430	
<b>+45 mins.</b>	<b>167</b>	<b>56</b>	<b>32</b>	<b>0</b>	<b>255</b>	<b>5</b>	<b>215</b>	<b>15</b>	<b>0</b>	<b>235</b>	<b>18</b>	<b>76</b>	<b>52</b>	<b>0</b>	<b>146</b>	<b>45</b>	<b>222</b>	<b>163</b>	<b>0</b>	<b>430</b>	
Total Volume	646	244	119	0	1009	40	867	70	0	977	69	310	199	0	578	110	974	738	0	1822	
% App. Total	64	24.2	11.8	0		4.1	88.7	7.2	0		11.9	53.6	34.4	0		6	53.5	40.5	0		
PHF	.950	.803	.930	.000	.927	.370	.934	.795	.000	.958	.958	.912	.816	.000	.881	.611	.885	.846	.000	.891	





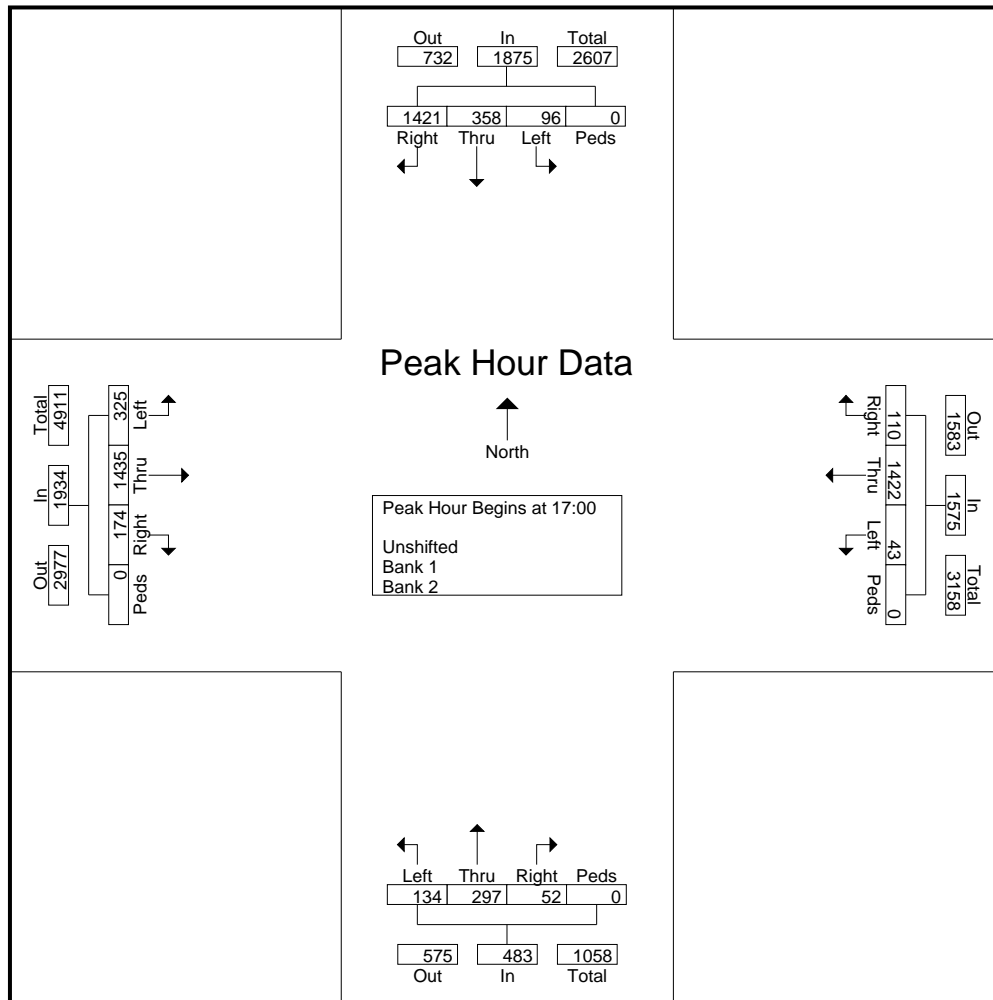
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SW 152 St & SW 117 Ave

12 Hours TMC

File Name : SW152S~2  
 Site Code : 0000026  
 Start Date : 6/26/2007  
 Page No : 8

Start Time	From North					From East					From South					From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 14:00 to 18:15 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 17:00																					
17:00	354	89	24	0	467	19	322	7	0	348	21	79	36	0	136	43	388	88			
17:15	339	83	23	0	445	39	329	9	0	377	9	79	33	0	121	43	399	87	0	529	1472
17:30	362	102	25		489	30	363	15								47					1495
17:45	366					408				442	9	73	34	0	116	41	289	68	0	398	1430
Total Volume	1421	358	96	0	1875	110	1422	43	0	1575	52	297	134	0	483	174	1435	325	0	1934	5867
% App. Total	75.8	19.1	5.1	0		7	90.3	2.7	0		10.8	61.5	27.7	0		9	74.2	16.8	0		
PHF	.971	.877	.960	.000	.959	.705	.871	.717	.000	.891	.619	.940	.931	.000	.888	.926	.899	.923	.000	.914	.981



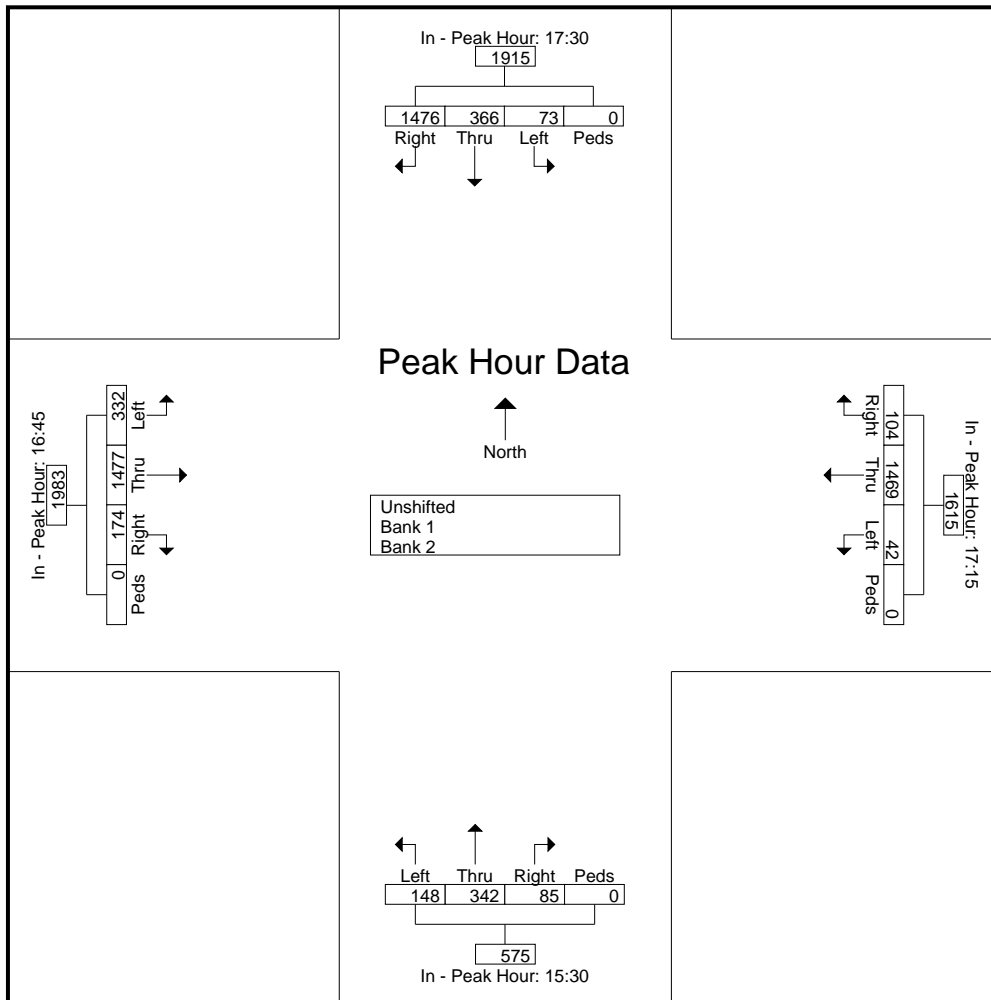
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SW 152 St & SW 117 Ave

12 Hours TMC

File Name : SW152S~2  
 Site Code : 00000026  
 Start Date : 6/26/2007  
 Page No : 9

Start Time	From North					From East					From South					From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 14:00 to 18:15 - Peak 1 of 1																					
Peak Hour for Each Approach Begins at:																					
	17:30					17:15					15:30					16:45					
+0 mins.	362	102	25		489	39	329	9	0	377	25	123			186	41	331	75	0	447	
+15 mins.	366	84	24	0	474	30	363	15					43	0	135	43	388	88			
<b>+30 mins.</b>	<b>372</b>	<b>95</b>	<b>10</b>	<b>0</b>	<b>477</b>	<b>22</b>	<b>408</b>	<b>12</b>	<b>0</b>	<b>442</b>	<b>26</b>	<b>71</b>	<b>36</b>	<b>0</b>	<b>133</b>	<b>43</b>	<b>399</b>	<b>87</b>	<b>0</b>	<b>529</b>	
+45 mins.	376															47					
Total Volume	1476	366	73	0	1915	104	1469	42	0	1615	85	342	148	0	575	174	1477	332	0	1983	
% App. Total	77.1	19.1	3.8	0		6.4	91	2.6	0		14.8	59.5	25.7	0		8.8	74.5	16.7	0		
PHF	.981	.897	.730	.000	.979	.667	.900	.700	.000	.913	.817	.695	.860	.000	.773	.926	.925	.943	.000	.937	





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SW 152 St & HEFT SB  
 On & Off Ramp  
 12 Hours TMC

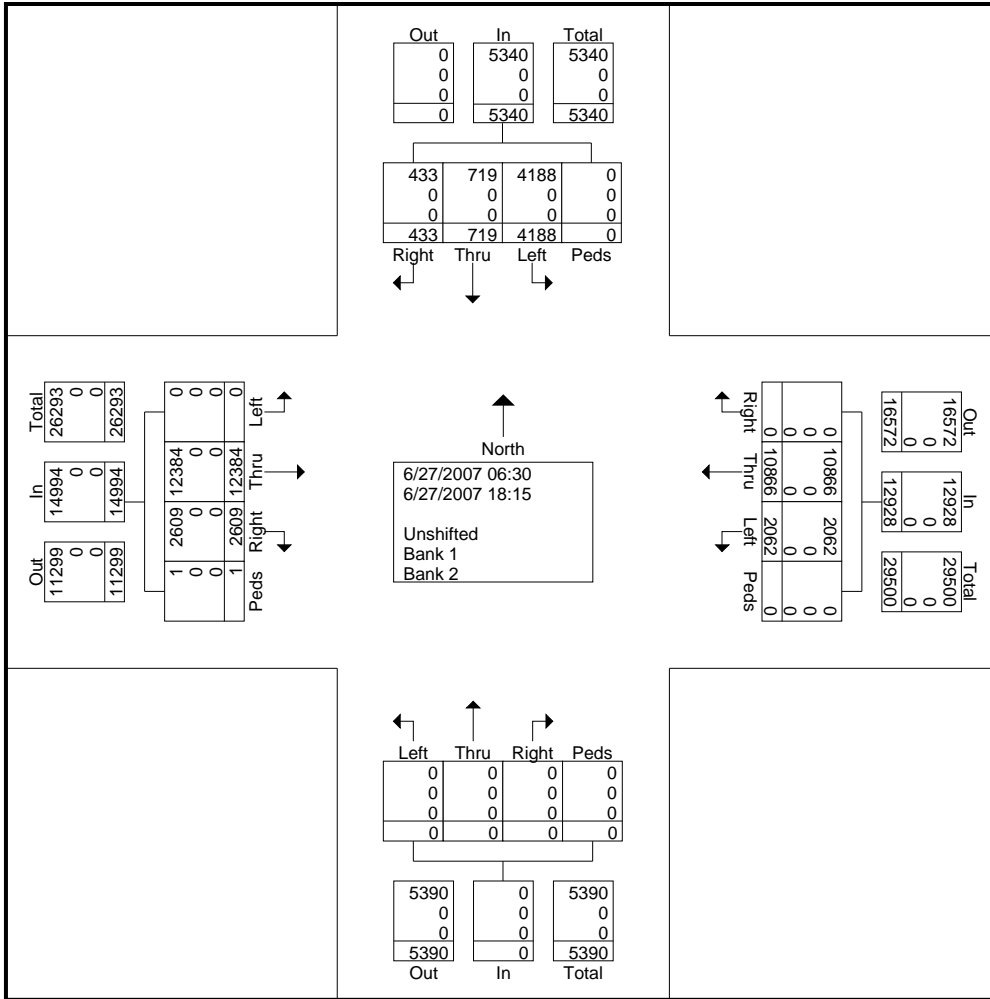
File Name : SW152S~4  
 Site Code : 0000027  
 Start Date : 6/27/2007  
 Page No : 1

Groups Printed- Unshifted - Bank 1 - Bank 2

Start Time	From North					From East					From South					From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
06:30	2	11	30	0	43	0	102	16	0	118	0	0	0	0	0	38	226	0	0	264	425
06:45	1	12	41	0	54	0	154	29	0	183	0	0	0	0	0	32	267	0	0	299	536
Total	3	23	71	0	97	0	256	45	0	301	0	0	0	0	0	70	493	0	0	563	961
07:00	0	9	49	0	58	0	132	25	0	157	0	0	0	0	0	35	249	0	0	284	499
07:15	0	6	49	0	55	0	131	30	0	161	0	0	0	0	0	40	258	0	0	298	514
07:30	0	12	72	0	84	0	158	25	0	183	0	0	0	0	0	44	247	0	0	291	558
07:45	0	17	52	0	69	0	209	40	0	249	0	0	0	0	0	61	360	0	0	421	739
Total	0	44	222	0	266	0	630	120	0	750	0	0	0	0	0	180	1114	0	0	1294	2310
08:00	0	10	79	0	89	0	183	40	0	223	0	0	0	0	0	44	326	0	0	370	682
08:15	0	13	57	0	70	0	186	42	0	228	0	0	0	0	0	48	328	0	0	376	674
08:30	0	8	62	0	70	0	207	28	0	235	0	0	0	0	0	56	299	0	0	355	660
08:45	0	16	70	0	86	0	200	35	0	235	0	0	0	0	0	56	340	0	0	396	717
Total	0	47	268	0	315	0	776	145	0	921	0	0	0	0	0	204	1293	0	0	1497	2733
09:00	1	14	83	0	98	0	185	41	0	226	0	0	0	0	0	60	284	0	0	344	668
09:15	1	17	58	0	76	0	193	38	0	231	0	0	0	0	0	46	325	0	0	371	678
09:30	0	9	67	0	76	0	171	39	0	210	0	0	0	0	0	58	320	0	0	378	664
09:45	1	11	74	0	86	0	180	18	0	198	0	0	0	0	0	62	316	0	0	378	662
Total	3	51	282	0	336	0	729	136	0	865	0	0	0	0	0	226	1245	0	0	1471	2672
10:00	1	16	65	0	82	0	159	36	0	195	0	0	0	0	0	45	276	0	0	321	598
10:15	1	10	81	0	92	0	187	33	0	220	0	0	0	0	0	50	230	0	0	280	592
10:30	1	9	81	0	91	0	171	24	0	195	0	0	0	0	0	43	244	0	0	287	573
10:45	1	9	68	0	78	0	189	25	0	214	0	0	0	0	0	31	251	0	0	282	574
Total	4	44	295	0	343	0	706	118	0	824	0	0	0	0	0	169	1001	0	0	1170	2337
11:00	1	12	75	0	88	0	180	39	0	219	0	0	0	0	0	38	221	0	0	259	566
11:15	0	12	56	0	68	0	190	31	0	221	0	0	0	0	0	42	235	0	0	277	566
11:30	0	18	70	0	88	0	188	25	0	213	0	0	0	0	0	41	241	0	0	282	583
11:45	0	18	86	0	104	0	195	39	0	234	0	0	0	0	0	45	226	0	0	271	609
Total	1	60	287	0	348	0	753	134	0	887	0	0	0	0	0	166	923	0	0	1089	2324
12:00	2	15	91	0	108	0	213	38	0	251	0	0	0	0	0	63	253	0	0	316	675
12:15	1	13	64	0	78	0	184	35	0	219	0	0	0	0	0	50	235	0	0	285	582
12:30	0	14	83	0	97	0	180	37	0	217	0	0	0	0	0	57	286	0	0	343	657
12:45	0	14	74	0	88	0	280	23	0	303	0	0	0	0	0	48	279	0	0	327	718
Total	3	56	312	0	371	0	857	133	0	990	0	0	0	0	0	218	1053	0	0	1271	2632
13:00	0	8	98	0	106	0	280	47	0	327	0	0	0	0	0	56	267	0	0	323	756
13:15	0	11	98	0	109	0	261	43	0	304	0	0	0	0	0	29	229	0	0	258	671
13:30	0	10	96	0	106	0	265	50	0	315	0	0	0	0	0	22	131	0	0	153	574
13:45	0	13	92	0	105	0	263	37	0	300	0	0	0	0	0	34	205	0	0	239	644
Total	0	42	384	0	426	0	1069	177	0	1246	0	0	0	0	0	141	832	0	0	973	2645
14:00	0	14	93	0	107	0	222	38	0	260	0	0	0	0	0	44	194	0	0	238	605
14:15	0	23	68	0	91	0	251	36	0	287	0	0	0	0	0	46	180	0	0	226	604
14:30	0	8	89	0	97	0	223	46	0	269	0	0	0	0	0	47	243	0	0	290	656
14:45	0	15	106	0	121	0	219	55	0	274	0	0	0	0	0	42	206	0	0	248	643
Total	0	60	356	0	416	0	915	175	0	1090	0	0	0	0	0	179	823	0	0	1002	2508





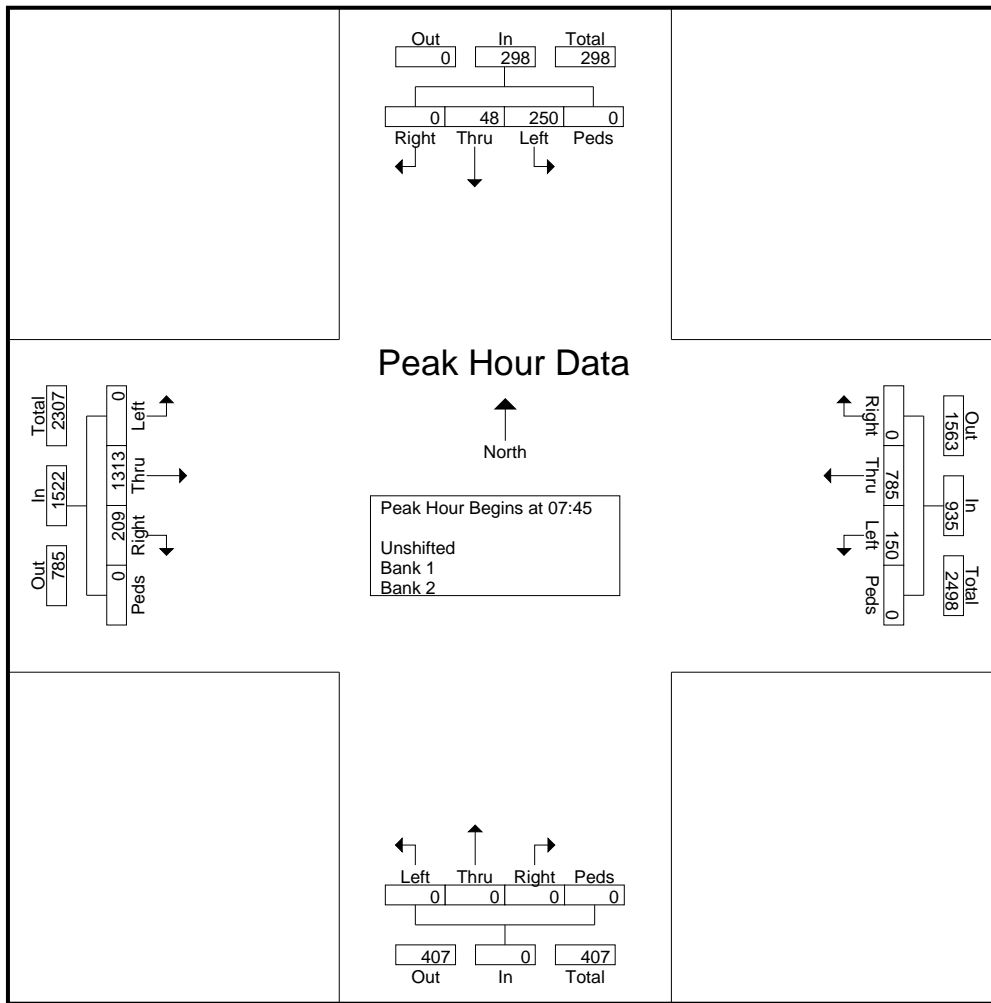


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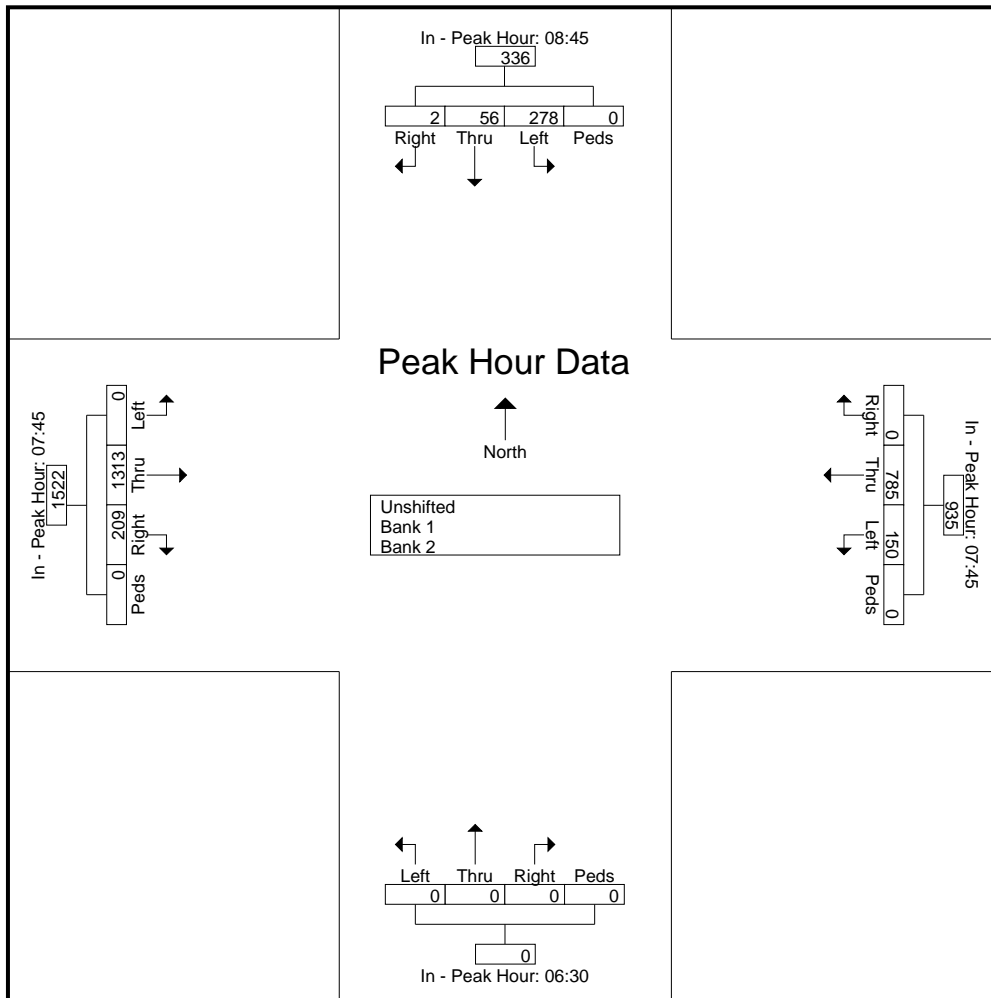
File Name : SW152S~4  
 Site Code : 00000027  
 Start Date : 6/27/2007  
 Page No : 4

