

NW 7th Avenue Traffic and Pedestrian Study

Work Order No. GPC III-41

FINAL REPORT

Submitted to:
Miami-Dade County MPO



Submitted by:
THE CORRADINO GROUP, INC.



May, 2010

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7TH AVENUE TRAFFIC AND PEDESTRIAN STUDY EXECUTIVE SUMMARY

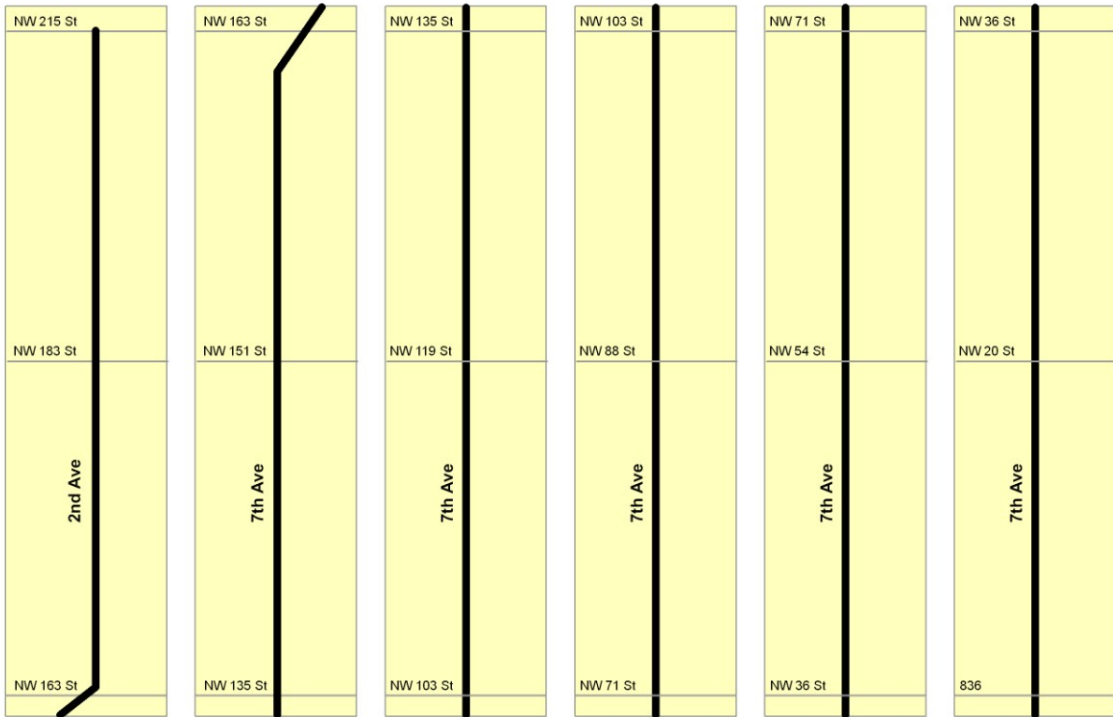
Executive Summary

Introduction

The objectives of the NW 7th Avenue Traffic and Pedestrian Study are to document the need for pedestrian improvements along NW 7th Avenue and to document the impacts of the new federal immigration facility at NW 7th Avenue and NW 88th Street.

The existing conditions analysis was the basis for the evaluation, and lead to the ultimate recommendations focused on issues surrounding the new immigration facility, general pedestrian improvements along the corridor, areas of specific pedestrian activity and improvements for roadway and transit along the corridor.

Figure 1: Study Area Segments



To develop an existing conditions analysis, a variety of reports and studies relevant to this study were reviewed. Right-of-way, geometry, other traffic and pedestrian data were reviewed collected from existing sources. Transit data was gathered for the routes along 7th Avenue and those that crossed and stopped along 7th Avenue. A detailed land use map of the area within a ¼ mile radius of the federal immigration facility was prepared, and a complete inventory of all on- and off-street parking in the vicinity of that facility including a mid-day occupancy count was undertaken. Additionally, traffic and turning movement counts at the intersection of NW 88th Street and NW 7th Avenue were taken. The Miami Dade County Department of Planning and Zoning was met with to identify future activity centers in the corridor, as was FDOT District IV to identify outputs from the regional travel model being developed. Multiple site visits were taken to examine sidewalk locations and widths along the corridor, as well as other pedestrian amenities,

7th Avenue Traffic and Pedestrian Study

Executive Summary

including identification of areas of high pedestrian activity. Ultimately this resulted in necessary intersection modifications related to the traffic generated by the immigration facility, in addition to parking access, transit, pedestrian and safety improvements related to that facility. For the corridor as a whole were made.

Immigration Facility

The Immigration Facility is located in the northeast corner of NW 7th Avenue and NW 88th Street. The building area is approximately 70,000 square feet. There are a total of 380 parking spaces with 130 allotted for employees and 250 for customers. It is estimated that when the facility is fully occupied and operational over 4,800 trips will be generated daily with 412 of those generated during the AM peak hour and 85 trips during the PM peak hour. It is projected that by the year 2015 the facility will be operating at its maximum capacity. The traffic impact of the facility on the LOS of 7th Avenue is negligible. Suggestions have been made for how to mitigate the background deterioration of level of service in the vicinity of the facility.

The United States Citizenship and Immigration Services (USCIS) District 9 office is located on the second floor; and the USCIS Miami Field Office is located on the first floor. The facility employs about 110 employees in the building; consisting of federal and contract employees.

The facility operates Monday through Friday from 7:00am to 3:30pm with the exception of federal holidays. At maximum capacity they can accommodate about 950 applicants per day; plus family members, attorneys, and interpreters. The USCIS is a benefit based organization and does not perform law enforcement functions.

Table 1 - Immigration Facility Trip Generation

ITE Land Use Code	Condition	Size (sf)	AM Peak Hour Trips			PM Peak Hour Trips		
			TOTAL	IN	OUT	TOTAL	IN	OUT
820	Proposed	70,000	412	347	65	85	27	58
			100%	84%	16%	100%	31%	69%
	Existing (YR 2009)	70,000	144	100	44	18	4	14
			100%	70%	30%	100%	23%	77%
	Difference	70,000	268	247	21	67	23	44
			100%	93%	7%	100%	35%	65%

As can be seen from the table above, the existing AM trips are 144 out of 412 possible generated trips, about 35% of the projected total trips when the facility is at maximum capacity and the existing PM trips are 18 out of 85 possible trips approximately 20% of the anticipated PM peak hour trips once the facility is at full capacity.

Based on the analysis, the intersections are operating at acceptable levels-of-service (LOS) for the Existing and Year 2015 conditions. However, the north and southbound approaches to NW 79th Street may be at LOS F.

By the Year 2030, the intersections of NW 79th Street and NW 95th Street with NW 7th Avenue may be operating at LOS F.

Operational issues at major intersections such as delays can be addressed by adding roadway capacity, by separating intersection turn movements from the through movements or by removing trips from the roadway network.

The proposed alternative recommends:

- Periodic traffic signal optimization for all signalized intersections within the area of influence of the Immigration Facility;
- Increasing the left-turn lanes storage capacity by year 2015 to meet the demands of Year 2030.

Additional strategies to reduce delays and improve roadway level of service include:

- Add roadway capacity by procuring right-of-way and adding through lanes or lanes to separate turning movements from through movements;
- Transportation System Management strategies such as revision of speed limit throughout corridor, review pavement markings at major intersections, review street lighting with focus on crosswalks, restrict on-street parking;
- Travel Demand Management Strategies such as ridesharing, increased transit service, encourage vanpooling and carpooling, provide a guaranteed ride home to those who take transit, provide showers and other necessary amenities to those who bike to work, flex-time, coordinate bus routes and scheduling and other methods to decrease the peak period traffic demand;
- Study increased visibility for pedestrians, bicyclists and drivers, reduction of conflicts at intersection which can enhance, minimally, corridor output at major intersections;
- Provide alternative walking and biking routes to remove non-motorized and pedestrian traffic from major intersections, this could provide relief for peak period traffic delays due to pedestrians and vehicular conflicts at intersections;
- Remove pedestrian and bicycle traffic from grade crossings;
- Manage driveway access along roadway segment by combining adjacent driveways and allowing adjacent properties to share property line driveways and provide shared parking policies incentives;
- Design and construct lighting that not only serves the private vehicle drivers and buses but as well as the pedestrians and bicyclists;
- Design and construct right-turn in/out channelization at key driveways with high volumes of traffic;
- Procure right-of-way, design and construct additional lanes at NW 95th and NW 79th Streets to install dual left-turns north and southbound.

Pedestrian Activity Areas

Areas of higher pedestrian activity were identified through an initial site visit. This was done to evaluate general sidewalk locations and widths along the corridor, as well as other pedestrian amenities, including identification of areas of high pedestrian activity, as well as the evaluation of transit activity and land use.

Typically the corridor is a 5 to 7 lane facility with turning lanes, moderate vehicular volumes, keeping the level of service at a generally acceptable level. Transit is prevalent with Rt. 77 and the various cross routes using NW 7th Avenue. Nine intersections along the corridor account for over half of the total on and offs along the corridor. The land uses are commercial along the corridor and low density residential off of the corridor. Pedestrian level of service is generally high, yet pedestrian activity is sparse along the entire length of the corridor.

Areas of intensity of use, either in commercial or residential activity were sought to be selected as specific study areas.

Over all there were pedestrian counts at 25 intersections along the corridor. These range from a high of 209 pedestrian crossings at 79th Street to a low of 15 pedestrian crossings at 66 St. In order to determine locations that warranted further study, it was decided to examine intersections where pedestrian activity exceeded 1% of vehicular volume at individual intersections.

As a result of on-site observation, the analysis of existing potential pedestrian activity from higher intensity land uses planned in the corridor, and the analysis of transit on and off activity, and actual pedestrian counts, 14 intersections were selected for more intensive study in Task 4: Analysis of Pedestrian Activity and Needs. These include:

1. 17 St
2. 20 St
3. 23 St
4. 32 St
5. 46 St
6. 54 St
7. 62 St
8. 69 St
9. 75 St
10. 79 St
11. 88 St
12. 95 St
13. 125 St
14. 183 St

Many of these intersections have adequate facilities for the most part. However, many of the intersections are lacking and some are seriously behind the standards that they should have. It is recommended that many stops have ADA/FDOT-approved shelters, benches,

trash cans, and signs. Some intersections are busier than others and would justify the need for an emergency phone as well as pedestrian countdown signals. This is one of the most traveled pedestrian corridors in all of Miami and it should be safe for pedestrians so that the neighboring communities and businesses have ample opportunity to flourish.

This corridor has limited on street parking, which is restricted during the peak period in the peak direction, yet parked cars are scattered throughout the corridor and they are, for the most part, not ticketed or shown any form of enforcement. These cars make it difficult for drivers and thus it takes away some of their attention for the near by pedestrians. It is recommended that enforcement of these rules take place.

Another major concern was that of the crosswalks. First, all major intersections should have thermoplastic paver like crosswalks across all 4 legs of the intersection. This gives the intersection high visibility and thus makes it safer for crossing pedestrians. Second, it is suggested that these crosswalks also have some sort of reflective device so as to make them visible to drivers at night time. This will enhance the crosswalk from an aesthetic point of view as well.

Future Impacts

Traffic impacts of a future land use/growth scenario along the Corridor were examined. The Miami Dade County Department of Planning and Zoning (DPZ) was consulted and it was determined to examine the future land use scenario which is currently mapped in the Miami Dade County Comprehensive Plan's Future Land Use Map. The analysis consisted of assessing impact of future growth and mitigating that impact through roadway or transit projects. Because the facility is constrained and few opportunities exist for additional lanes, several scenarios were examined. These included existing and future conditions. In the future a no-build scenario was tested, as were alternatives examining mitigation through the additional of physical capacity, the addition of improved bus service.

It is observed for the existing condition (Year 2009) all the roadway segments operate within the allowable threshold of LOS E+ 20%. In the future no build scenario, the roadway LOS analysis indicates that the eight segments of the corridor exceed the allowable threshold and operate at LOS F. This degradation of LOS is due to ambient growth and not the immigration facility. To mitigate these capacity deficits through traditional means, additional lanes were tested. Essentially, the failing segments could be brought into compliance through the addition of one lane in each direction. In order to improve the LOS in the study corridor without increasing the number of lanes, improved bus service was introduced in mixed traffic, as well as in exclusive lanes. It was observed that by introducing improved transit service at 7.5 and 15 minute headways, all the roadway segments operate within the allowable standards of LOS E+ 50%.

Formal Recommendations

Recommendations from each task of the study were used to develop a formal set of recommendations for mitigating the effects of the pedestrian, bicycle and vehicular traffic generated as well as to improve the existing conditions of transit facilities. The tasks included extensive field observations, data collection, simulation models and scenario analyses. These included recommendations in the following areas:

- Intersection Modifications in the Vicinity of the Immigration Facility
- Immigration Facility Parking Access Improvements
- Bus Stop Improvements in the Vicinity of the Immigration Building
- Pedestrian and Safety Improvements in the Vicinity of the Immigration Building
- General Pedestrian Guidelines for the Entire Corridor
- Specific Improvements in Major Pedestrian Areas
- Roadway and Transit Improvements

7TH AVENUE TRAFFIC AND PEDESTRIAN STUDY

TASK 2 EXISTING CONDITIONS

Introduction

The objectives of the NW 7th Avenue Traffic and Pedestrian Study are to document the need for pedestrian improvements along NW 7th Avenue and to document the impacts of the new federal immigration facility at NW 7th Avenue and NW 88th Street.

The first technical report of existing conditions will be the basis for further evaluation which will lead to the ultimate recommendations focused on issues surrounding the new immigration facility, general pedestrian improvements along the corridor, areas of specific pedestrian activity and improvements for roadway and transit along the corridor.

Figure 1: Study area segments



To develop an existing conditions analysis, a variety of reports and studies relevant to this study were reviewed. Right-of-way, geometry, other traffic and pedestrian data were reviewed collected from existing sources. Transit data was gathered for the routes along 7th Avenue and those that crossed and stopped along 7th Avenue. A detailed land use map of the area within a ¼ mile radius of the federal immigration facility was prepared, and a complete inventory of all on- and off-street parking in the vicinity of that facility including a mid-day occupancy count was undertaken. Additionally, traffic and turning movement counts at the intersection of NW 88th Street and NW 7th Avenue were taken. The Miami Dade County Department of Planning and Zoning was met with to identify future activity centers in the corridor, as was FDOT District IV to identify outputs from the regional travel model being developed. Multiple site visits were taken to examine sidewalk locations and widths along the corridor, as well as other pedestrian amenities, including identification of areas of high pedestrian activity. Ultimately this will result in necessary intersection modifications related to the traffic generated by the immigration facility, in addition to parking access, transit, pedestrian and safety improvements related

to that facility. For the corridor (as a whole) general pedestrian guidelines, roadway, and transit improvements will be made. Specific improvements will be in major pedestrian activity areas identified in this task.

Previous Efforts

As a starting point to develop an existing conditions analysis, a variety of reports and studies that are relevant to this study, were reviewed including:

- Miami-Dade County Comprehensive Development Master Plan (CDMP)
- Civic Center Streetscape Improvement (City of Miami Basis of Design Report - BODR)
- NW 7th Avenue Reversible Lane PD&E
- City of Miami NW 7th Avenue Study
- 7th Avenue Transit Village
- Miami Dade Planning Charrette along NW 7th Avenue

Miami-Dade County Comprehensive Development Master Plan (CDMP)

The Miami-Dade County CDMP through its Transportation Element and Capital Improvement Element plans for a multi-modal approach in implementing a transportation system through motorized and non-motorized means.

The Transportation Element is divided into five sub elements, the Traffic Circulation Sub element, Mass Transit Sub element, Aviation Sub element and the Port of Miami River and Port of Miami Master Plan sub elements. It sets forth the Goals, Objectives and Policies that the County will follow as it plans, and implements transportation improvements. It is supported by data and analysis and implemented by a Cost Feasible Capital Improvements Element.

The Capital Improvement Element ensures all services and facilities are in place consistent with the impacts of the development, and provides for levels of service for each service, including transportation. This is explained in great detail in a subsequent chapter.

The Future Land Use Map is the official map detailing allowable uses and intensities of use in the corridor. It will be used as the basis for all future transportation planning and modeling efforts. Detailed maps of the land use in the corridor are later in this Chapter.

Civic Center Streetscape Improvement (City of Miami Basis of Design Report - BODR)

The Miami Health District Streetscape, Gateway and Signage Improvements Bases of Design Report (BODR) was produced for the Miami Partnership, which is a partnership formed by the City of Miami and the University of Miami. In order to revitalize the Health District the Miami Partnership envisioned a series of improvement projects that would eventually transform the neighborhood into an appealing and attractive place.

For the purpose of the BODR effort, streetscapes were defined as right-of-way modifications intended to improve function, appearance, safety and comfort for pedestrians and drivers. Gateways were defined as features on transit, pedestrian, or vehicular routes that mark the transition from one defined area to another. Wayfinding signage was defined as graphics and text that provides an easy way to comprehend directions to a comprehensive set of Health District destinations.

The BODR area consists of NW 20th St and NW 14th St on the north and south, and NW 17th Ave and NW 7th Ave on the west and east.

NW 16th and 17th Streets through the Health District from NW 7th to 17th Ave are considered linkage streets and as such the designation of a health walk as a component of the streetscape improvements was proposed for implementation. The improvements include shaded sidewalks, street trees, landscaping, specialty paving, lighting, information panels, etc. to provide for healthful activity in general. The BODR proposed funding by the City of Miami, Jackson Hospital and the Healthy Communities Organizations Grant for this specific project.

Gateway Improvements were developed for Regional, District and Local level gateways and were intended to function as a family of improvements with common elements including a stainless steel or brushed aluminum spire topped with a light and the “H” Health District Branding symbol. The Local gateways would have only the “H” overall Health District symbol.

As for signage improvements there are four sign types:

- District signs
- Local signs
- Pedestrian destination signs
- Pedestrian orientation signs

The City of Miami has approved the Project and has moved forward with implementing the first phase of the project.

NW 7th Avenue Reversible Lane PD&E

It was this study’s intent to improve mobility by increasing capacity on NW 7th Ave by conducting a study for reversible flow lanes between NW 5th St and NW 119 St. The project would involve placing one or more of the existing traffic lanes, including the existing center dual left turn lane, in service as a reversible lane during peak hours. It would have been accomplished through electronic signage on overhead gantry structures. The final recommendation from this study was that reversible lanes should not be implemented at this time. Yet by 2015 the level of congestion will increase and levels of service will degrade, at which point in time the implementation of a reversible lane could be reevaluated. Other considerations included the implementation of a bus rapid transit line in the median lane during peak hours, with or without a reversible lane alternative.

City of Miami NW 7th Avenue Study

The NW 7th Avenue Study was the first step in establishing a Multimodal Transportation Hub within the study area of NW 7th Avenue between NW 59th Street and NW 95th Street. The study was conducted by the City of Miami with coordination from the Florida Department of Transportation. Since the completion of the project in September 2002, Miami Dade Transit has proceeded with the project as the “NW 7th Avenue Transit Village.”

Miami Dade Transit, Transit Hub plans for NW 7th Avenue and 62nd Street (7th Avenue Transit Village)

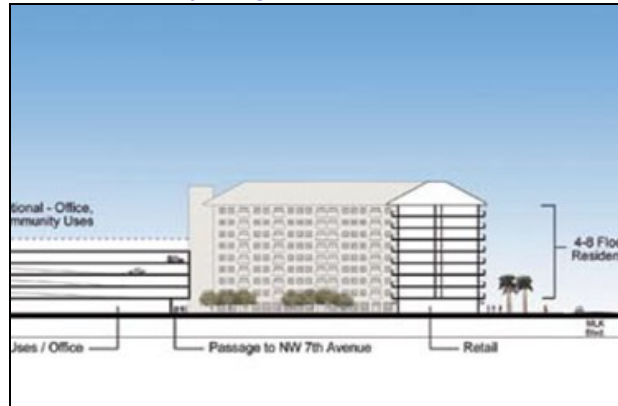
Miami-Dade Transit (MDT) is proposing the construction of a bus transfer facility at the intersection of NW 7 Avenue and NW 62 Street in the City of Miami. To help fund the project, provide additional amenities to its patrons, and stimulate economic redevelopment in this economically disadvantaged community, MDT anticipates entering into a joint-development agreement with a private enterprise. The preferred alternative for the proposed bus transfer facility, which is now referred to as the “NW 7 Avenue Transit Village,” is to construct the facility at the southeast quadrant of the NW 7 Avenue and NW 62 Street intersection. The existing 3.8-acre site is of sufficient size; contains vacant land and commercial buildings (several are vacant); is desirable for transit operations; and has no significant environmental impacts.

The conceptual site plan for the Transit Village includes bus bay loading/unloading areas along NW 6 Court for four buses and provisions for charging stations for future electric hybrid buses. An anticipated joint-development of the site will provide a multi-story retail, office, and residential facility with a parking garage. This facility would also support staff and would include a ticket center, drivers’ restrooms and lounge area, public restrooms, and seating areas for pedestrian and patron use to access buses. An internal park-like setting with gardens, abundant landscaping and walkways is also proposed. In addition, architectural highlights and Art in Public Places will be featured throughout the site to reflect the unique cultural composition of the local community.

The development of the proposed Transit Village has proceeded in cooperation with the goals and policies of federal, state, and local government authority. The project is consistent with approved transportation plans and local government comprehensive plans.

MDT is currently preparing a Request for Proposals (RFP) to solicit proposals from interested developers for a multi-story, mixed-use development project on a parcel of land located at the southeast corner of NW 7th Avenue and NW 62 Street. Concurrent to the preparation of the RFP, the County is conducting right-of-way acquisition.

Figure 2 - Preliminary Image of NW 7th Avenue Transit Village



Right-of-Way Data

Right-of-way, geometry, and other traffic data was examined and reported, specifically that data collected by the MDCPW department during the 7th Avenue Reversible Lane Study. The study examined existing conditions, related corridor improvements, operation analysis, traffic data, feasibility of implementation, crash summary and proposed improvements. The study did not adequately address pedestrian conditions between 119th Street and 6th Street, which this 7th Avenue Traffic and Pedestrian study is primarily concerned with. Additionally it did not address the immigration facility. Much of the data for this traffic and pedestrian study, particularly for the southern half of the project area, south of 119th Street was gleaned from the MDCPW Reversible Lane report.

NW 7th Avenue has about 100' ROW throughout its entire alignment. It is a five-lane roadway between SR 836 and NW 79th Street with a continuous left turn lane. It is a seven-lane roadway between NW 79th Street to NW 159th Street and from NW 7th Avenue extension to Broward County line with a continuous left turn lane. The road's surface is asphalt, and its pavement is in fair to good condition along most of the corridor. Standard and enhanced pavement markings at the intersections are in generally fair condition throughout most of the corridor. The signal operations at intersections exhibit a diverse set of traffic controls, ranging from simple two phase operations to full eight phase quad left turn operations. Some signals are also configured for a dual mode pedestrian operation with exclusive pedestrian phases being implemented by time of day.

Generally pedestrian conditions are adequate, with 5' sidewalks existing on both the east and west sides of the street through its entire length. The corridor's major intersections are striped with appropriate pedestrian cross walks and pedestrian signal heads. In the southern end of the corridor, particularly in the City of Miami, cross walks have been enhanced with either colored and stamped concrete or thermoplastic covering. Sidewalks are ADA accessible with colored and textured sidewalk ramps.

Most transit stops along the corridor are signed, with benches, and some shelters.

Transit Data

For this task a map of boarding and alighting data was assembled by stop on Miami Dade Transit for Route 77 and the 7th Avenue Max, as well as, the east/west routes crossing the corridor. This data was collected from Miami Dade Transit. There are 19 transit routes that impact the 7th Avenue corridor. The two primary routes are the Route 77 and the 7th Avenue Max (Rt 277). Both of these are extensive as they run on 7th Avenue north and south. All other routes cross 7th Avenue at various intersections and stops. Routes include:

- 17
- 21
- 28
- 32
- 33
- 36
- 46
- 54
- 62
- 75
- 77
- 83
- 91
- 95
- 105
- 107
- 112
- 113
- 277

On/off data on all the impacting routes shows that 7,473 people get on a bus on 7th Avenue, and 6,144 people get off a bus on 7th Avenue, for a total of 13,617 passengers utilizing the corridor, at about 316 stops at 119 intersections.

Route 77 has 7,680 people or 56% of all embarking and disembarking passengers utilizing 7th Avenue getting on and off along its route. This route makes 179 different stops along the corridor. Nearly 500 people (about 6% of its ons and offs) get on and off at 79th Street. Nearly 420 people get on and off at 62 Street. Nearly 375 people get on and off at 183rd Street. Individually only 23 of the 179 stops (12%) handle more than 1% of total route traffic.

The 7th Avenue Max (Rt 277) has 1,524 people or 11% of all embarking and disembarking riders getting on and off along its route. This route stops at about 29 locations on the corridor. About 180 people get on and off at 79th Street, and about 130 get on and off at 11th Street. Each stop carries at least 2% of all route ons and offs.

There are four routes that individually carry at least 5% of total passenger ons and offs along the corridor. These four routes, (62, 77, 112 and 277) carry 80% of all the passengers that get on or off along the corridor.

The most effective route would be the 112, which has nearly 1,000 ons and offs, (nearly 7% of all routes combined) at one street (79th Street). This is followed by Route 62, which has nearly 5% of all combined ons and offs at 62nd Street.

Some routes are relatively minimal. Route 91 has 24 ons and offs at its 4 stops. Route 113 has about 40 ons and offs at its 2 stops at 17th Street. On average routes carry about 717 people. An average of 43 people get on and off at each stop.

Table 1: Route Summary – Daily Totals at 7th Avenue Stops

Route	On	Off	Total / Stop
17	152	127	279
21	35	39	74
28	81	101	182
32	128	101	229
33	32	89	121
36	130	100	230
46	15	10	25
54	135	110	245
62	387	251	638
75	243	199	442
77	4193	3487	7680
83	136	100	236
91	17	7	24
95	39	13	52
105	121	106	227
107	218	152	370
112	599	399	998
113	18	23	41
277	794	730	1524
Total	7473	6144	13617

The Immigration facility is serviced by the Little River stop. At this stop 77 ons and offs occur, (46 people get on and 31 people get off).

Six other intersections have intensive passenger ons and offs above 400 passengers (+- 3% of cumulative corridor total) and therefore potential pedestrian activity.

7th Avenue Traffic and Pedestrian Study

Task 2: Existing Conditions

There are 119 streets that buses stop at along the corridor. Important to understanding pedestrian activity is knowledge of where the bulk of passengers get on and off of buses. While the average numbers of passengers that get on or off a bus at any given street is about 114, the bulk of the boarding and alighting is done at a hand full of streets. Sixty-four percent of all ons and offs (8,674) occur at 19 streets. Thirty-three percent of all ons and offs (4,492) occur at only 4 streets. Conversely 100 of 119 streets carry only 4,943 of the ons and offs (36%). Fifty-one percent of all ons and offs (7,010) occur at only 9 streets. These 9 locations will be examined in more detail and specific recommendations made for increased pedestrian and transit treatments made.

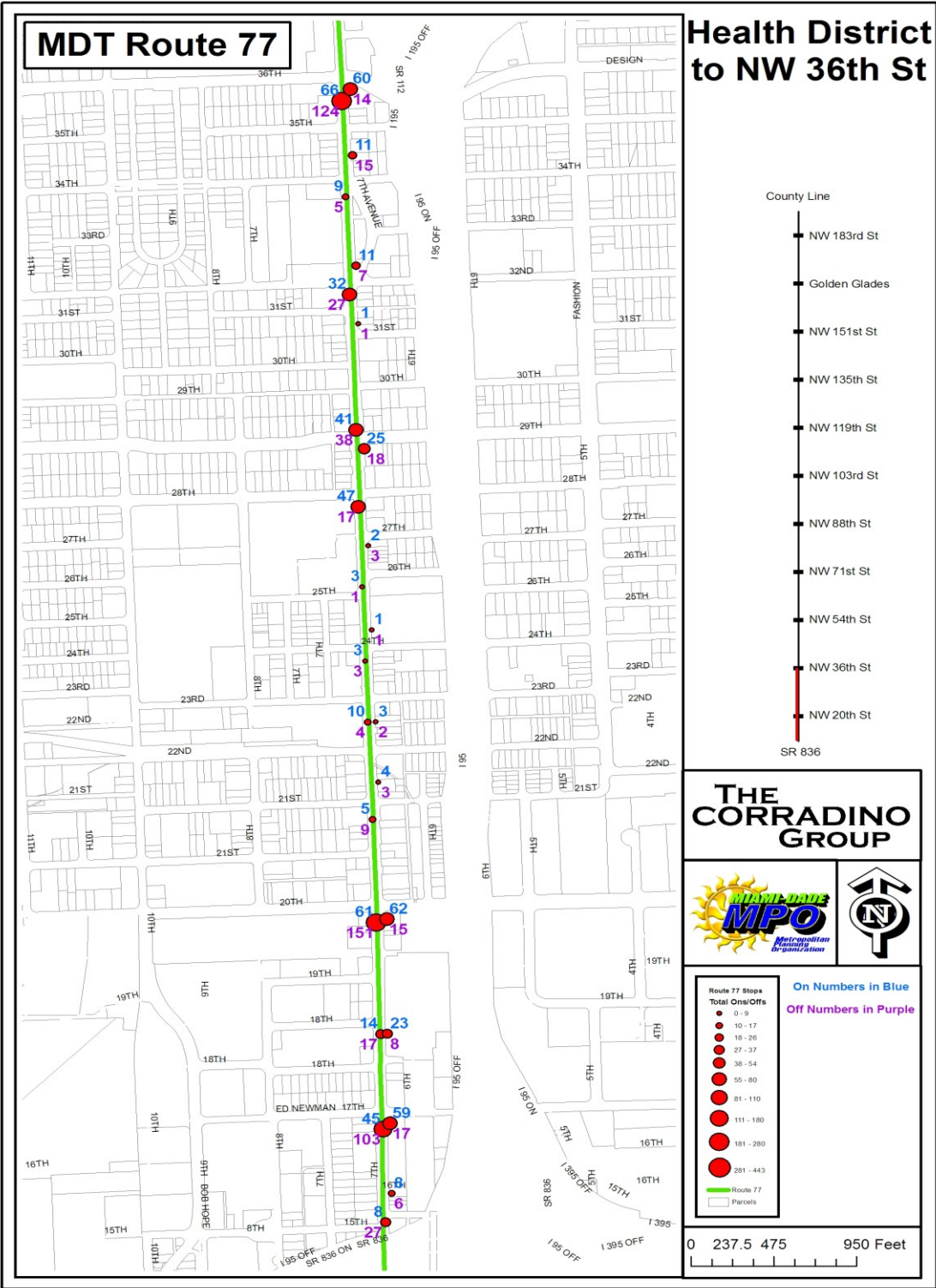
- 79th Street embarks and disembarks the most passengers (1,674) or 12% of total corridor ons and offs. More people get on (962) than off (712). This occurs on three routes, (77, 112, 277).
- 62nd Street embarks and disembarks the second most passengers (1,190) or 9% of total corridor ons and offs. More people get on (670) than off (520). This occurs on five routes, (46, 62, 77, 277, 46).
- 183rd Street embarks and disembarks the third most passengers (900) or 7% of total corridor ons and offs. More people get on (593) than off (307). This occurs on five routes, (17, 75, 77, 83, 95).

Table 2: MDT APC Ridership Statistics

#	Stop Location	On	Off	Total / Street
	7th Ave @			
1	79 St	962	712	1674
2	62 St	670	520	1190
3	183 St	593	307	900
4	125 St	441	287	728
5	20 St	291	350	641
6	11th Street	205	313	518
7	54 St	283	234	517
8	17 St	196	233	429
9	95 St	229	184	413
		3870	3140	7010

7th Avenue Traffic and Pedestrian Study Task 2: Existing Conditions

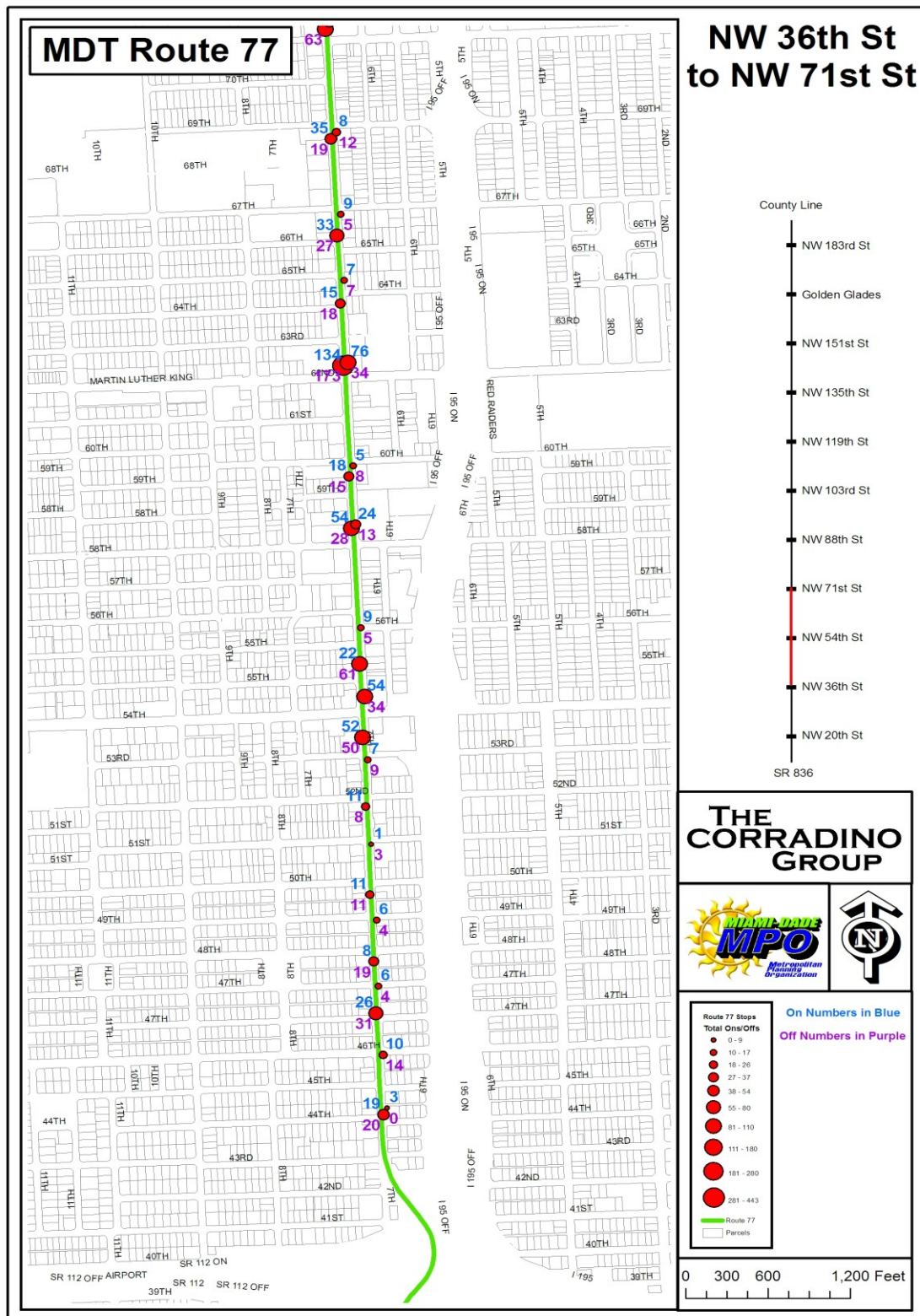
Map 1: MDT Route 77 – Health District to NW 36th Street



7th Avenue Traffic and Pedestrian Study

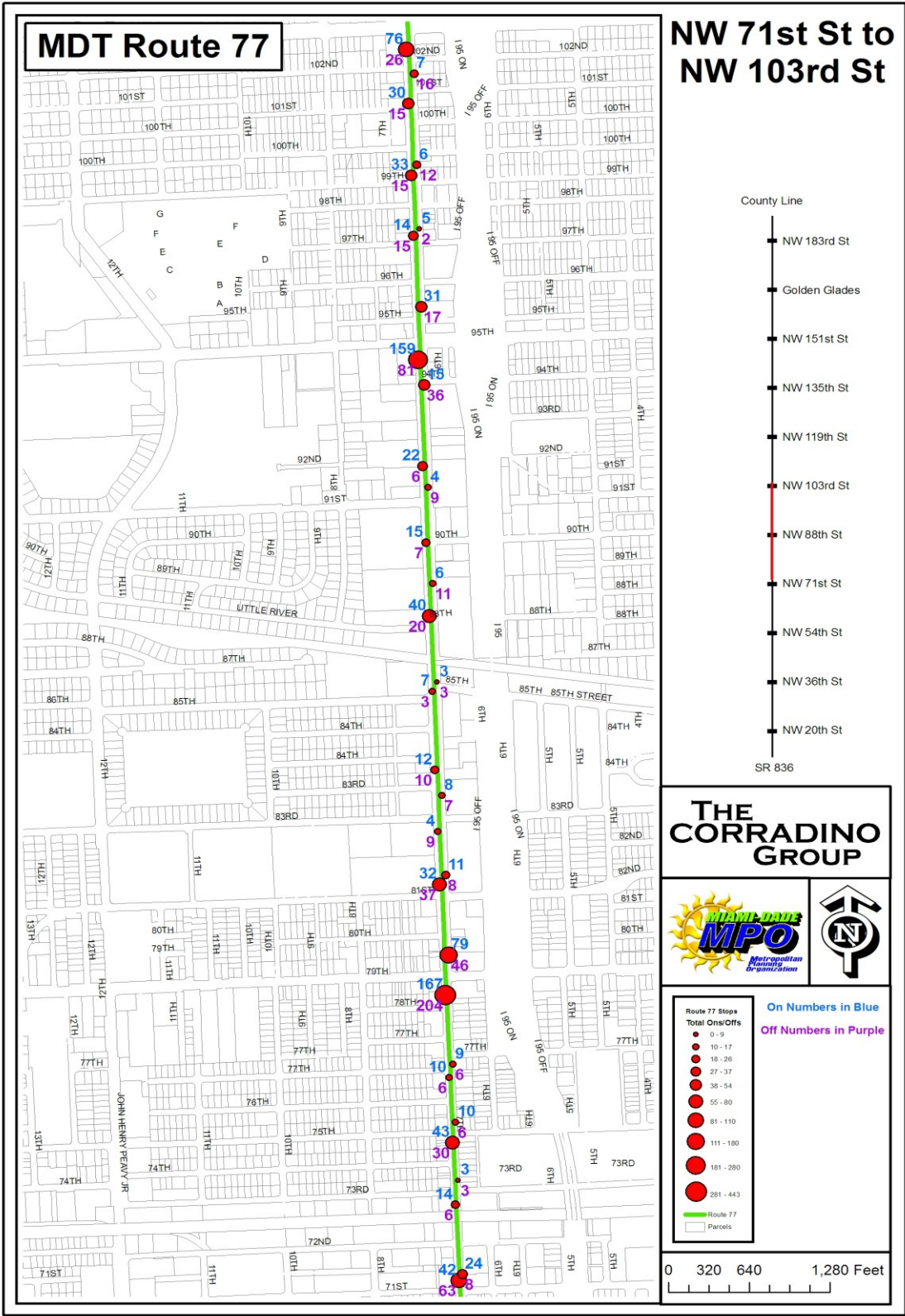
Task 2: Existing Conditions

Map 2: MDT Route 77 – NW 36th St. to NW 71st ST.



7th Avenue Traffic and Pedestrian Study Task 2: Existing Conditions

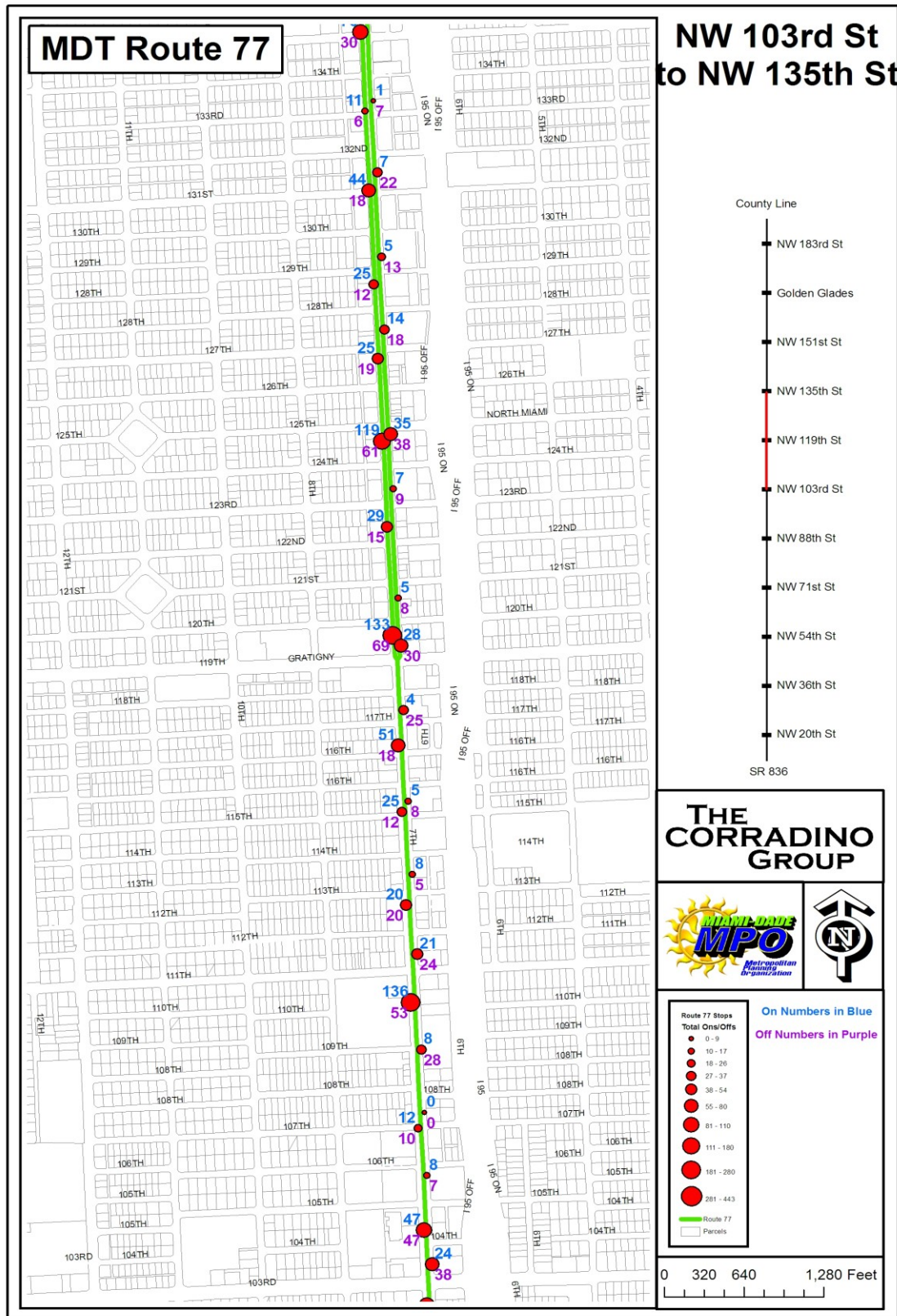
Map 3: MDT Route 77 – NW 71st St. to NW 103rd St.



7th Avenue Traffic and Pedestrian Study

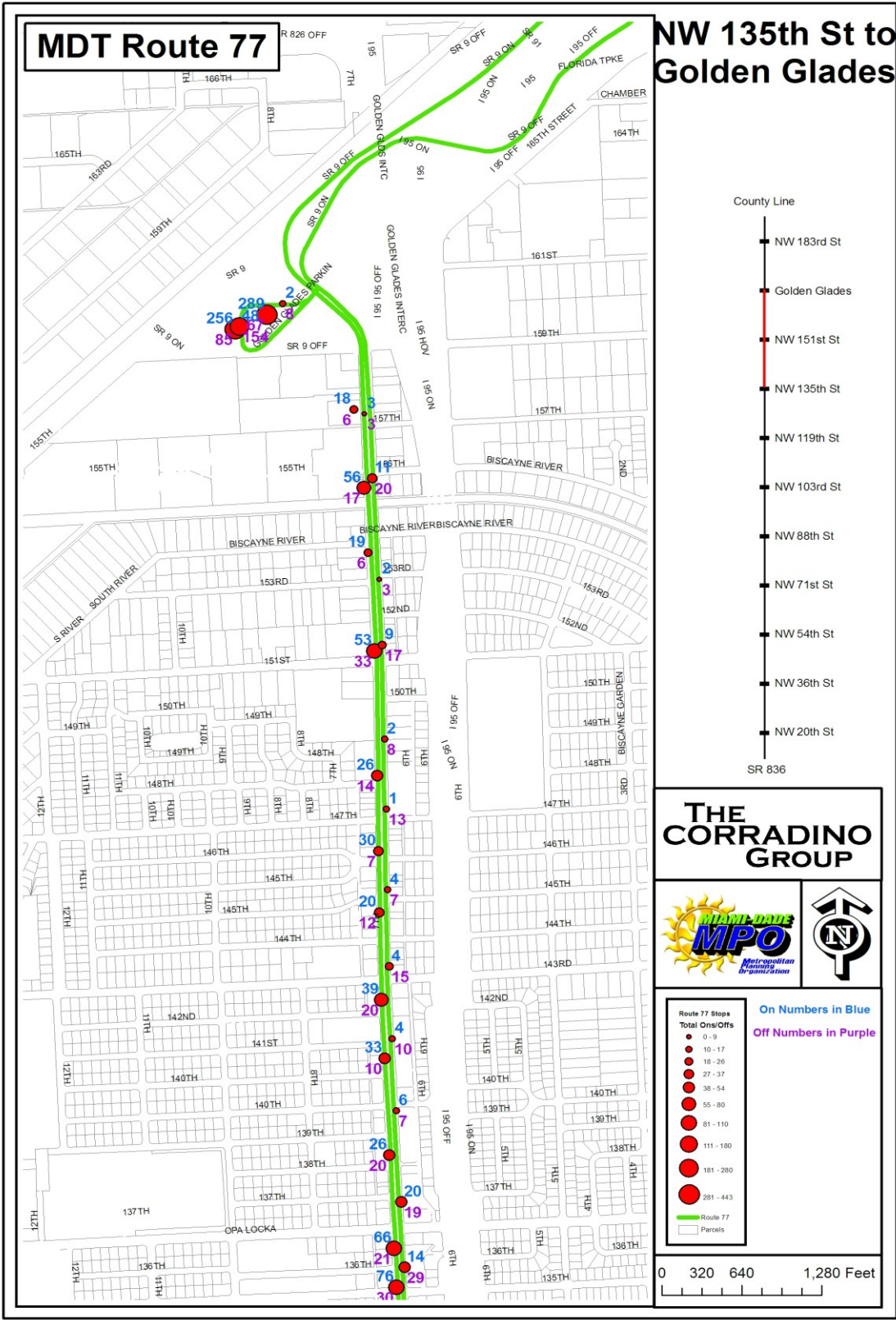
Task 2: Existing Conditions

Map 4: MDT Route 77 – NW 103rd St. to NW 135th Street



7th Avenue Traffic and Pedestrian Study Task 2: Existing Conditions

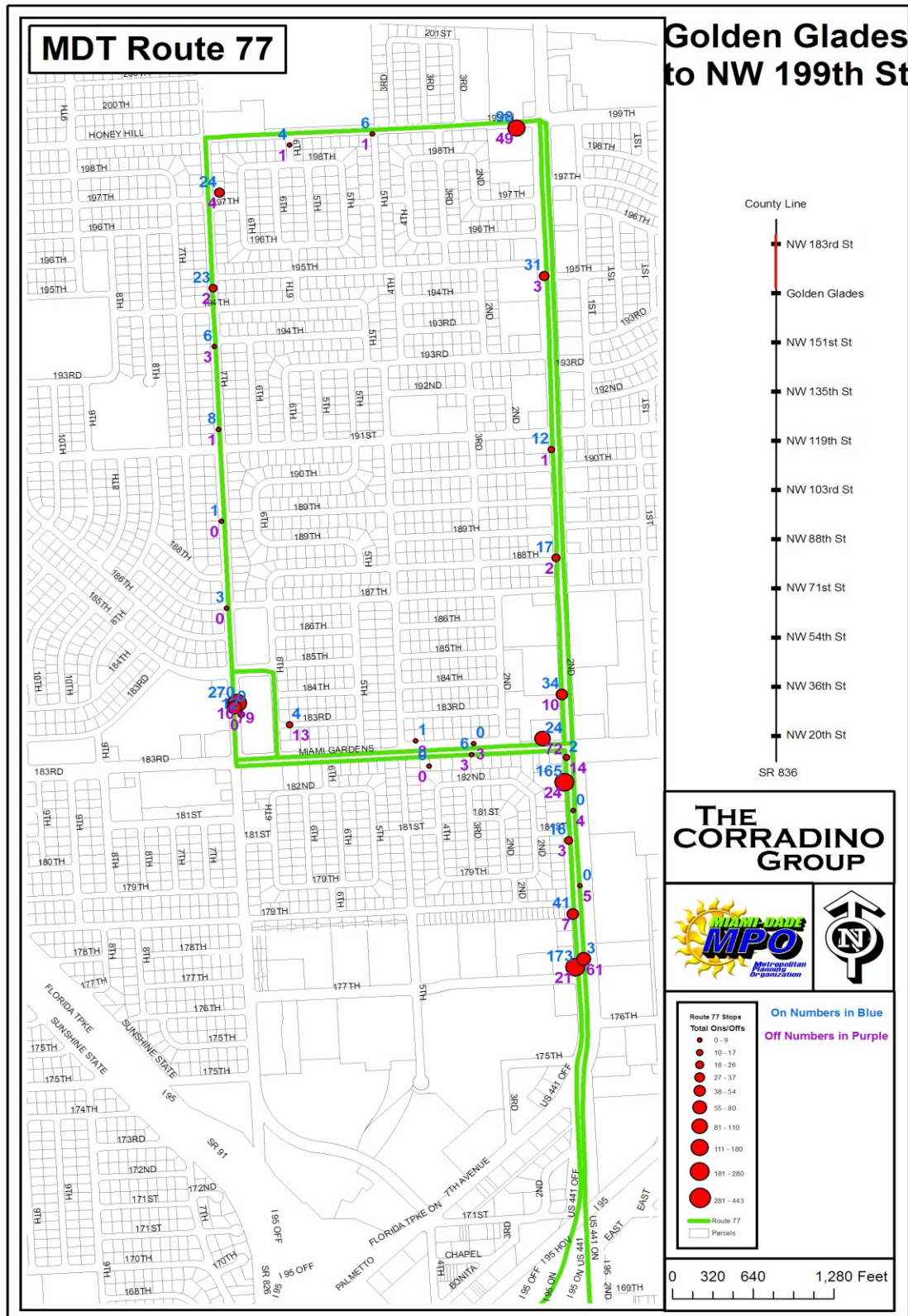
Map 5: MDT Route 77 – NW 135th St. to Golden Glades