Start Time	From North					From East					From South					From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 06:30 to 09:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:45																					
07:45	0	17	52	0	69	0	209			249	0	0	0	0	0	61	360	0	0	421	739
08:00	0	10	79		89	0	183	40	0	223	0	0	0	0	0	44	326	0	0	370	682
08:15	0	13	57	0	70	0	186	42													
08:30	0	8	62	0	70	0	207	28	0	235	0	0	0	0	0	56	299	0	0	355	660
Total Volume	0	48	250	0	298	0	785	150	0	935	0	0	0	0	0	209	1313	0	0	1522	2755
% App. Total	0	16.1	83.9	0		0	84	16	0		0	0	0	0		13.7	86.3	0	0		
PHF	.000	.706	.791	.000	.837	.000	.939	.893	.000	.939	.000	.000	.000	.000	.000	.857	.912	.000	.000	.904	.932





Start Time	From North					From East					From South					From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 06:30 to 09:45 - Peak 1 of 1																					
Peak Hour for Each Approach Begins at:																					
	08:45					07:45					06:30					07:45					
+0 mins.	0	16	70	0	86	0	209			249	0	0	0	0	0	61	360	0	0	421	
+15 mins.	1		83		98	0	183	40	0	223	0	0	0	0	0	44	326	0	0	370	
+30 mins.	1	17	58	0	76	0	186	42													
<b>+45 mins.</b>	<b>0</b>	<b>9</b>	<b>67</b>	<b>0</b>	<b>76</b>	<b>0</b>	<b>207</b>	<b>28</b>	<b>0</b>	<b>235</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>56</b>	<b>299</b>	<b>0</b>	<b>0</b>	<b>355</b>	
Total Volume	2	56	278	0	336	0	785	150	0	935	0	0	0	0	0	209	1313	0	0	1522	
% App. Total	0.6	16.7	82.7	0		0	84	16	0		0	0	0	0		13.7	86.3	0	0		
PHF	.500	.824	.837	.000	.857	.000	.939	.893	.000	.939	.000	.000	.000	.000	.000	.857	.912	.000	.000	.904	

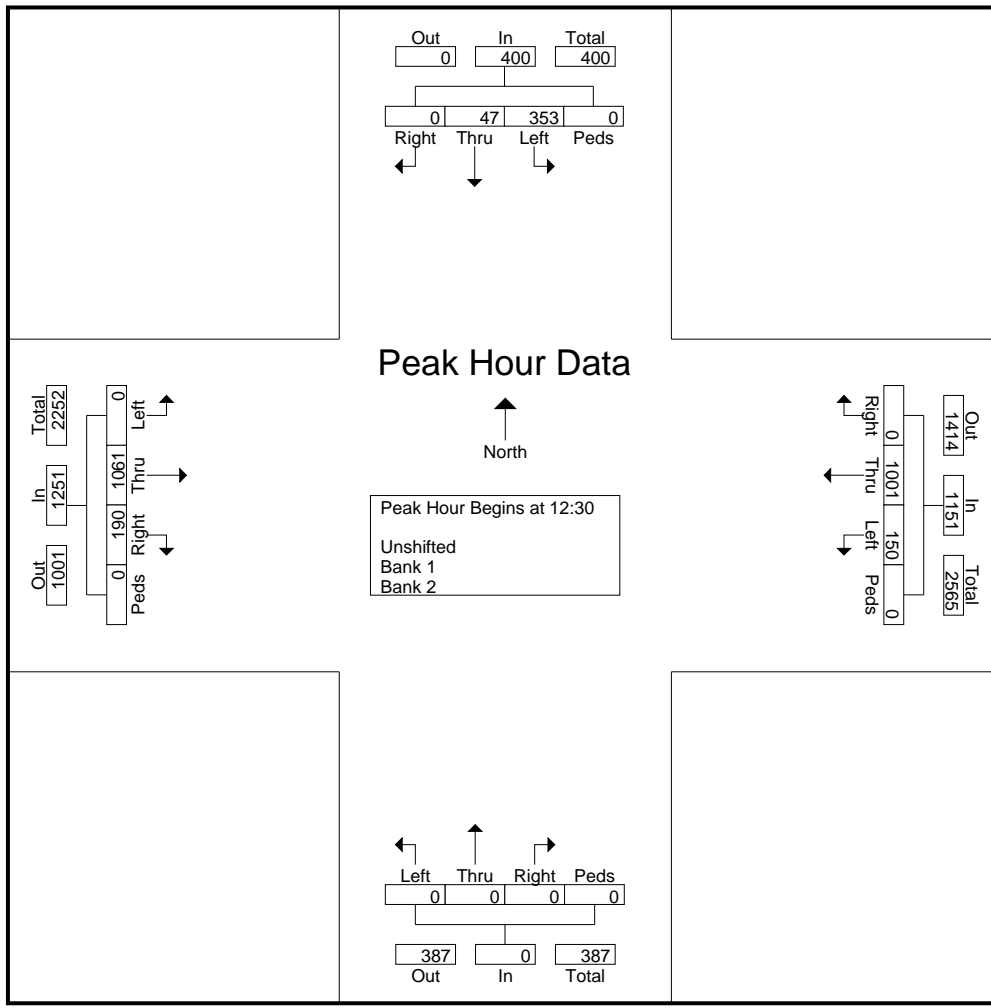


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SW 152 St & HEFT SB  
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 12 Hours TMC

File Name : SW152S~4  
 Site Code : 0000027  
 Start Date : 6/27/2007  
 Page No : 6

Start Time	From North					From East					From South					From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 10:00 to 13:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 12:30																					
12:30	0	14	83	0	97	0	180	37	0	217	0	0	0	0	0	57	286	0	0	343	657
12:45	0	14	74	0	88	0	280				0	0	0	0	0	56	267	0	0	323	756
13:00	0	8	98	0	106	0	280	47	0	327	0	0	0	0	0	29	229	0	0	258	671
13:15	0	11	98	0	109	0	261	43	0	304	0	0	0	0	0	29	229	0	0	258	671
Total Volume	0	47	353	0	400	0	1001	150	0	1151	0	0	0	0	0	190	1061	0	0	1251	2802
% App. Total	0	11.8	88.2	0		0	87	13	0		0	0	0	0		15.2	84.8	0	0		
PHF	.000	.839	.901	.000	.917	.000	.894	.798	.000	.880	.000	.000	.000	.000	.000	.833	.927	.000	.000	.912	.927



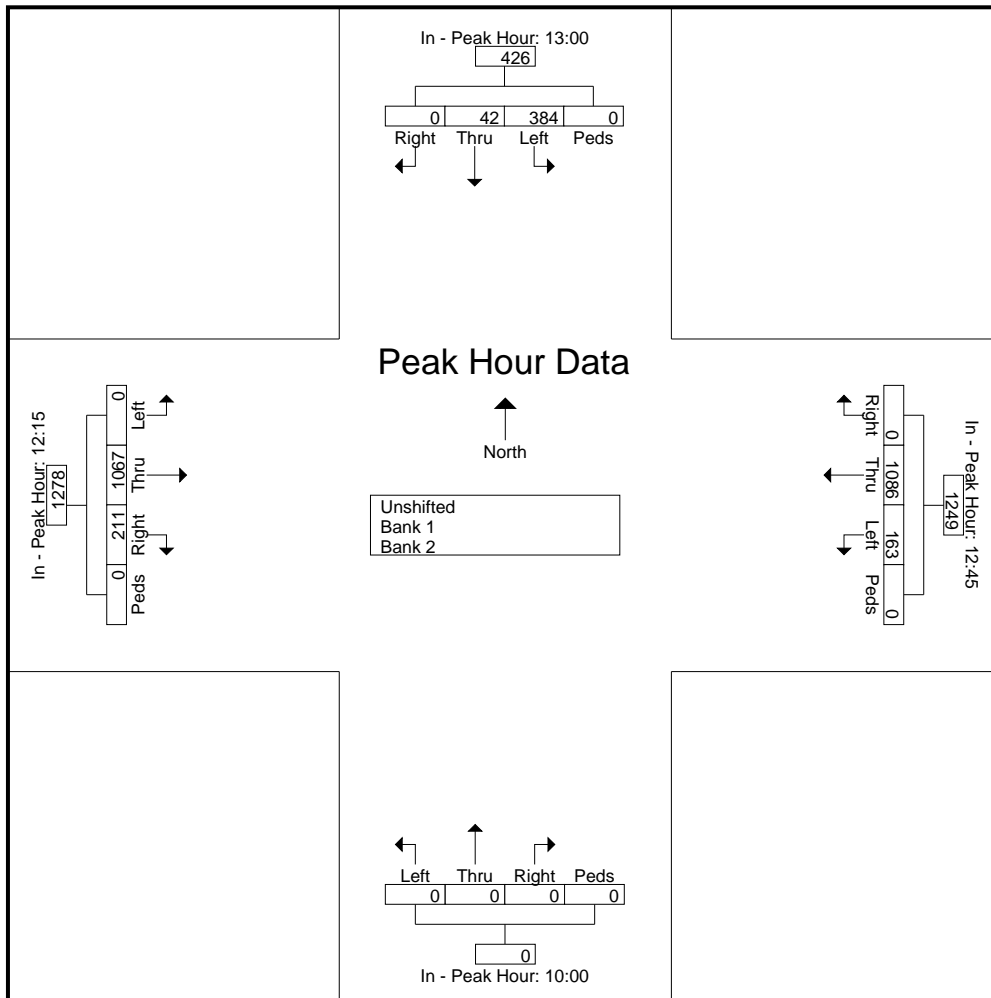


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SW 152 St & HEFT SB  
 On & Off Ramp  
 12 Hours TMC

File Name : SW152S~4  
 Site Code : 0000027  
 Start Date : 6/27/2007  
 Page No : 7

Start Time	From North					From East					From South					From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 10:00 to 13:45 - Peak 1 of 1																					
Peak Hour for Each Approach Begins at:																					
	13:00					12:45					10:00					12:15					
+0 mins.	0	8	98				280				0	0	0	0	0	57	286	0	0	343	
+15 mins.	0	11	98	0	109	0	280	47	0	327	0	0	0	0	0	48	279	0	0	327	
+30 mins.	0	10	96	0	106	0	261	43	0	304	0	0	0	0	0						
+45 mins.	0	13	92	0	105	0	265	50													
Total Volume	0	42	384	0	426	0	1086	163	0	1249	0	0	0	0	0	211	1067	0	0	1278	
% App. Total	0	9.9	90.1	0		0	86.9	13.1	0		0	0	0	0		16.5	83.5	0	0		
PHF	.000	.808	.980	.000	.977	.000	.970	.815	.000	.955	.000	.000	.000	.000	.000	.925	.933	.000	.000	.931	

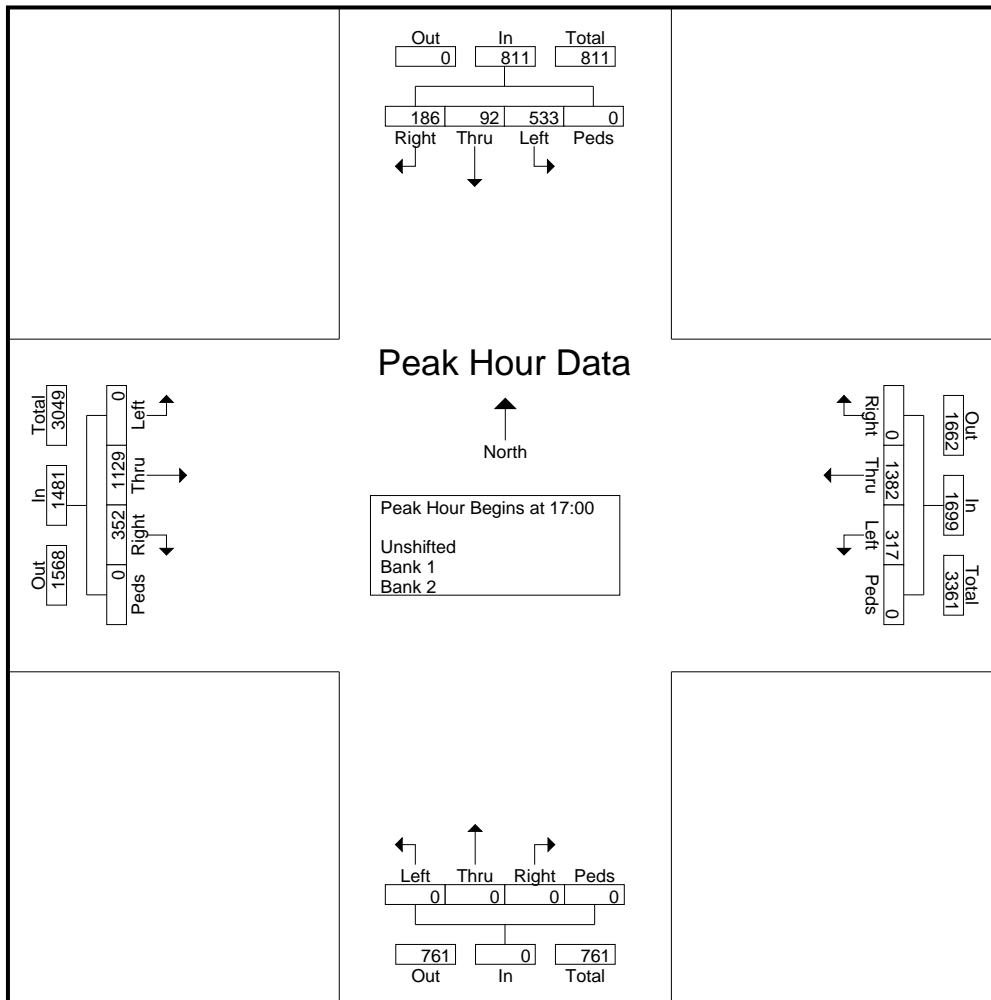


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SW 152 St & HEFT SB  
On & Off Ramp  
12 Hours TMC

File Name : SW152S~4  
Site Code : 0000027  
Start Date : 6/27/2007  
Page No : 8

Start Time	From North					From East					From South					From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 14:00 to 18:15 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 17:00																					
17:00	42	18	140	0	200	0	298	78	0	376	0	0	0	0	0	82	322	0	0	404	980
17:15	49	30	126	0	205	0	353	76	0	429	0	0	0	0	0	87	285	0	0	372	1006
17:30	50						373														
17:45	45	17	154	0	216	0	358	93	0	451	0	0	0	0	0	101	256	0	0	357	1024
Total Volume	186	92	533	0	811	0	1382	317	0	1699	0	0	0	0	0	352	1129	0	0	1481	3991
% App. Total	22.9	11.3	65.7	0		0	81.3	18.7	0		0	0	0	0		23.8	76.2	0	0		
PHF	.930	.767	.865	.000	.939	.000	.926	.852	.000	.942	.000	.000	.000	.000	.000	.871	.877	.000	.000	.916	.974



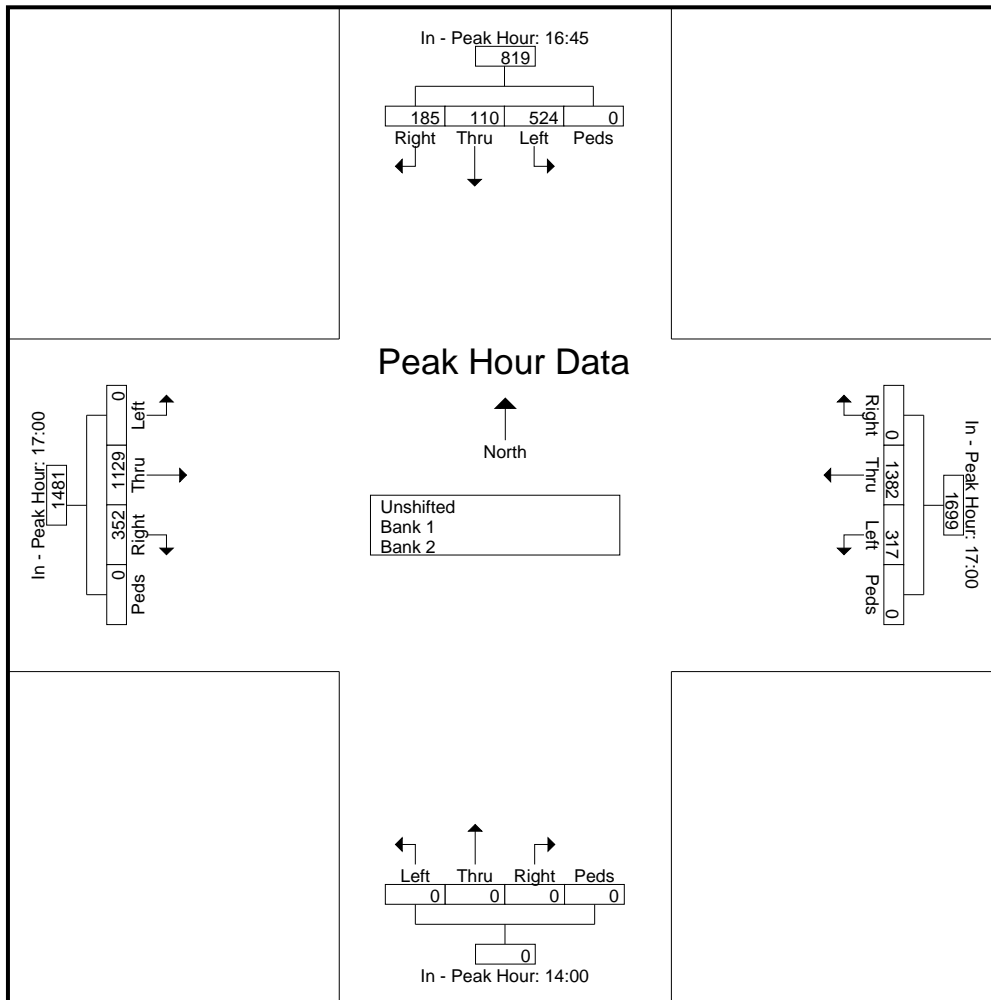


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SW 152 St & HEFT SB  
 On & Off Ramp  
 12 Hours TMC

File Name : SW152S~4  
 Site Code : 0000027  
 Start Date : 6/27/2007  
 Page No : 9

Start Time	From North					From East					From South					From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 14:00 to 18:15 - Peak 1 of 1																					
Peak Hour for Each Approach Begins at:																					
	16:45	17:00					14:00					17:00									
+0 mins.	44	35	145		224	0	298	78	0	376	0	0	0	0	0	82	322	0	0	404	
+15 mins.	42	18	140	0	200	0	353	76	0	429	0	0	0	0	0	87	285	0	0	372	
+30 mins.	49	30	126	0	205	0	373														
<b>+45 mins.</b>	<b>50</b>	<b>27</b>	<b>113</b>	<b>0</b>	<b>190</b>	<b>0</b>	<b>358</b>	<b>93</b>	<b>0</b>	<b>451</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>101</b>	<b>256</b>	<b>0</b>	<b>0</b>	<b>357</b>	
Total Volume	185	110	524	0	819	0	1382	317	0	1699	0	0	0	0	0	352	1129	0	0	1481	
% App. Total	22.6	13.4	64	0		0	81.3	18.7	0		0	0	0	0		23.8	76.2	0	0		
PHF	.925	.786	.903	.000	.914	.000	.926	.852	.000	.942	.000	.000	.000	.000	.000	.871	.877	.000	.000	.916	



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SW 152 St & HEFT NB  
 On & Off Ramp  
 12 Hours TMC

File Name : SW152S~3  
 Site Code : 0000027  
 Start Date : 6/27/2007  
 Page No : 1