7th Avenue Traffic and Pedestrian Study

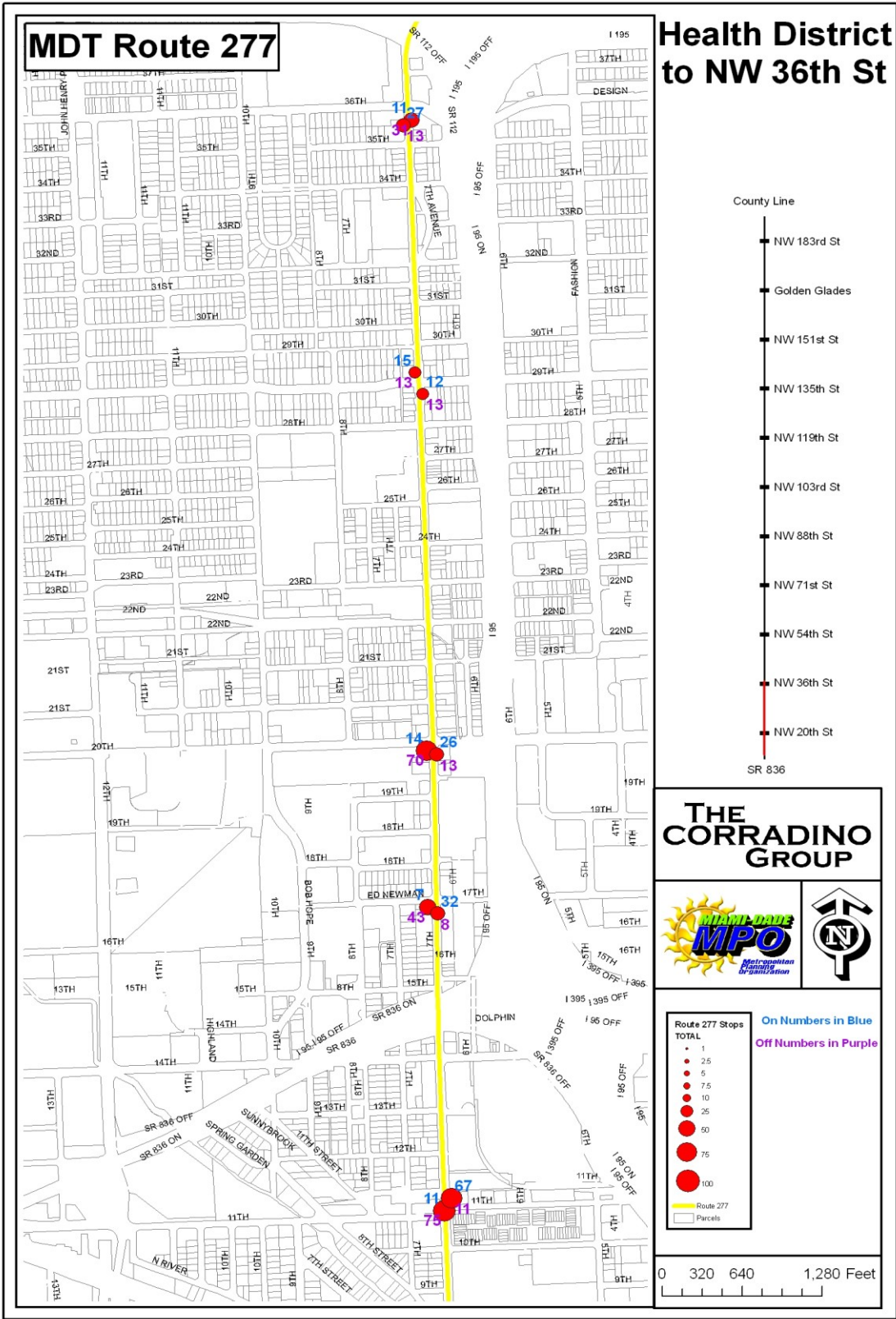
Task 2: Existing Conditions

Map 6: MDT Route 77 – Golden Glades to NW 199th St.



7th Avenue Traffic and Pedestrian Study Task 2: Existing Conditions

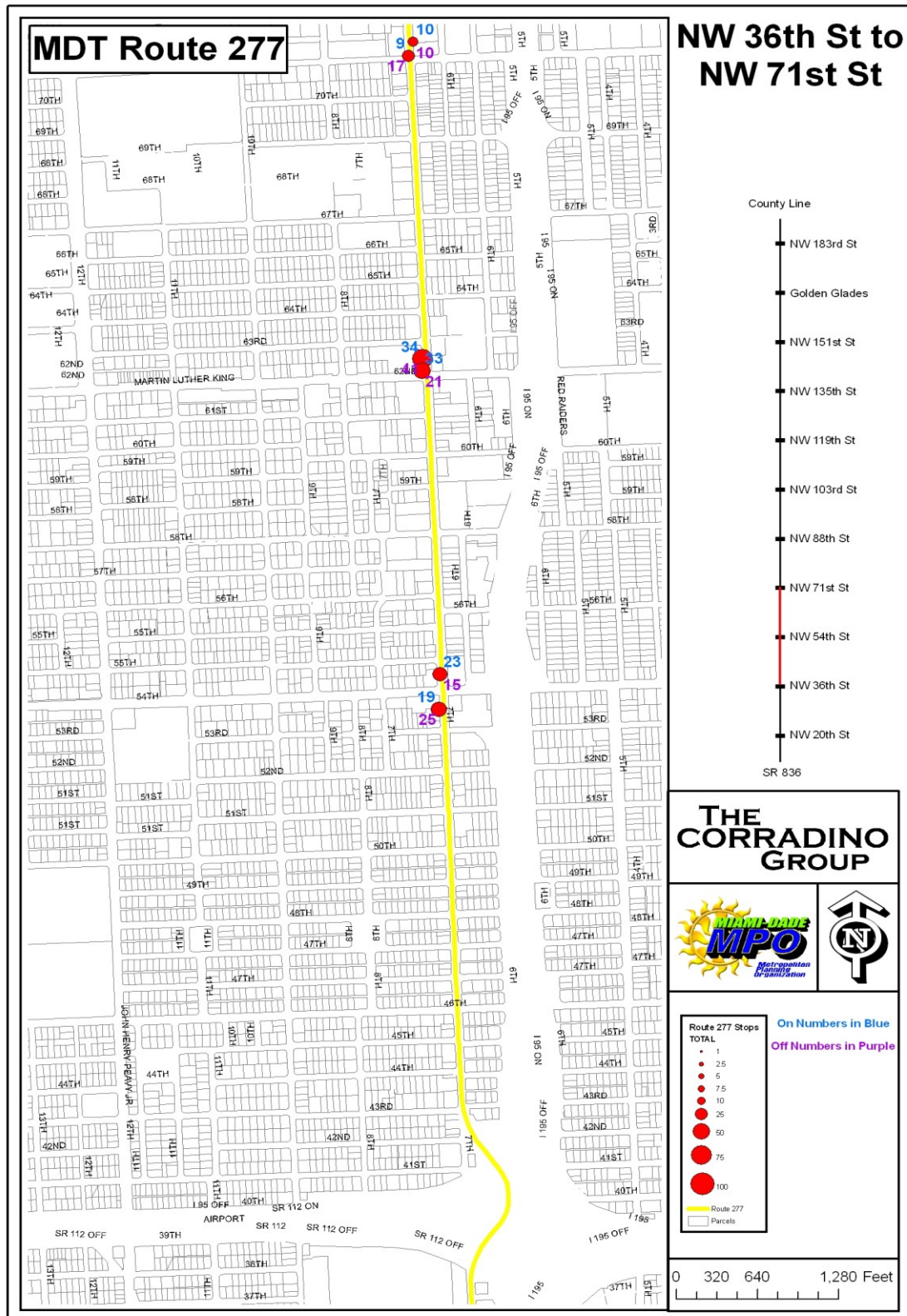
Map 7: MDT Route 277 – Health District to NW 36th St



7th Avenue Traffic and Pedestrian Study

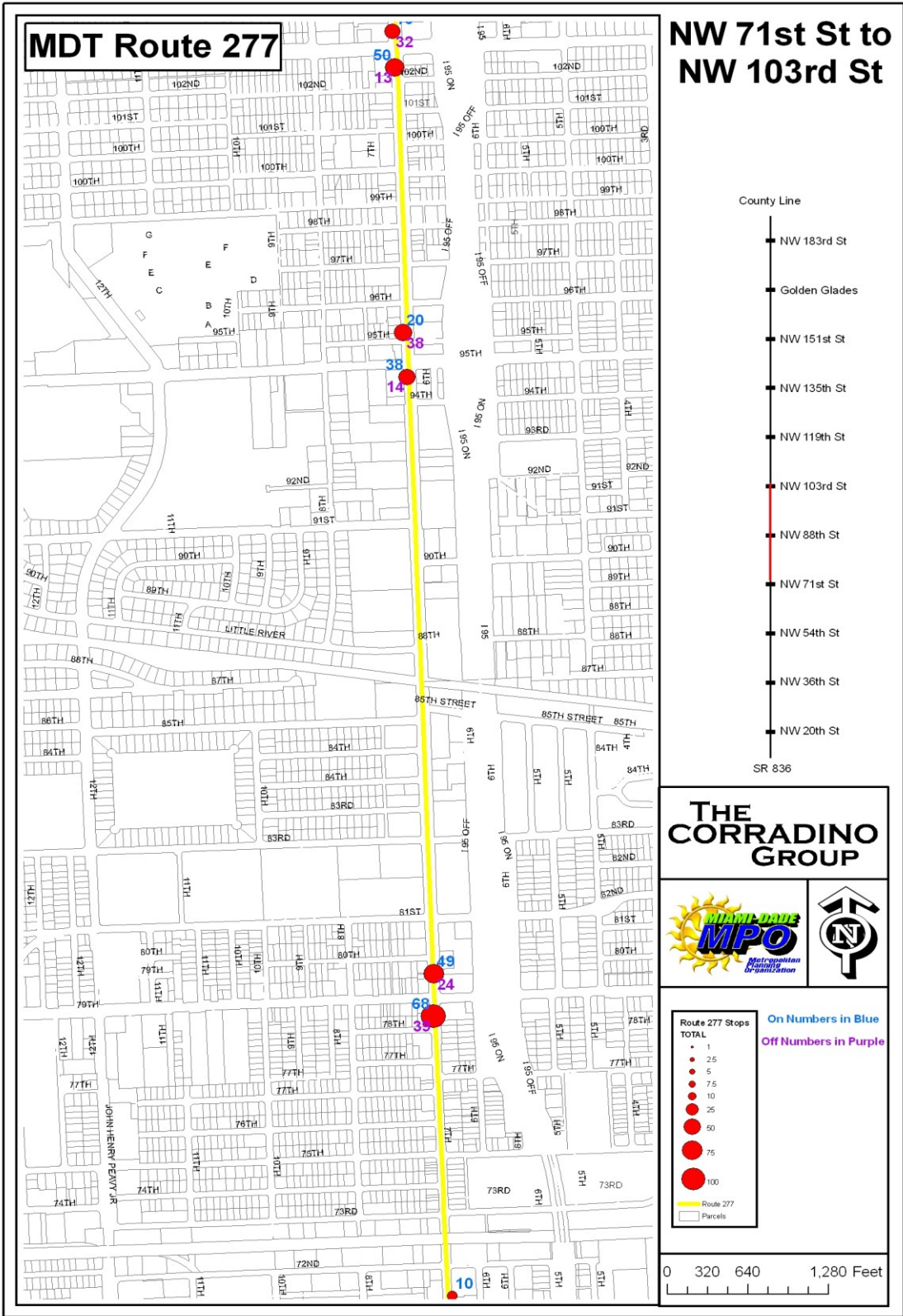
Task 2: Existing Conditions

Map 8: MDT 277 NW 36th St. to NW 71st St.



7th Avenue Traffic and Pedestrian Study Task 2: Existing Conditions

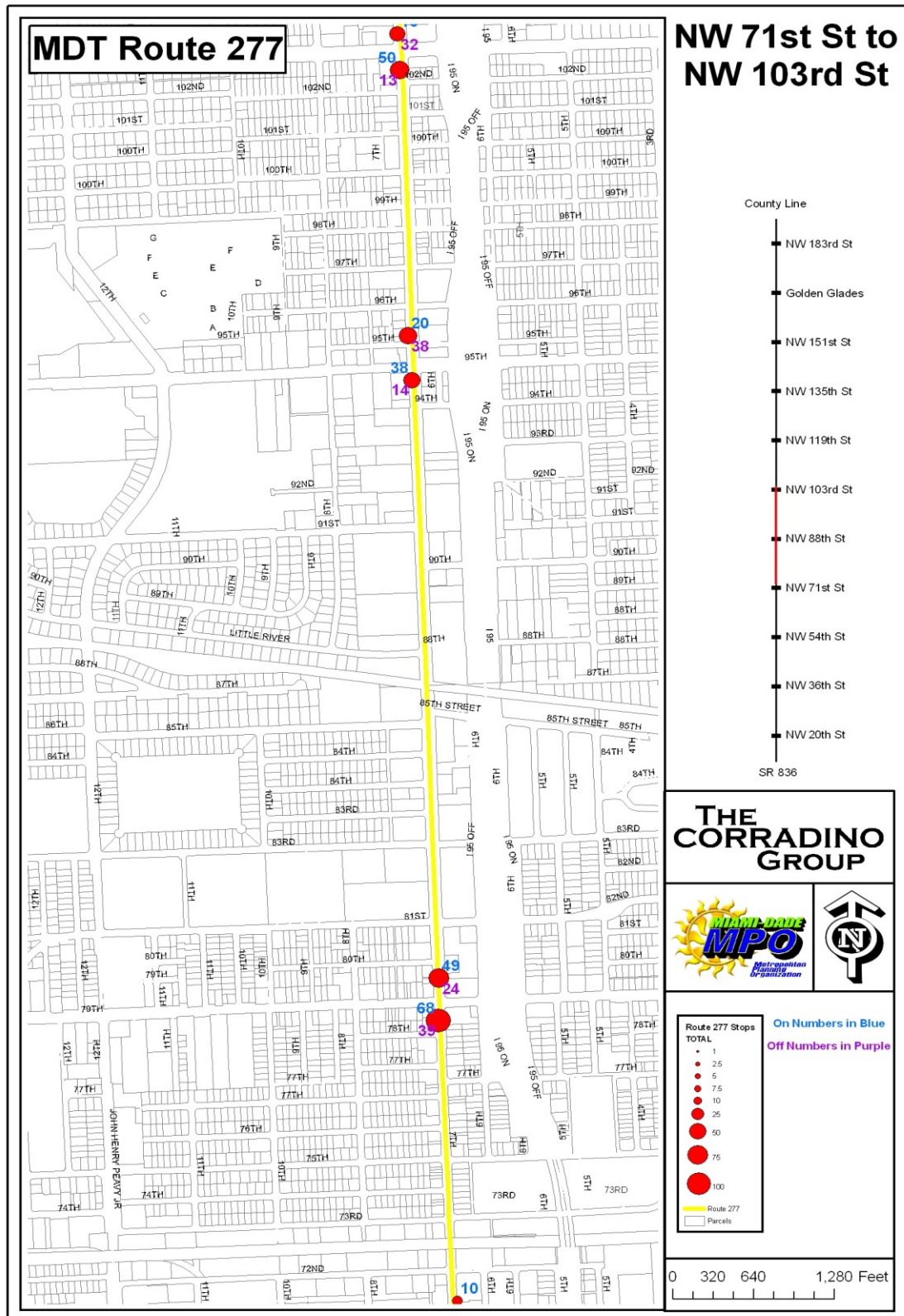
Map 9: MDT Route 277 – NW 71st St. to NW 103rd St.



7th Avenue Traffic and Pedestrian Study

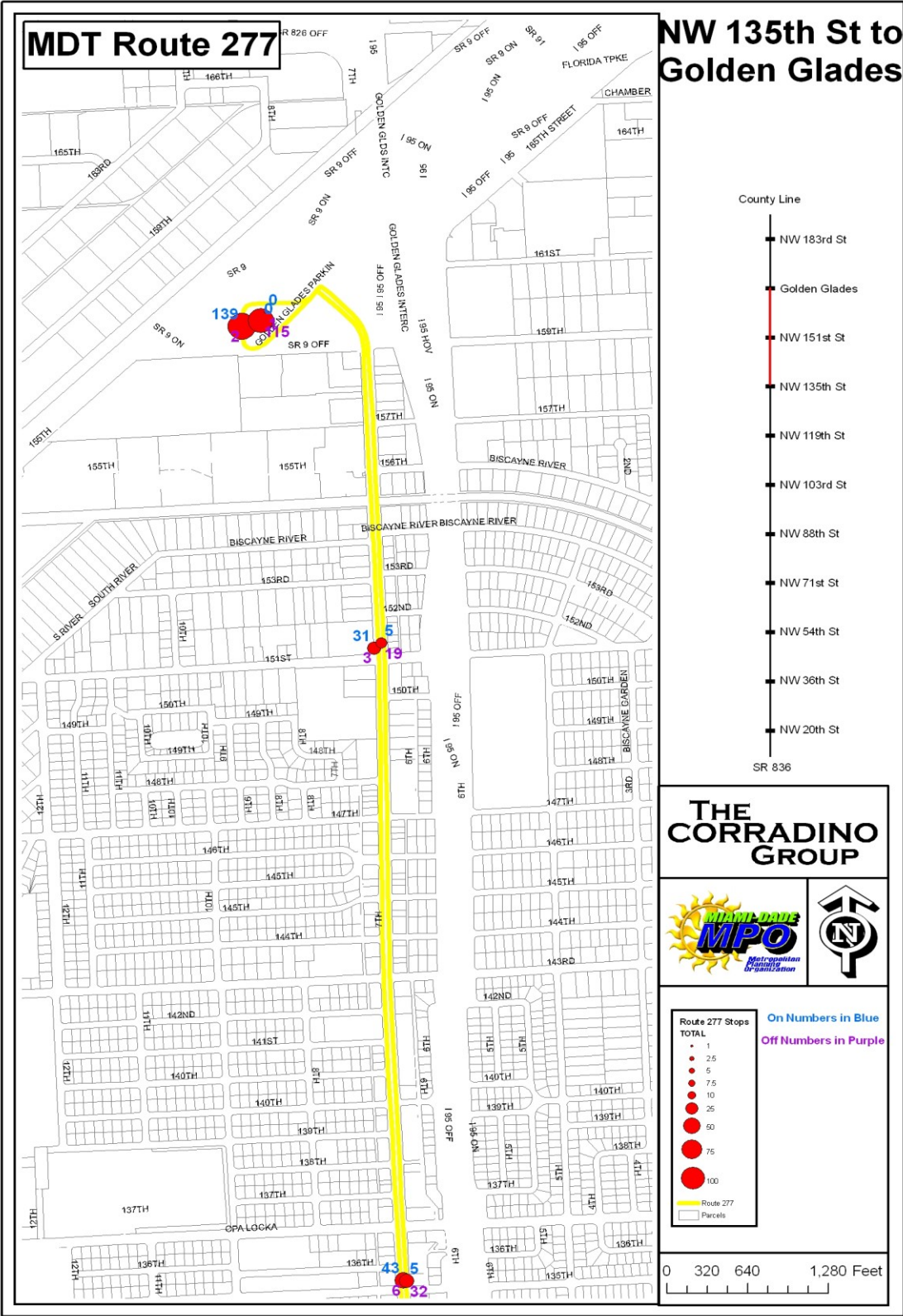
Task 2: Existing Conditions

Map 10: MDT Route 277 – NW 71st St. to NW 103rd St.



7th Avenue Traffic and Pedestrian Study Task 2: Existing Conditions

Map 11: MDT Route 277 – MW 135th St. to Golden Glades



Health District Area

The southern end of the 7th Avenue corridor moves through the Health District. This area is a major employer in Miami-Dade County and has undergone significant redevelopment and infrastructure planning. There are numerous improvements slated for the area. Directly along 7th Avenue at 15th Street is a proposed Camillus House facility, that is anticipated to be a generator of pedestrian activity. Yet this area is well planned for. Currently according to the Health District Traffic Study, pedestrian activity in this area is less than 1% of vehicular volumes at major intersections.