Groups Printed- Unshifted - Bank 1 - Bank 2

Start Time	From North					From East					From South					From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
06:30	0	0	0	0	0	91	74	0	0	165	8	15	43	0	66	0	215	67	0	282	513
06:45	0	0	0	0	0	88	108	0	0	196	53	19	75	0	147	0	228	64	0	292	635
Total	0	0	0	0	0	179	182	0	0	361	61	34	118	0	213	0	443	131	0	574	1148
07:00	0	0	0	0	0	110	93	0	0	203	34	21	54	0	109	0	252	83	0	335	647
07:15	0	0	0	0	0	101	99	0	0	200	38	31	43	0	112	0	219	81	0	300	612
07:30	0	0	0	0	0	108	135	0	0	243	54	20	37	0	111	0	264	99	0	363	717
07:45	0	0	0	0	0	130	173	0	0	303	59	36	63	0	158	0	312	102	0	414	875
Total	0	0	0	0	0	449	500	0	0	949	185	108	197	0	490	0	1047	365	0	1412	2851
08:00	0	0	0	0	0	99	145	0	0	244	57	32	71	0	160	0	321	90	0	411	815
08:15	0	0	0	0	0	97	138	0	0	235	84	32	75	0	191	0	298	89	0	387	813
08:30	0	0	0	0	0	102	172	0	0	274	58	31	69	0	158	0	300	77	0	377	809
08:45	0	0	0	0	0	110	140	0	0	250	54	25	62	0	141	0	326	87	0	413	804
Total	0	0	0	0	0	408	595	0	0	1003	253	120	277	0	650	0	1245	343	0	1588	3241
09:00	0	0	0	0	0	119	175	0	0	294	60	22	60	0	142	0	294	78	0	372	808
09:15	0	0	0	0	0	97	170	0	0	267	43	18	55	0	116	0	282	91	0	373	756
09:30	0	0	0	0	0	100	142	0	0	242	45	12	38	0	95	0	245	98	0	343	680
09:45	0	0	0	0	0	111	146	0	0	257	28	8	61	0	97	0	287	101	0	388	742
Total	0	0	0	0	0	427	633	0	0	1060	176	60	214	0	450	0	1108	368	0	1476	2986
10:00	0	0	0	0	0	116	170	0	0	286	44	9	41	0	94	0	260	72	0	332	712
10:15	0	0	0	0	0	108	169	0	0	277	36	9	42	0	87	0	245	60	0	305	669
10:30	0	0	0	0	0	105	164	0	0	269	29	8	50	0	87	0	242	72	0	314	670
10:45	0	0	0	0	0	112	181	0	0	293	32	15	48	0	95	0	257	66	0	323	711
Total	0	0	0	0	0	441	684	0	0	1125	141	41	181	0	363	0	1004	270	0	1274	2762
11:00	0	0	0	0	0	109	209	6	0	324	31	9	46	0	86	0	218	50	0	268	678
11:15	0	0	0	0	0	95	176	0	0	271	38	23	63	0	124	0	220	54	0	274	669
11:30	0	0	0	0	0	108	165	0	0	273	39	15	64	0	118	0	240	56	0	296	687
11:45	0	0	0	0	0	101	211	0	0	312	34	16	61	0	111	0	244	60	0	304	727
Total	0	0	0	0	0	413	761	6	0	1180	142	63	234	0	439	0	922	220	0	1142	2761
12:00	0	0	0	0	0	102	205	0	0	307	40	22	60	0	122	0	268	56	0	324	753
12:15	0	0	0	0	0	93	246	0	0	339	29	14	55	0	98	0	257	59	0	316	753
12:30	0	0	0	0	0	81	172	0	0	253	20	11	54	0	85	0	252	69	0	321	659
12:45	0	0	0	0	0	73	209	0	0	282	22	8	52	0	82	0	285	53	0	338	702
Total	0	0	0	0	0	349	832	0	0	1181	111	55	221	0	387	0	1062	237	0	1299	2867
13:00	0	0	0	0	0	96	203	0	0	299	22	11	46	0	79	0	306	61	0	367	745
13:15	0	0	0	0	0	107	238	0	0	345	35	20	56	0	111	0	290	49	0	339	795
13:30	0	0	0	0	0	117	237	0	0	354	39	15	45	0	99	0	305	72	0	377	830
13:45	0	0	0	0	0	101	228	0	0	329	37	14	47	0	98	0	290	60	0	350	777
Total	0	0	0	0	0	421	906	0	0	1327	133	60	194	0	387	0	1191	242	0	1433	3147
14:00	0	0	0	0	0	79	215	0	0	294	26	9	38	0	73	0	256	70	0	326	693
14:15	0	0	0	0	0	98	200	0	0	298	29	11	66	0	106	0	228	82	0	310	714
14:30	0	0	0	0	0	81	203	0	0	284	32	13	43	0	88	0	254	70	0	324	696
14:45	0	0	0	0	0	91	207	0	0	298	34	4	50	0	88	0	263	60	0	323	709
Total	0	0	0	0	0	349	825	0	0	1174	121	37	197	0	355	0	1001	282	0	1283	2812



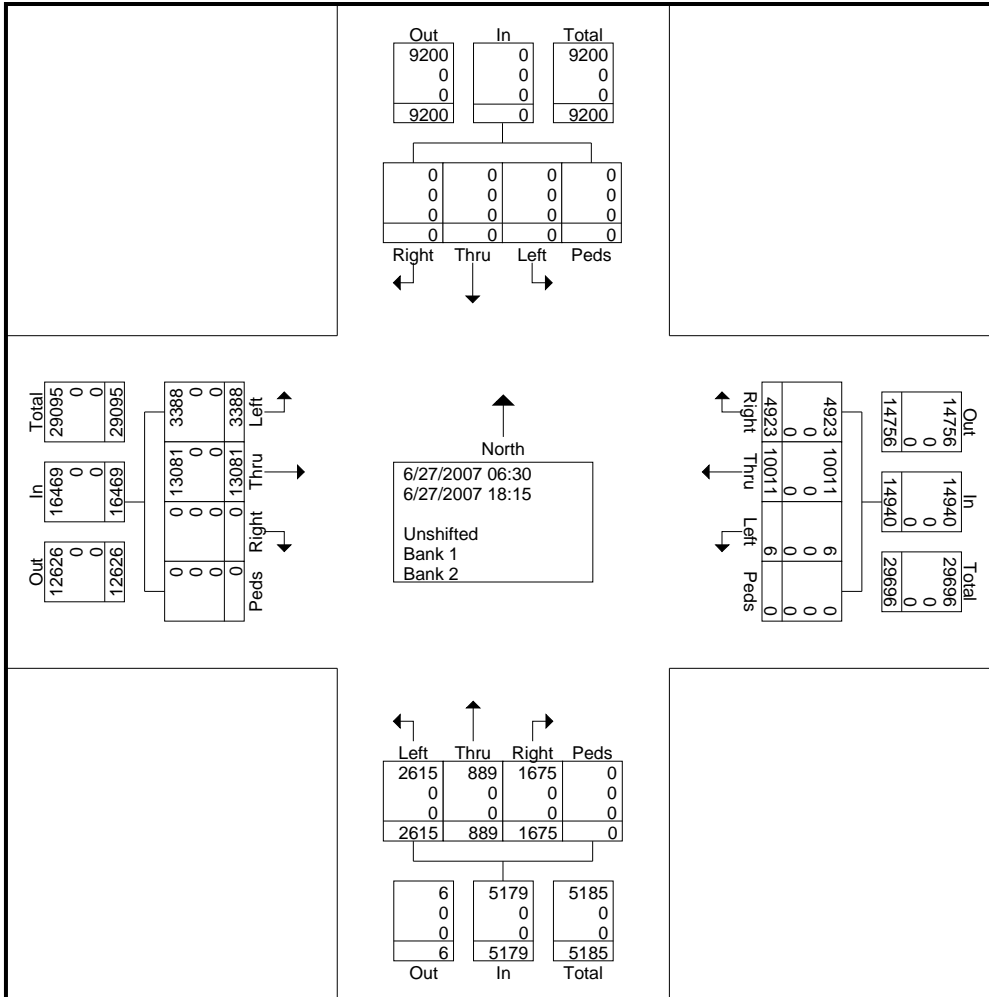
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SW 152 St & HEFT NB  
 On & Off Ramp  
 12 Hours TMC

File Name : SW152S~3  
 Site Code : 0000027  
 Start Date : 6/27/2007  
 Page No : 2

Groups Printed- Unshifted - Bank 1 - Bank 2

Start Time	From North					From East					From South					From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
15:00	0	0	0	0	0	89	212	0	0	301	23	12	47	0	82	0	290	39	0	329	712
15:15	0	0	0	0	0	94	237	0	0	331	25	14	44	0	83	0	306	43	0	349	763
15:30	0	0	0	0	0	103	272	0	0	375	28	15	72	0	115	0	285	78	0	363	853
15:45	0	0	0	0	0	111	279	0	0	390	24	20	51	0	95	0	292	58	0	350	835
Total	0	0	0	0	0	397	1000	0	0	1397	100	61	214	0	375	0	1173	218	0	1391	3163
16:00	0	0	0	0	0	95	255	0	0	350	18	20	71	0	109	0	287	65	0	352	811
16:15	0	0	0	0	0	86	194	0	0	280	28	23	60	0	111	0	265	60	0	325	716
16:30	0	0	0	0	0	100	329	0	0	429	15	35	54	0	104	0	245	85	0	330	863
16:45	0	0	0	0	0	103	253	0	0	356	16	19	55	0	90	0	301	66	0	367	813
Total	0	0	0	0	0	384	1031	0	0	1415	77	97	240	0	414	0	1098	276	0	1374	3203
17:00	0	0	0	0	0	108	331	0	0	439	19	18	57	0	94	0	355	66	0	421	954
17:15	0	0	0	0	0	105	377	0	0	482	21	27	70	0	118	0	325	67	0	392	992
17:30	0	0	0	0	0	113	372	0	0	485	41	19	63	0	123	0	288	66	0	354	962
17:45	0	0	0	0	0	139	378	0	0	517	32	31	50	0	113	0	325	69	0	394	1024
Total	0	0	0	0	0	465	1458	0	0	1923	113	95	240	0	448	0	1293	268	0	1561	3932
18:00	0	0	0	0	0	126	298	0	0	424	43	27	41	0	111	0	255	87	0	342	877
18:15	0	0	0	0	0	115	306	0	0	421	19	31	47	0	97	0	239	81	0	320	838
Grand Total	0	0	0	0	0	4923	10011	6	0	14940	1675	889	2615	0	5179	0	13081	3388	0	16469	36588
Apprch %	0	0	0	0	0	33	67	0	0		32.3	17.2	50.5	0		0	79.4	20.6	0		
Total %	0	0	0	0	0	13.5	27.4	0	0	40.8	4.6	2.4	7.1	0	14.2	0	35.8	9.3	0	45	
Unshifted	0	0	0	0	0	492	1001	6	0	1494	1675	889	2615	0	5179	0	13081	3388	0	16469	36588
% Unshifted	0	0	0	0	0	100	100	100	0	100	100	100	100	0	100	0	100	100	0	100	100
Bank 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bank 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bank 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bank 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



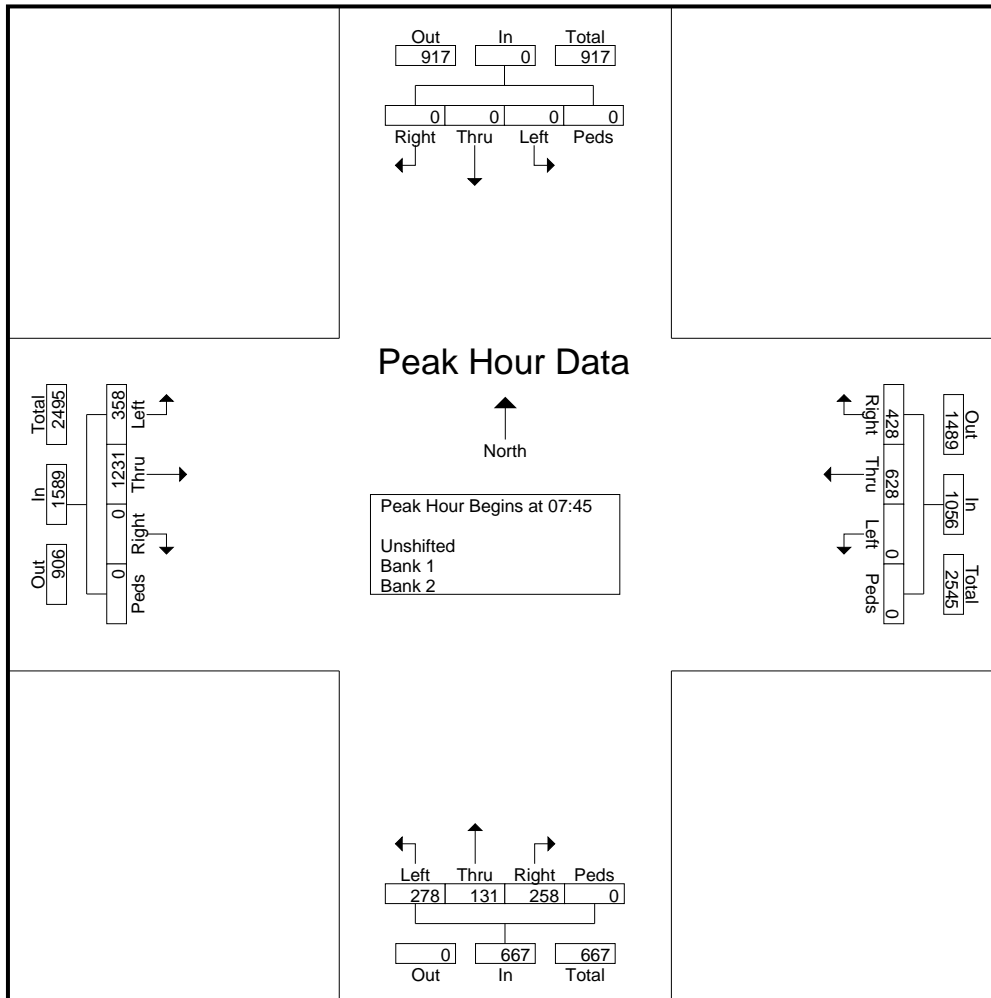


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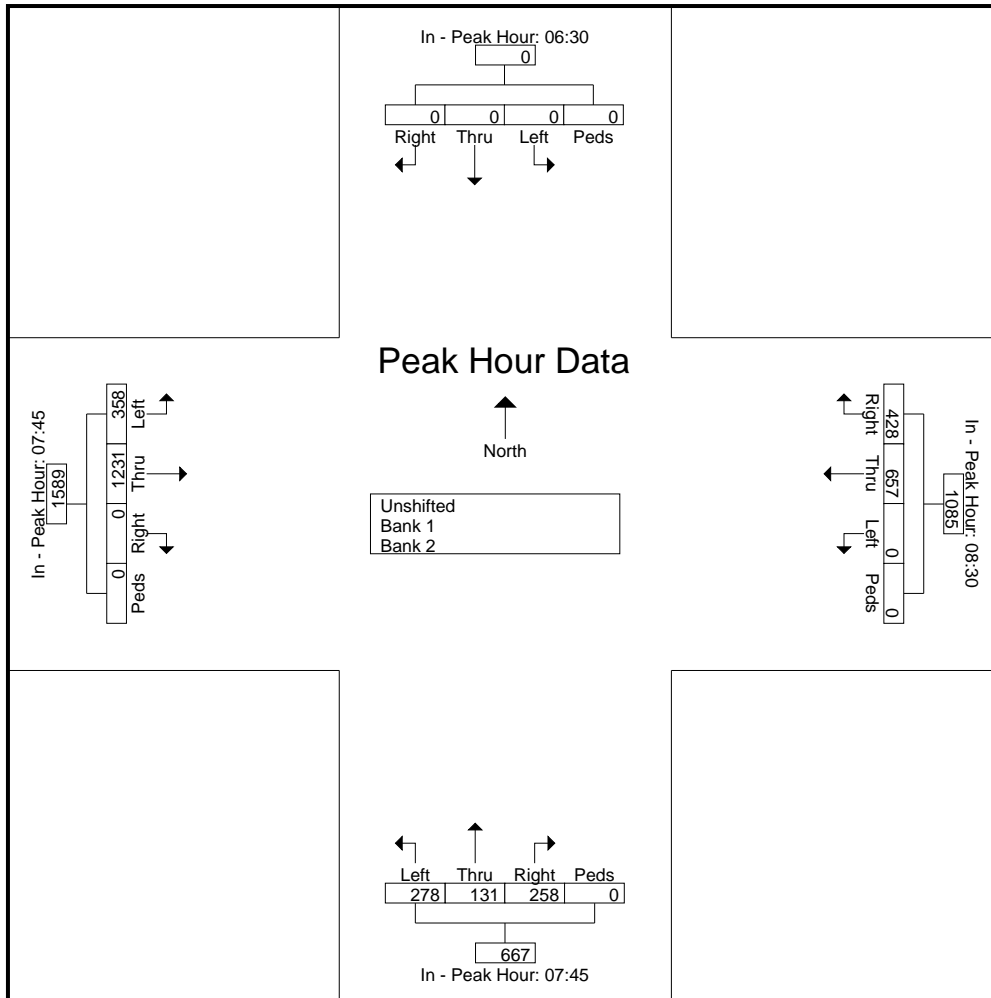
SW 152 St & HEFT NB  
 On & Off Ramp  
 12 Hours TMC

File Name : SW152S~3  
 Site Code : 0000027  
 Start Date : 6/27/2007  
 Page No : 4

Start Time	From North					From East					From South					From West					Int. Total	
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total		
Peak Hour Analysis From 06:30 to 09:45 - Peak 1 of 1																						
Peak Hour for Entire Intersection Begins at 07:45																						
07:45	0	0	0	0	0	130	173			303	59	36						102			414	875
08:00	0	0	0	0	0	99	145	0	0	244	57	32	71	0	160	0	321	90	0	411	815	
08:15	0	0	0	0	0	97	138	0	0	235	84		75	0	191	0	298	89	0	387	813	
08:30	0	0	0	0	0	102	172	0	0	274	58	31	69	0	158	0	300	77	0	377	809	
Total Volume	0	0	0	0	0	428	628	0	0	1056	258	131	278	0	667	0	1231	358	0	1589	3312	
% App. Total	0	0	0	0	0	40.5	59.5	0	0		38.7	19.6	41.7	0		0	77.5	22.5	0			
PHF	.000	.000	.000	.000	.000	.823	.908	.000	.000	.871	.768	.910	.927	.000	.873	.000	.959	.877	.000	.960	.946	



	From North					From East					From South					From West						
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total	
Peak Hour Analysis From 06:30 to 09:45 - Peak 1 of 1																						
Peak Hour for Each Approach Begins at:																						
	06:30					08:30					07:45					07:45						
+0 mins.	0	0	0	0	0	102	172	0	0	274	59	<b>36</b>							<b>102</b>		<b>414</b>	
+15 mins.	0	0	0	0	0	110	140	0	0	250	57	32	71	0	160	0	<b>321</b>	90	0	411		
+30 mins.	0	0	0	0	0	<b>119</b>	<b>175</b>			<b>294</b>	<b>84</b>		<b>75</b>	0	<b>191</b>	0	298	89	0	387		
+45 mins.	0	0	0	0	0	97	170	0	0	267	58	31	69	0	158	0	300	77	0	377		
Total Volume	0	0	0	0	0	428	657	0	0	1085	258	131	278	0	667	0	1231	358	0	1589		
% App. Total	0	0	0	0	0	39.4	60.6	0	0		38.7	19.6	41.7	0		0	77.5	22.5	0			
PHF	.000	.000	.000	.000	.000	.899	.939	.000	.000	.923	.768	.910	.927	.000	.873	.000	.959	.877	.000	.960		



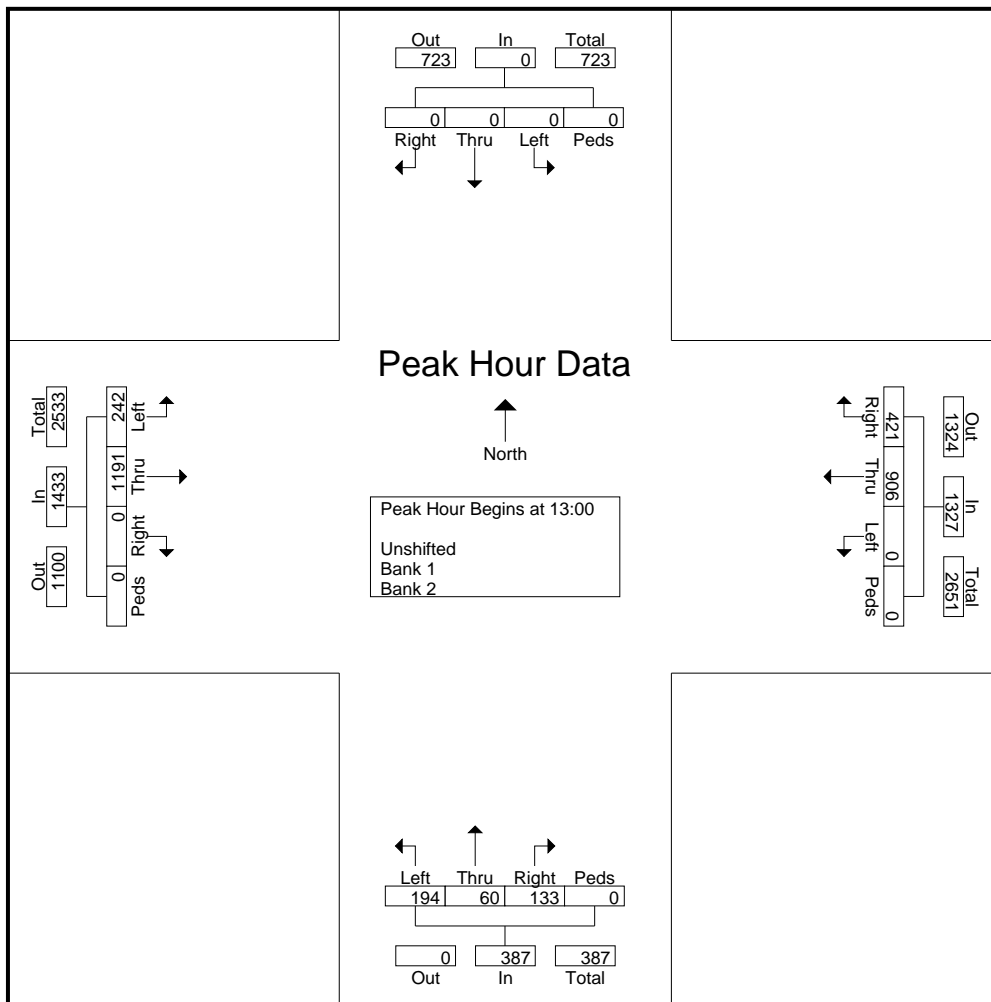


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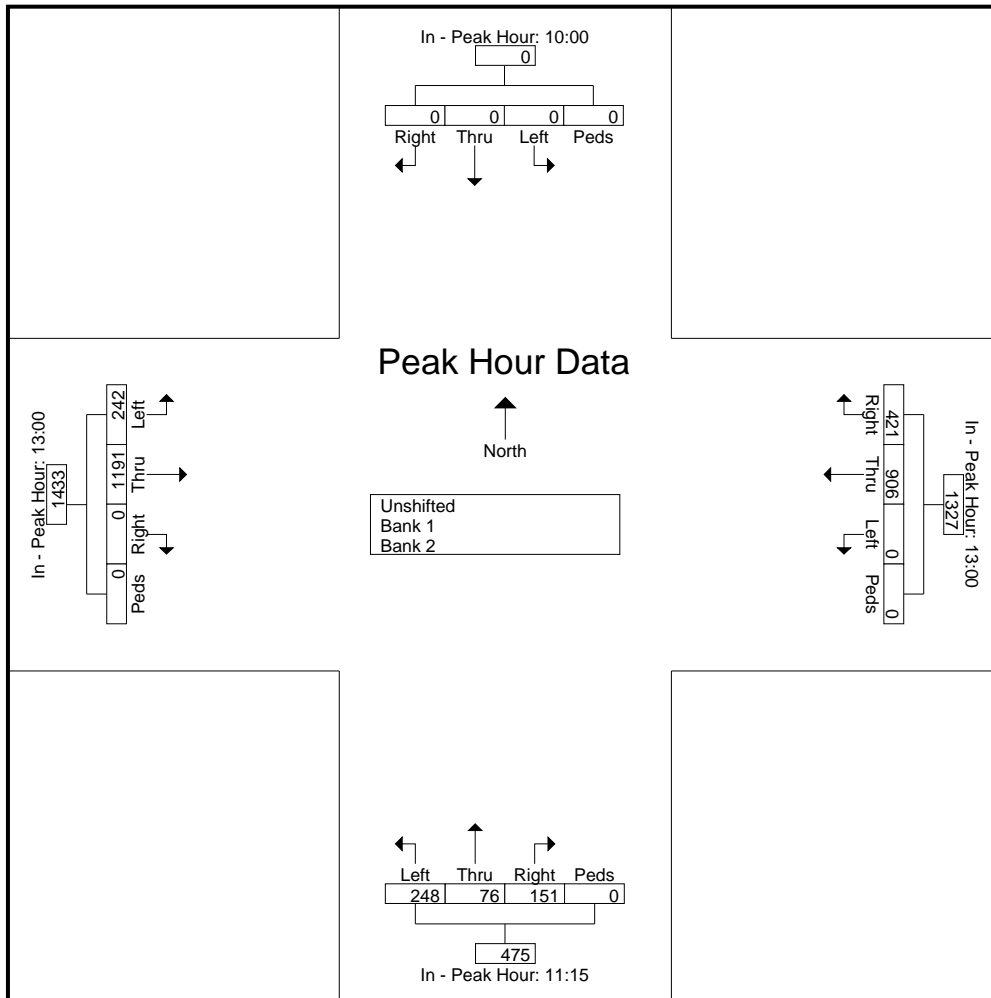
SW 152 St & HEFT NB  
On & Off Ramp  
12 Hours TMC

File Name : SW152S~3  
Site Code : 0000027  
Start Date : 6/27/2007  
Page No : 6

Start Time	From North					From East					From South					From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 10:00 to 13:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 13:00																					
13:00	0	0	0	0	0	96	203	0	0	299	22	11	46	0	79	0	<b>306</b>	61	0	367	745
13:15	0	0	0	0	0	107	<b>238</b>	0	0	345	0	<b>20</b>	<b>56</b>	0	<b>111</b>	0	290	49	0	339	795
13:30	0	0	0	0	0	<b>117</b>	237	0	0	<b>354</b>	<b>39</b>	0	0	0	0	0	0	<b>72</b>	0	<b>377</b>	<b>830</b>
13:45	0	0	0	0	0	101	228	0	0	329	37	14	47	0	98	0	290	60	0	350	777
Total Volume	0	0	0	0	0	421	906	0	0	1327	133	60	194	0	387	0	1191	242	0	1433	3147
% App. Total	0	0	0	0	0	31.7	68.3	0	0	0	34.4	15.5	50.1	0	0	0	83.1	16.9	0	0	0
PHF	.000	.000	.000	.000	.000	.900	.952	.000	.000	.937	.853	.750	.866	.000	.872	.000	.973	.840	.000	.950	.948



Start Time	From North					From East					From South					From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 10:00 to 13:45 - Peak 1 of 1																					
Peak Hour for Each Approach Begins at:																					
	10:00	13:00					11:15					13:00									
+0 mins.	0	0	0	0	0	96	203	0	0	299	38	23			124	0	306	61	0	367	
+15 mins.	0	0	0	0	0	107	238						64	0	118	0	290	49	0	339	
+30 mins.	0	0	0	0	0	117	237	0	0	354	34	16	61	0	111	0	305	72		377	
+45 mins.	0	0	0	0	0	101	228	0	0	329	40										
Total Volume	0	0	0	0	0	421	906	0	0	1327	151	76	248	0	475	0	1191	242	0	1433	
% App. Total	0	0	0	0	0	31.7	68.3	0	0		31.8	16	52.2	0		0	83.1	16.9	0		
PHF	.000	.000	.000	.000	.000	.900	.952	.000	.000	.937	.944	.826	.969	.000	.958	.000	.973	.840	.000	.950	



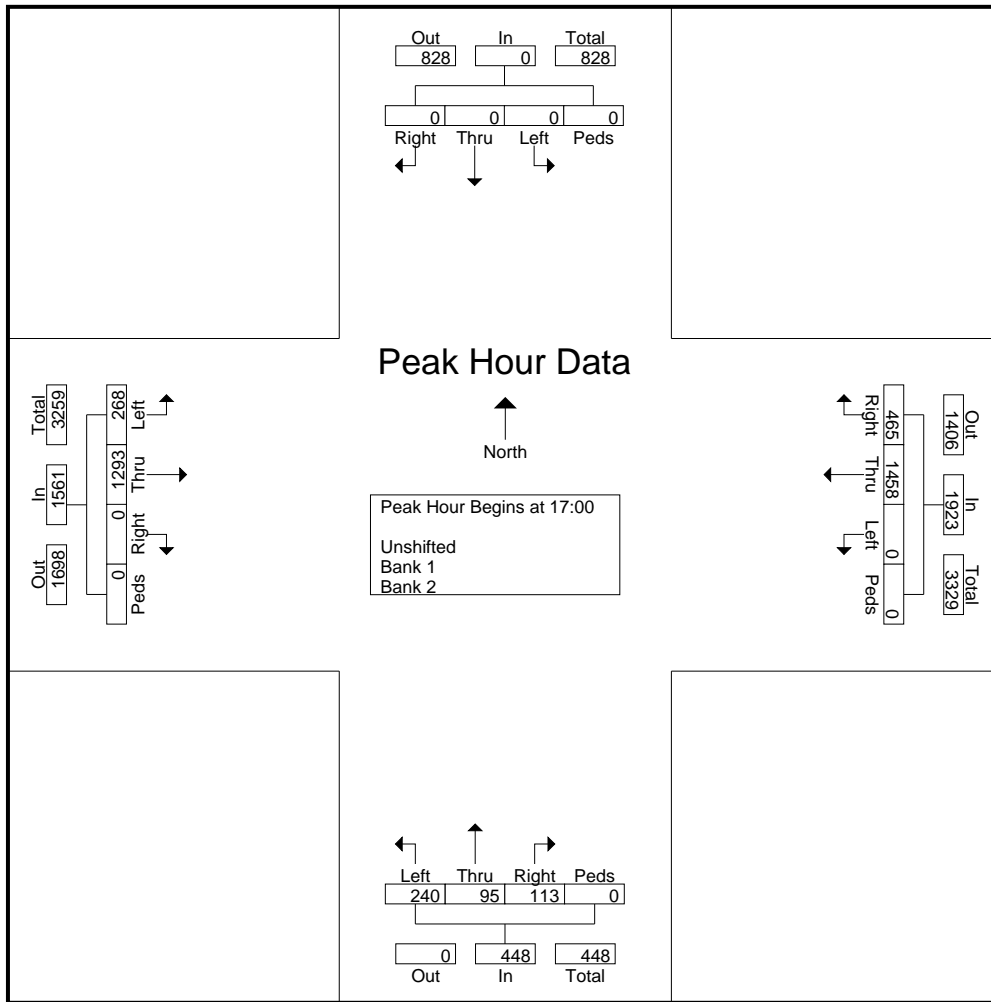


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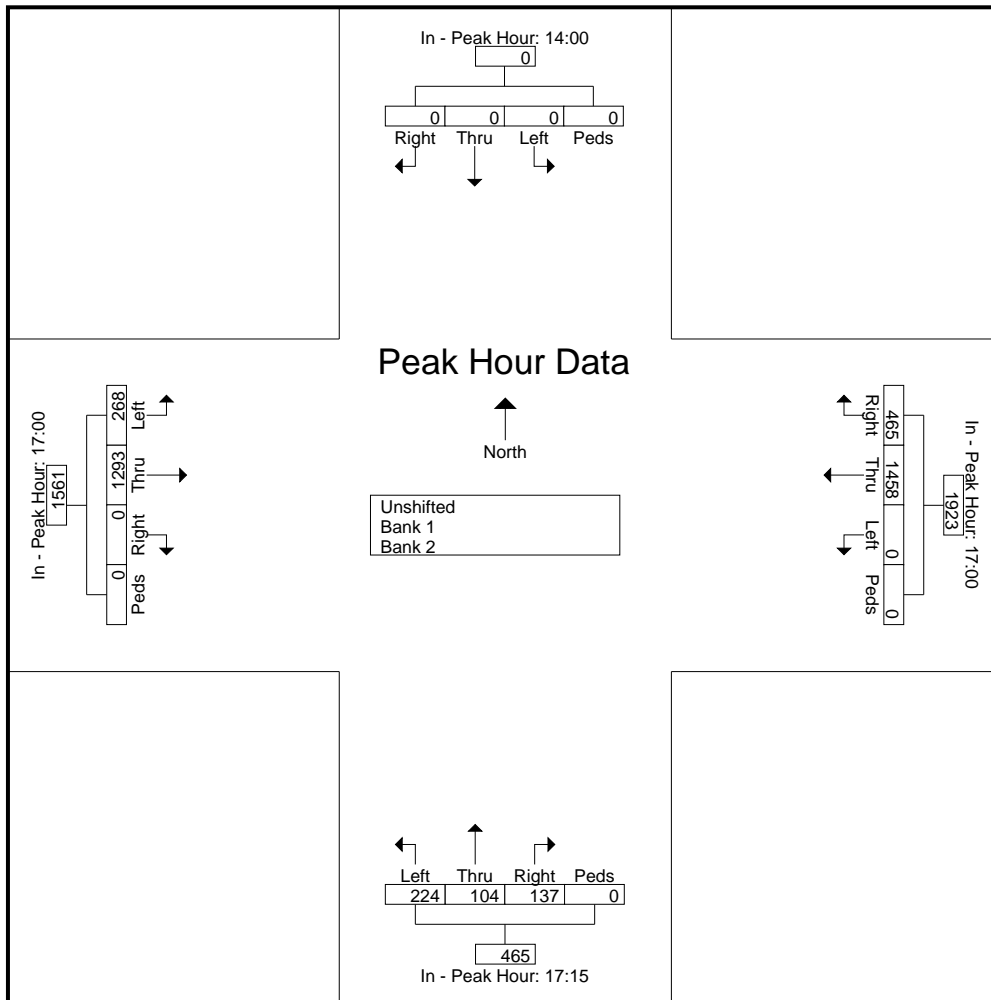
SW 152 St & HEFT NB  
 On & Off Ramp  
 12 Hours TMC

File Name : SW152S~3  
 Site Code : 0000027  
 Start Date : 6/27/2007  
 Page No : 8

Start Time	From North					From East					From South					From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 14:00 to 18:15 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 17:00																					
17:00	0	0	0	0	0	108	331	0	0	439	19	18	57	0	94	0	355	66	0	421	954
17:15	0	0	0	0	0	105	377	0	0	482	21	27	70	0	118	0	325	67	0	392	992
17:30	0	0	0	0	0	113	372	0	0	485	41				123	0	288	66	0	354	962
17:45	0	0	0	0	0	139	378			517	32	31						69			1024
Total Volume	0	0	0	0	0	465	1458	0	0	1923	113	95	240	0	448	0	1293	268	0	1561	3932
% App. Total	0	0	0	0	0	24.2	75.8	0	0		25.2	21.2	53.6	0		0	82.8	17.2	0		
PHF	.000	.000	.000	.000	.000	.836	.964	.000	.000	.930	.689	.766	.857	.000	.911	.000	.911	.971	.000	.927	.960



Start Time	From North					From East					From South					From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 14:00 to 18:15 - Peak 1 of 1																					
Peak Hour for Each Approach Begins at:																					
	14:00	17:00					17:15					17:00									
+0 mins.	0	0	0	0	0	108	331	0	0	439	21	27	70	0	118	0	355	66	0	421	
+15 mins.	0	0	0	0	0	105	377	0	0	482	41	19	63	0	123	0	325	67	0	392	
+30 mins.	0	0	0	0	0	113	372	0	0	485	32	31									
<b>+45 mins.</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>139</b>	<b>378</b>	<b>0</b>	<b>0</b>	<b>517</b>	<b>43</b>	<b>27</b>	<b>41</b>	<b>0</b>	<b>111</b>	<b>0</b>	<b>325</b>	<b>69</b>	<b>0</b>	<b>394</b>	
Total Volume	0	0	0	0	0	465	1458	0	0	1923	137	104	224	0	465	0	1293	268	0	1561	
% App. Total	0	0	0	0	0	24.2	75.8	0	0		29.5	22.4	48.2	0		0	82.8	17.2	0		
PHF	.000	.000	.000	.000	.000	.836	.964	.000	.000	.930	.797	.839	.800	.000	.945	.000	.911	.971	.000	.927	





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12 Hours TMC

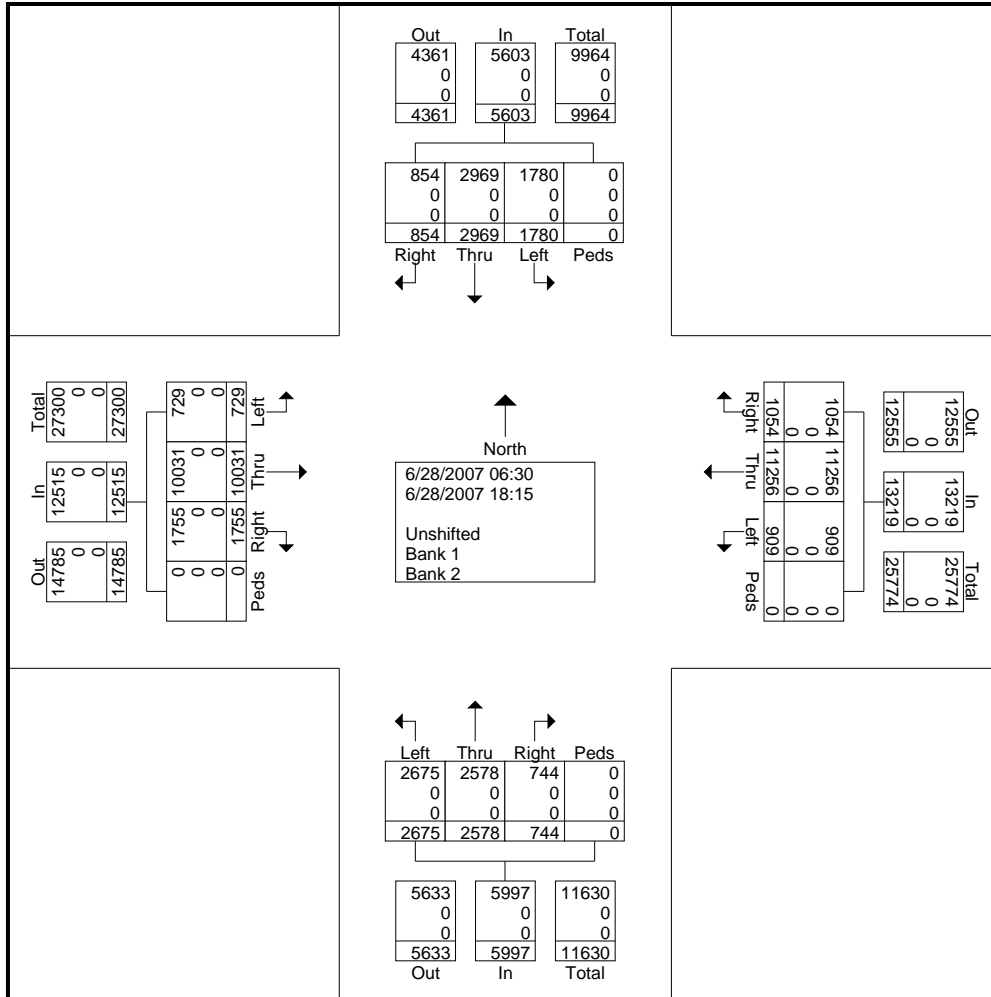
File Name : SW152S~1  
Site Code : 0000028  
Start Date : 6/28/2007  
Page No : 1

**Groups Printed- Unshifted - Bank 1 - Bank 2**

Start Time	From North					From East					From South					From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
06:30	13	28	15	0	56	20	79	6	0	105	31	47	56	0	134	17	186	9	0	212	507
06:45	16	30	22	0	68	17	137	8	0	162	26	54	58	0	138	28	246	18	0	292	660
Total	29	58	37	0	124	37	216	14	0	267	57	101	114	0	272	45	432	27	0	504	1167
07:00	11	29	30	0	70	18	89	9	0	116	34	56	76	0	166	22	205	14	0	241	593
07:15	9	23	21	0	53	18	143	9	0	170	24	62	55	0	141	28	249	13	0	290	654
07:30	16	41	29	0	86	21	158	9	0	188	13	78	64	0	155	28	258	15	0	301	730
07:45	17	50	26	0	93	24	163	12	0	199	10	85	68	0	163	31	306	24	0	361	816
Total	53	143	106	0	302	81	553	39	0	673	81	281	263	0	625	109	1018	66	0	1193	2793
08:00	20	50	40	0	110	22	166	17	0	205	13	68	57	0	138	40	294	23	0	357	810
08:15	21	54	36	0	111	24	174	15	0	213	33	90	75	0	198	33	305	23	0	361	883
08:30	19	51	37	0	107	35	190	19	0	244	21	63	75	0	159	47	285	18	0	350	860
08:45	15	44	28	0	87	23	211	11	0	245	25	63	61	0	149	30	276	17	0	323	804
Total	75	199	141	0	415	104	741	62	0	907	92	284	268	0	644	150	1160	81	0	1391	3357
09:00	20	43	46	0	109	27	172	14	0	213	23	50	80	0	153	36	275	20	0	331	806
09:15	12	44	31	0	87	16	156	10	0	182	14	53	66	0	133	29	188	14	0	231	633
09:30	17	44	17	0	78	12	183	5	0	200	16	44	41	0	101	34	176	11	0	221	600
09:45	10	42	32	0	84	25	173	6	0	204	9	46	45	0	100	28	203	10	0	241	629
Total	59	173	126	0	358	80	684	35	0	799	62	193	232	0	487	127	842	55	0	1024	2668
10:00	13	37	39	0	89	13	181	9	0	203	19	42	71	0	132	34	206	13	0	253	677
10:15	21	35	45	0	101	13	163	5	0	181	20	35	43	0	98	23	192	6	0	221	601
10:30	23	40	27	0	90	15	216	12	0	243	14	38	51	0	103	33	177	14	0	224	660
10:45	18	54	19	0	91	24	178	10	0	212	9	42	54	0	105	25	205	13	0	243	651
Total	75	166	130	0	371	65	738	36	0	839	62	157	219	0	438	115	780	46	0	941	2589
11:00	26	47	25	0	98	16	188	11	0	215	17	34	38	0	89	44	170	10	0	224	626
11:15	17	51	33	0	101	13	165	13	0	191	13	36	46	0	95	35	172	10	0	217	604
11:30	23	48	23	0	94	8	180	13	0	201	8	41	59	0	108	23	158	8	0	189	592
11:45	16	38	31	0	85	10	222	7	0	239	6	38	57	0	101	27	132	12	0	171	596
Total	82	184	112	0	378	47	755	44	0	846	44	149	200	0	393	129	632	40	0	801	2418
12:00	18	55	34	0	107	25	186	10	0	221	15	50	36	0	101	29	163	10	0	202	631
12:15	11	67	41	0	119	21	255	16	0	292	10	48	52	0	110	34	194	17	0	245	766
12:30	16	80	38	0	134	26	197	36	0	259	19	32	58	0	109	42	213	11	0	266	768
12:45	28	59	33	0	120	27	234	18	0	279	12	43	56	0	111	40	212	20	0	272	782
Total	73	261	146	0	480	99	872	80	0	1051	56	173	202	0	431	145	782	58	0	985	2947
13:00	21	57	36	0	114	38	239	12	0	289	20	53	48	0	121	36	232	14	0	282	806
13:15	29	53	47	0	129	44	218	24	0	286	14	43	65	0	122	47	245	16	0	308	845
13:30	25	50	35	0	110	24	229	23	0	276	25	50	59	0	134	39	294	14	0	347	867
13:45	8	58	37	0	103	36	313	39	0	388	29	51	63	0	143	49	246	15	0	310	944
Total	83	218	155	0	456	142	999	98	0	1239	88	197	235	0	520	171	1017	59	0	1247	3462
14:00	22	48	31	0	101	36	309	26	0	371	12	54	46	0	112	50	197	20	0	267	851
14:15	15	66	32	0	113	28	267	22	0	317	11	51	52	0	114	55	193	15	0	263	807
14:30	15	71	44	0	130	37	259	22	0	318	16	48	66	0	130	39	208	16	0	263	841
14:45	20	64	35	0	119	32	235	11	0	278	15	55	71	0	141	46	252	17	0	315	853
Total	72	249	142	0	463	133	1070	81	0	1284	54	208	235	0	497	190	850	68	0	1108	3352