Table 3: Vehicular/Pedestrian Volume

Intersection	Vehicular Volume		Pedestrian Volume		Ped (Total)
	AM	PM	AM	PM	
NW 36th Street & 7th Avenue	2,694	2,571	9	24	33
NW 20th Street & 7th Avenue	3,004	2,768	10	25	35
NW 17th Street & 7th Avenue	1,818	1,699	5	2	7
NW 14th Street & 7th Avenue	1,622	1,722	1	0	1
NW 11th Street & 7th Avenue	1,274	1,297	0	11	11

There are currently 62 planned and recommended transportation improvements in the Health District itself, in the areas of:

- ITS projects
- Capacity projects
- Studies
- Operational projects
- Resurfacing /Landscaping / Maintenance projects
- Transit Projects
- Signage and Street Furniture projects

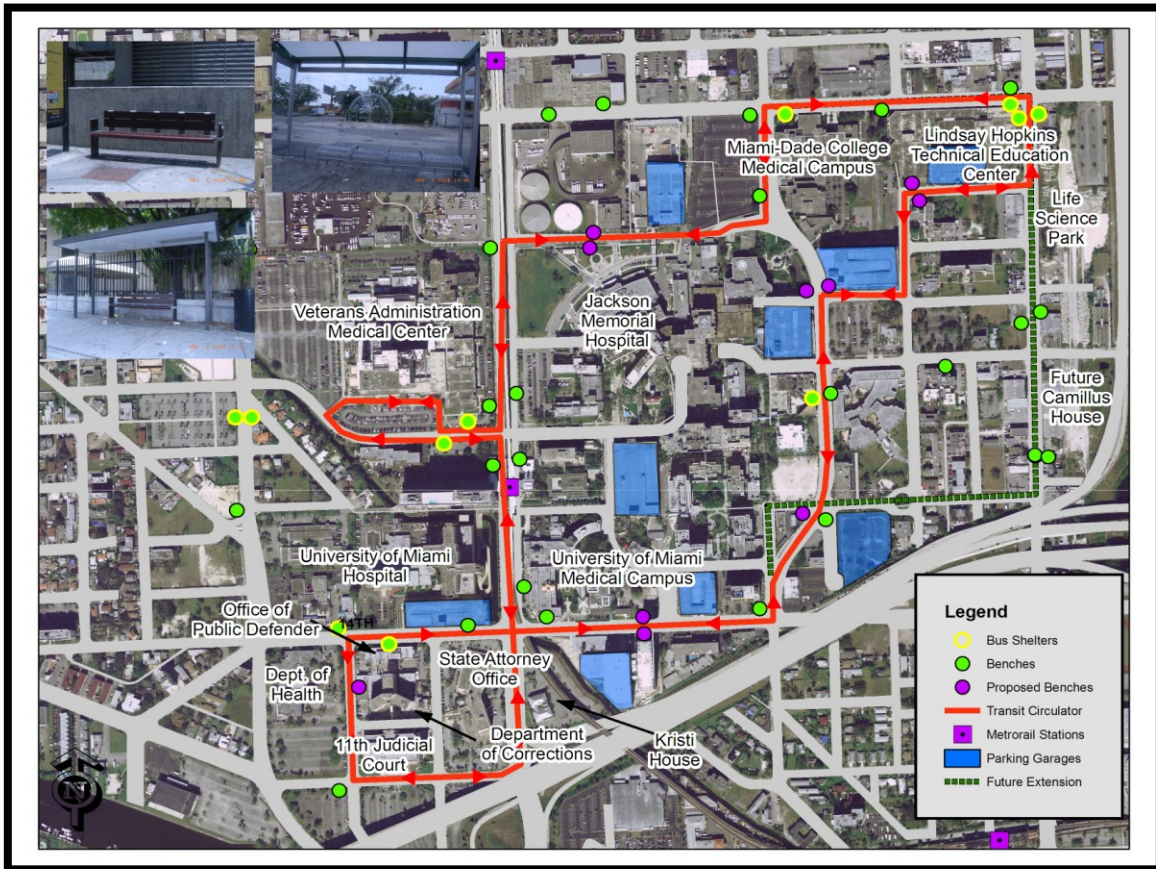
Most projects come from the Resurfacing, Landscaping, and Maintenance category.

Specifically related to 7th Avenue there are a number of pedestrian improvements recommended. These include:

- 14th Street: Additional crosswalks, 8' sidewalks, and a new right turn lane south bound on NW 7th Ave
- 15th Street: 7' sidewalks
- 16th Street: 8' sidewalks
- 17th Street: 6' sidewalks, signal optimization
- 18th Street: Widen sidewalks
- 20th Street: Widen sidewalks, signal optimization, new right turn land south bound on NW 7th Ave
- 29th Street: Optimize signal
- 36th Street: Optimize signal

Additionally there are two transit improvements that will interact with 7th Avenue in this area. The Health District Circulator will operate on 7th Avenue between 19th and 20th Street as it connects Jackson Hospital the judicial activities and various parking facilities west of 7th Avenue. The project is funded for an initial three years by the City of Miami and FDOT.

Map 12: Health District Circulator Route Map



The Miami Streetcar project is a joint effort by the City of Miami and the Florida Department of Transportation to develop a streetcar to connect downtown Miami to the growing and redeveloped areas of Wynwood/Edgewater, midtown Miami, the Miami design district, the Buena Vista East Historic District, and the Health District. The 10-mile streetcar project would operate on existing roadways connecting to transit stations and multi-modal centers. It will run on 7th Avenue between 20th Street and 17th Street.

The project has been studied by the 2005 City of Miami Initial Streetcar Corridor Feasibility Study and the 2006 City of Miami Streetcar Corridor Alternative Analysis Report. The proposed route flows in a north/south alignment, with a westward spur into the Health District. This would connect the residential and commercial areas of midtown Miami, Downtown Miami and Brickell with the district. The project is currently searching for a funding source.

Land Use Surrounding the Immigration Facility

A detailed land use map of the area within a ¼ mile radius of the federal immigration facility at NW 88th Street 7th Avenue has been prepared. All most all of the frontage to NW 78th Avenue itself is commercial in nature consisting of the Immigration Facility and various shopping centers. There are three industrial parcels fronting the corridor. There is one institutional parcel and one low density multi-family residential parcel. In addition there is one office use fronting the corridor. The primary land use for properties not abutting NW 7th Ave is single family residential. There are a few duplex areas and some other low density multi family uses, around a couple institutional uses.

7th Avenue Traffic and Pedestrian Study

Task 2: Existing Conditions

Immigration Facility Parking

A complete inventory of all on- and off-street parking was taken in the vicinity of the facility including a mid-day occupancy count. Access to the structured parking and lots at the actual facility was denied by the Department of Homeland Security; therefore no data exists for this aspect of the evaluation. It is anticipated that at the time that the department responds to data collection requests that either access will be provided or actual data will be provided.

There are approximately 1,985 parking spaces in the vicinity of the study area. About 1,080 are on-street spaces, and 905 are off-street spaces. All off-street parking is private. All private parking is surface parking, the mid day occupancy counts show that about 24% of these spaces were occupied. Nearly 15% (167) of on-street spaces are occupied, and 34% (304) of off-street spaces are occupied. It appears that parking is ample in the area.

Table 4: Immigration Facility Parking

Location	Parking Spaces			Comments
	Occupied	Total	% Occupied	
NW 6th Ave b/w NW 95th St & NW 94th St	3	12	25%	On-Street
NW 10th Ave b/w NW 91st St & NW 89th St	2	48	4%	On-Street
NW 83rd St, east of NW 7th Ave	10	16	63%	On-Street
NW 91st St b/w NW 7th Ave & NW 12th Ave	37	160	23%	On-Street
Little River Dr, from NW 7th Ave to NW 12th Ave	19	140	14%	On-Street
NW 8th Ave b/w NW 91st St to Little River Dr	6	52	12%	On-Street
NW 9 Ave/NW 89th St/NW 11th Ct b/w NW 91st St & Little River Dr	8	124	6%	On-Street
NW 90th St/NW 11th Ct	3	56	5%	On-Street
NW 9th Ct b/w NW 89th St & NW 91st St	6	32	19%	On-Street
NW 11th Ave b/w Little River Dr and NW 89th Ct	0	12	0%	On-Street
NW 85th St b/w NW 7th Ave & NW 12th Ave	18	136	13%	On-Street
NW 10th Ave b/w NW 83rd St & NW 85th St	9	46	20%	On-Street
NW 83rd St, b/w NW 10th Ave and NW 7th Ave	7	88	8%	On-Street
NW 84th Terrace b/w NW 10th Ave & NW 7th Ave	16	72	22%	On-Street
NW 84th St b/w NW 10th Ave & NW 7th Ave	16	72	22%	On-Street
NW 90th St, east of NW 7th Ave	7	14	50%	On-Street
Walgreens, corner of NW 7th Ave & NW 95th St	40	80	50%	Off- Street
Property behind gas station on NW 6th Ave	6	11	55%	Off- Street
9497 NW 7th Ave	2	5	40%	Off- Street
8431 NW 7th Ave	3	20	15%	Off- Street
Snappers, 8995 NW 7th Ave	10	34	29%	Off- Street
8431 NW 7th Ave	3	10	30%	Off- Street
McDonalds, 9250 NW 7th Ave	18	61	30%	Off- Street
9150 NW 7th Ave	25	45	56%	Off- Street
9100 NW 7th Ave	15	27	56%	Off- Street
9240 NW 7th Ave	8	15	53%	Off- Street
895 to 901 NW 91st St	9	16	56%	Off- Street
Save-A-Lot, 8890 NW 7th Ave	45	158	28%	Off- Street
Abundant Life Dchristian Learning Center, 777 NW 85th St	0	120	0%	Off- Street
8460 NW 7th Ave	0	35	0%	Off- Street
740 NW 84th St	8	22	36%	Off- Street
Enterprise, 8400 NW 7th Ave	11	34	32%	Off- Street
Worshiper's House of Prayer, 8350 NW 7th Ave	1	10	10%	Off- Street
Value Store It, 9101 NW 7th Ave	7	12	58%	Off- Street
Miami Shores Nursing & Rehab Center, 9380 NW 7th Ave	18	26	69%	Off- Street
Moody Electronics, 669 NW 90th St	6	8	75%	Off- Street
Wachovia, 9301 NW 7th Ave	46	79	58%	Off- Street
Punjab Mobil Mart, 9497 NW 7th Ave	3	5	60%	Off- Street
NW 83 Terrace b/w NW 7th Ave & NW 10th Ave	20	72	28%	Off- Street
	471	1985	24%	

Immigration Facility Traffic Data

Traffic and turning movement counts were conducted at the intersection of NW 88th Street and NW 7th Avenue, both at Little River Drive which leads into the facility and at the north driveway to the facility. Additionally counts at adjacent intersections were counted to inform the synchro analysis to be performed at a later date. At the north driveway in the morning period there are about 11 pedestrians and over 2,100 vehicles mainly using the southbound left turn movement into the facility. Similarly at Little River Drive in the morning there are 14 pedestrians and over 2,260 vehicles most of which (1,512) making south Bound lefts into the facility.

Table 5: AM Peak Hour Volumes

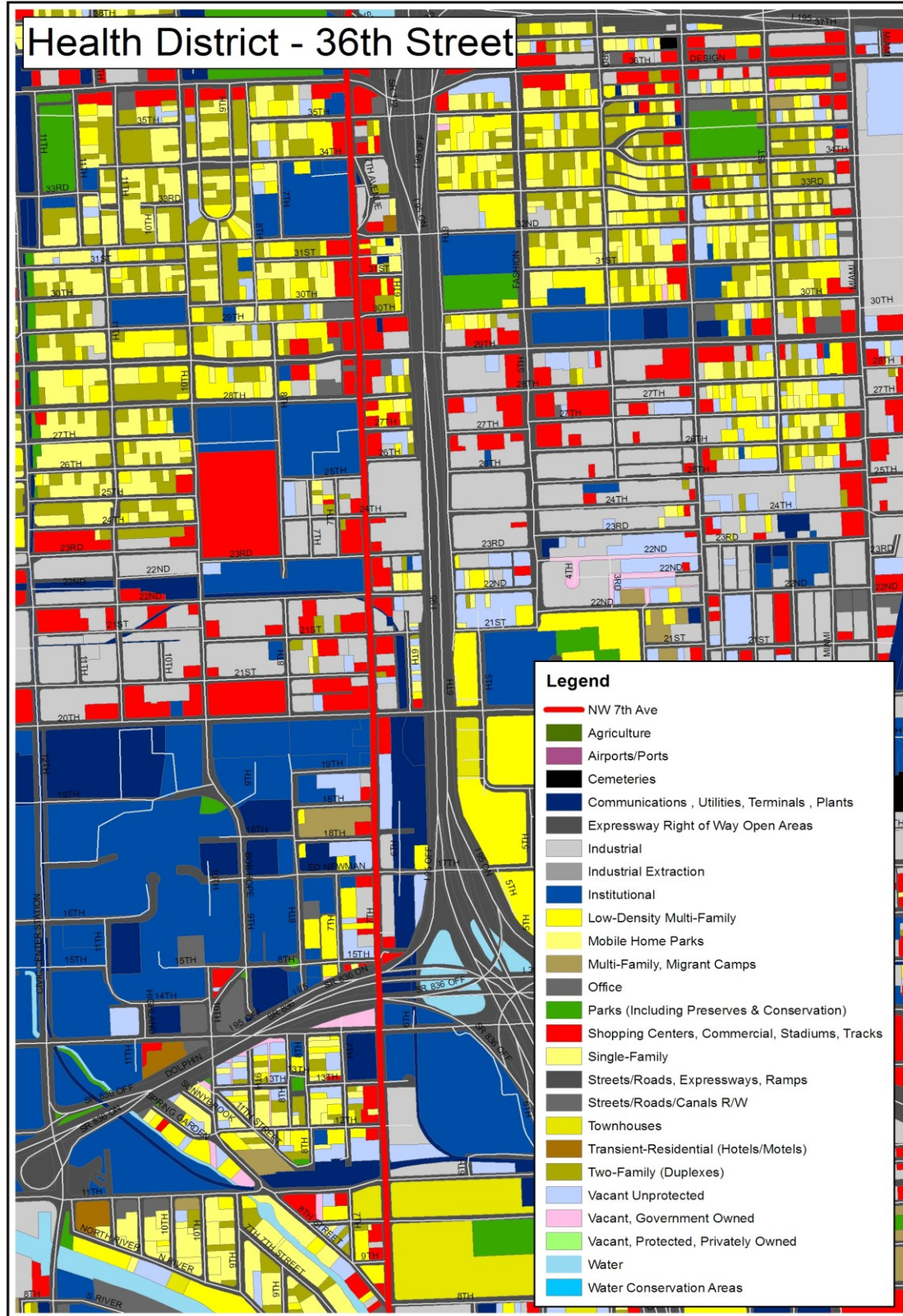
AM PEAK HOUR VOLUMES SUMMARY OF VEHICLE MOVEMENTS									
Location	Move	PHF	Peds	Cars & Trucks	Cars	Truck %age	Existing		
							2009 Vol		
NW 7 AVE & NW 95 ST (7:30 to 8:30am) 06/09/09	EBL			70	69	1%	70		0
	EBT	0.84		432	419	3%	432		
	EBR		7	86	81	6%	86		
	WBL	0.90		190	188	1%	190		
	WBT			361	353	2%	361		
	WBR		19	49	48	2%	49		
	NBL			66	63	5%	66		
	NBT	0.91		343	324	6%	343		
	NBR		4	132	131	1%	132		
	SBL			238	236	1%	238		
NW 7 AVE & N DWY (7:30 to 8:30am) 06/09/09	EBL	0.25		0	0	0%	0		0
	EBT			0	0	0%	0		
	EBR		4	0	0	0%	0		
	WBL			3	3	0%	3		
	WBT	0.70		0	0	0%	0		
	WBR		2	23	23	0%	23		
	NBL			0	0	0%	0		
	NBT	0.89		593	566	5%	593		
	NBR		5	22	22	0%	22		
	SBL			26	26	0%	26		
NW 7 AVE & LITTLE RIVER DR (7:30 to 8:30am) 06/09/09	EBL	0.88		5	5	0%	5		0
	EBT			0	0	0%	0		
	EBR		0	51	51	0%	51		
	WBL			7	7	0%	7		
	WBT	0.64		0	0	0%	0		
	WBR		0	11	11	0%	11		
	NBL			10	9	10%	10		
	NBT	0.88		609	581	5%	609		
	NBR		8	27	26	4%	27		
	SBL			25	25	0%	25		
NW 7 AVE & NW 81 ST (7:30 to 8:30am) 06/09/09	EBL			0	0	0%	0		0
	EBT	0.63		0	0	0%	0		
	EBR		5	0	0	0%	0		
	WBL			119	119	0%	119		
	WBT	0.90		350	331	5%	350		
	WBR		1	114	111	3%	114		
	NBL			6	5	17%	6		
	NBT	0.84		506	478	6%	506		
	NBR		5	0	0	0%	0		
	SBL			0	0	0%	0		
NW 7 AVE & NW 79 ST (7:30 to 8:30am) 06/09/09	EBL			144	139	3%	144		0
	EBT	0.93		749	665	11%	749		
	EBR		26	37	33	11%	37		
	WBL			51	48	6%	51		
	WBT	0.93		220	210	5%	220		
	WBR		15	59	56	5%	59		
	NBL			31	30	3%	31		
	NBT	0.85		321	301	6%	321		
	NBR		6	116	99	15%	116		
	SBL			265	256	3%	265		
06/09/09	SBT	0.91		1072	1046	2%	1,072		
	SBR		6	156	153	2%	156	3221	

Future Land Use in the Corridor

A conversation was held with the Miami Dade County Department of Planning and Zoning to identify future activity centers in the corridor. The current Future Land Use Map from the Comprehensive Development Master Plan consists of all the future plans for the area at this time. A corridor master plan is being planned, but it will not be undertaken and completed during the time frame of this analysis.

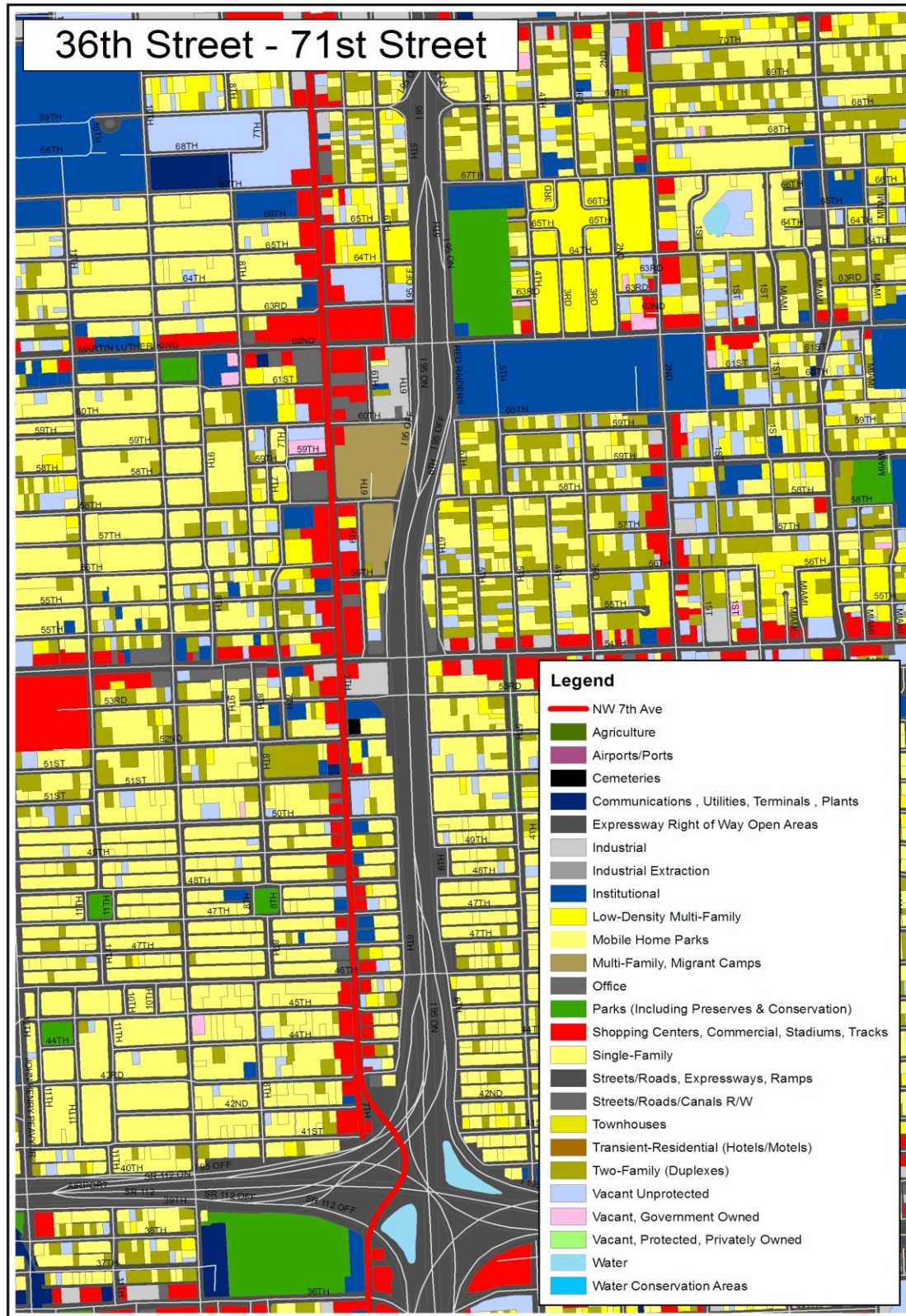
Future land use along the entire corridor is relatively consistent. Primary uses abutting NW 7th Ave, are commercial or industrial in nature as shopping centers, office, or various government or institutional uses. Vacant government owned land also exists. Properties not abutting NW 7th Ave and those a block off of the corridor are primarily residential in nature, with single family, duplex, and higher density multi family all located in that area. There are very few, if any areas of high density residential along or around the corridor. The corridor is typical of South Florida in that it is urban but not dense, and as such it can be expected that the automobile will be the dominant mode for all but the most local of trips. Significant change to the land development code governing the intensity of land use would be needed to make the corridor more accommodating to pedestrians and transit.

Map 14: Land Use Map – Health District – 36th St.



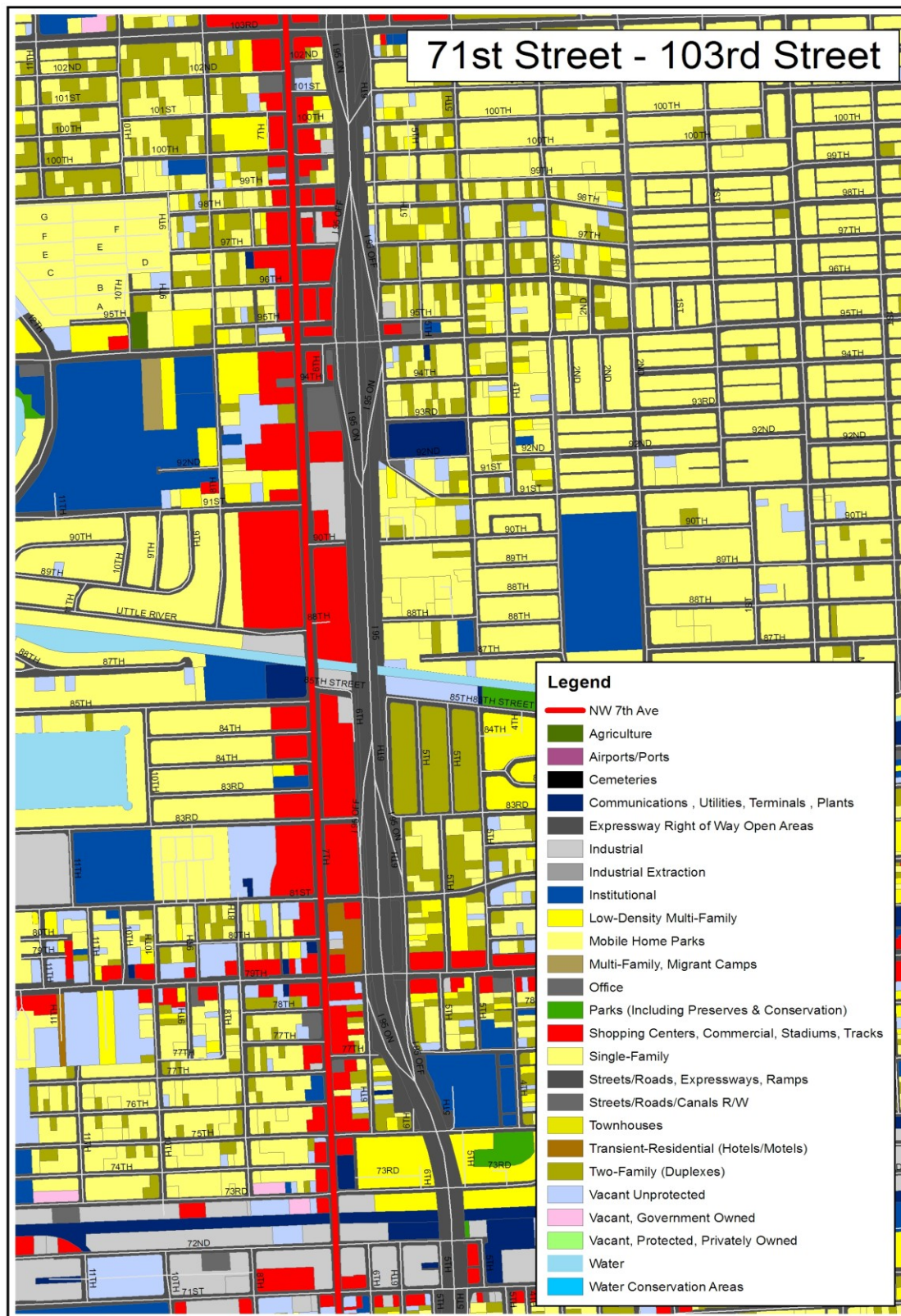
7th Avenue Traffic and Pedestrian Study
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Map 15: Land Use Map – 36th St. to 71st St.