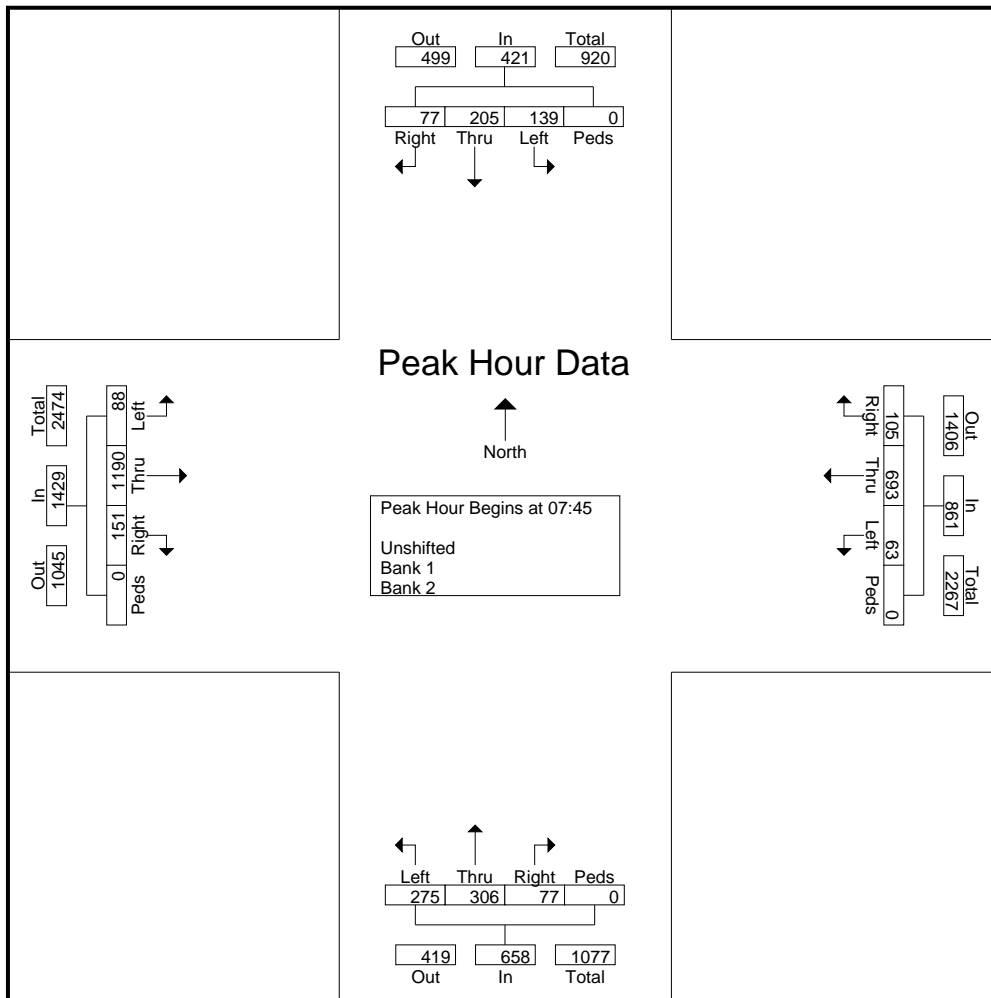
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SW 152 St & SW 112 Ave

12 Hours TMC

File Name : SW152S~1  
 Site Code : 0000028  
 Start Date : 6/28/2007  
 Page No : 4

Start Time	From North					From East					From South					From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 06:30 to 09:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:45																					
07:45	17	50	26	0	93	24	163	12	0	199	10	85	68	0	163	31	306	24	0	361	816
08:00	20	50	40	0	110	24	174	15	0	213	33	90	75	0	198	33	305	23	0	361	883
<b>08:15</b>	<b>21</b>	<b>54</b>	<b>36</b>	<b>0</b>	<b>111</b>	24	174	15	0	213	<b>33</b>	<b>90</b>	<b>75</b>	<b>0</b>	<b>198</b>	33	305	23	0	361	<b>883</b>
08:30	19	51	37	0	107	<b>35</b>	<b>190</b>	<b>19</b>	<b>0</b>	<b>244</b>	21	63	75	0	159	<b>47</b>					
Total Volume	77	205	139	0	421	105	693	63	0	861	77	306	275	0	658	151	1190	88	0	1429	3369
% App. Total	18.3	48.7	33	0		12.2	80.5	7.3	0		11.7	46.5	41.8	0		10.6	83.3	6.2	0		
PHF	.917	.949	.869	.000	.948	.750	.912	.829	.000	.882	.583	.850	.917	.000	.831	.803	.972	.917	.000	.990	.954





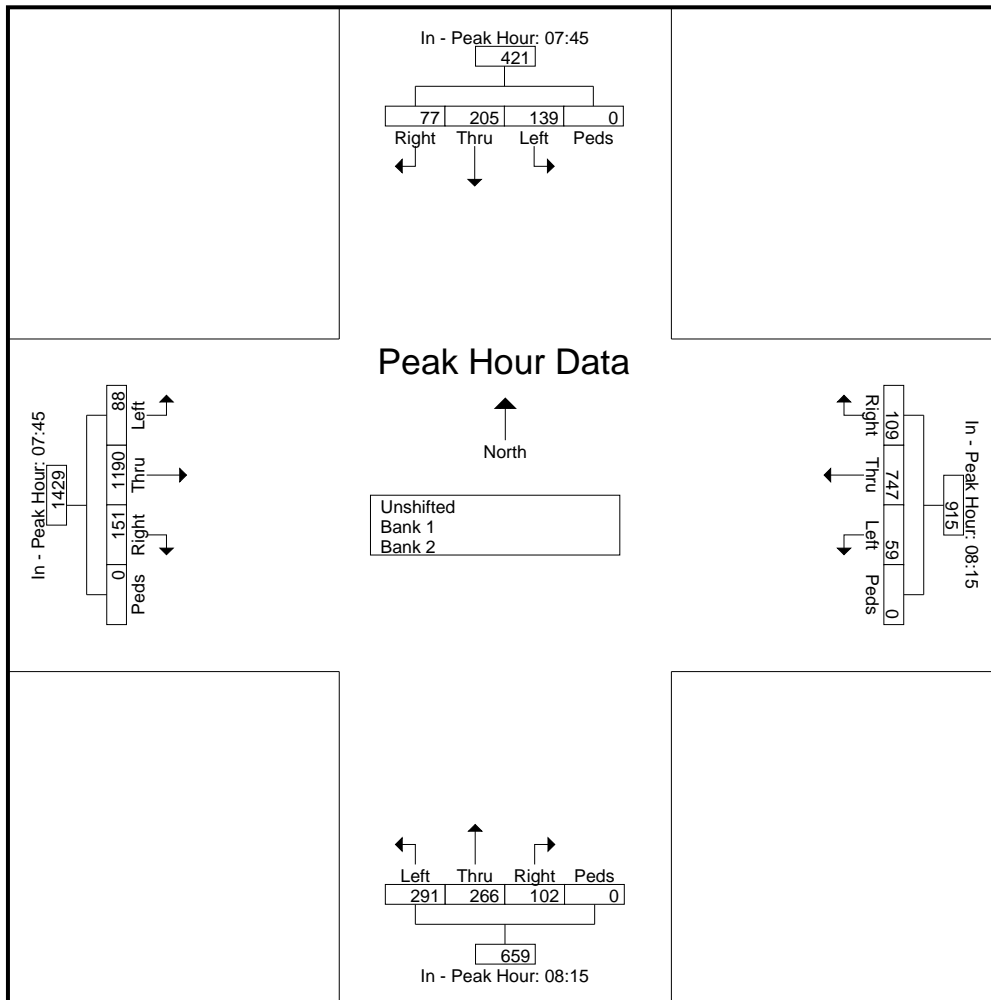
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SW 152 St & SW 112 Ave

12 Hours TMC

File Name : SW152S~1  
 Site Code : 0000028  
 Start Date : 6/28/2007  
 Page No : 5

Start Time	From North					From East					From South					From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 06:30 to 09:45 - Peak 1 of 1																					
Peak Hour for Each Approach Begins at:																					
	07:45	08:15					08:15					07:45									
+0 mins.	17	50	26	0	93	24	174	15	0	213	<b>33</b>	<b>90</b>			<b>198</b>	31	<b>306</b>	<b>24</b>		<b>361</b>	
+15 mins.	20	50	<b>40</b>			<b>35</b>	190	<b>19</b>			25	63	61	0	149	33	305	23	0	361	
<b>+30 mins.</b>	<b>21</b>	<b>54</b>	36	0	<b>111</b>	23	<b>211</b>	<b>11</b>	<b>0</b>	<b>245</b>	23	50	<b>80</b>	0	153	<b>47</b>					
+45 mins.	19	51	37	0	107	27	172	14	0	213	23	50	<b>80</b>	0	153	<b>47</b>					
Total Volume	77	205	139	0	421	109	747	59	0	915	102	266	291	0	659	151	1190	88	0	1429	
% App. Total	18.3	48.7	33	0		11.9	81.6	6.4	0		15.5	40.4	44.2	0		10.6	83.3	6.2	0		
PHF	.917	.949	.869	.000	.948	.779	.885	.776	.000	.934	.773	.739	.909	.000	.832	.803	.972	.917	.000	.990	



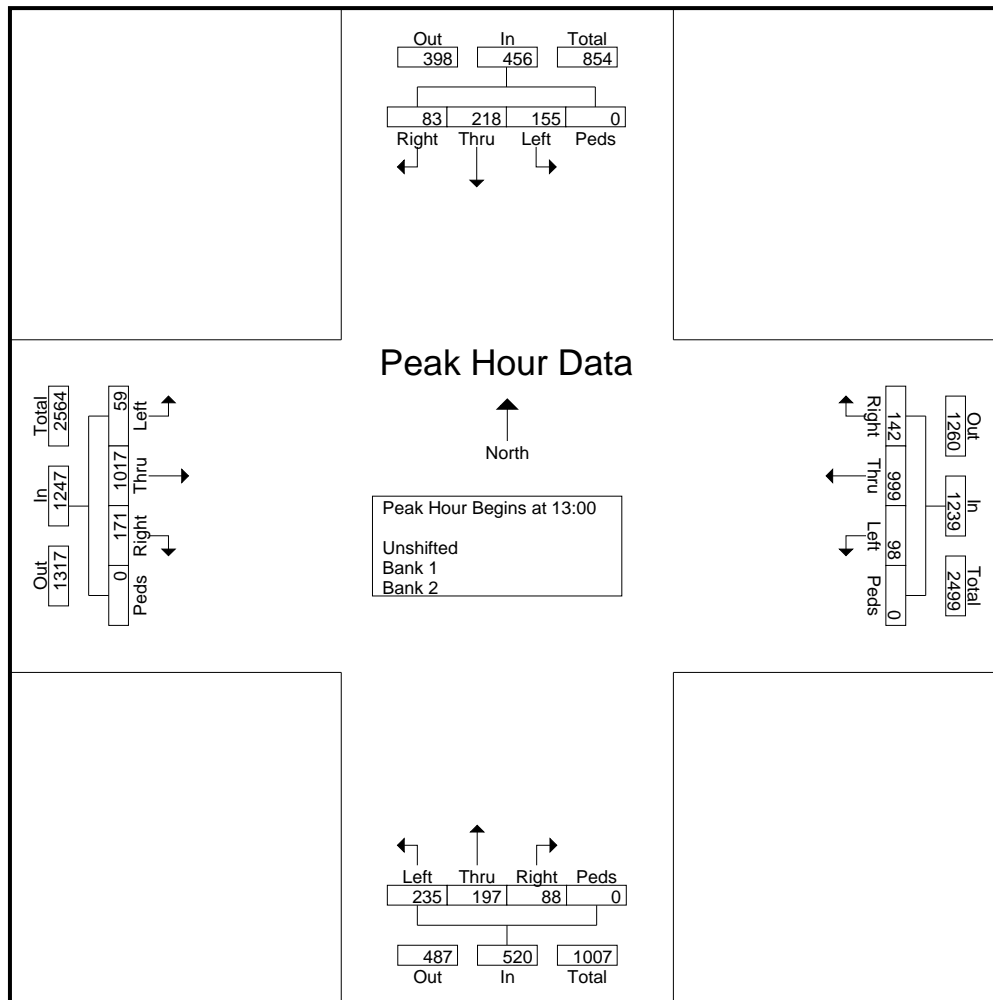
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SW 152 St & SW 112 Ave

12 Hours TMC

File Name : SW152S~1  
 Site Code : 0000028  
 Start Date : 6/28/2007  
 Page No : 6

Start Time	From North					From East					From South					From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 10:00 to 13:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 13:00																					
13:00	21	57	36	0	114	38	239	12	0	289	20	53									
13:15	29	53	47	0	129	44	218	24	0	286	14	43	65	0	122	47	245	16	0	308	845
13:30	25	50	35	0	110	24	229	23	0	276	25	50	59	0	134	39	294	14	0	347	867
13:45	8	58	37	0	103	36	313	39		388	29				143	49					944
Total Volume	83	218	155	0	456	142	999	98	0	1239	88	197	235	0	520	171	1017	59	0	1247	3462
% App. Total	18.2	47.8	34	0		11.5	80.6	7.9	0		16.9	37.9	45.2	0		13.7	81.6	4.7	0		
PHF	.716	.940	.824	.000	.884	.807	.798	.628	.000	.798	.759	.929	.904	.000	.909	.872	.865	.922	.000	.898	.917





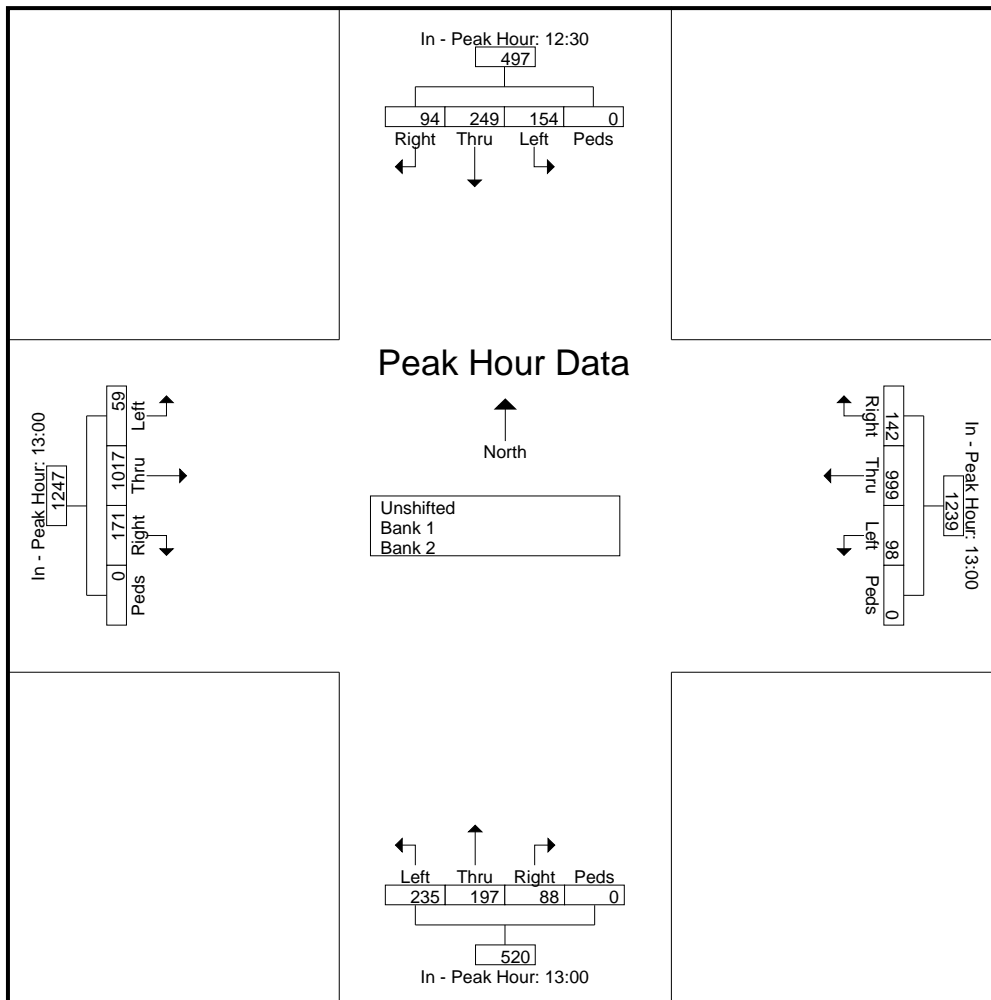
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SW 152 St & SW 112 Ave

12 Hours TMC

File Name : SW152S~1  
Site Code : 0000028  
Start Date : 6/28/2007  
Page No : 7

Start Time	From North					From East					From South					From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 10:00 to 13:45 - Peak 1 of 1																					
Peak Hour for Each Approach Begins at:																					
	12:30					13:00					13:00					13:00					
+0 mins.	16	80	38	0	134	38	239	12	0	289	20	53				47	245	16	0	308	
+15 mins.	28	59	33	0	120	44	218	24	0	286	14	43	65	0	122	39	294	14	0	347	
+30 mins.	21	57	36	0	114	24	229	23	0	276	25	50	59	0	134	39	294	14	0	347	
+45 mins.	29		47			313	39			388	29				143	49					
Total Volume	94	249	154	0	497	142	999	98	0	1239	88	197	235	0	520	171	1017	59	0	1247	
% App. Total	18.9	50.1	31	0		11.5	80.6	7.9	0		16.9	37.9	45.2	0		13.7	81.6	4.7	0		
PHF	.810	.778	.819	.000	.927	.807	.798	.628	.000	.798	.759	.929	.904	.000	.909	.872	.865	.922	.000	.898	



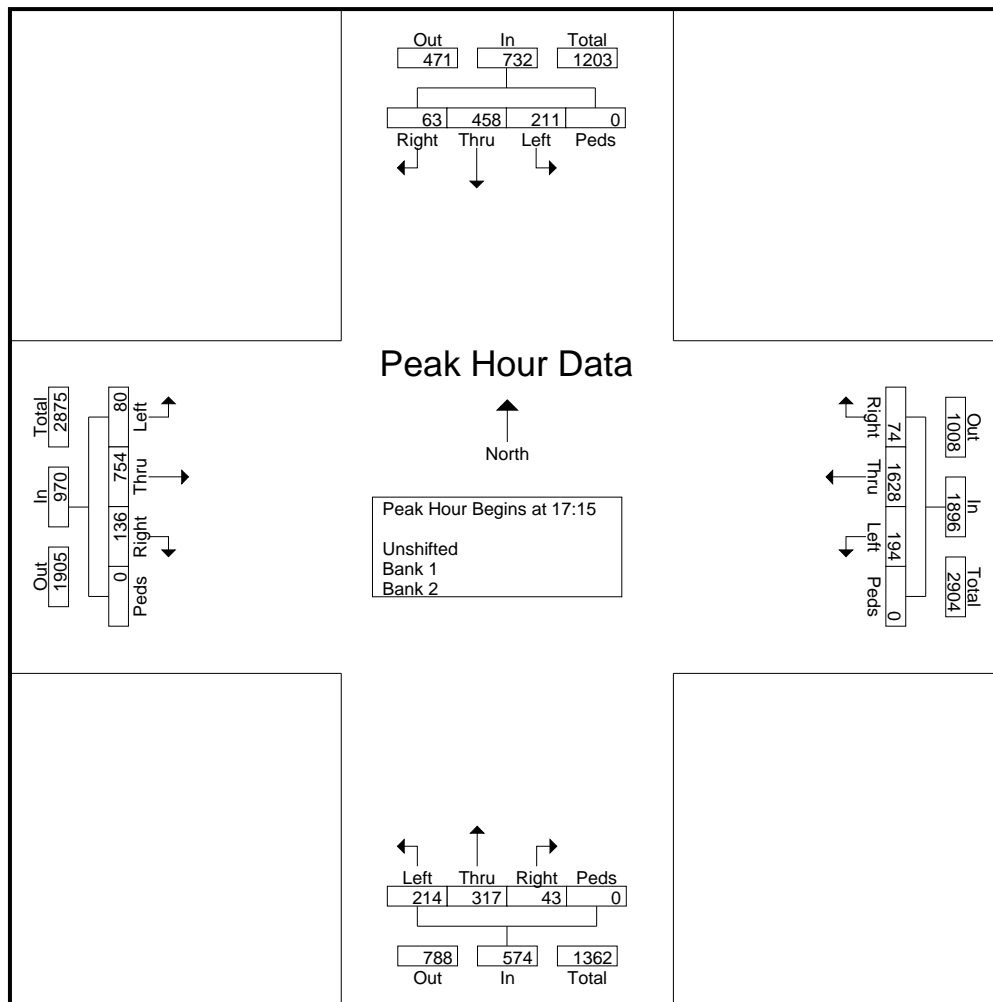
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SW 152 St & SW 112 Ave

12 Hours TMC

File Name : SW152S~1  
 Site Code : 0000028  
 Start Date : 6/28/2007  
 Page No : 8

Start Time	From North					From East					From South					From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 14:00 to 18:15 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 17:15																					
17:15	12	106	42	0	160	16	384	40	0	440	15		67	0	149	38	222	20	0	280	1029
17:30	13	106	54	0	173	21	435			502	9	56	40	0	105	32	167	10	0	209	989
17:45	22		60			22	417	46	0	485	13	111			174	38	190	29			1112
18:00	16	132	55	0	203	15	392	62													
Total Volume	63	458	211	0	732	74	1628	194	0	1896	43	317	214	0	574	136	754	80	0	970	4172
% App. Total																					
PHF	.716	.867	.879	.000	.901	.841	.936	.782	.000	.944	.717	.714	.799	.000	.825	.895	.849	.690	.000	.866	.938





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SW 152 St & SW 112 Ave

12 Hours TMC

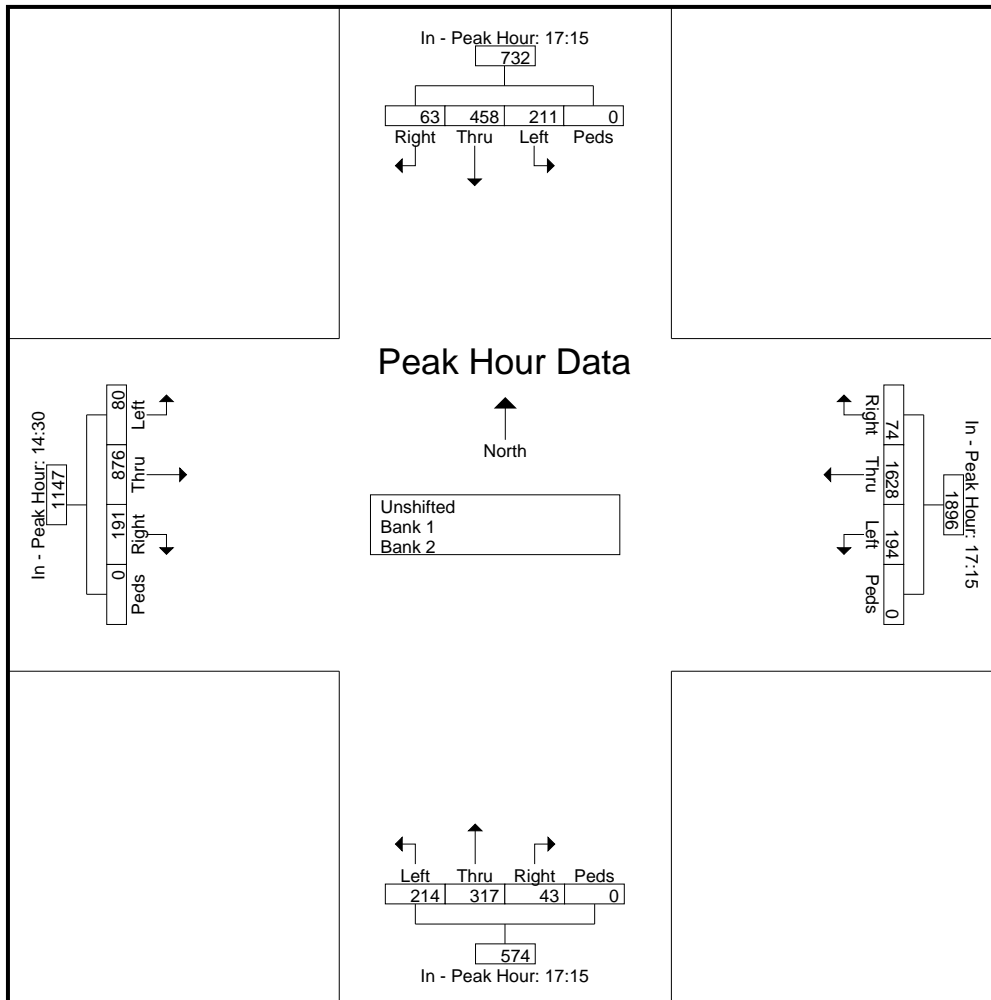
File Name : SW152S~1  
 Site Code : 0000028  
 Start Date : 6/28/2007  
 Page No : 9