7th Avenue Traffic and Pedestrian Study Task 2: Existing Conditions

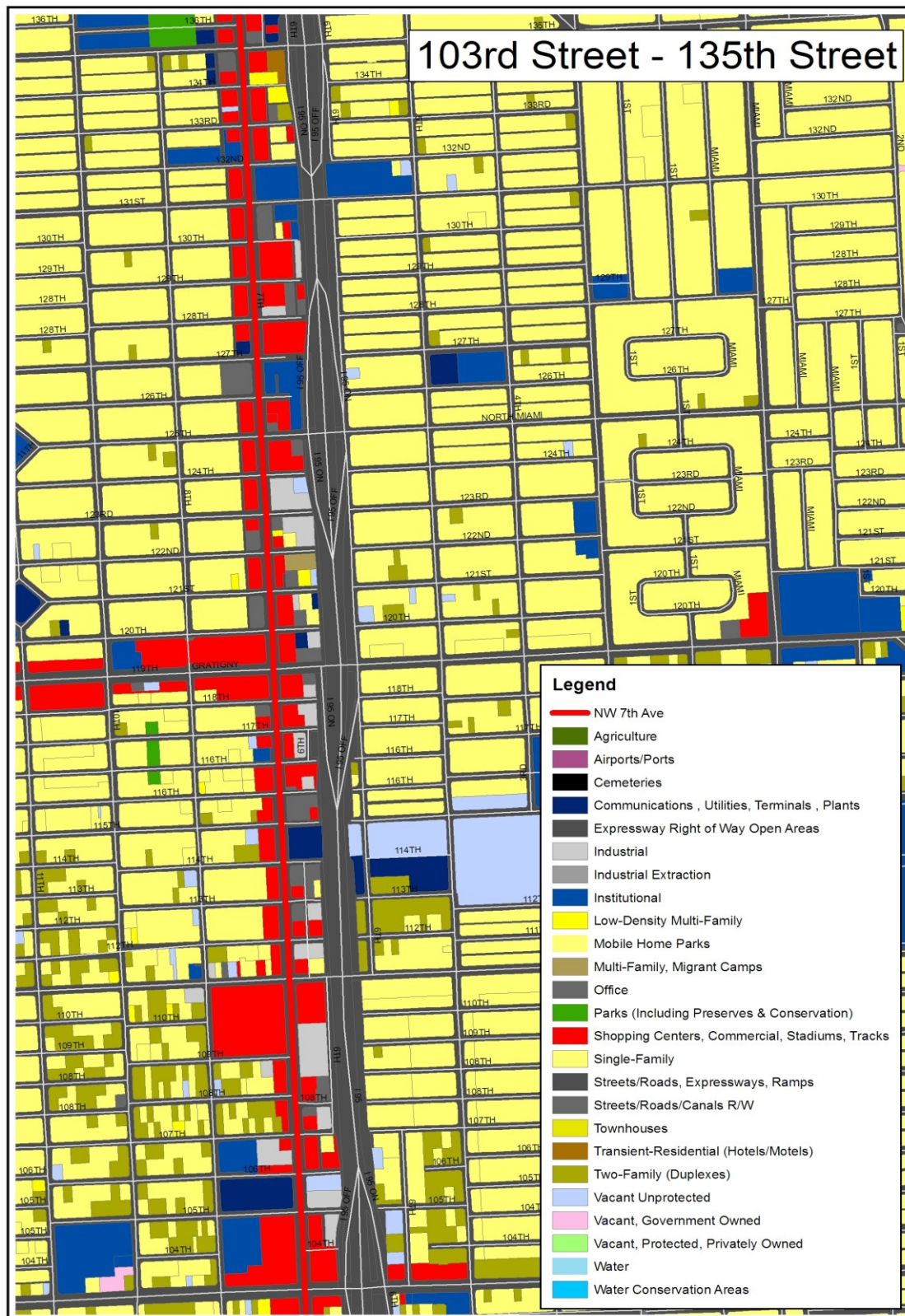
Map 16: Land Use Map – 71st St. to 103rd St.



7th Avenue Traffic and Pedestrian Study

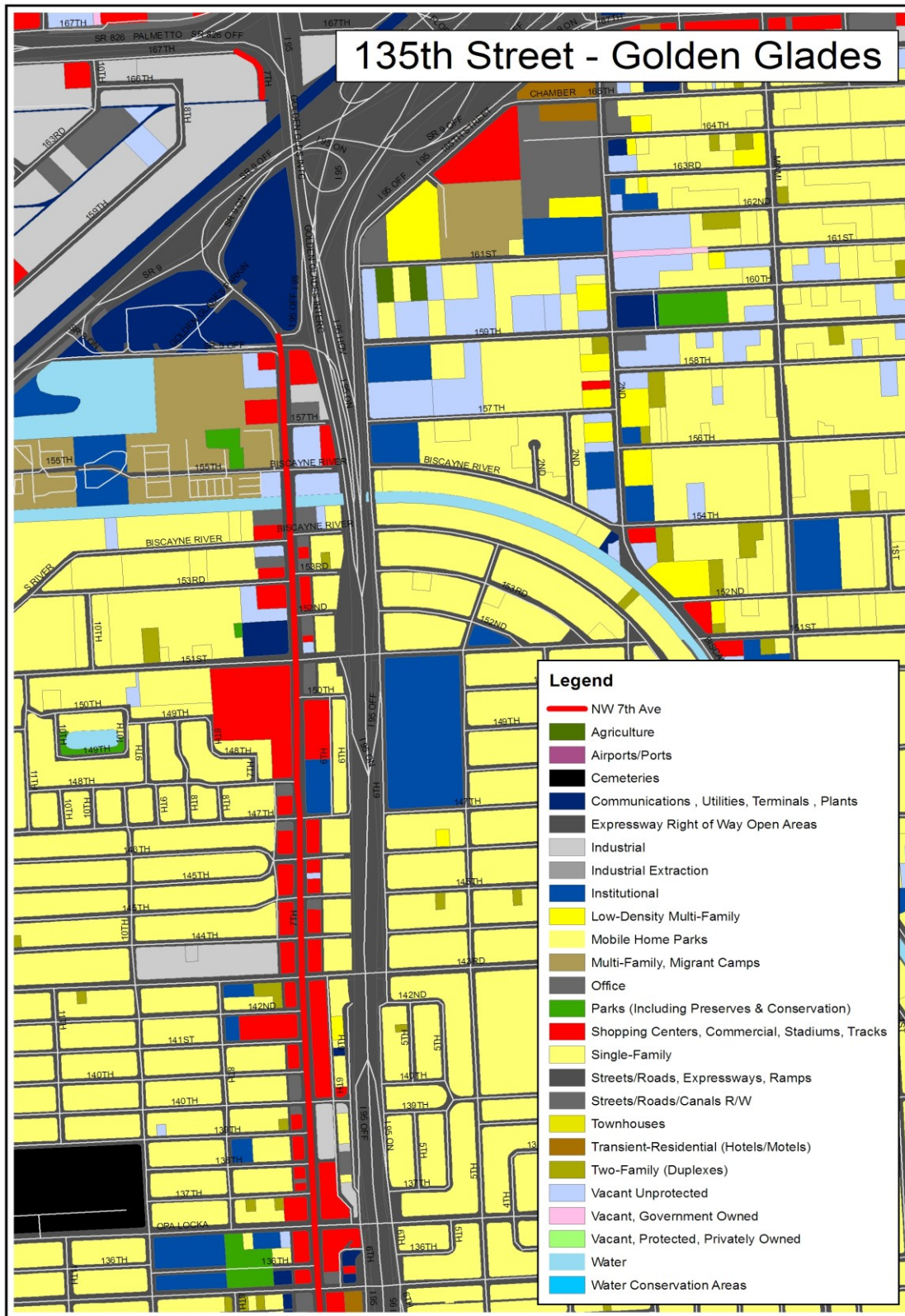
Task 2: Existing Conditions

Map 17: Land Use Map – 103rd St. to 135th St.



7th Avenue Traffic and Pedestrian Study Task 2: Existing Conditions

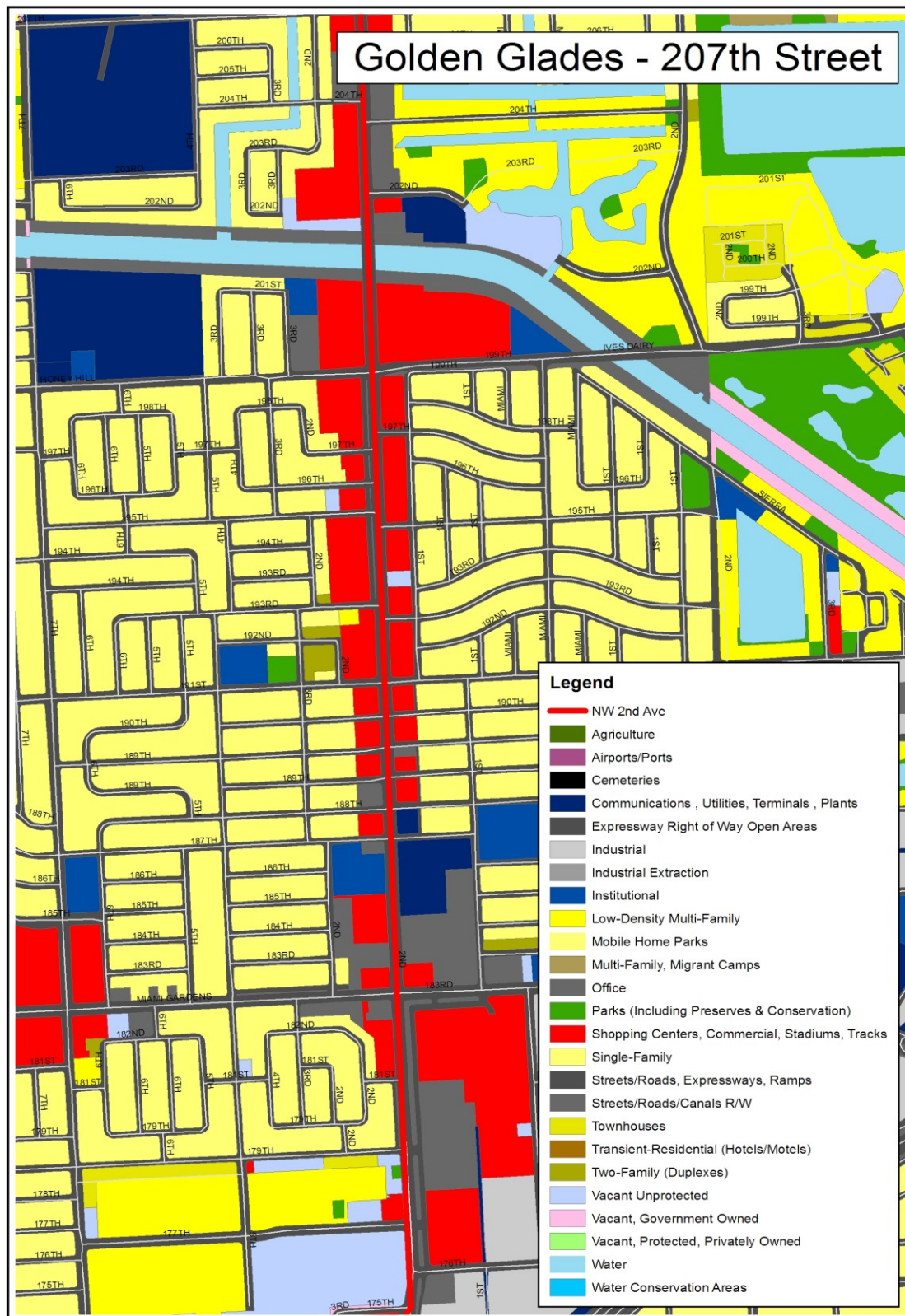
Map 18: Land Use Map – 135th St. to Golden Glades



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Map 19: Land Use Map – Golden Glades to 207th St.



Regional Model Results

Engineers met with FDOT District IV to identify outputs from the Regional Travel Model currently being developed for the entire corridor between the Broward County line and SR 836. This report determines the existing conditions and traffic volumes for the study corridor under evaluation. Multiple sources were utilized to determine the existing conditions as traffic counts for the entire length of the study corridor were not available. The following sources were used to determine the existing traffic volumes:

- Year 2008 FDOT AADT's
- Year 2005 FDOT AADT's
- South East Regional Planning Model (SERPM) 6.5 with 2005 Base Year
- Historical AADT between Year 2002 and Year 2008

Year 2008 AADT's were used to determine Year 2009 volumes at locations where Year 2008 AADT's were available with slight adjustments. However, Year 2008 AADT's were not available on the entire length of the study corridor. The information gaps were filled out by using SERPM6.5 Time of Day (TOD) model volumes.

SERPM6.5 Post Processing

SERPM 6.5 model results were reviewed in the study corridor. When compared against Year 2005 AADT's, as shown in Table 1, the model, in general, underestimated daily traffic volumes. Using model volumes directly is not recommended. Hence, a post processing procedure was developed to make Year 2005 model volumes in line with Year 2005 AADT's. Since Year 2005 AADT's are not available throughout, the study corridor has been divided into 16 segments for analysis purpose. Each segment was identified using daily volumes as basis. In other words, continuous links with similar volumes were identified as one segment for analysis purpose. The different roadway segments, Year 2005 model volumes and Year 2005 post processed model volumes have been presented in Table 1.

Determining Growth Rates per Year

Year 2005 AADT's and Year 2008 AADT's were collected for all the available segments and growth rates per year were calculated as shown in Table 2. It is observed from Table 2 that most of the roadway segments showed a negative growth rate between Year 2005 and Year 2008. Hence, historical AADT's for these segments were collected and reviewed. It was observed that the AADT's at these locations were decreasing steadily from Year 2005 to Year 2008. Hence, a default growth rate of 1.0 was assumed at locations where negative growth was observed.

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Table 6: Comparison of Year 2005 AADT and SERPM Model Volumes

Roadway Segment	Location	Y2005 AADT	Y2005 Model Volumes	Vol/Cnt Ratio
	N of NW 199th St	70,000	58,568	0.84
NW 2nd Ave	N of NW 183rd St	61,000	67,128	1.10
	S of 183rd St	60,500	75,628	1.25
NW 7th Ave SB	SB 200' N of I-95	25,000	24,210	0.97
NW 7th Ave NB	NB Under I-95	38,500	26,425	0.69
	S of NW 151st St	24,500	4,120	0.17
	N of 119th St	35,000	20,259	0.58
	S of 119th St	39,500	17,970	0.45
	N of NW 95th St	33,000	23,267	0.71
	N of NW 81st St	38,500	26,598	0.69
NW 7th Ave	S of NW 79th St	36,132	15,655	0.43
	N of NW 62nd St	25,000	12,880	0.52
	N of NW 54th St	23,500	20,925	0.89
	S of NW 46th St	23,000	27,887	1.21
	N of NW 20th St	25,000	21,657	0.87
	S of NW 20th St	29,252	16,571	0.57

Determining Year 2009 Traffic Volumes

The calculated growth rates as shown in Table 2 were applied to Year 2005 post processed model volumes to obtain Year 2009 traffic volumes at locations, where Year 2008 AADT's were not available. Growth rates were also applied to Year 2008 AADT's at locations, where Year 2008 AADT's were available to obtain Year 2009 model volumes. The computed Year 2009 model volumes are tabulated in Table 2 and presented in Table 2.

These volumes range from just over 21,000vpd between NW 54th Street and NW 43rd Street, to over 61,000vpd between NW 199th Street and NS 183rd Street. Volumes are generally heavier in the north and lighter in the south, with volumes between 50,000vpd and 60,000vpd north of NW 159th St. Volumes are generally between 34,000vpd and 38,000vpd between NW 71st St and 135th Street. Volumes are generally less than 25,000vpd south of NW 62nd Street.

This data will be used as the basis for the analysis of future conditions in the study corridor, and will identify impacted segments of roadway, and areas where the level-of-service would change because in the future roadway or transit improvements required from the alternative land use scenario.

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**Table 7: Computed Growth Rates and Year 2009 Computed Model Volumes
for Roadway Segments in Study Area**

	Roadway Segment	From	To	Y2005 AADT	Y2008 AADT	Y2007 AADT	Growth Rate (%)	Adj Growth Rate (%)	Y2009 Computed Model Volumes
1		SW 41st St	NW 199th St	70,000	58,000		-5.71	1.00	58,580
2	NW 2nd Ave	NW 199th St	NW 183rd St	61,000	60,500		-0.27	1.00	61,105
3		NW 183rd St	NW 7th Ave Ext	60,500	57,500		-1.65	1.00	58,075
4	NW 7th Ave -SB	NW 7th Ave Ext	NW 159th St	25,000	24,000		-1.33	1.00	24,240
5	NW 7th Ave -NB	NW 7th Ave Ext	NW 159th St	38,500	25,500		-11.26	1.00	25,755
6		Golden Glades Int	NW 135th St	24,500	27,500		4.08	4.08	28,622
7		NW 135th St	NW 119th St	35,000	34,000		-0.95	1.00	34,340
8		NW 119th St	NW 103rd St	39,500	37,500		-1.69	1.00	37,875
9		NW 103rd St	NW 95th St	33,000	32,000		-1.01	1.00	32,320
10		NW 95th St	NW 81st St	38,500	37,000		-1.30	1.00	37,370
11	NW 7th Ave	NW 81st St	NW 71st St	36,132	0	31,500	-6.41	1.00	36,992
12		NW 71st St	NW 62nd St	25,000	21,500		-4.67	1.00	21,715
13		NW 62nd St	NW 54th St	23,500	24,500		1.42	1.42	24,848
14		NW 54th St	NW 43rd St	23,000	21,000		-2.90	1.00	21,210
15		NW 43rd St	NW 20th St	25,000	22,000		-4.00	1.00	22,220
16		NW 20th St	SR 836	29,252	0	22,000	-12.40	1.00	31,003

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Using traffic counts, the link level of service was computed for the study area. It can be seen that the peak hour two way level of service shows that all but two links function at an adequate level of service. The areas along NW 2nd Ave south of Miami Gardens Drive and North of Ives Dairy Road are the only two intersections with levels of service that exceed the standard E+20%. These both function at LOS F.

Table 8: Roadway Link Capacity/LOS Analysis – From Miami-Dade/Broward County Line to SR 836/Dolphin Expressway

Count Station #	Location	Number of lanes	AADT	Peak Hr K Factor	Peak Hr 2-Way Volume(Vph)	LOS
498	NW 2 Ave @ M-Dade/Broward Co. line	6LD	44000	0.09	3960	D
365	Nw 2 Ave N. of Ives Dairy Rd	6LD	58000	0.09	5220	F
21	NW 2 Ave S. of M-Gardens Dr	6LD	57500	0.09	5175	F
436	NW 7 Ave N. of 147 St	6LD	27500	0.09	2475	C
128	NW 7 Ave N. of 119 St	6LD	34000	0.09	3060	C
5014	NW 7 Ave S. of 119 St	6LD	37500	0.09	3375	C
235	NW 7 Ave N. of 95 St	6LD	32000	0.09	2880	C
529	NW 7 Ave N. of 81 St	6LD	37000	0.09	3330	C
5144	NW 7 Ave N. of 62 St	4LD	21500	0.09	1935	C
5141	NW 7 Ave N. of 54 St	4LD	24500	0.09	2205	C
9030	NW 7 Ave S. of 46 ST	4LD	21000	0.09	1890	C
5005	NW 7 Ave S. of 21 St	4LD	22000	0.09	1980	C

Survey of Pedestrian Conditions

It is through this sub-task that more detailed study areas will be identified for further examination in *Task 4: Analysis of Pedestrian Activity and Needs*. Because of the length of the corridor, and relative inactivity of overall pedestrianism, general conditions were examined in this phase of the analysis. To do so an initial site visit was taken as part of this task to evaluate general sidewalk locations and widths along the corridor, as well as other pedestrian amenities, including identification of areas of high pedestrian activity. These will be detailed for further study. More detail will be provided in the subsequent task where the locations will have specific recommendations made.

Typically the corridor is a 5 to 7 lane facility with turning lanes, moderate vehicular volumes, keeping the level of service at a generally acceptable level. Transit is prevalent with Rt. 77 and the various cross routes using NW 7th Avenue. Nine intersections along the corridor account for over half of the total ons and offs along the corridor. The land uses are commercial along the corridor and low density residential off of the corridor. Pedestrian level of service is generally high because facilities exist in the form of typically 5' sidewalks on the east and west side of the street, with adequate ADA features, as well as ample cross walks, striping, and pedestrian signal. Curb cuts are

prevalent as the form of the abutting commercial uses are typically strip center in nature with the presence of few if any cross access easements. Where shopping centers exist, there is ample parking, and their nature serves the driver primarily, and the surrounding residential uses secondarily. Pedestrian activity is sparse along the entire length of the corridor.

Areas of intensity of use, either in commercial or residential activity were sought to be selected as specific study areas. There are a few locations where there is either existing or pending intensity of use. On the southern end of the corridor, in the Health District at 20th Street, Camillus House will be locating, it is anticipated that this would bring significant pedestrian activity. The area around 50th Street seems to have been positioned as a pedestrian center. It contains adequate facilities, but little evidence of pedestrianism. The area between NW 54th Street and NW 58th Street contains the Edison apartments, and is an area of more heavy pedestrian activity. Again sidewalks and adequate facilities seem to be in place. Just north of this area between NW 58th Street and NW 69th Street is the Miami Dade College Education Center. More moderately dense public housing exists in the NW 79th Street area. At this point along the corridor the utilities have been placed underground. The new immigration facility is located at NW 88th Street. This facility has the ability to handle significant pedestrian activity. Land uses surrounding it would be accommodating to pedestrians. Many brand new pedestrian amenities are in place, as are ample sidewalks. North of this area the sidewalk pattern, while existent on both sides and generally 5' in width, have taken on a zig zag pattern. There are several instances where NW 7th Avenue must cross another major transportation facility, like at SR 112 and the Golden Glades Interchange. At SR 112 there is pedestrian access typified by a 4' sidewalk, a concrete barrier and continuous chain link fencing. Pedestrian access at the Golden Glades is less adequate if existent at all. North of Miami Gardens Drive the corridor flows on the NW 2nd Avenue alignment, and becomes significantly more polished, having undergone relatively recent redevelopment. Potential internal and connective systems may be considered in a subsequent task.

Over all there were pedestrian counts at 25 intersections along the corridor. These range from a high of 209 pedestrian crossings at 79th Street to a low of 15 pedestrian crossings at 66 St. In order to determine locations that warranted further study, it was decided to examine intersections where pedestrian activity exceeded 1% of vehicular volume at individual intersections. Seven intersections met this criterion. Again at 79th Street there is a total of 209 pedestrian crossings and a total of 4,810 vehicles at the intersection for a total of 4.3% pedestrians. At 46th Street the 95 pedestrians are 1.8% of the 5,106 vehicular volume. Seventeenth Street has 65 pedestrians and 4,228 vehicles crossing it for a total of 2.6% pedestrian activity. Streets with more than pedestrian volumes greater than 1% of vehicular volumes include:

- 17 St
- 23 St
- 32 St
- 46 St
- 69 St
- 75 St
- 79 St

7th Avenue Traffic and Pedestrian Study

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Table 9: Pedestrian Summary for NW 7th Avenue / US-441

Intersection	Volume		Pedestrian Volume		Ped (Total)	AM %	PM %
	AM	PM	AM	PM			
NW 7 AVE & NW 17 ST	1,904	2,324	30	35	65	1.58%	1.51%
NW 7 AVE & NW 20 ST	2,861	3,738	25	28	53	0.87%	0.75%
NW 7 AVE & NW 23 ST	2,313	2,206	25	17	42	1.08%	0.77%
NW 7 AVE & NW 29 ST	3,352	3,426	12	25	37	0.36%	0.73%
NW 7 AVE & NW 32 ST	2,266	2,486	37	20	57	1.63%	0.80%
NW 7 AVE & NW 36 ST	3,135	3,187	0	0	0	0.00%	0.00%
NW 7 AVE & NW 46 ST	2,376	2,730	50	45	95	2.10%	1.65%
NW 7 AVE & NW 54 ST	4,354	4,711	36	38	74	0.83%	0.81%
NW 7 AVE & NW 58 ST	2,095	2,412	16	17	33	0.76%	0.70%
NW 7 AVE & NW 62 ST	4,129	3,875	20	22	42	0.48%	0.57%
NW 7 AVE & NW 65 ST (EB)	2,943	2,518	3	7	10	0.10%	0.28%
NW 7 AVE & NW 65 ST (WB)	2,948	2,527	5	3	8	0.17%	0.12%
NW 7 AVE & NW 66 ST	2,924	2,524	11	4	15	0.38%	0.16%
NW 7 AVE & NW 67 ST	3,028	2,666	29	20	49	0.96%	0.75%
NW 7 AVE & NW 69 ST	2,952	2,654	38	8	46	1.29%	0.30%
NW 7 AVE & NW 71 ST	2,495	2,886	17	12	29	0.68%	0.42%
NW 7 AVE & NW 75 ST	2,245	2,565	30	27	57	1.34%	1.05%
NW 7 AVE & NW 79 ST	3,595	3,953	119	90	209	3.31%	2.28%
NW 7 AVE & NW 81 ST	3,831	4,158	6	11	17	0.16%	0.26%
NW 7 AVE & LITTLE RIVER DR	3,092	3,181	10	3	13	0.32%	0.09%
NW 7 AVE & IMMIGRATION NORTH DRIVE-WAY	2,187	2,386	11	2	13	0.50%	0.08%
NW 7 AVE & NW 95 ST	4,566	4,908	17	11	28	0.37%	0.22%
NW 7 AVE & NW 103 ST	5,289	5,447	21	15	36	0.40%	0.28%
NW 7 AVE & NW 111 ST	4,520	3,445	7	9	16	0.15%	0.26%
NW 7 AVE & NW 119 ST	5,137	5,036	18	17	35	0.35%	0.34%
Total	80,537	81,949	593	486	1079		
Average	3,221	3,278	24	19	43	0.81%	0.61%

Identification of Study Areas

As a result of this on-site observation, the analysis of existing potential pedestrian activity from higher intensity land uses planned in the corridor, and the analysis of transit on and off activity, and actual pedestrian counts, 14 intersections were selected for more intensive study in Task 4: Analysis of Pedestrian Activity and Needs. These include:

- | | |
|----------|------------|
| 1. 17 St | 8. 69 St |
| 2. 20 St | 9. 75 St |
| 3. 23 St | 10. 79 St |
| 4. 32 St | 11. 88 St |
| 5. 46 St | 12. 95 St |
| 6. 54 St | 13. 125 St |
| 7. 62 St | 14. 183 St |

7TH AVENUE TRAFFIC AND PEDESTRIAN STUDY

TASK 3 IMPACTS OF IMMIGRATION FACILITY

Introduction

The purpose of this task is to determine the impacts of the Immigration Facility recently opened at the intersection of NW 7th Avenue and 88th Street. The following is a summary of the effort taken to determine the impacts of the Immigration Facility located at the intersection of NW 7th Avenue and NW 88th Street/Little River Drive.

Study Area

NW 7th Avenue is a north-south corridor that runs parallel to Interstate 95 (I-95); I-95 is a limited access facility that carries a high volume of regional trips. NW 7th Avenue runs parallel and is approximately 500 feet west of I-95. The area of influence of the Immigration Facility was determined to extend from NW 95th Street to NW 79th Street. These limits were selected as they constitute the nearest exits and entrances to I-95. These are signalized intersections north and south of the study facility driveways. Therefore, these intersections, as well as those in between and along NW 7th Avenue, were selected for analysis and reporting purposes as these would be the most impacted by the Immigration Facility generated trips.

Figure 1 (page 44) shows the limits, as well as the study intersections and their traffic control device within the area of influence.

Immigration Facility

The Immigration Facility is located in the northeast corner of NW 7th Avenue and NW 88th Street. The building area is approximately 70,000 square feet. There are a total of 380 parking spaces with 130 allotted for employees and 250 for customers. It is estimated that when the facility is fully occupied and operational over 4,800 trips will be generated daily with 412 of those generated during the AM peak hour and 85 trips during the PM peak hour. Table 1 below shows the trips projected for the facility at maximum capacity and the existing trips. It is projected that by the year 2015 the facility will be operating at it maximum capacity.

The United States Citizenship and Immigration Services (USCIS) District 9 office is located on the second floor; and the USCIS Miami Field Office is located on the first floor. The facility employs about 110 employees in the building; consisting of federal and contract employees.

There are no exterior waiting areas. The facility has sufficient waiting space inside the building to accommodate all of the customers. The only time lines occur outside the building is during naturalization ceremonies. Everyone entering the building must go through security screening so ingress can backup at certain points in the day.

The facility has an around-the-clock security guard support inside the facility. In addition they have CCTV coverage inside and outside the facility that is monitored 24 hours per day. The facility has a 20 foot setback around the entire building. There are no setback requirements for the parking facilities.

The facility operates Monday through Friday from 7:00am to 3:30pm with the exception of federal holidays. At maximum capacity they can accommodate about 950 applicants per day; plus family members, attorneys, and interpreters. The USCIS is a benefit based organization and does not perform law enforcement functions.

Table 1: Immigration Facility Trip Generation

ITE Land Use Code	Condition	Size (sf)	AM Peak Hour Trips			PM Peak Hour Trips		
			TOTAL	IN	OUT	TOTAL	IN	OUT
820	Proposed	70,000	412	347	65	85	27	58
			100%	84%	16%	100%	31%	69%
	Existing (YR 2009)	70,000	144	100	44	18	4	14
			100%	70%	30%	100%	23%	77%
	Difference	70,000	268	247	21	67	23	44
			100%	93%	7%	100%	35%	65%

As can be seen from the table above, the existing AM trips are 144 out of 412 possible generated trips, about 35% of the projected total trips when the facility is at maximum capacity and the existing PM trips are 18 out of 85 possible trips approximately 20% of the anticipated PM peak hour trips once the facility is at full capacity.

Data Collection Effort

To evaluate the existing conditions and to provide the basis for future analysis, the data collection included:

- Facilities Inventory;
- Intersection Control;
- Intersection Lane Geometry;
- Turning Movement Counts;
- Queue Counts;
- Seasonal Adjustment Factors;
- Growth Rates; and
- Identification of planned and programmed improvements.

Facility Inventory

NW 7th Avenue/US-441 is a state arterial which runs north-south and just west of I-95. It is a six-lane roadway with a two-way left turn (TWLT) lane down the center of the road. The posted speed limit is 35 miles per hour and the lanes are approximately eleven feet wide. Facilities inventory shows the existing roadway segment conditions) included:

- Jurisdiction and Functional classification;
- Number of lanes and widths;
- Traffic control types;
- Lengths between study intersections and driveways;
- Intersections and driveways lane usage and exclusive turn lanes queue capacity.

Table 2: NW 7th Avenue Mainline Facilities Inventory

Facility	Segment		Jurisdiction	Functional Classification	Lanes	Length (miles)	Speed (mph)	Lane Width (ft)
	From	To						
NW 7th Avenue	--	NW 95th St	State	Minor Arterial	6LU	--	35	11
	NW 95th St	NW 88th St	State	Minor Arterial	6LU	0.46	35	11
	NW 88th St	NW 81st St	State	Minor Arterial	6LU	0.44	35	11
	NW 81st St	NW 79th St	State	Minor Arterial	6LU	0.12	35	11
	NW 79th St	--	State	Minor Arterial	6LU	--	35	11

Traffic Control

Within the study area four (4) signalized intersections as well as one (1) unsignalized intersection, (the Immigration Facility driveway north of Little River Drive), were selected for reporting purposes. The study intersections and driveways are listed below:

Signalized Intersections:

- NW 79th Street and NW 7th Avenue;
- NW 81st Street and NW 7th Avenue;
- NW 88th Street and NW 7th Avenue
- NW 95th Street and NW 7th Avenue;

Un-signalized Intersection:

- North Immigration Facility Driveway.

The four signalized intersections are semi-actuated. The signal timing to evaluate the performance for these intersections was obtained from Miami-Dade County (MDC) Traffic Control Center. Review of the signal timing data that served as baseline for the analyses show that the AM peak hour cycle length was generally 140 seconds with the exception of NW 95th Street whose AM peak hour cycle length is of 100 seconds. The PM peak hour cycle length was 100 seconds for all signalized study intersections.

At the signalized intersections, there are no exclusive pedestrian phases; push buttons are provided. Pedestrian signals are concurrent with the through movements.

Intersection Lane Geometry

The lane geometry of the study intersections is depicted in Figure2. These intersections generally have exclusive left-turn lanes with a protected or permitted left-turn signal phase. The length of these left turn lanes were inventoried and included in the baseline analysis of the intersections and for comparison of the proposed geometric strategies.

Figure 1: Study Area

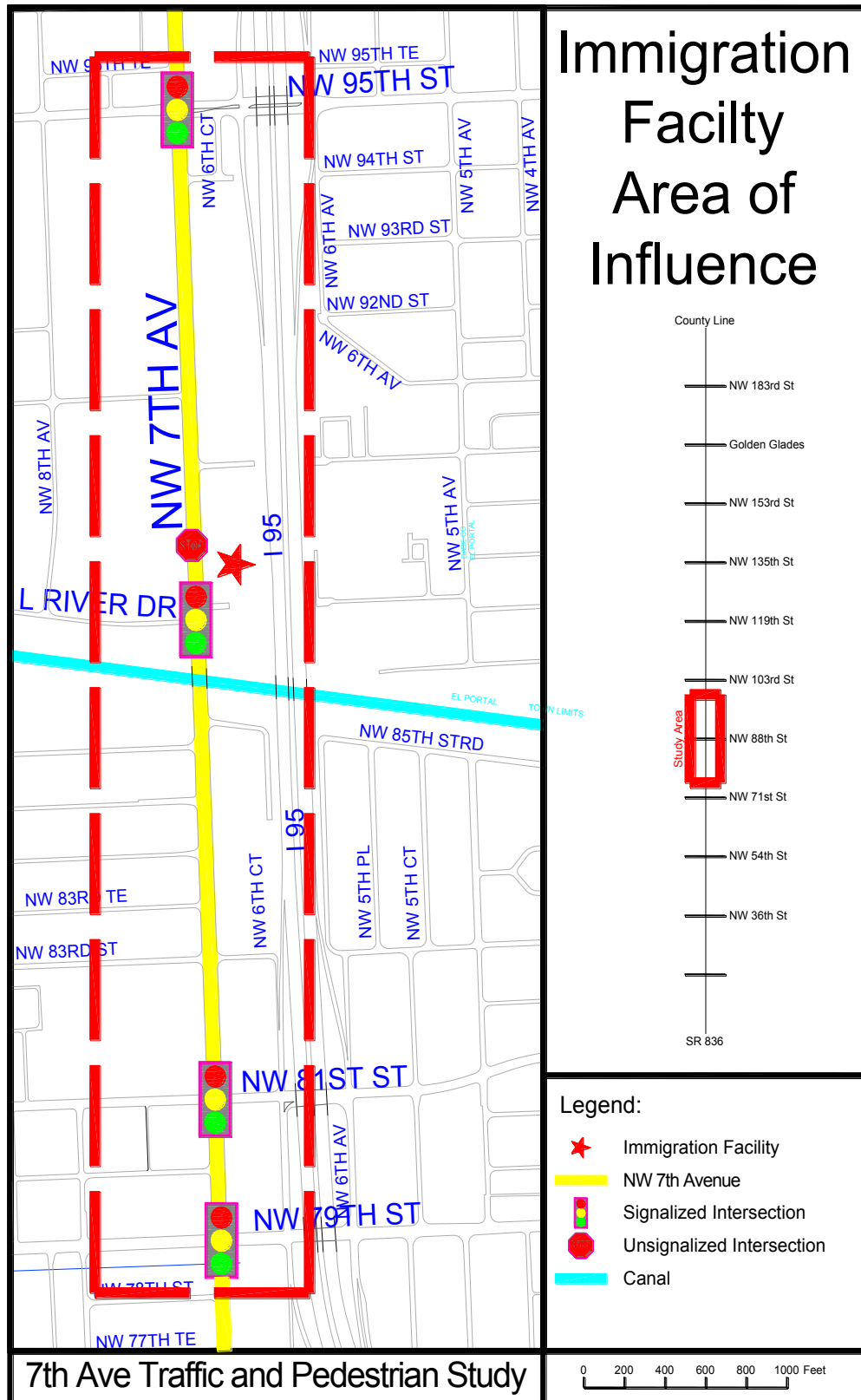
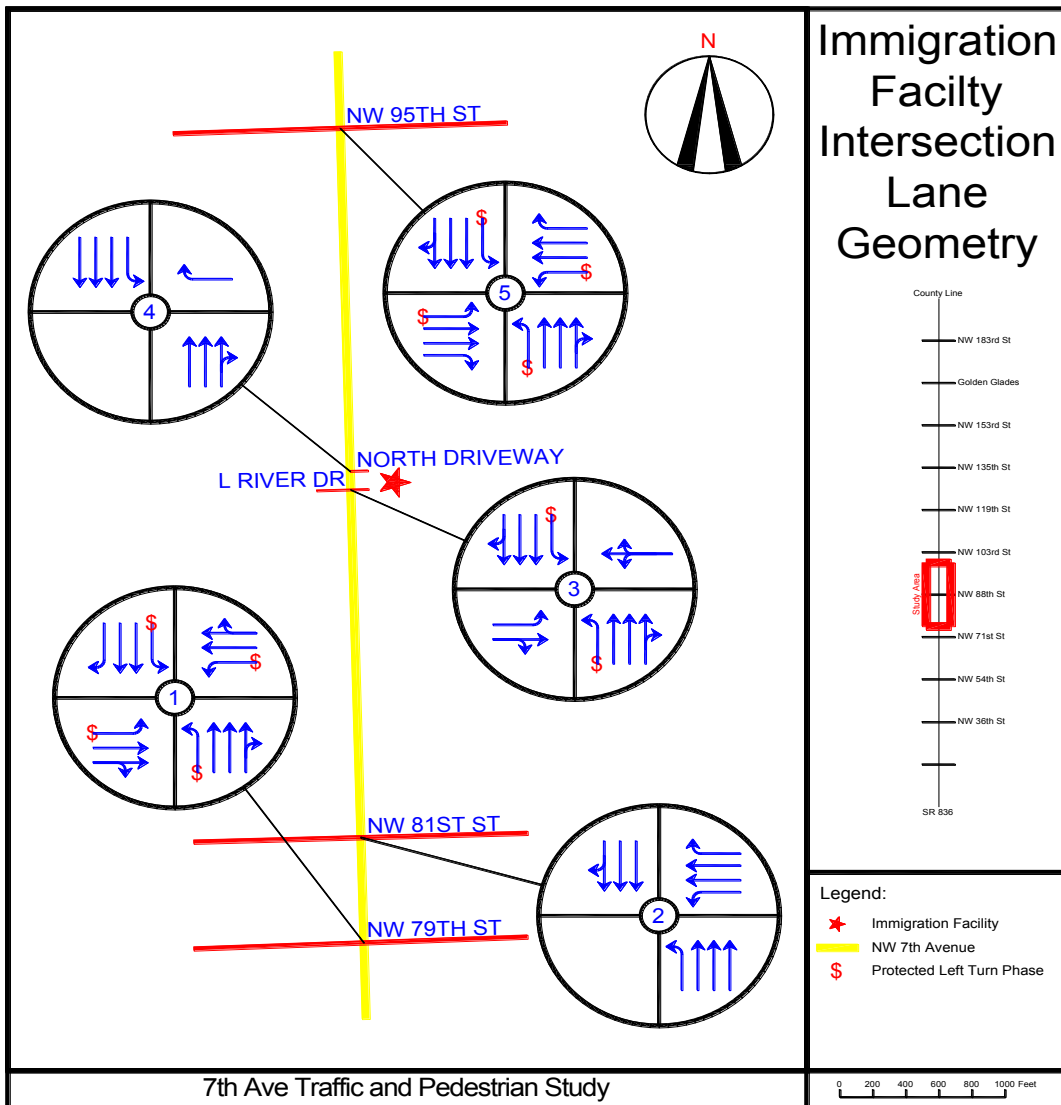


Figure 2: Intersection Lane Geometry



Turning Movement Counts

Turning movement counts (TMC's) were taken on Tuesday, June 9th, 2009 at the study intersections. Counts were carried out from 7:00 – 9:00 AM and from 4:00 – 6:00 PM with the peak hour generally between 7:30 – 8:30 AM and 4:30 – 5:30 PM. A summary of the peak hour volumes are shown in Table 4 and Table 5.

Turning movement counts included:

- Cars,
- Trucks/Buses, and
- Pedestrians.

Queue Counts

Queue counts were carried out on Wednesday, July 20, 2009. Counts were conducted during the peak hour periods of 7:00 – 9:00 AM and 4:00 – 6:00 PM, and queue lengths were recorded every five minutes. These locations are listed below:

1. NW 79th Street and NW 7th Avenue;
2. NW 81st Street and NW 7th Avenue;
3. NW 88th Street and NW 7th Avenue
4. NW 95th Street and NW 7th Avenue;

The recorded queue counts showed that most of the observed movements do not have significant queuing.

Charts were created to graphically depict the queuing at the above listed intersections. 1 through Chart 3 depicts the intersections where queues were observed. Appendix F contains additional charts as well as the queue count sheets.

Significant queues were observed at the AM and PM peak hour westbound left movements at NW 7th Avenue and NW 95th Street as well as for the southbound left movement at NW 7th Avenue and NW 79th Street.

Queues are likely to be a problem at the intersections of NW 95th and NW 79th Streets, particularly for the movements that are to and from I-95. Other locations within the study area do not appear to have significant queuing issues for existing conditions.

Chart 1: AM Peak Hour Vehicle Queue Volumes at NW 7th Avenue and 95th Street

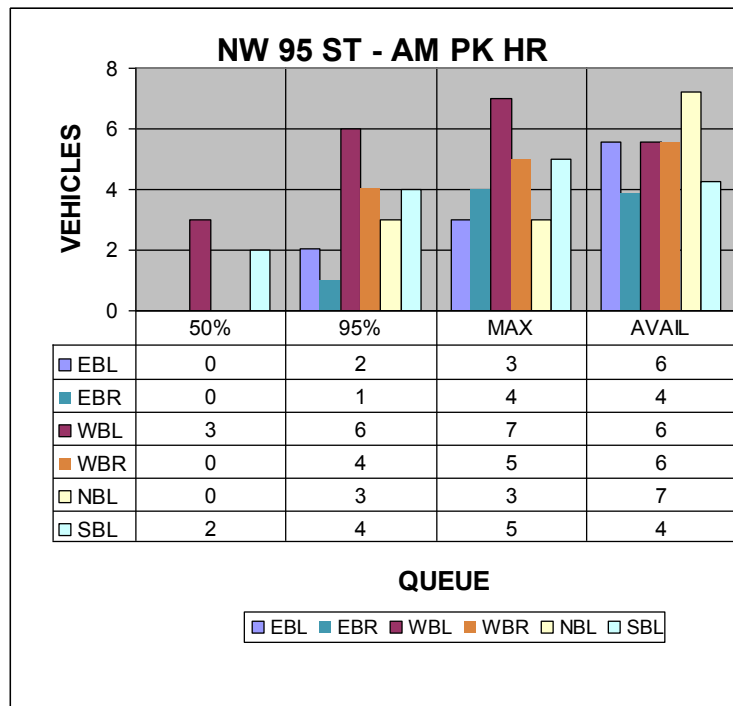


Chart 2: PM Peak Hour Vehicle Queue Volumes

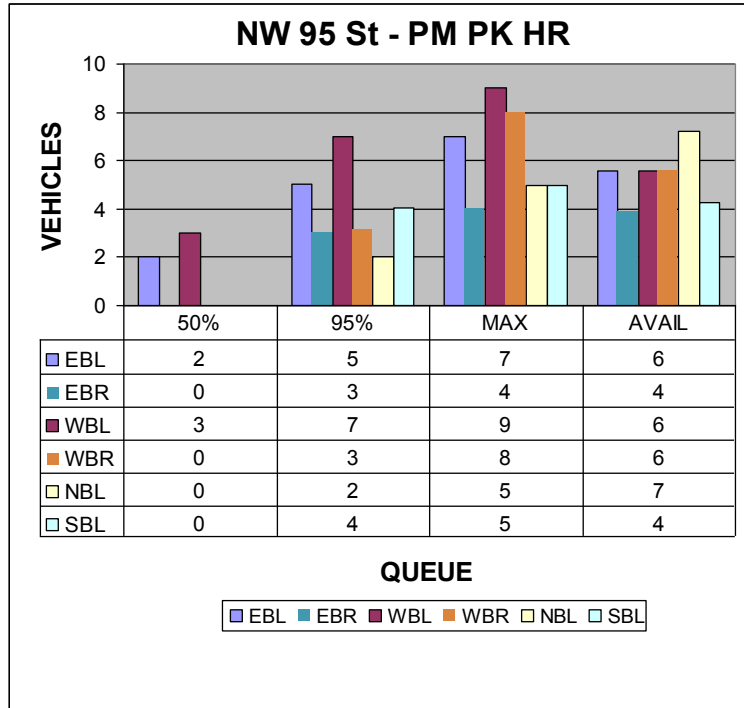


Chart 3: AM Peak Hour Vehicle Queues Volumes

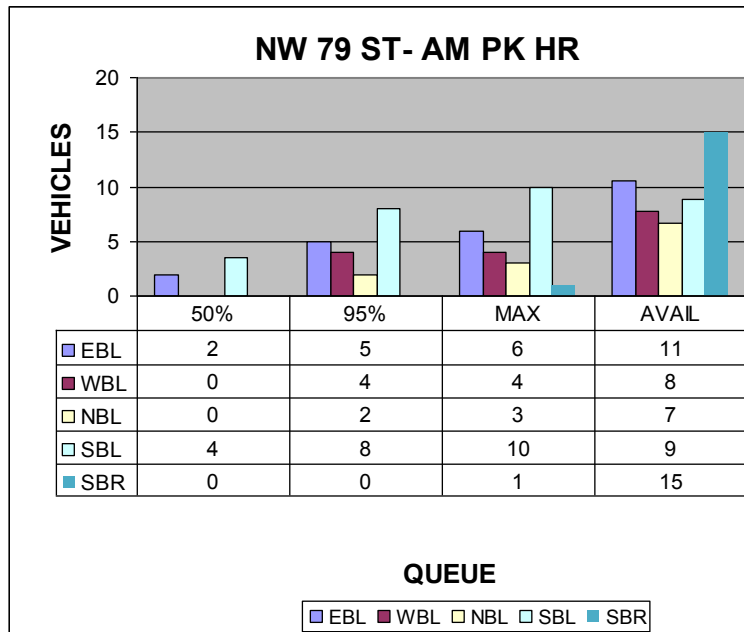
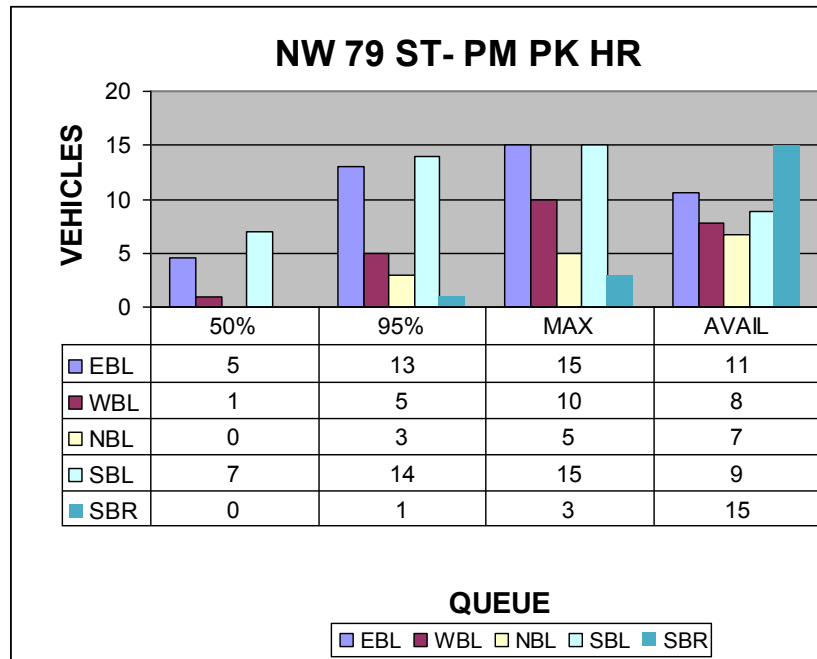


Chart 4: PM Peak Hour Vehicle Queue Volumes



Seasonal Factors

Daily counts are susceptible to seasonal fluctuation as roadways might have high numbers of traffic either from tourist or school seasons.