Start Time	From North					From East					From South					From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	

Peak Hour Analysis From 14:00 to 18:15 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	17:15					17:15					17:15					14:30				
+0 mins.	12	106	42	0	160	16	384	40	0	440	15		67	0	149	39	208	16	0	263
+15 mins.	13	106	54	0	173	21	435			502	9	56	40	0	105	46	252	17	0	315
+30 mins.	22		60			22	417	46	0	485	13	111			174	60				
<b>+45 mins.</b>	<b>16</b>	<b>132</b>	<b>55</b>	<b>0</b>	<b>203</b>	<b>15</b>	<b>392</b>	<b>62</b>	<b>0</b>	<b>469</b>	<b>6</b>	<b>83</b>	<b>57</b>	<b>0</b>	<b>146</b>	<b>46</b>	<b>203</b>	<b>26</b>	<b>0</b>	<b>275</b>
Total Volume	63	458	211	0	732	74	1628	194	0	1896	43	317	214	0	574	191	876	80	0	1147
% App. Total																				
PHF	.716	.867	.879	.000	.901	.841	.936	.782	.000	.944	.717	.714	.799	.000	.825	.796	.869	.769	.000	.910



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SW 152 St & US 1

12 Hours TMC

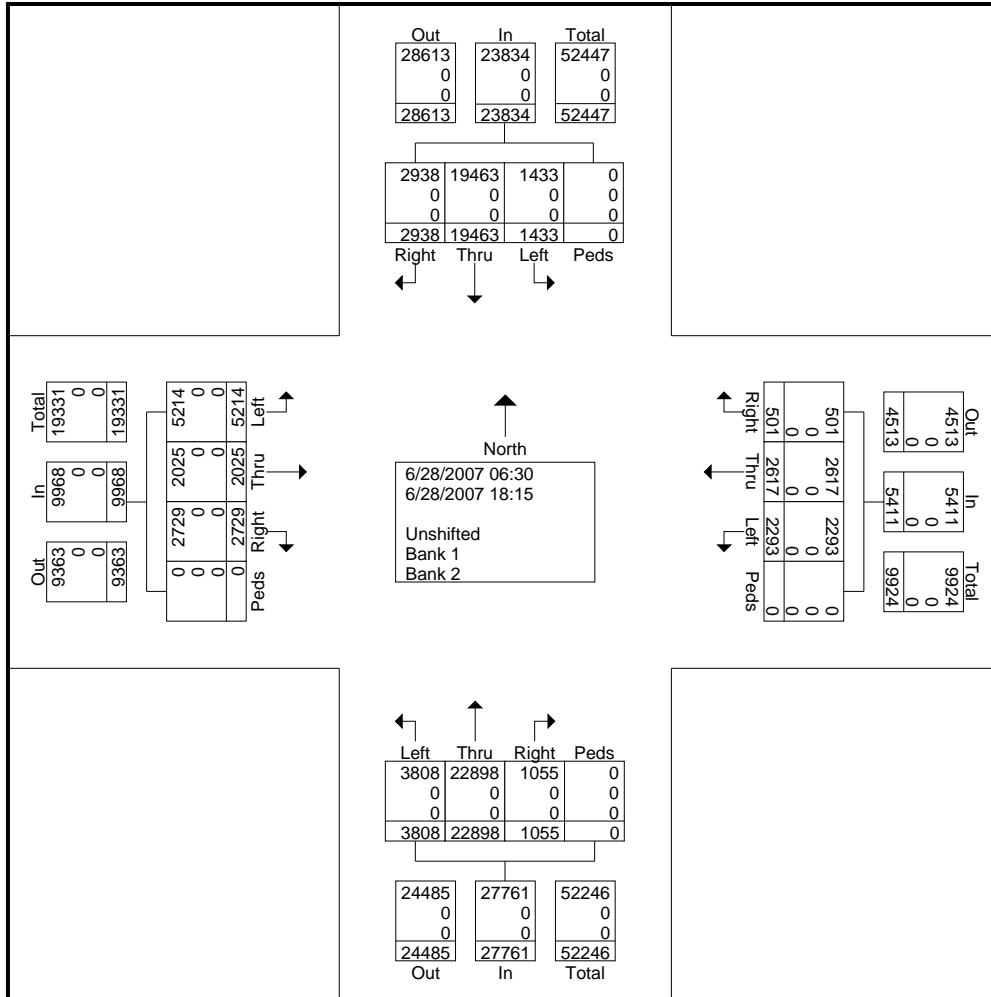
File Name : SWB06C~1  
Site Code : 0000028  
Start Date : 6/28/2007  
Page No : 1

**Groups Printed- Unshifted - Bank 1 - Bank 2**

Start Time	From North					From East					From South					From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
06:30	18	168	9	0	195	9	35	11	0	55	14	676	32	0	722	10	33	145	0	188	1160
06:45	34	146	9	0	189	9	30	9	0	48	10	731	34	0	775	22	25	142	0	189	1201
Total	52	314	18	0	384	18	65	20	0	103	24	1407	66	0	1497	32	58	287	0	377	2361
07:00	22	167	7	0	196	10	31	21	0	62	7	670	42	0	719	18	45	127	0	190	1167
07:15	34	197	18	0	249	11	35	22	0	68	17	661	61	0	739	16	58	169	0	243	1299
07:30	37	212	15	0	264	7	32	17	0	56	22	736	59	0	817	26	44	131	0	201	1338
07:45	34	246	21	0	301	14	30	19	0	63	22	727	77	0	826	28	56	143	0	227	1417
Total	127	822	61	0	1010	42	128	79	0	249	68	2794	239	0	3101	88	203	570	0	861	5221
08:00	18	190	16	0	224	16	57	27	0	100	24	630	63	0	717	34	72	178	0	284	1325
08:15	19	233	15	0	267	16	53	27	0	96	26	606	78	0	710	31	48	149	0	228	1301
08:30	27	244	10	0	281	19	62	38	0	119	31	628	73	0	732	34	40	103	0	177	1309
08:45	27	295	27	0	349	26	65	41	0	132	51	623	81	0	755	53	56	119	0	228	1464
Total	91	962	68	0	1121	77	237	133	0	447	132	2487	295	0	2914	152	216	549	0	917	5399
09:00	26	251	32	0	309	15	37	47	0	99	33	494	65	0	592	28	47	116	0	191	1191
09:15	29	249	22	0	300	21	39	36	0	96	21	527	61	0	609	46	36	84	0	166	1171
09:30	39	279	28	0	346	7	46	38	0	91	23	388	79	0	490	62	58	128	0	248	1175
09:45	45	307	39	0	391	11	116	45	0	172	21	375	66	0	462	69	55	109	0	233	1258
Total	139	1086	121	0	1346	54	238	166	0	458	98	1784	271	0	2153	205	196	437	0	838	4795
10:00	57	297	34	0	388	0	47	47	0	94	21	391	67	0	479	77	57	102	0	236	1197
10:15	37	357	44	0	438	5	41	27	0	73	17	445	69	0	531	65	43	120	0	228	1270
10:30	53	352	36	0	441	10	55	31	0	96	19	411	75	0	505	56	33	132	0	221	1263
10:45	51	303	31	0	385	18	45	46	0	109	31	398	70	0	499	70	43	120	0	233	1226
Total	198	1309	145	0	1652	33	188	151	0	372	88	1645	281	0	2014	268	176	474	0	918	4956
11:00	61	382	34	0	477	11	39	41	0	91	19	427	65	0	511	65	37	105	0	207	1286
11:15	67	383	28	0	478	16	40	44	0	100	16	441	77	0	534	67	44	94	0	205	1317
11:30	105	427	41	0	573	20	37	57	0	114	18	400	67	0	485	74	43	98	0	215	1387
11:45	80	376	42	0	498	21	39	44	0	104	27	439	75	0	541	54	28	89	0	171	1314
Total	313	1568	145	0	2026	68	155	186	0	409	80	1707	284	0	2071	260	152	386	0	798	5304
12:00	62	372	46	0	480	14	55	69	0	138	11	451	59	0	521	90	42	127	0	259	1398
12:15	61	419	47	0	527	16	42	70	0	128	29	458	78	0	565	72	33	109	0	214	1434
12:30	69	439	28	0	536	12	42	63	0	117	24	435	93	0	552	74	29	91	0	194	1399
12:45	62	432	36	0	530	8	40	44	0	92	25	453	94	0	572	64	29	66	0	159	1353
Total	254	1662	157	0	2073	50	179	246	0	475	89	1797	324	0	2210	300	133	393	0	826	5584
13:00	60	434	21	0	515	13	76	67	0	156	30	517	82	0	629	48	30	74	0	152	1452
13:15	45	414	37	0	496	19	40	56	0	115	19	478	97	0	594	54	38	80	0	172	1377
13:30	76	463	35	0	574	17	53	49	0	119	27	539	74	0	640	39	24	68	0	131	1464
13:45	48	369	26	0	443	7	82	71	0	160	24	424	110	0	558	49	39	104	0	192	1353
Total	229	1680	119	0	2028	56	251	243	0	550	100	1958	363	0	2421	190	131	326	0	647	5646
14:00	51	458	28	0	537	2	65	66	0	133	34	435	115	0	584	43	30	91	0	164	1418
14:15	54	443	28	0	525	4	50	60	0	114	27	434	86	0	547	46	25	98	0	169	1355
14:30	64	491	29	0	584	6	48	55	0	109	23	407	93	0	523	45	19	99	0	163	1379
14:45	65	471	37	0	573	0	40	40	0	80	27	464	80	0	571	47	44	86	0	177	1401
Total	234	1863	122	0	2219	12	203	221	0	436	111	1740	374	0	2225	181	118	374	0	673	5553
15:00	84	485	30	0	599	0	35	31	0	66	20	439	93	0	552	59	38	87	0	184	1401
15:15	64	496	20	0	580	9	90	79	0	178	24	438	90	0	552	54	55	83	0	192	1502
15:30	43	542	13	0	598	7	54	54	0	115	14	431	89	0	534	53	33	96	0	182	1429
15:45	54	543	24	0	621	15	58	38	0	111	20	427	96	0	543	60	39	79	0	178	1453
Total	245	2066	87	0	2398	31	237	202	0	470	78	1735	368	0	2181	226	165	345	0	736	5785









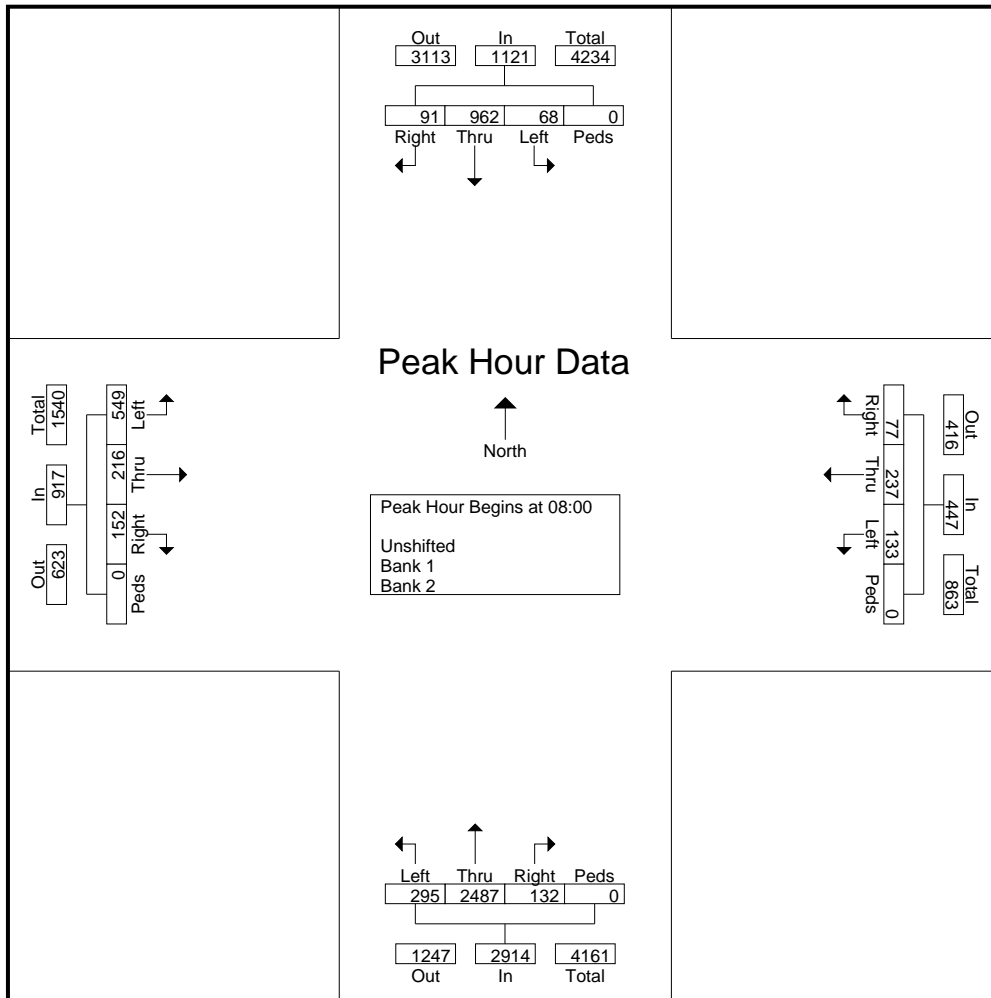
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SW 152 St & US 1

12 Hours TMC

File Name : SWB06C~1  
 Site Code : 0000028  
 Start Date : 6/28/2007  
 Page No : 4

Start Time	From North					From East					From South					From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 06:30 to 09:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 08:00																					
08:00	18	190	16	0	224	16	57	27	0	100	24	<b>630</b>					<b>72</b>	<b>178</b>		<b>284</b>	1325
08:15	19	233	15	0	267	16	53	27	0	96	26	606	78	0	710	31	48	149	0	228	1301
08:30	<b>27</b>																				
<b>08:45</b>	<b>27</b>	<b>295</b>	<b>27</b>	<b>0</b>	<b>349</b>	<b>26</b>	<b>65</b>	<b>41</b>	<b>0</b>	<b>132</b>	<b>51</b>	<b>623</b>	<b>81</b>	<b>0</b>	<b>755</b>	<b>53</b>	<b>56</b>	<b>119</b>	<b>0</b>	<b>228</b>	<b>1464</b>
Total Volume	91	962	68	0	1121	77	237	133	0	447	132	2487	295	0	2914	152	216	549	0	917	5399
% App. Total																					
PHF	.843	.815	.630	.000	.803	.740	.912	.811	.000	.847	.647	.987	.910	.000	.965	.717	.750	.771	.000	.807	.922



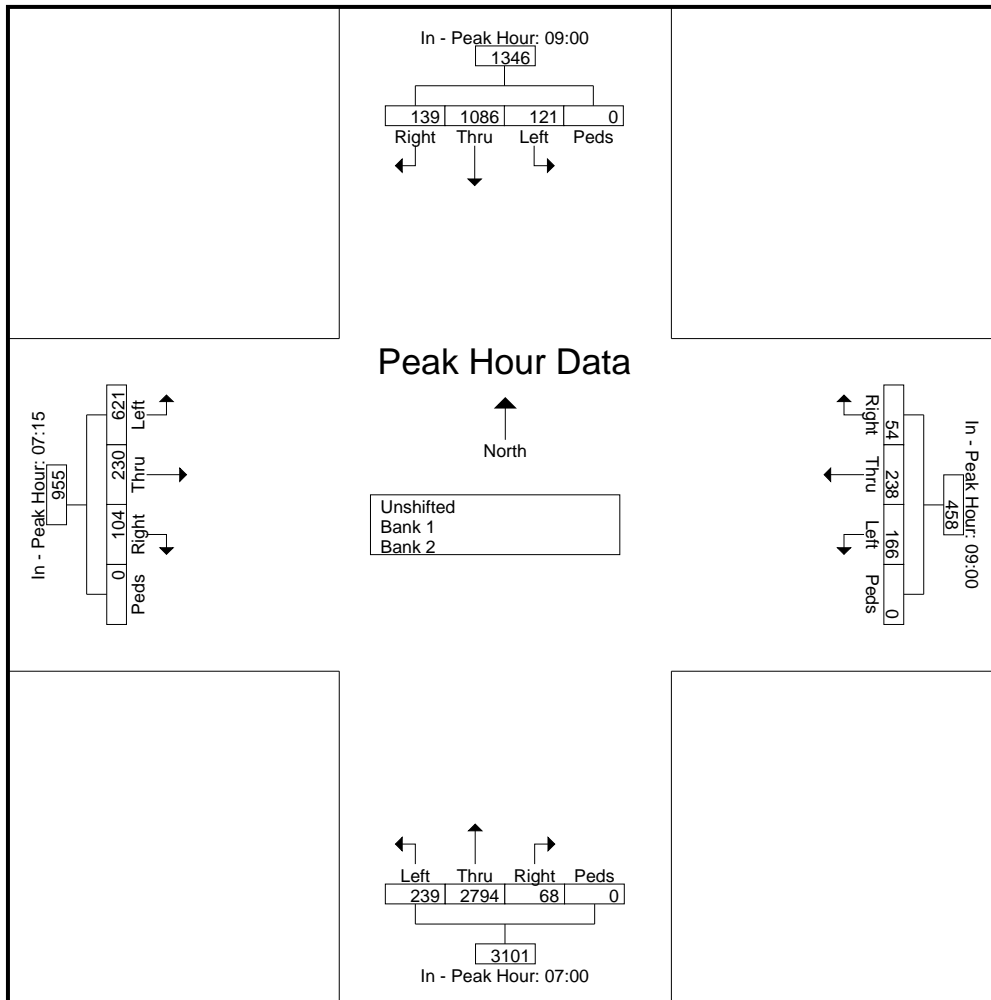
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SW 152 St & US 1

12 Hours TMC

File Name : SWB06C~1  
Site Code : 0000028  
Start Date : 6/28/2007  
Page No : 5

Start Time	From North					From East					From South					From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 06:30 to 09:45 - Peak 1 of 1																					
Peak Hour for Each Approach Begins at:																					
	09:00					09:00					07:00					07:15					
+0 mins.	26	251	32	0	309	15	37	47			17	661	61	0	739	26	44	131	0	201	
<b>+15 mins.</b>	<b>29</b>	<b>249</b>	<b>22</b>	<b>0</b>	<b>300</b>	<b>21</b>	39	36	0	96	<b>22</b>	<b>736</b>									
+30 mins.	39	279	28	0	346	7	46	38	0	91	22	727	77	0	826	34	72	178	0	284	
<b>+45 mins.</b>	<b>45</b>	<b>307</b>	<b>39</b>	<b>0</b>	<b>391</b>	<b>11</b>	<b>116</b>	<b>45</b>	<b>0</b>	<b>172</b>	<b>22</b>	<b>727</b>	<b>77</b>	<b>0</b>	<b>826</b>	<b>34</b>	<b>72</b>	<b>178</b>	<b>0</b>	<b>284</b>	
Total Volume	139	1086	121	0	1346	54	238	166	0	458	68	2794	239	0	3101	104	230	621	0	955	
% App. Total																					
PHF	.772	.884	.776	.000	.861	.643	.513	.883	.000	.666	.773	.949	.776	.000	.939	.765	.799	.872	.000	.841	





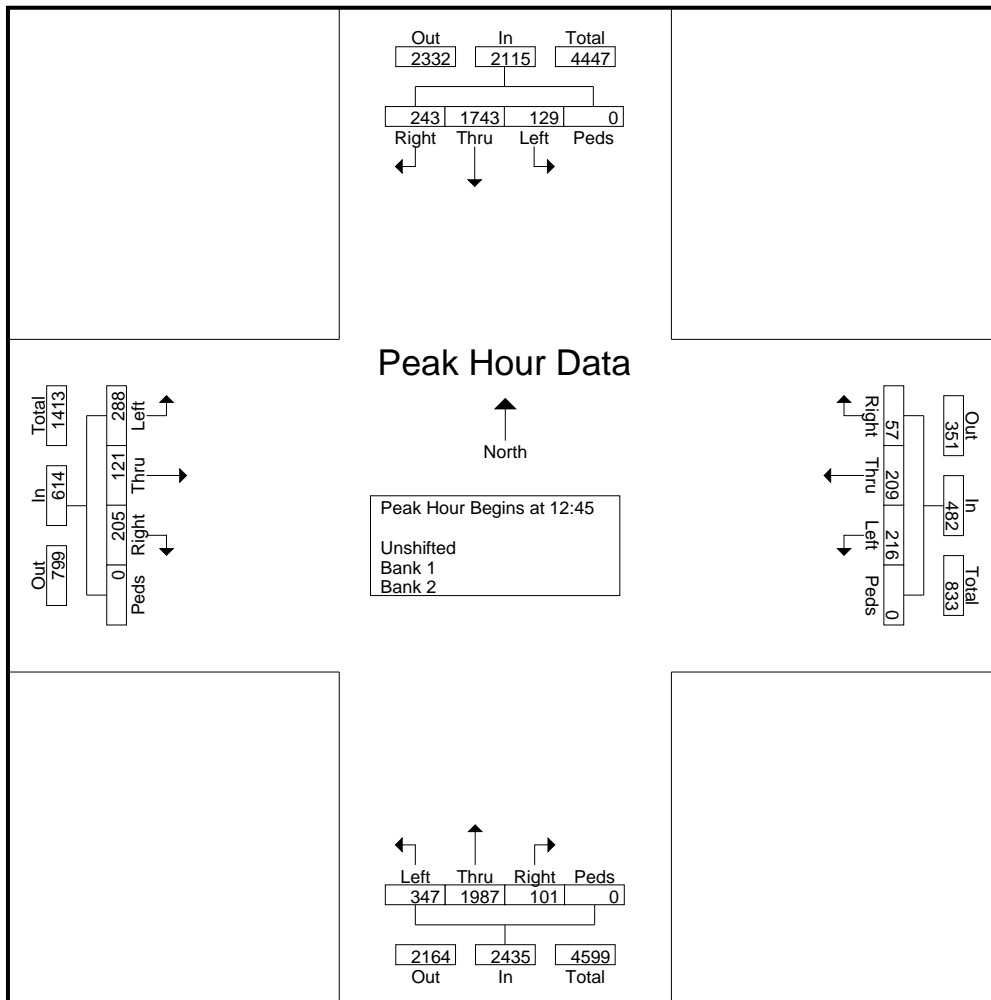
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 Engineering Consultants, Inc  
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 Miami, Florida 33175  
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SW 152 St & US 1