Therefore the FDOT seasonal factor was used to adjust the counts to an average time of the year. To estimate the peak hour volumes, the field traffic volumes from the selected peak hours were comp Table 4: Existing AM Existing Peak Hour Volumes and Table 5: Existing PM Peak Hour Volumes) into tables. The FDOT seasonal adjustment factors from the 2007 Florida Traffic Information DVD were applied to these field turning movement counts.

Table 3 shows the factors used to adjust field data.

Table 3: Factors for Adjusting Existing Volumes

Category	Dates	SF
8700 Miami-Dade North	06/03/2007 - 06/09/2009	1.02

Additionally, the AASHTO rounding standards were applied to the adjusted volumes to account for daily inconsistencies of traffic volumes. Appendix E contains a copy of the AASHTO rounding standards.

Table 4: Existing AM Peak Hour Volumes

Location	Move	2009 Existing								
		PHF	Peds	Vehs	Trucks	Cars	Truck	2007	2009	2009
				Volume			%	SF	Prj Vol	Adj Vol ¹
1	NBL			31	1	30	4%	1.02	32	40
	NBT	0.85	6	321	21	300	7%	1.02	328	350
	NBR			116	14	102	13%	1.02	119	150
NW 7 AVE & NW 79 ST	SBL			265	7	258	3%	1.02	271	300
	SBT	0.91	6	1072	21	1,051	2%	1.02	1,094	1,100
	SBR			156	2	154	2%	1.02	160	200
7:30 - 8:30 AM	EBL			144	6	138	5%	1.02	147	150
	EBT	0.93	26	749	88	661	12%	1.02	764	800
	EBR			37	3	34	9%	1.02	38	40
06/09/09	WBL			51	4	47	8%	1.02	53	60
	WBT	0.93	15	220	18	202	9%	1.02	225	250
	WBR			59	2	57	4%	1.02	61	70
2	NBL			6	1	5	17%	1.02	7	10
	NBT	0.84	5	506	28	478	6%	1.02	517	550
	NBR			0	0	0	0%	1.02	0	0
NW 7 AVE & NW 81 ST	SBL			0	0	0	0%	1.02	0	0
	SBT	0.91	7	1370	37	1,333	3%	1.02	1,398	1,400
	SBR			77	4	73	6%	1.02	79	80
7:30 - 8:30 AM	EBL			0	0	0	0%	1.02	0	0
	EBT	0.63	5	0	0	0	0%	1.02	0	0
	EBR			0	0	0	0%	1.02	0	0
06/09/09	WBL			119	0	119	0%	1.02	122	150
	WBT	0.90	1	350	19	331	6%	1.02	357	400
	WBR			114	3	111	3%	1.02	117	150
3	NBL			10	1	9	10%	1.02	11	20
	NBT	0.88	6	609	28	581	5%	1.02	622	650
	NBR			27	1	26	4%	1.02	28	30
NW 7 AVE & LITTLE RIVER DR	SBL			25	0	25	0%	1.02	26	30
	SBT	0.90	8	1512	37	1,475	3%	1.02	1,543	1,600
	SBR			6	0	6	0%	1.02	7	10
7:30 - 8:30 AM	EBL			5	0	5	0%	1.02	6	10
	EBT	0.88	0	0	0	0	0%	1.02	0	0
	EBR			51	0	51	0%	1.02	53	60
06/09/09	WBL			7	0	7	0%	1.02	8	10
	WBT	0.64	0	0	0	0	0%	1.02	0	0
	WBR			11	0	11	0%	1.02	12	20
4	NBL			0	0	0	0%	1.02	0	0
	NBT	0.89	5	593	27	566	5%	1.02	605	650
	NBR			22	0	22	0%	1.02	23	30
NW 7 AVE & IMMIGRATION NORTH	SBL			26	0	26	0%	1.02	27	30
	SBT	0.91	0	1474	34	1,440	3%	1.02	1,504	1,600
	SBR			0	0	0	0%	1.02	0	0
7:30 - 8:30 AM	EBL			0	0	0	0%	1.02	0	0
	EBT	0.25	4	0	0	0	0%	1.02	0	0
	EBR			0	0	0	0%	1.02	0	0
06/09/09	WBL			3	0	3	0%	1.02	4	10
	WBT	0.70	2	0	0	0	0%	1.02	0	0
	WBR			23	0	23	0%	1.02	24	30
5	NBL			66	3	63	5%	1.02	68	70
	NBT	0.91	4	343	19	324	6%	1.02	350	350
	NBR			132	1	131	1%	1.02	135	150
NW 7 AVE & NW 95 ST	SBL			238	2	236	1%	1.02	243	250
	SBT	0.92	1	1225	25	1,200	3%	1.02	1,250	1,300
	SBR			89	1	88	2%	1.02	91	100
7:30 - 8:30 AM	EBL			70	1	69	2%	1.02	72	80
	EBT	0.84	7	432	13	419	4%	1.02	441	450
	EBR			85	4	81	5%	1.02	87	90
06/09/09	WBL			190	2	188	2%	1.02	194	200
	WBT	0.90	19	361	8	353	3%	1.02	369	400
	WBR			49	1	48	3%	1.02	50	50

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Table 5: Existing PM Peak Hour Volumes

Location	Move	2009 Existing								
		PHF	Peds	Total Vehs	Trucks	Cars	Truck %	2007 SF	2009 Prj Vol	2009 Adj Vol ¹
				Volume						
1	NBL	0.92	12	98	3	95	4%	1.02	100	100
	NBT			1068	26	1,042	3%	1.02	1,090	1100
	NBR			120	10	110	9%	1.02	123	150
NW 7 AVE & NW 79 ST	SBL	0.93	6	215	2	213	1%	1.02	220	250
	SBT			469	21	448	5%	1.02	479	500
	SBR			117	3	114	3%	1.02	120	150
4:30 - 5:30 PM	EBL	0.97	23	248	6	242	3%	1.02	253	300
	EBT			710	33	677	5%	1.02	725	750
	EBR			54	1	53	2%	1.02	56	60
06/09/09	WBL	0.91	17	75	4	71	6%	1.02	77	80
	WBT			297	13	284	5%	1.02	303	350
	WBR			72	4	68	6%	1.02	74	80
2	NBL	0.92	3	54	2	52	4%	1.02	56	60
	NBT			1334	32	1,302	3%	1.02	1,361	1400
	NBR			0	0	0	0%	1.02	0	0
NW 7 AVE & NW 81 ST	SBL	0.94	4	0	0	0	0%	1.02	0	0
	SBT			695	21	674	4%	1.02	709	750
	SBR			107	3	104	3%	1.02	110	150
4:30 - 5:30 PM	EBL	0.45	9	0	0	0	0%	1.02	0	0
	EBT			0	0	0	0%	1.02	0	0
	EBR			0	0	0	0%	1.02	0	0
06/09/09	WBL	0.90	8	109	5	104	5%	1.02	112	150
	WBT			538	45	493	9%	1.02	549	550
	WBR			217	6	211	3%	1.02	222	250
3	NBL	0.97	9	56	0	56	0%	1.02	58	60
	NBT			1546	36	1,510	3%	1.02	1,577	1600
	NBR			2	0	2	0%	1.02	3	10
NW 7 AVE & LITTLE RIVER DR	SBL	0.94	9	1	0	1	0%	1.02	2	10
	SBT			807	23	784	3%	1.02	824	850
	SBR			28	0	28	0%	1.02	29	30
4:30 - 5:30 PM	EBL	0.79	0	15	0	15	0%	1.02	16	20
	EBT			0	0	0	0%	1.02	0	0
	EBR			48	0	48	0%	1.02	49	50
06/09/09	WBL	0.50	0	8	0	8	0%	1.02	9	10
	WBT			0	0	0	0%	1.02	0	0
	WBR			4	1	3	25%	1.02	5	10
4	NBL	0.96	0	0	0	0	0%	1.02	0	0
	NBT			1536	36	1,500	3%	1.02	1,567	1600
	NBR			1	0	1	0%	1.02	2	10
NW 7 AVE & IMMIGRATION NORTH	SBL	0.94	1	0	0	0	0%	1.02	0	0
	SBT			796	22	774	3%	1.02	812	850
	SBR			0	0	0	0%	1.02	0	0
4:30 - 5:30 PM	EBL	0.00	0	0	0	0	0%	1.02	0	0
	EBT			0	0	0	0%	1.02	0	0
	EBR			0	0	0	0%	1.02	0	0
06/09/09	WBL	0.75	1	0	0	0	0%	1.02	0	0
	WBT			0	0	0	0%	1.02	0	0
	WBR			2	0	2	0%	1.02	3	10
5	NBL	0.88	4	115	1	114	1%	1.02	118	150
	NBT			993	22	971	3%	1.02	1,013	1100
	NBR			237	4	233	2%	1.02	242	250
NW 7 AVE & NW 95 ST	SBL	0.94	4	150	6	144	4%	1.02	153	200
	SBT			495	24	471	5%	1.02	505	550
	SBR			55	3	52	6%	1.02	57	60
3:30 - 4:30 PM	EBL	0.93	9	125	2	123	2%	1.02	128	150
	EBT			440	13	427	3%	1.02	449	450
	EBR			82	4	78	5%	1.02	84	90
06/09/09	WBL	0.87	20	152	5	147	4%	1.02	156	200
	WBT			411	5	406	2%	1.02	420	450
	WBR			114	2	112	2%	1.02	117	150

Study Horizons and Growth Rate

To understand the transportation needs within the study area, existing traffic operations as well as anticipated future conditions need to be assessed. Analysis was performed to determine the existing as well as the conditions in the years of 2015 and 2030.

The future growth rate for the study area was determined from review of the available FDOT Annual Average Daily Traffic (AADT) data. This review, carried out in Task 2, shows that between the years of 2005 and 2008 there have been a negative growth trend. However, a moderate growth rate of 2.0% per year was utilized for the purposes of this study.

Projection of Future Volumes

Utilizing an annual growth rate of 2% and AASHTO rounding standards, traffic volumes for the years 2015 and 2030 were derived.

Based on the study assumptions, traffic is expected to grow by approximately 12.6% by the year 2015 and by approximately 51.6% by the year 2030.

To obtain, Year 2015 vehicular traffic volumes, the existing (Year 2009) traffic volumes were projected to the year 2015 utilizing the 1.126 multiplier, then these were augmented adding the unutilized project trips.

To obtain, Year 2030 vehicular traffic volumes, the Year 2009 traffic volumes were projected to the Year 2030 utilizing a multiplier of 1.516.

Tables 8 and 9 show the summary tables with the projection to the years 2015 and 2030 with the inclusion of committed trips of the Immigration Facility.

Programmed Transportation Improvements

The Miami-Dade County Metropolitan Planning Organization (MPO) is responsible for planning transportation projects within the County. The currently approved 2009 Transportation Improvement Program (TIP) and the 2030 Long Range Transportation Plan (LRTP) contain these plans; both were reviewed for transportation improvements that would impact the study area. Review of the MPO TIP and LRTP revealed that there are no planned capacity projects that would impact the study area.

Table 6 below depicts the result of the review carried out of the 2009 TIP. Table 7 below depicts the result of the review carried out of the 2030 LRTP.

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Table 6: 2009 Transportation Improvement Program

MPO #	FACILITY	LIMITS	WORK PROGRAM	CONST. YR
FLORIDA DEPARTMENT OF TRANSPORTATION				
DT2516701	SR 836/I-395/I-95	From NW 17 Ave to MacArthur CSWY	PD&E / EMO Study	NA
DT4231261	SR 836/I-95	From NW 12 Ave to I-95	Interchange Ramps Modification	NA
DT4149641	SR 9A/I-95	From S of SR 836/I-395 to Broward County Line	PD&E / EMO Study	NA
DT4137543	NW 7 Ave	NW 62 St	Passenger Transfer Station/Public Transportation Shelter	NA
DT4154561	SR9A/I-95 Express	From N of SR 836/I-395 to Golden Glades Interchange	Add Special Use Lane	2009
DT4198551	SR 934/NW 79 St	From 175' E of NW 12 Ave to NW 7 Ave	Resurfacing	2009
DT2500812	SR 7/ NW 7 Ave	From NW 79 St to NW 107 St	Landscaping	2009
DT2500813	SR 7/ NW 7 Ave	From NW 107 St to NW 137 St	Landscaping	2009
DT4235182	SR 916 / NW 135 St	From NW 7 Ave/SR 441 to NW 6 Ave	Intersection (Modify)	2010
DT2500814	SR 7/NW 7 Avenue	From NW 137 St to NW 159 St	Landscaping	2011
DT2500815	SR 7/NW 7 Avenue	From NW 159 St to NW 177 St	Landscaping	2011
DT4180941	SR 7/NW 2 Avenue	From NW 176 St to 1200' S of NW 125 St	Resurfacing	2011
DT4180881	SR 826/ NW 7 Ave Ext.	From 850' SW of NW 7 Ave to SR 7/US 441/NW 2 Ave	Resurfacing	2009
DT2512003	Snake Creek Trail	From NE Miami Gardens Dr. to NW 17 Ave/ Turnpike	Bike Path/Trail	2012
MIAMI-DADE COUNTY PUBLIC WORKS DEPARTMENT				
PW671204	N 20 Street	From Civic Center to Biscayne Blvd	Resurfacing/Re-stripe existing 4 lanes, curbs, gutters and sidewalks	2011
PW000304b	NW 62 Street	From NW 37 Ave to I-95	Resurfacing and Traffic Operational Improvement	Complete
PW1000008	NW 7 Avenue	NW 119 Street	Intersection renovation: reposition of median	N/A
MIAMI-DADE TRANSIT				
TA4137545	NW 7 Avenue	NW 62 Street	Transit Hub/Public Transportation Shelter	NA
TA0000038	NW 7 Avenue	NW 62 Street	Construct New and Improve existing Passenger Activity Centers	2009
TA4137546	NW 7 Avenue	NW 62 Street	Transit Hub/Public Transportation Shelter	NA
SOUTH FLORIDA REGIONAL TRANSPORTATION AUTHORITY				
TR4187421	NW 7 Avenue	NW 62 Street	Metrorail/Tri-Rail Transfer Station	NA
MIAMI-DADE EXPRESSWAYS				
XA83611	SR 836 / I-95	From NW 17 Ave to I-95	Interchange Environmental Impact Statement	NA

Table 7: 2030 Long Range Transportation Plan

Priority	Project Roadway	Limits	Project Description
1			
2	Golden Glades	SR 836/ Turnpike/ I-95	Multi Modal Terminal
	Northwest Passenger Activity Center	NW 7 Ave & NW 62 ST	MultiModal Activity Center
	US 441 / NW 27 Ave	US 1 to Broward Countyline	ITS
3			
4			

Table 8: Future AM Peak Hour Volumes

Location	Move	2015					2030		
		Study Horizon 1					Study Horizon 2		
		Growth Factor	2015 Prj Vol	Comt'd Vols	Prj + Comt'd Vols	2015 Adj Vol ¹	Growth Factor	2030 Prj Vol	2030 Adj Vol ¹
1	NBL	1.02	37	0	37	40	1.02	50	50
	NBT	1.02	370	63	433	450	1.02	583	600
	NBR	1.02	135	0	135	150	1.02	182	200
NW 7 AVE & NW 79 ST	SBL	1.02	306	2	308	350	1.02	415	450
	SBT	1.02	1233	6	1239	1300	1.02	1668	1700
	SBR	1.02	181	1	183	200	1.02	247	250
7:30 - 8:30 AM	EBL	1.02	166	27	193	200	1.02	260	300
	EBT	1.02	861	0	861	900	1.02	1159	1200
	EBR	1.02	43	0	43	50	1.02	58	60
06/09/09	WBL	1.02	60	0	60	60	1.02	81	90
	WBT	1.02	254	0	254	300	1.02	342	350
	WBR	1.02	69	13	82	90	1.02	111	150
2	NBL	1.02	8	0	8	10	1.02	11	20
	NBT	1.02	583	102	686	700	1.02	924	950
	NBR	1.02	0	0	0	0	1.02	0	0
NW 7 AVE & NW 81 ST	SBL	1.02	0	0	0	0	1.02	0	0
	SBT	1.02	1575	9	1584	1600	1.02	2132	2200
	SBR	1.02	89	0	90	90	1.02	122	150
7:30 - 8:30 AM	EBL	1.02	0	0	0	0	1.02	0	0
	EBT	1.02	0	0	0	0	1.02	0	0
	EBR	1.02	0	0	0	0	1.02	0	0
06/09/09	WBL	1.02	138	0	138	150	1.02	186	200
	WBT	1.02	403	0	403	450	1.02	543	550
	WBR	1.02	132	28	160	200	1.02	216	250
3	NBL	1.02	13	0	13	20	1.02	18	20
	NBT	1.02	701	65	766	800	1.02	1031	1100
	NBR	1.02	32	65	97	100	1.02	131	150
NW 7 AVE & LITTLE RIVER DR	SBL	1.02	30	61	91	100	1.02	123	150
	SBT	1.02	1738	0	1738	1800	1.02	2340	2400
	SBR	1.02	8	0	8	10	1.02	11	20
7:30 - 8:30 AM	EBL	1.02	7	0	7	10	1.02	10	10
	EBT	1.02	0	0	0	0	1.02	0	0
	EBR	1.02	60	0	60	60	1.02	81	90
06/09/09	WBL	1.02	10	9	19	20	1.02	26	30
	WBT	1.02	0	0	0	0	1.02	0	0
	WBR	1.02	14	2	16	20	1.02	22	30
4	NBL	1.02	0	0	0	0	1.02	0	0
	NBT	1.02	682	2	684	700	1.02	921	950
	NBR	1.02	26	65	91	100	1.02	123	150
NW 7 AVE & IMMIGRATION NORTH	SBL	1.02	31	61	92	100	1.02	124	150
	SBT	1.02	1694	61	1755	1800	1.02	2362	2400
	SBR	1.02	0	0	0	0	1.02	0	0
7:30 - 8:30 AM	EBL	1.02	0	0	0	0	1.02	0	0
	EBT	1.02	0	0	0	0	1.02	0	0
	EBR	1.02	0	0	0	0	1.02	0	0
06/09/09	WBL	1.02	5	0	5	10	1.02	7	10
	WBT	1.02	0	0	0	0	1.02	0	0
	WBR	1.02	28	3	31	40	1.02	42	50
5	NBL	1.02	77	1	78	80	1.02	105	150
	NBT	1.02	395	3	399	400	1.02	538	550
	NBR	1.02	153	1	155	200	1.02	209	250
NW 7 AVE & NW 95 ST	SBL	1.02	274	0	274	300	1.02	369	400
	SBT	1.02	1408	99	1507	1600	1.02	2029	2100
	SBR	1.02	103	0	103	150	1.02	139	150
7:30 - 8:30 AM	EBL	1.02	82	0	82	90	1.02	111	150
	EBT	1.02	497	0	497	500	1.02	669	700
	EBR	1.02	98	7	105	150	1.02	142	150
06/09/09	WBL	1.02	219	15	235	250	1.02	317	350
	WBT	1.02	416	0	416	450	1.02	560	600
	WBR	1.02	57	0	57	60	1.02	77	80

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Table 9: Future PM Peak Hour Traffic Volumes

Location	Move	2015					2030		
		Study Horizon 1					Study Horizon 2		
		Growth Factor	2015 Prj Vol	Comt'd Vols	Prj + Comt'd Vols	2015 Adj Vol ¹	Growth Factor	2030 Prj Vol	2030 Adj Vol ¹
1	NBL	1.02	113	0	113	150	1.02	153	200
	NBT	1.02	1228	9	1237	1300	1.02	1665	1700
	NBR	1.02	139	0	139	150	1.02	188	200
NW 7 AVE & NW 79 ST	SBL	1.02	248	6	254	300	1.02	342	350
	SBT	1.02	540	12	552	600	1.02	743	750
	SBR	1.02	136	3	140	150	1.02	189	200
4:30 - 5:30 PM	EBL	1.02	285	2	288	300	1.02	388	400
	EBT	1.02	817	0	817	850	1.02	1100	1100
	EBR	1.02	64	0	64	70	1.02	87	90
06/09/09	WBL	1.02	87	0	87	90	1.02	118	150
	WBT	1.02	342	0	342	350	1.02	461	500
	WBR	1.02	84	1	85	90	1.02	115	150
2	NBL	1.02	64	0	64	70	1.02	87	90
	NBT	1.02	1533	12	1545	1600	1.02	2080	2100
	NBR	1.02	0	0	0	0	1.02	0	0
NW 7 AVE & NW 81 ST	SBL	1.02	0	0	0	0	1.02	0	0
	SBT	1.02	799	21	820	850	1.02	1104	1200
	SBR	1.02	124	4	129	150	1.02	174	200
4:30 - 5:30 PM	EBL	1.02	0	0	0	0	1.02	0	0
	EBT	1.02	0	0	0	0	1.02	0	0
	EBR	1.02	0	0	0	0	1.02	0	0
06/09/09	WBL	1.02	127	0	127	150	1.02	171	200
	WBT	1.02	619	0	619	650	1.02	834	850
	WBR	1.02	251	2	254	300	1.02	342	350
3	NBL	1.02	66	0	66	70	1.02	89	90
	NBT	1.02	1776	7	1783	1800	1.02	2400	2400
	NBR	1.02	4	7	11	20	1.02	15	20
NW 7 AVE & LITTLE RIVER DR	SBL	1.02	3	14	17	20	1.02	23	30
	SBT	1.02	928	0	928	950	1.02	1249	1300
	SBR	1.02	33	0	33	40	1.02	45	50
4:30 - 5:30 PM	EBL	1.02	19	0	19	20	1.02	26	30
	EBT	1.02	0	0	0	0	1.02	0	0
	EBR	1.02	56	0	56	60	1.02	76	80
06/09/09	WBL	1.02	11	25	36	40	1.02	49	50
	WBT	1.02	0	0	0	0	1.02	0	0
	WBR	1.02	6	11	17	20	1.02	23	30
4	NBL	1.02	0	0	0	0	1.02	0	0
	NBT	1.02	1765	11	1776	1800	1.02	2391	2400
	NBR	1.02	3	7	10	10	1.02	14	20
NW 7 AVE & IMMIGRATION NORTH	SBL	1.02	0	0	0	0	1.02	0	0
	SBT	1.02	915	14	929	950	1.02	1251	1300
	SBR	1.02	0	0	0	0	1.02	0	0
4:30 - 5:30 PM	EBL	1.02	0	0	0	0	1.02	0	0
	EBT	1.02	0	0	0	0	1.02	0	0
	EBR	1.02	0	0	0	0	1.02	0	0
06/09/09	WBL	1.02	0	0	0	0	1.02	0	0
	WBT	1.02	0	0	0	0	1.02	0	0
	WBR	1.02	4	11	15	20	1.02	21	30
5	NBL	1.02	133	2	136	150	1.02	184	200
	NBT	1.02	1141	16	1158	1200	1.02	1559	1600
	NBR	1.02	273	4	277	300	1.02	373	400
NW 7 AVE & NW 95 ST	SBL	1.02	173	0	173	200	1.02	233	250
	SBT	1.02	569	9	579	600	1.02	780	800
	SBR	1.02	65	0	65	70	1.02	88	90
3:30 - 4:30 PM	EBL	1.02	145	0	145	150	1.02	196	200
	EBT	1.02	506	0	506	550	1.02	682	700
	EBR	1.02	95	2	97	100	1.02	131	150
06/09/09	WBL	1.02	176	3	180	200	1.02	243	250
	WBT	1.02	473	0	473	500	1.02	637	650
	WBR	1.02	132	0	132	150	1.02	178	200

Corridor Alternatives and Analysis

To assess the conditions within the study area the following alternatives were developed:

- Existing Conditions – 2009 No Build Conditions,
- Alternative 1 – 2015 and 2030 No Build Conditions, and
- Alternative 2 – 2030 Build Conditions with Signal Improvement, Transportation Improvements and Roadway System Management.