12 Hours TMC

File Name : SWB06C~1  
 Site Code : 0000028  
 Start Date : 6/28/2007  
 Page No : 6

Start Time	From North					From East					From South					From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 10:00 to 13:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 12:45																					
12:45	62	432	36	0	530	8	40	44	0	92	25	453	94	0	572	64					
13:00	60	434	21	0	515	13	76	67	0	156	30	517	82	0	629	48	30	74	0	152	1452
13:15	45	414	37	0	496	19	40	56	0	115	19	478	97	0	594	54	38	80	0	172	1377
13:30	76	463	35	0	574	17	53	49	0	119	27	539		0	640	39	24	68	0	131	1464
Total Volume	243	1743	129	0	2115	57	209	216	0	482	101	1987	347	0	2435	205	121	288	0	614	5646
% App. Total																					
PHF	.799	.941	.872	.000	.921	.750	.688	.806	.000	.772	.842	.922	.894	.000	.951	.801	.796	.900	.000	.892	.964



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SW 152 St & US 1

12 Hours TMC

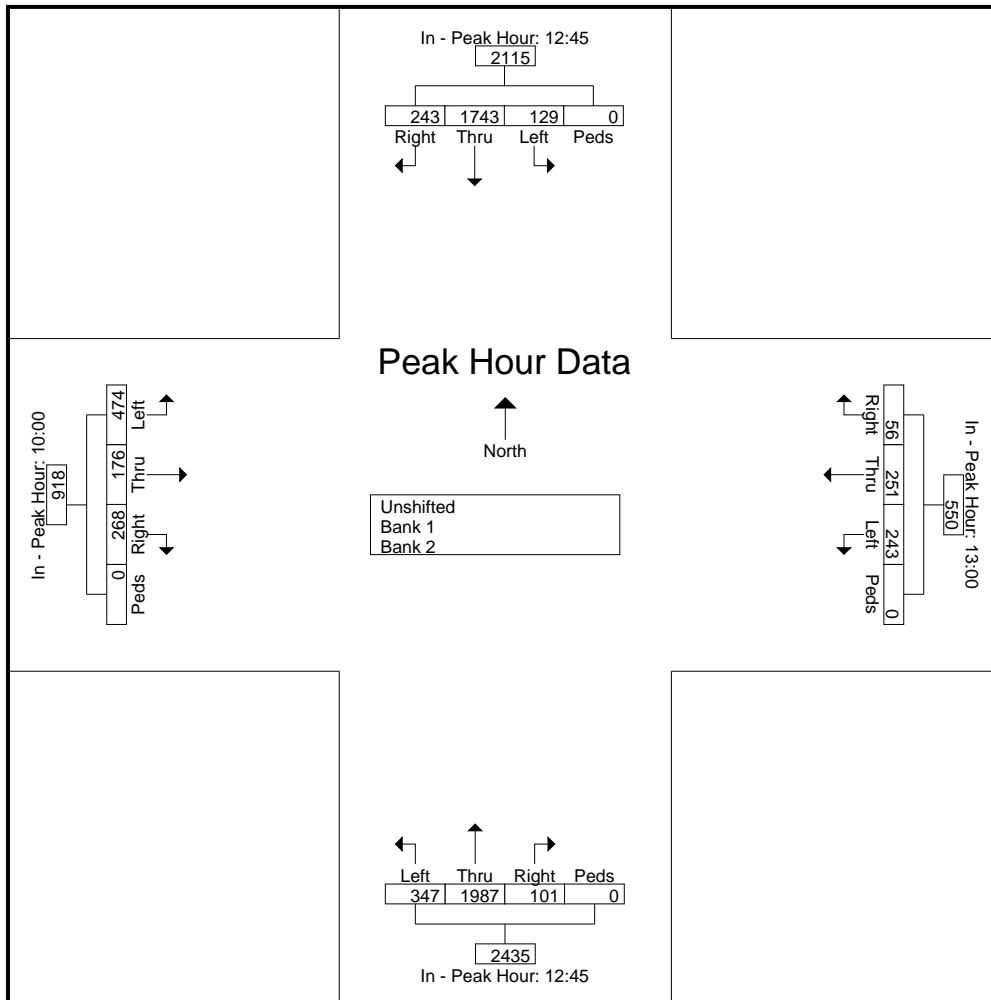
File Name : SWB06C~1  
 Site Code : 0000028  
 Start Date : 6/28/2007  
 Page No : 7

Start Time	From North					From East					From South					From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	

Peak Hour Analysis From 10:00 to 13:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	12:45					13:00					12:45					10:00				
+0 mins.	62	432	36	0	530	13	76	67	0	156	25	453	94	0	572	77	57	102	0	236
+15 mins.	60	434	21	0	515	19	40	56	0	115	30									
<b>+30 mins.</b>	<b>45</b>	<b>414</b>	<b>37</b>	<b>0</b>	<b>496</b>	<b>17</b>	<b>53</b>	<b>49</b>	<b>0</b>	<b>119</b>	<b>19</b>	<b>478</b>	<b>97</b>	<b>0</b>	<b>594</b>	56	33	132	0	221
<b>+45 mins.</b>	<b>76</b>	<b>463</b>	<b>35</b>	<b>0</b>	<b>574</b>	<b>7</b>	<b>82</b>	<b>71</b>	<b>0</b>	<b>160</b>	<b>27</b>	<b>539</b>	<b>74</b>	<b>0</b>	<b>640</b>	70	43	120	0	233
Total Volume	243	1743	129	0	2115	56	251	243	0	550	101	1987	347	0	2435	268	176	474	0	918
% App. Total																				
PHF	.799	.941	.872	.000	.921	.737	.765	.856	.000	.859	.842	.922	.894	.000	.951	.870	.772	.898	.000	.972





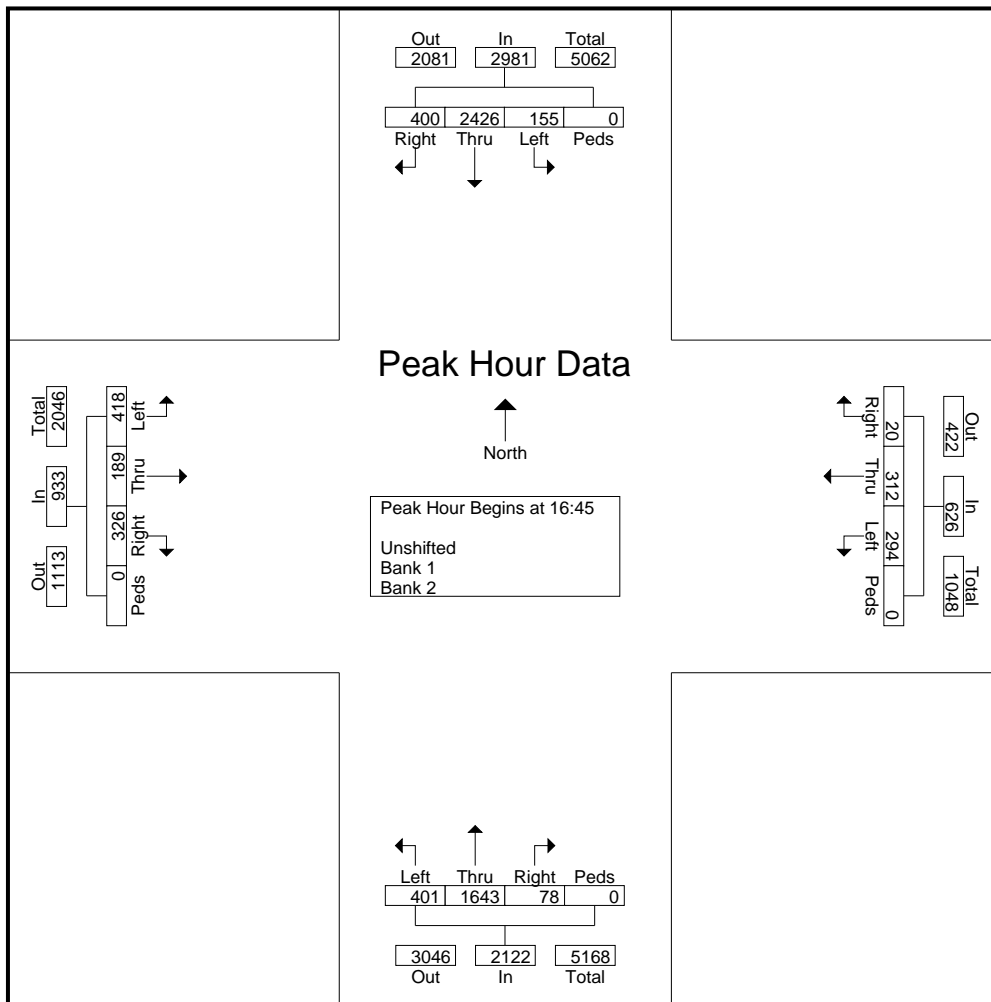
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SW 152 St & US 1

12 Hours TMC

File Name : SWB06C~1  
 Site Code : 0000028  
 Start Date : 6/28/2007  
 Page No : 8

Start Time	From North					From East					From South					From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 14:00 to 18:15 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 16:45																					
16:45	96	603	41	0	740	5	68	59	0	132	18	<b>459</b>			<b>576</b>	78	<b>56</b>	102	0	236	1684
17:00	91	<b>620</b>	<b>45</b>		<b>756</b>	<b>6</b>	77	60	0	143	<b>23</b>		<b>125</b>	0	558	61	37	76	0	174	1631
17:15	94	620	32	0	746	5	<b>97</b>	<b>108</b>		<b>210</b>	16	389	86	0	491	88	41	119	0	248	<b>1695</b>
17:30	<b>119</b>															<b>99</b>		<b>121</b>		<b>275</b>	1652
Total Volume	400	2426	155	0	2981	20	312	294	0	626	78	1643	401	0	2122	326	189	418	0	933	6662
% App. Total																					
PHF	.840	.978	.861	.000	.986	.833	.804	.681	.000	.745	.848	.895	.802	.000	.921	.823	.844	.864	.000	.848	.983



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SW 152 St & US 1

12 Hours TMC

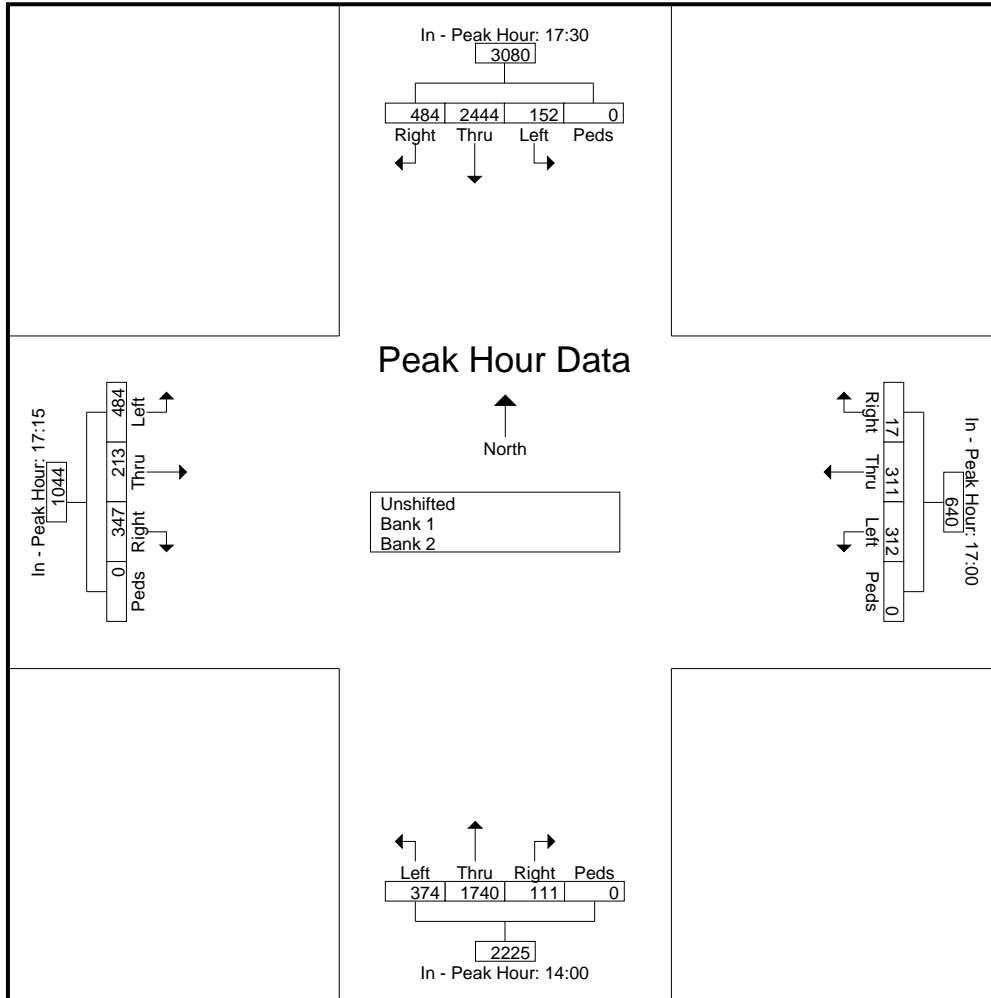
File Name : SWB06C~1  
 Site Code : 0000028  
 Start Date : 6/28/2007  
 Page No : 9

Start Time	From North					From East					From South					From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	

Peak Hour Analysis From 14:00 to 18:15 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	17:30					17:00					14:00					17:15				
+0 mins.	119	583	37	0	739	6	77	60	0	143	34		115	0	584	88	41	119	0	248
+15 mins.	103	570	44			97	108		210	27	434	86	0	547	99					275
+30 mins.	115	640	37	0	792	4	70	67	0	141	23	407	93	0	523	79	56	117	0	252
+45 mins.	147	651	34	0	832	2	67	77	0	146	27	464				61	127			
Total Volume	484	2444	152	0	3080	17	311	312	0	640	111	1740	374	0	2225	347	213	484	0	1044
% App. Total																				
PHF	.823	.939	.864	.000	.925	.708	.802	.722	.000	.762	.816	.938	.813	.000	.952	.876	.873	.953	.000	.949





## **Appendix D: 72-hour Bi-directional Counts**

Start Time	16-Jul-07		Tue		Wed		Thu		Fri		Sat		Sun		Average Day	
	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00	*	*	56	265	52	250	56	244	*	*	*	*	*	*	55	253
12:15	*	*	34	213	42	260	22	258	*	*	*	*	*	*	33	244
12:30	*	*	28	224	34	220	38	247	*	*	*	*	*	*	33	230
12:45	*	*	24	213	28	223	28	223	*	*	*	*	*	*	27	220
01:00	*	*	27	210	31	214	29	220	*	*	*	*	*	*	29	215
01:15	*	*	20	246	22	210	15	240	*	*	*	*	*	*	19	232
01:30	*	*	20	253	20	250	15	235	*	*	*	*	*	*	18	246
01:45	*	*	11	210	18	214	27	188	*	*	*	*	*	*	19	204
02:00	*	*	9	172	16	205	10	210	*	*	*	*	*	*	12	196
02:15	*	*	14	190	12	182	13	193	*	*	*	*	*	*	13	188
02:30	*	*	8	188	10	210	10	214	*	*	*	*	*	*	9	204
02:45	*	*	8	206	14	216	9	190	*	*	*	*	*	*	10	204
03:00	*	*	14	196	10	170	11	188	*	*	*	*	*	*	12	185
03:15	*	*	10	192	18	200	9	182	*	*	*	*	*	*	12	191
03:30	*	*	14	202	12	192	16	205	*	*	*	*	*	*	14	200
03:45	*	*	12	193	16	182	17	186	*	*	*	*	*	*	15	187
04:00	*	*	12	194	14	167	15	191	*	*	*	*	*	*	14	184
04:15	*	*	25	182	19	184	23	164	*	*	*	*	*	*	22	177
04:30	*	*	21	198	28	180	34	182	*	*	*	*	*	*	28	187
04:45	*	*	46	192	52	189	41	178	*	*	*	*	*	*	46	186
05:00	*	*	61	190	58	204	60	182	*	*	*	*	*	*	60	192
05:15	*	*	97	200	93	174	72	204	*	*	*	*	*	*	87	193
05:30	*	*	131	210	126	218	137	194	*	*	*	*	*	*	131	207
05:45	*	*	187	197	191	213	180	206	*	*	*	*	*	*	186	205
06:00	*	*	230	203	219	186	180	219	*	*	*	*	*	*	210	203
06:15	*	*	248	204	237	198	224	233	*	*	*	*	*	*	236	212
06:30	*	*	264	216	266	232	297	210	*	*	*	*	*	*	276	219
06:45	*	*	310	220	268	202	278	204	*	*	*	*	*	*	285	209
07:00	*	*	310	191	290	174	320	196	*	*	*	*	*	*	307	187
07:15	*	*	346	198	338	206	364	216	*	*	*	*	*	*	349	207
07:30	*	*	419	202	392	197	375	212	*	*	*	*	*	*	395	204
07:45	*	*	380	183	374	181	391	214	*	*	*	*	*	*	382	193
08:00	*	*	396	180	358	188	328	195	*	*	*	*	*	*	361	188
08:15	*	*	358	183	362	206	392	158	*	*	*	*	*	*	371	182
08:30	*	*	373	186	366	159	326	186	*	*	*	*	*	*	355	177
08:45	*	*	349	164	378	192	326	172	*	*	*	*	*	*	351	176
09:00	*	*	308	170	318	178	296	157	*	*	*	*	*	*	307	168
09:15	*	*	296	148	314	140	276	162	*	*	*	*	*	*	295	150
09:30	*	*	279	136	270	158	284	154	*	*	*	*	*	*	278	149
09:45	*	*	293	102	267	152	272	154	*	*	*	*	*	*	277	136
10:00	*	*	246	132	257	126	246	110	*	*	*	*	*	*	250	123
10:15	*	*	274	124	242	121	261	162	*	*	*	*	*	*	259	136
10:30	*	*	233	84	226	116	232	142	*	*	*	*	*	*	230	114
10:45	*	*	208	98	260	100	196	101	*	*	*	*	*	*	221	100
11:00	*	*	243	84	200	92	216	99	*	*	*	*	*	*	220	92
11:15	*	*	213	63	212	86	222	75	*	*	*	*	*	*	216	75
11:30	*	*	217	67	186	68	225	74	*	*	*	*	*	*	209	70
11:45	*	*	240	54	232	54	198	48	*	*	*	*	*	*	223	52
Total Day	0	0	7922	8528	7768	8639	7612	8777	0	0	0	0	0	0	7767	8652
Total % Splits	0	0	16450	16407	16389	16389	0	0	0	0	0	0	0	16419		
Peak Vol.			07:30	00:45	07:30	12:00	07:30	12:00							07:30	12:00
P.H.F.			0.927	0.870	0.948	0.916	0.948	0.942							0.955	0.936

ADT Not Calculated



Start Time	16-Jul-07		Tue		Wed		Thu		Fri		Sat		Sun		Average Day	
	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00	*	*	40	206	56	217	55	206	*	*	*	*	*	*	50	210
12:15	*	*	42	225	50	221	55	229	*	*	*	*	*	*	49	225
12:30	*	*	43	204	26	186	41	214	*	*	*	*	*	*	37	201
12:45	*	*	25	220	42	196	27	205	*	*	*	*	*	*	31	207
01:00	*	*	24	198	22	214	31	242	*	*	*	*	*	*	26	218
01:15	*	*	28	222	24	230	14	242	*	*	*	*	*	*	22	231
01:30	*	*	23	223	27	216	22	232	*	*	*	*	*	*	24	224
01:45	*	*	16	236	24	218	13	261	*	*	*	*	*	*	18	238
02:00	*	*	12	239	21	226	20	240	*	*	*	*	*	*	18	235
02:15	*	*	12	242	14	194	13	239	*	*	*	*	*	*	13	225
02:30	*	*	7	251	14	234	14	234	*	*	*	*	*	*	12	240
02:45	*	*	12	278	14	222	16	278	*	*	*	*	*	*	14	259
03:00	*	*	16	268	4	268	17	311	*	*	*	*	*	*	12	282
03:15	*	*	12	304	15	306	7	300	*	*	*	*	*	*	11	303
03:30	*	*	6	330	10	356	14	334	*	*	*	*	*	*	10	340
03:45	*	*	13	314	14	304	12	316	*	*	*	*	*	*	13	311
04:00	*	*	12	350	11	354	17	310	*	*	*	*	*	*	13	338
04:15	*	*	12	<b>368</b>	11	334	10	366	*	*	*	*	*	*	11	356
04:30	*	*	16	<b>368</b>	9	382	10	<b>386</b>	*	*	*	*	*	*	12	<b>379</b>
04:45	*	*	11	<b>362</b>	17	<b>356</b>	23	<b>348</b>	*	*	*	*	*	*	17	<b>355</b>
05:00	*	*	19	<b>376</b>	11	<b>406</b>	18	<b>382</b>	*	*	*	*	*	*	16	<b>388</b>
05:15	*	*	30	352	28	<b>375</b>	32	<b>393</b>	*	*	*	*	*	*	30	<b>373</b>
05:30	*	*	30	376	34	<b>394</b>	28	364	*	*	*	*	*	*	31	378
05:45	*	*	26	344	36	320	34	362	*	*	*	*	*	*	32	342
06:00	*	*	58	356	37	346	54	356	*	*	*	*	*	*	50	353
06:15	*	*	57	382	62	362	74	388	*	*	*	*	*	*	64	377
06:30	*	*	62	361	55	357	70	344	*	*	*	*	*	*	62	354
06:45	*	*	68	344	75	334	104	356	*	*	*	*	*	*	82	345
07:00	*	*	95	288	93	330	104	326	*	*	*	*	*	*	97	315
07:15	*	*	104	288	102	319	82	300	*	*	*	*	*	*	96	302
07:30	*	*	110	272	125	310	111	288	*	*	*	*	*	*	115	290
07:45	*	*	116	296	109	302	106	276	*	*	*	*	*	*	110	291
08:00	*	*	114	286	103	306	115	292	*	*	*	*	*	*	111	295
08:15	*	*	123	270	148	280	132	272	*	*	*	*	*	*	134	274
08:30	*	*	144	262	138	292	127	268	*	*	*	*	*	*	136	274
08:45	*	*	132	265	143	258	135	198	*	*	*	*	*	*	137	240
09:00	*	*	132	244	145	232	142	234	*	*	*	*	*	*	140	237
09:15	*	*	151	232	145	199	158	212	*	*	*	*	*	*	151	214
09:30	*	*	141	204	172	231	149	176	*	*	*	*	*	*	154	204
09:45	*	*	141	174	126	192	125	172	*	*	*	*	*	*	131	179
10:00	*	*	172	159	132	184	146	151	*	*	*	*	*	*	150	165
10:15	*	*	174	146	166	146	179	148	*	*	*	*	*	*	173	147
10:30	*	*	160	107	142	138	161	126	*	*	*	*	*	*	154	124
10:45	*	*	186	100	177	133	177	100	*	*	*	*	*	*	180	111
11:00	*	*	<b>210</b>	90	<b>180</b>	111	<b>183</b>	70	*	*	*	*	*	*	<b>191</b>	90
11:15	*	*	<b>200</b>	79	<b>216</b>	76	<b>208</b>	88	*	*	*	*	*	*	<b>208</b>	81
11:30	*	*	<b>202</b>	76	<b>203</b>	70	<b>210</b>	76	*	*	*	*	*	*	<b>205</b>	74
11:45	*	*	<b>205</b>	70	<b>215</b>	58	<b>217</b>	58	*	*	*	*	*	*	<b>212</b>	62
Total	0	0	3744	12207	3743	12295	3812	12269	0	0	0	0	0	0	3765	12256
Day Total	0		15951		16038		16081		0		0		0		16021	
% Splits	0.0%	0.0%	23.5%	76.5%	23.3%	76.7%	23.7%	76.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	23.5%	76.5%
Peak Vol.			11:00	04:15	11:00	04:45	11:00	04:30							11:00	04:30
P.H.F.			0.973	0.965	0.942	0.943	0.942	0.960							0.962	0.963

ADT Not Calculated

Start Time	09-Jul-07		Tue		Wed		Thu		Fri		Sat		Sun		Average Day	
	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00	*	*	58	459	54	501	44	392	*	*	*	*	*	*	52	451
12:15	*	*	54	476	58	470	72	470	*	*	*	*	*	*	61	472
12:30	*	*	59	450	50	484	33	440	*	*	*	*	*	*	47	458
12:45	*	*	24	499	36	492	31	504	*	*	*	*	*	*	30	498
01:00	*	*	31	434	39	425	20	460	*	*	*	*	*	*	30	440
01:15	*	*	30	424	38	452	32	432	*	*	*	*	*	*	33	436
01:30	*	*	26	410	38	415	24	420	*	*	*	*	*	*	29	415
01:45	*	*	24	450	25	404	21	403	*	*	*	*	*	*	23	419
02:00	*	*	36	397	30	407	25	395	*	*	*	*	*	*	30	400
02:15	*	*	24	435	28	404	25	422	*	*	*	*	*	*	26	420
02:30	*	*	25	438	28	435	24	389	*	*	*	*	*	*	26	421
02:45	*	*	47	462	34	430	24	425	*	*	*	*	*	*	35	439
03:00	*	*	31	438	34	460	42	404	*	*	*	*	*	*	36	434
03:15	*	*	35	448	45	437	44	434	*	*	*	*	*	*	41	440
03:30	*	*	57	440	59	445	55	450	*	*	*	*	*	*	57	445
03:45	*	*	82	438	76	445	80	458	*	*	*	*	*	*	79	447
04:00	*	*	102	412	84	402	92	418	*	*	*	*	*	*	93	411
04:15	*	*	120	508	115	519	122	505	*	*	*	*	*	*	119	511
04:30	*	*	158	502	163	452	171	473	*	*	*	*	*	*	164	476
04:45	*	*	268	369	297	440	292	388	*	*	*	*	*	*	286	399
05:00	*	*	388	436	369	410	317	362	*	*	*	*	*	*	358	403
05:15	*	*	428	408	457	426	475	406	*	*	*	*	*	*	453	413
05:30	*	*	540	440	502	398	470	374	*	*	*	*	*	*	504	404
05:45	*	*	527	402	532	394	530	383	*	*	*	*	*	*	530	393
06:00	*	*	601	374	560	386	534	386	*	*	*	*	*	*	565	382
06:15	*	*	600	366	615	347	628	349	*	*	*	*	*	*	614	354
06:30	*	*	674	300	681	322	639	308	*	*	*	*	*	*	665	310
06:45	*	*	720	312	711	324	708	328	*	*	*	*	*	*	713	321
07:00	*	*	712	293	734	292	714	311	*	*	*	*	*	*	720	299
07:15	*	*	713	290	708	291	692	274	*	*	*	*	*	*	704	285
07:30	*	*	708	328	737	280	674	270	*	*	*	*	*	*	706	293
07:45	*	*	693	296	706	266	733	294	*	*	*	*	*	*	711	285
08:00	*	*	709	312	670	250	698	268	*	*	*	*	*	*	692	277
08:15	*	*	564	262	554	268	546	257	*	*	*	*	*	*	555	262
08:30	*	*	573	224	596	256	560	216	*	*	*	*	*	*	576	232
08:45	*	*	508	238	522	206	574	232	*	*	*	*	*	*	535	225
09:00	*	*	610	236	576	216	554	201	*	*	*	*	*	*	580	218
09:15	*	*	518	202	536	218	470	252	*	*	*	*	*	*	508	224
09:30	*	*	524	220	496	188	518	217	*	*	*	*	*	*	513	208
09:45	*	*	464	184	454	172	448	248	*	*	*	*	*	*	455	201
10:00	*	*	448	165	461	154	453	213	*	*	*	*	*	*	454	177
10:15	*	*	458	142	396	159	440	145	*	*	*	*	*	*	431	149
10:30	*	*	411	154	412	128	420	148	*	*	*	*	*	*	414	143
10:45	*	*	452	121	432	120	464	103	*	*	*	*	*	*	449	115
11:00	*	*	460	124	448	100	426	110	*	*	*	*	*	*	445	111
11:15	*	*	448	98	412	102	446	120	*	*	*	*	*	*	435	107
11:30	*	*	442	62	453	70	453	68	*	*	*	*	*	*	449	67
11:45	*	*	450	89	440	56	438	60	*	*	*	*	*	*	443	68
Total	0	0	16634	15967	16501	15718	16295	15585	0	0	0	0	0	0	16474	15758
Day Total	0		32601		32219		31880		0		0		0		32232	
% Splits	0.0%	0.0%	51.0%	49.0%	51.2%	48.8%	51.1%	48.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	51.1%	48.9%
Peak Vol.			06:45	12:00	06:45	12:00	07:00	00:15							06:45	12:00
P.H.F.			0.991	0.927	0.980	0.938	0.959	0.928							0.987	0.919

ADT Not Calculated



Start Time	09-Jul-07		Tue		Wed		Thu		Fri		Sat		Sun		Average Day	
	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00	*	*	160	432	170	418	165	367	*	*	*	*	*	*	165	406
12:15	*	*	142	469	170	424	176	408	*	*	*	*	*	*	163	434
12:30	*	*	97	460	166	438	127	440	*	*	*	*	*	*	130	446
12:45	*	*	94	444	112	435	89	440	*	*	*	*	*	*	98	440
01:00	*	*	92	434	108	428	96	426	*	*	*	*	*	*	99	429
01:15	*	*	80	476	92	418	88	444	*	*	*	*	*	*	87	446
01:30	*	*	55	444	71	456	72	482	*	*	*	*	*	*	66	461
01:45	*	*	53	477	60	520	52	493	*	*	*	*	*	*	55	497
02:00	*	*	47	474	56	482	50	453	*	*	*	*	*	*	51	470
02:15	*	*	29	497	46	474	41	442	*	*	*	*	*	*	39	471
02:30	*	*	37	490	36	468	36	451	*	*	*	*	*	*	36	470
02:45	*	*	31	501	61	511	34	450	*	*	*	*	*	*	42	487
03:00	*	*	24	482	43	470	28	470	*	*	*	*	*	*	32	474
03:15	*	*	33	537	44	536	29	532	*	*	*	*	*	*	35	535
03:30	*	*	20	571	30	545	35	522	*	*	*	*	*	*	28	546
03:45	*	*	21	633	26	584	37	627	*	*	*	*	*	*	28	615
04:00	*	*	15	622	34	650	30	600	*	*	*	*	*	*	26	624
04:15	*	*	29	644	25	607	24	570	*	*	*	*	*	*	26	607
04:30	*	*	20	648	24	584	28	564	*	*	*	*	*	*	24	599
04:45	*	*	37	670	38	619	33	586	*	*	*	*	*	*	36	625
05:00	*	*	38	667	42	634	38	630	*	*	*	*	*	*	39	644
05:15	*	*	50	666	45	655	42	630	*	*	*	*	*	*	46	650
05:30	*	*	46	<b>716</b>	53	<b>751</b>	60	634	*	*	*	*	*	*	53	700
05:45	*	*	98	<b>760</b>	94	<b>785</b>	96	660	*	*	*	*	*	*	96	<b>735</b>
06:00	*	*	115	<b>771</b>	100	<b>749</b>	118	690	*	*	*	*	*	*	111	<b>737</b>
06:15	*	*	132	<b>756</b>	115	<b>746</b>	114	<b>707</b>	*	*	*	*	*	*	120	<b>736</b>
06:30	*	*	160	716	144	745	140	<b>723</b>	*	*	*	*	*	*	148	<b>728</b>
06:45	*	*	248	670	220	705	246	<b>724</b>	*	*	*	*	*	*	238	700
07:00	*	*	223	666	240	660	234	<b>700</b>	*	*	*	*	*	*	232	675
07:15	*	*	270	606	254	656	238	685	*	*	*	*	*	*	254	649
07:30	*	*	252	634	269	598	228	647	*	*	*	*	*	*	250	626
07:45	*	*	360	572	321	588	322	657	*	*	*	*	*	*	334	606
08:00	*	*	345	537	342	551	342	585	*	*	*	*	*	*	343	558
08:15	*	*	333	503	359	505	339	522	*	*	*	*	*	*	344	510
08:30	*	*	326	484	334	460	371	466	*	*	*	*	*	*	<b>344</b>	470
08:45	*	*	356	490	367	448	336	449	*	*	*	*	*	*	<b>353</b>	462
09:00	*	*	412	470	<b>393</b>	464	377	430	*	*	*	*	*	*	<b>394</b>	455
09:15	*	*	331	436	<b>380</b>	447	346	450	*	*	*	*	*	*	<b>352</b>	444
09:30	*	*	332	454	<b>333</b>	418	312	433	*	*	*	*	*	*	326	435
09:45	*	*	356	410	<b>370</b>	391	343	386	*	*	*	*	*	*	356	396
10:00	*	*	336	365	360	345	342	376	*	*	*	*	*	*	346	362
10:15	*	*	343	365	349	361	328	370	*	*	*	*	*	*	340	365
10:30	*	*	322	348	370	320	351	347	*	*	*	*	*	*	348	338
10:45	*	*	342	272	358	246	338	292	*	*	*	*	*	*	346	270
11:00	*	*	<b>355</b>	255	352	250	<b>340</b>	252	*	*	*	*	*	*	349	252
11:15	*	*	<b>326</b>	232	290	238	<b>384</b>	218	*	*	*	*	*	*	333	229
11:30	*	*	<b>378</b>	240	352	222	<b>353</b>	220	*	*	*	*	*	*	361	227
11:45	*	*	<b>401</b>	226	356	216	<b>368</b>	171	*	*	*	*	*	*	375	204
Total Day	0	0	8702	24692	8974	24221	8716	23821	0	0	0	0	0	0	8797	24245
Total % Splits	0	0	33394		33195		32537		0	0	0	0	0	0	33042	
Peak Vol. P.H.F.			11:00 1460 0.886	05:30 3003 0.974	09:00 1476 0.939	05:30 3031 0.965	11:00 1445 0.941	06:15 2854 0.985							08:30 1443 0.916	05:45 2936 0.996

ADT Not Calculated

Start Time	09-Jul-07		Tue		Wed		Thu		Fri		Sat		Sun		Average Day	
	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00	*	*	65	240	74	239	96	243	*	*	*	*	*	*	78	241
12:15	*	*	48	282	64	273	77	268	*	*	*	*	*	*	63	274
12:30	*	*	36	260	60	249	56	302	*	*	*	*	*	*	51	270
12:45	*	*	38	262	53	278	42	278	*	*	*	*	*	*	44	273
01:00	*	*	41	266	42	274	48	231	*	*	*	*	*	*	44	257
01:15	*	*	40	309	44	333	43	306	*	*	*	*	*	*	42	316
01:30	*	*	24	328	39	344	40	346	*	*	*	*	*	*	34	339
01:45	*	*	24	372	36	345	20	348	*	*	*	*	*	*	27	355
02:00	*	*	13	352	21	310	18	300	*	*	*	*	*	*	17	321
02:15	*	*	16	298	24	307	22	317	*	*	*	*	*	*	21	307
02:30	*	*	18	284	13	292	18	290	*	*	*	*	*	*	16	289
02:45	*	*	17	264	47	281	24	286	*	*	*	*	*	*	29	277
03:00	*	*	10	292	28	325	12	318	*	*	*	*	*	*	17	312
03:15	*	*	8	311	18	308	12	346	*	*	*	*	*	*	13	322
03:30	*	*	14	318	14	373	14	360	*	*	*	*	*	*	14	350
03:45	*	*	10	334	16	337	20	354	*	*	*	*	*	*	15	342
04:00	*	*	9	342	15	343	24	350	*	*	*	*	*	*	16	345
04:15	*	*	12	354	14	352	12	322	*	*	*	*	*	*	13	343
04:30	*	*	18	344	15	354	20	329	*	*	*	*	*	*	18	342
04:45	*	*	20	342	27	404	15	354	*	*	*	*	*	*	21	367
05:00	*	*	19	396	8	356	18	394	*	*	*	*	*	*	15	382
05:15	*	*	44	322	24	386	31	416	*	*	*	*	*	*	33	375
05:30	*	*	37	<b>544</b>	33	<b>548</b>	38	<b>520</b>	*	*	*	*	*	*	36	<b>537</b>
05:45	*	*	45	<b>473</b>	46	<b>451</b>	46	<b>460</b>	*	*	*	*	*	*	46	<b>461</b>
06:00	*	*	60	<b>372</b>	58	<b>391</b>	49	<b>479</b>	*	*	*	*	*	*	56	<b>414</b>
06:15	*	*	76	<b>450</b>	72	<b>410</b>	74	<b>422</b>	*	*	*	*	*	*	74	<b>427</b>
06:30	*	*	88	432	103	376	100	424	*	*	*	*	*	*	97	411
06:45	*	*	128	343	98	362	100	359	*	*	*	*	*	*	109	355
07:00	*	*	118	354	100	300	104	330	*	*	*	*	*	*	107	328
07:15	*	*	102	328	116	331	116	306	*	*	*	*	*	*	111	322
07:30	*	*	155	312	165	304	161	304	*	*	*	*	*	*	160	307
07:45	*	*	188	292	182	268	206	293	*	*	*	*	*	*	192	284
08:00	*	*	188	254	170	271	198	278	*	*	*	*	*	*	185	268
08:15	*	*	216	258	208	256	210	246	*	*	*	*	*	*	211	253
08:30	*	*	224	234	192	269	183	204	*	*	*	*	*	*	200	236
08:45	*	*	268	240	216	213	254	202	*	*	*	*	*	*	246	218
09:00	*	*	228	226	208	214	200	246	*	*	*	*	*	*	212	229
09:15	*	*	192	294	204	244	199	244	*	*	*	*	*	*	198	261
09:30	*	*	207	210	219	212	232	226	*	*	*	*	*	*	219	216
09:45	*	*	234	212	207	184	<b>211</b>	190	*	*	*	*	*	*	217	195
10:00	*	*	<b>233</b>	174	219	170	<b>229</b>	194	*	*	*	*	*	*	<b>227</b>	179
10:15	*	*	<b>238</b>	157	<b>260</b>	164	<b>238</b>	174	*	*	*	*	*	*	<b>245</b>	165
10:30	*	*	<b>252</b>	159	<b>268</b>	158	<b>253</b>	176	*	*	*	*	*	*	<b>258</b>	164
10:45	*	*	<b>249</b>	125	<b>228</b>	132	186	136	*	*	*	*	*	*	<b>221</b>	131
11:00	*	*	204	95	<b>239</b>	126	210	96	*	*	*	*	*	*	218	106
11:15	*	*	240	129	202	112	224	119	*	*	*	*	*	*	222	120
11:30	*	*	242	128	218	125	223	114	*	*	*	*	*	*	228	122
11:45	*	*	256	99	257	110	241	97	*	*	*	*	*	*	251	102
Total Day	0	0	5212	13766	5184	13764	5167	13897	0	0	0	0	0	0	5187	13810
Total % Splits	0.0%	0.0%	27.5%	72.5%	27.4%	72.6%	27.1%	72.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	27.3%	72.7%
Peak Vol. P.H.F.			10:00 972 0.907	05:30 1839 0.845	10:15 995 0.928	05:30 1800 0.821	09:45 931 0.916	05:30 1881 0.904							10:00 951 0.922	05:30 1839 0.856

ADT Not Calculated

Start Time	09-Jul-07		Tue		Wed		Thu		Fri		Sat		Sun		Average Day	
	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00	*	*	54	267	58	256	50	260	*	*	*	*	*	*	54	261
12:15	*	*	36	278	44	282	28	266	*	*	*	*	*	*	36	275
12:30	*	*	36	278	34	292	26	276	*	*	*	*	*	*	32	282
12:45	*	*	30	<b>319</b>	32	269	35	283	*	*	*	*	*	*	32	290
01:00	*	*	28	<b>329</b>	32	<b>304</b>	21	<b>331</b>	*	*	*	*	*	*	27	<b>321</b>
01:15	*	*	22	<b>297</b>	24	<b>350</b>	26	<b>320</b>	*	*	*	*	*	*	24	<b>322</b>
01:30	*	*	15	<b>404</b>	16	<b>389</b>	19	<b>410</b>	*	*	*	*	*	*	17	<b>401</b>
01:45	*	*	16	293	22	<b>324</b>	13	<b>311</b>	*	*	*	*	*	*	17	<b>309</b>
02:00	*	*	12	274	14	275	14	264	*	*	*	*	*	*	13	271
02:15	*	*	17	260	12	268	17	244	*	*	*	*	*	*	15	257
02:30	*	*	18	285	24	284	18	276	*	*	*	*	*	*	20	282
02:45	*	*	14	300	23	282	14	306	*	*	*	*	*	*	17	296
03:00	*	*	8	281	12	243	20	261	*	*	*	*	*	*	13	262
03:15	*	*	12	283	13	286	15	277	*	*	*	*	*	*	13	282
03:30	*	*	19	282	22	299	20	294	*	*	*	*	*	*	20	292
03:45	*	*	18	233	15	280	16	250	*	*	*	*	*	*	16	254
04:00	*	*	19	226	20	273	23	258	*	*	*	*	*	*	21	252
04:15	*	*	26	300	25	301	23	280	*	*	*	*	*	*	25	294
04:30	*	*	35	306	29	278	29	303	*	*	*	*	*	*	31	296
04:45	*	*	34	290	37	328	46	325	*	*	*	*	*	*	39	314
05:00	*	*	58	351	39	350	54	340	*	*	*	*	*	*	50	347
05:15	*	*	52	340	68	356	56	342	*	*	*	*	*	*	59	346
05:30	*	*	116	312	110	278	115	278	*	*	*	*	*	*	114	289
05:45	*	*	153	269	145	266	152	228	*	*	*	*	*	*	150	254
06:00	*	*	186	237	194	295	212	231	*	*	*	*	*	*	197	254
06:15	*	*	220	270	216	230	214	218	*	*	*	*	*	*	217	239
06:30	*	*	300	284	310	258	285	262	*	*	*	*	*	*	298	268
06:45	*	*	287	262	292	248	304	250	*	*	*	*	*	*	294	253
07:00	*	*	296	218	322	232	330	230	*	*	*	*	*	*	316	227
07:15	*	*	329	210	285	220	286	206	*	*	*	*	*	*	300	212
07:30	*	*	389	176	322	182	386	178	*	*	*	*	*	*	366	179
07:45	*	*	369	172	387	172	<b>426</b>	178	*	*	*	*	*	*	394	174
08:00	*	*	<b>340</b>	192	<b>354</b>	176	<b>362</b>	176	*	*	*	*	*	*	<b>352</b>	181
08:15	*	*	<b>392</b>	196	<b>389</b>	160	<b>382</b>	182	*	*	*	*	*	*	<b>388</b>	179
08:30	*	*	<b>410</b>	160	<b>361</b>	155	<b>387</b>	162	*	*	*	*	*	*	<b>386</b>	159
08:45	*	*	<b>406</b>	152	<b>393</b>	148	390	152	*	*	*	*	*	*	<b>396</b>	151
09:00	*	*	340	159	335	146	334	169	*	*	*	*	*	*	336	158
09:15	*	*	314	132	362	144	316	146	*	*	*	*	*	*	331	141
09:30	*	*	314	138	314	118	316	136	*	*	*	*	*	*	315	131
09:45	*	*	350	128	328	119	306	145	*	*	*	*	*	*	328	131
10:00	*	*	300	117	331	114	300	122	*	*	*	*	*	*	310	118
10:15	*	*	294	109	292	101	299	114	*	*	*	*	*	*	295	108
10:30	*	*	250	98	250	103	251	104	*	*	*	*	*	*	250	102
10:45	*	*	266	97	274	92	255	104	*	*	*	*	*	*	265	98
11:00	*	*	238	66	258	80	240	80	*	*	*	*	*	*	245	75
11:15	*	*	255	82	246	66	230	74	*	*	*	*	*	*	244	74
11:30	*	*	302	64	240	47	313	48	*	*	*	*	*	*	285	53
11:45	*	*	254	54	278	55	266	51	*	*	*	*	*	*	266	53
Total	0	0	8249	10830	8203	10774	8240	10701	0	0	0	0	0	0	8229	10767
Day Total	0		19079		18977		18941		0		0		0		18996	
% Splits	0.0%	0.0%	43.2%	56.8%	43.2%	56.8%	43.5%	56.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	43.3%	56.7%
Peak Vol.			08:00	00:45	08:00	01:00	07:45	01:00							08:00	01:00
P.H.F.			0.944	0.835	0.952	0.879	0.914	0.837							0.961	0.844

ADT Not Calculated