Synchro Model Development

The first step was to build the Synchro model for existing conditions utilizing the collected data as input for existing conditions.

Each location required varying amounts of calibration, time and data collection which was dependent on size and issues that were unique for each location.

After all tasks necessary to build the model was completed, the model was coded, and visual calibration was performed to ensure that the micro-simulation resembled the traffic conditions observed in the field. The data coded and calibrated was then analyzed, tabulated and summarized.

Capacity

Capacity analyses for the study intersections and the arterial contained between the study intersections were performed using Synchro. Capacity analyses were performed for the corridor alternatives.

Peak hour vehicle traffic volumes that include adjustments and projection to satisfy the corridor alternatives were utilized. Peak hour factors measured for existing traffic was used for the analyses of future conditions. The traffic generated by the facility will not affect the existing peak hour factors as this facility already exist so the variance of peak hour factor is already addressed. Therefore, no supplemental calculations for peak hour factors are needed. Instead the existing peak hour factors are used for future capacity analyses.

Truck percentages and pedestrian volumes were also maintained the same without any adjustments as current growth trends show a negative tendency.

The results of capacity analyses are contained in Appendix H and summarized in Table 11 through Table 25.

Level-of-Service

Level-of-Service (LOS) is a qualitative measure depicting operational conditions; LOS generally describes the freedom to maneuver, traffic interruptions, and the comfort, convenience, and safety of travel along a roadway.

Roadway Segments

NW 7th Avenue/US 441/SR7 is a major north-south arterial. The roadway is maintained by the Florida Department of Transportation (FDOT). As a state road Chapter 14-94, F.A.C defines the

minimum level-of-service (LOS) for roadways within urbanized areas with over 500,000 inhabitants at LOS D, LOS D would be considered to be near capacity.

However, in regards to traffic circulations, Miami-Dade County, for concurrency purposes, allows the two-way peak hour LOS to deteriorate to LOS E inside the Urban Infill Area (UIA); additionally, where mass transit headway of 20 minutes or less exist within ½ mile of a roadway facility, the LOS can be deteriorated to 120% of LOS E and where extraordinary mass transit exist such as the MetroRail and the BusWay, the LOS is allowed to deteriorate to 150% of LOS E.

Review of Miami-Dade Transit Bus route reveal that the Route 77 Bus operates at headways of 10 minutes and Route 277 also serves the study limits at headway of 15 minutes during the AM and PM peak hours.

NW 7th Avenue is located within the UIA. Review of transit headways indicate that the routes that run through the study area have headways of 20 minutes or less. There are no extraordinary transit facilities within ½ mile that is readily available to commuters in the vicinity of the study area. Therefore, the acceptable level of service for concurrency purposes is 120 percent of LOS E.

Intersections

The urban standard LOS for intersections is E and F is considered above capacity.

Table 10 below summarizes the LOS A through F for both signalized and unsignalized (stop-controlled) intersections.

Table 10: Level of Service Criteria

Level-of-Service	Average Vehicle Control Delay (s)		Comments
	Signalized Intersection	Unsignalized Intersection	
A	≤ 10	≤ 10	Very low delay
B	10 - 20	10 - 15	Some delays
C	20 - 35	15 - 25	Average delays
D	35 - 55	25 - 35	Longer delays
E	55 - 80	35 - 50	Limit of acceptable delay
F	≥ 80	≥ 50	Failure of Intersection

Turn Bays & Channelization

Turn bays on major approaches at an intersection can improve operations by separating the turning vehicles out of the through lane. The need for the installation of an exclusive right-turn or left-turn bays can be determined using guidelines established in the National Cooperative Highway Research Program (NCHRP) Report 457.

Channelization may enhance safety and operations as they restrict maneuvers, particularly left-turns. However, signing can also be implemented to restrict or prohibit turns at intersections. The 2030 Build Alternative will analyze the north driveway westbound movement as a channelized

stop controlled intersection to analyze if this action will bring significant operational improvements to this intersection.

All intersections within the study area as well as at the driveways into the Immigration Facility have left turn bays; therefore, where the intersection level-of-service (LOS) deteriorates below acceptable thresholds, the FDOT 2008 Design Standard Index No. 301 shall be used to calculate the necessary storage capacity. Additionally, if the driveways at the Immigration facility are below acceptable LOS, these will be analyzed for the need of an exclusive right-turn bay.

2009 Existing Conditions

These are the year 2009 roadway level-of-service (LOS) conditions assuming existing conditions will remain with no operational and capacity improvements.

Intersection Level of Service

Table 11 depicts the intersection analysis results. As can be seen from the table, the signalized intersections, within the immediate area of influence of the immigration facility, are operating at acceptable levels-of-service.

Table 11: 2009 Existing Intersection Conditions

#	North-South Road		East-West Road	CONTROL TYPE	AM Peak Hour		PM Peak Hour	
					Delay (s)	LOS	Delay (s)	LOS
1	NW 7 Ave	&	NW 79 St	Signal	35.5	D	34.1	C
2	NW 7 Ave	&	NW 81 St	Signal	18.5	B	18.5	B
3	NW 7 Ave	&	Little River Dr.	Signal	4.7	A	4.2	A
4	NW 7 Ave	&	N Driverway	Stop	11.5	B	9.9	A
5	NW 7 Ave	&	NW 95 St	Signal	27.1	C	30.0	C

Additionally, no spillback of vehicles was observed during the existing AM and PM peak hours.

Roadway Segment Level of Service

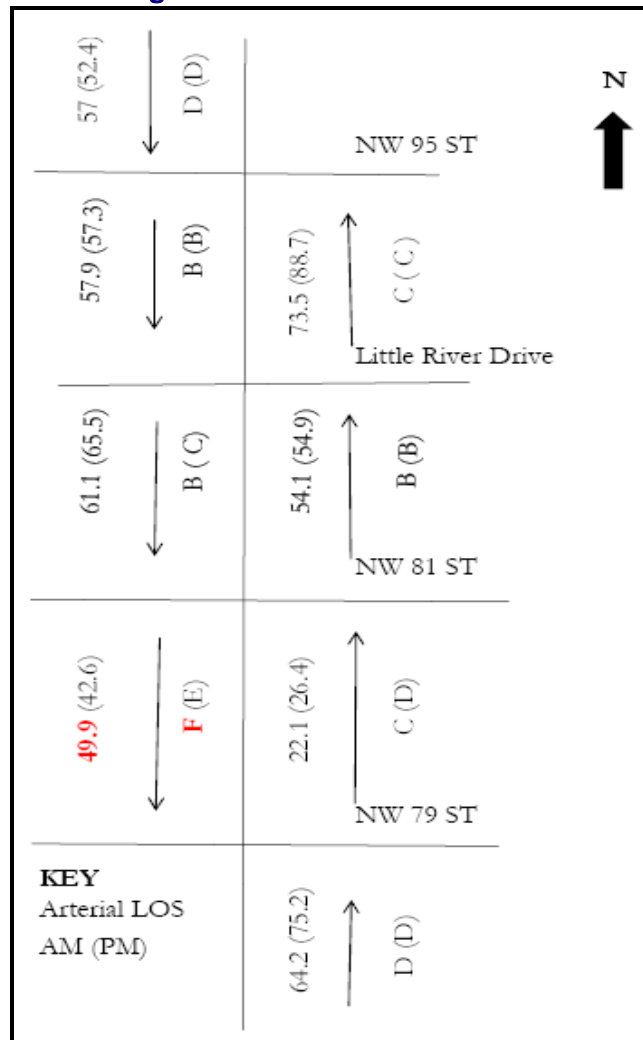
Table 12 below depicts the Synchro analysis results of NW 7th Avenue roadway for existing conditions. As the table shows, generally the roadway segments delineated by the signalized intersections are operating at acceptable level-of-service. However, the southbound approach to NW 79th Street may be operating at or above capacity (LOS F) during the AM and PM peak hour periods. Diagram 1 depicts graphically the table shown below.

Table 12: 2009 Existing Arterial Conditions

Existing AM NW 7 Avenue									
NB	Travel Time (s)	64.2	NW 79 ST	22.1	NW 81 ST	54.1	LITTLE RIVER I	73.5	NW 95 ST
	LOS	D		C		B		C	
SB	Travel Time (s)	-	NW 79 ST	49.9	NW 81 ST	61.1	LITTLE RIVER I	57.9	NW 95 ST
	LOS	-		F		B		B	

Existing PM NW 7 Avenue									
NB	Travel Time (s)	75.2	NW 79 ST	26.4	NW 81 ST	54.9	LITTLE RIVER I	88.7	NW 95 ST
	LOS	D		D		B		C	
SB	Travel Time (s)	-	NW 79 ST	42.6	NW 81 ST	65.5	LITTLE RIVER I	57.3	NW 95 ST
	LOS	-		E		C		B	

Diagram 1: 2009 AM & PM Arterial LOS



Additionally, the level-of-service (LOS) was examined utilizing the Florida Department of Transport (FDOT) Generalized Tables. **Error! Reference source not found.** below shows that the corridor is operating at acceptable LOS. This analysis shows that the roadway is operating at LOS C during the peak hour period.

Table 13: 2009 Roadway Segment Analysis

Roadway	From	To	Number of Lanes	Peak Hour Two-Way Volumes							
				Standard LOS & Volumes			Concurrency LOS	2009 Existing			
				C	D	E	1.2E	Volume	v/c	LOS	1.2E Met?
NW 7th Avenue	NW 81st Street	NW 95th Street	6LU	3640	4450	4680	5620	3330	0.75	C	Yes

Year 2015 No Build Conditions

This alternative is the year 2015 roadway level-of-service (LOS) conditions assuming existing conditions will remain with no operational and capacity improvements.

Intersection Level of Service

Table 14 depicts the intersection analysis results. As can be seen from the table, the signalized intersections, within the immediate area of influence of the immigration facility, are operating at acceptable levels-of-service.

Table 14: 2015 No Build Intersection Conditions

#	North-South Road		East-West Road	CONTROL TYPE	AM Peak Hour		PM Peak Hour	
					Delay (s)	LOS	Delay (s)	LOS
1	NW 7 Ave	&	NW 79 St	Signal	44.9	D	48.8	D
2	NW 7 Ave	&	NW 81 St	Signal	1.0	A	20.3	C
3	NW 7 Ave	&	Little River Dr.	Signal	4.6	A	4.6	A
4	NW 7 Ave	&	N Driverway	Stop	9.8	A	8.9	A
5	NW 7 Ave	&	NW 95 St	Signal	32.9	C	37.4	D

Table 15: Comparison between Existing 2009 and 2015

#	North-South Road		East-West Road	CONTROL TYPE	EXISTING (2009)				2015			
					AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
					Delay (s)	LOS	Delay (s)	LOS	Delay (s)	LOS	Delay (s)	LOS
1	NW 7 Ave	&	NW 79 St	Signal	35.5	D	34.1	C	44.9	D	48.8	D
2	NW 7 Ave	&	NW 81 St	Signal	18.5	B	18.5	B	1.0	A	20.3	C
3	NW 7 Ave	&	Little River Dr.	Signal	4.7	A	4.2	A	4.6	A	4.6	A
4	NW 7 Ave	&	N Driverway	Stop	11.5	B	9.9	A	9.8	A	8.9	A
5	NW 7 Ave	&	NW 95 St	Signal	27.1	C	30.0	C	32.9	C	37.4	D

As can be seen from the table above, intersections within the immediate area of influence are operating at acceptable levels-of-service.

2015 No Build Conditions – Immigration Facility Driveways Performance

The north and south (Little River Drive) driveways of NW 7th Avenue with the Immigration Facility are expected to operate at acceptable level-of-service. The level-of-service (LOS) for Little River Drive may be D with queues not expected to exceed five (5) vehicle lengths. The westbound movement for the north driveway may operate at LOS A with queues not expected to exceed one (1) vehicle length. See Table 23 for more details.

Roadway Segment Level of Service

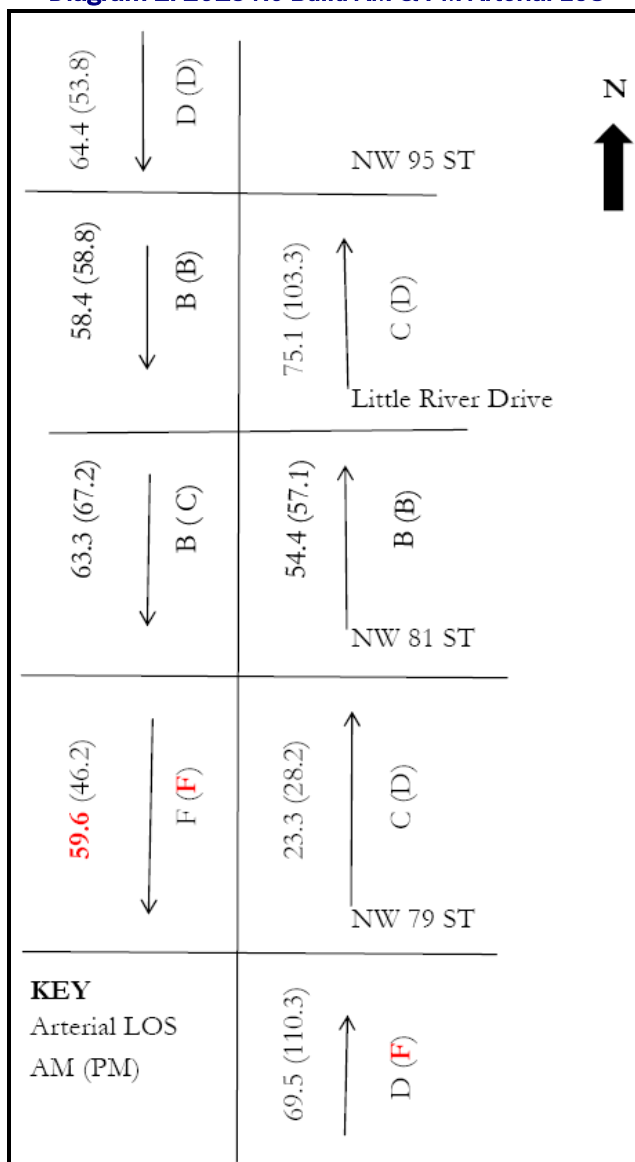
Table 16 below depicts the Synchro analysis results of NW 7th Avenue roadway for Year 2015 No Build conditions. As the table shows, generally the roadway segments delineated by the signalized intersections are operating at acceptable level-of-service with the exception of the southbound approach to NW 79th Street during the AM and PM peak hour periods; as well as the northbound approach to NW 79th Street along NW 7th Avenue during the PM peak hour. Diagram 2 depicts graphically the table shown below.

Table 16: 2015 No Build Arterial Conditions

2015 AM NW 7 Avenue									
NB	Travel Time (s)	69.5	NW 79 ST	23.3	NW 81 ST	54.4	LITTLE RIVER I	75.1	NW 95 ST
	LOS	D		C		B		C	
SB	Travel Time (s)	-	NW 79 ST	59.6	NW 81 ST	63.3	LITTLE RIVER I	58.4	NW 95 ST
	LOS	-		F		B		B	

2015 PM NW 7 Avenue									
NB	Travel Time (s)	110.3	NW 79 ST	28.2	NW 81 ST	57.1	LITTLE RIVER I	103.3	NW 95 ST
	LOS	F		D		B		D	
SB	Travel Time (s)	-	NW 79 ST	46.2	NW 81 ST	67.2	LITTLE RIVER I	58.8	NW 95 ST
	LOS	-		F		C		B	

Diagram 2: 2015 No Build AM & PM Arterial LOS



The level-of-service (LOS) was examined utilizing the FDOT Generalized Tables. Table 17 below shows that the corridor is operating at acceptable LOS. This analysis shows that the roadway is operating at LOS D by the year 2015 without the project during the peak hour period. Once project trips are added to the 2015 roadway volumes, this will continue to operate at LOS D.

Additionally, the impact of the Immigration Facility is less than five percent (5%) when compared to the Year 2015 background two-way peak hour vehicular traffic volumes. Therefore, the trips to be generated by the facility would be considered as not having significant impact.

Table 17: 2015 Roadway Segment Analysis with FDOT Generalized Table 4-4

Roadway	From	To	Growth Rate	Peak Hour Two-Way Volumes					
				2015 Background				2015 Project Trips	
				Volume	v/c	LOS	1.2E Met?	Volume	Impact
NW 7th Avenue	NW 81st Street	NW 95th Street	1.02	3800	0.85	D	Yes	139	4%

Roadway	From	To	Growth Rate	Peak Hour Two-Way Volumes					
				2015 Project Trips		2015 w/ Project Trips			
				Volume	Impact	Volume	v/C	LOS	1.2E Met?
NW 7th Avenue	NW 81st Street	NW 95th Street	1.02	139	4%	4,000	0.90	D	Yes

Year 2030 No Build Conditions

This alternative is the year 2030 roadway level-of-service (LOS) conditions assuming existing conditions will remain with no operational and capacity improvements.

Intersection Level of Service

Table 18 depicts the intersection analysis results. As can be seen from the table, the signalized intersections, within the immediate area of influence of the immigration facility, are operating at acceptable levels-of-service with the exception of NW 79th Street and NW 95th Street.

Table 18: 2030 No Build Intersection Conditions

#	North-South Road		East-West Road	CONTROL TYPE	AM Peak Hour		PM Peak Hour	
					Delay (s)	LOS	Delay (s)	LOS
1	NW 7 Ave	&	NW 79 St	Signal	120.8	F	144.6	F
2	NW 7 Ave	&	NW 81 St	Signal	25.2	C	32.6	C
3	NW 7 Ave	&	Little River Dr.	Signal	6.8	A	8.6	A
4	NW 7 Ave	&	N Driverway	Stop	9.7	A	9.6	A
5	NW 7 Ave	&	NW 95 St	Signal	122.5	F	107.9	F

Table 19: Comparison between Year 2015 and 2030

#	North-South Road		East-West Road	CONTROL TYPE	2015				2030 No Build			
					AM Peak Hour		PM Peak Hour		AM PK HR		PM PK HR	
					Delay (s)	LOS	Delay (s)	LOS	Delay (s)	LOS	Delay (s)	LOS
1	NW 7 Ave	&	NW 79 St	Signal	44.9	D	48.8	D	120.8	F	144.6	F
2	NW 7 Ave	&	NW 81 St	Signal	1.0	A	20.3	C	25.2	C	32.6	C
3	NW 7 Ave	&	Little River Dr.	Signal	4.6	A	4.6	A	6.8	A	8.6	A
4	NW 7 Ave	&	N Driverway	Stop	9.8	A	8.9	A	9.7	A	9.6	A
5	NW 7 Ave	&	NW 95 St	Signal	32.9	C	37.4	D	122.5	F	107.9	F

As can be seen from the table above, the intersections of NW 79th Street and NW 95th Street will be failing by the Year 2030.

Roadway Segment Level of Service

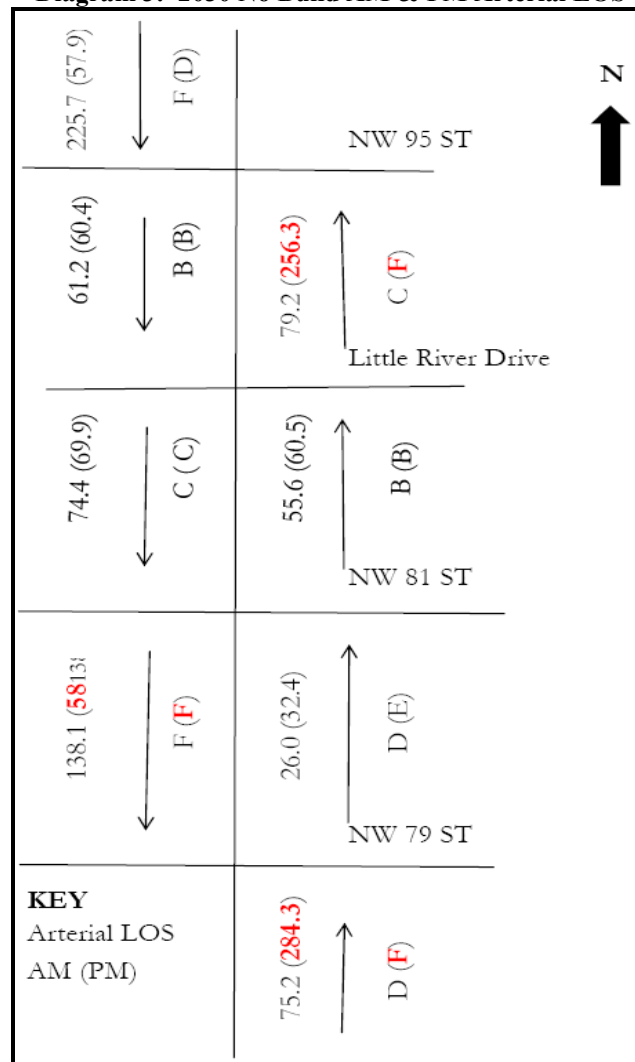
Table 20 below depicts the analysis results of NW 7th Avenue roadway for the Year 2030 No Build conditions. As the table shows, generally the roadway segments delineated by the signalized intersections are operating at acceptable level-of-service with the exception of the southbound approach to NW 79th Street during both the AM and PM peak hour periods; the southbound approach to NW 95th Street during the AM peak hour, as well as, the northbound approach to NW 79th Street and NW 95th Street along NW 7th Avenue during the PM peak hour.

Table 20: 2030 No Build Arterial Condiiti 1

2030 AM NW 7 Avenue										
NB	Travel Time (s)	75.2	NW 79 ST	26.0	NW 81 ST	55.6	LITTLE RIVER I	79.2	NW 95 ST	-
	LOS	D		D		B		C		-
SB	Travel Time (s)	-	NW 79 ST	138.1	NW 81 ST	74.4	LITTLE RIVER I	61.2	NW 95 ST	225.7
	LOS	-		F		C		B		F

2030 PM NW 7 Avenue										
NB	Travel Time (s)	284.3	NW 79 ST	32.4	NW 81 ST	60.5	LITTLE RIVER I	256.3	NW 95 ST	-
	LOS	F		E		B		F		-
SB	Travel Time (s)	-	NW 79 ST	58.0	NW 81 ST	69.9	LITTLE RIVER I	60.4	NW 95 ST	57.9
	LOS	-		F		C		B		D

Diagram 3: 2030 No Build AM & PM Arterial LOS



Additionally, the level-of-service (LOS) was examined based utilizing the FDOT Generalized Tables. Table 21 below shows that the corridor is operating at acceptable LOS. This analysis shows that the roadway is operating at LOS F by the year 2030 under No Build Conditions. However, concurrency will still be met.

Table 21: 2030 No Build Roadway Segment with FDOT Generalized Table 4-4

Roadway	From	To	Growth Rate	Peak Hour Two-Way Volumes			
				2030			
				Volume	v/c	LOS	1.2E Met?
NW 7th Avenue	NW 81st Street	NW 95th Street	1.02	5400	1.21	F	Yes

Year 2030 Build Conditions

This alternative is the year 2030 roadway level-of-service (LOS) conditions assuming signal optimization and increased left-turn lane storage capacity.

The objective of this build condition is to:

- Increase capacity to accommodate future demand;
- Improve access management at the Immigration Facility;

To achieve these objectives at all study intersections, it is recommended to:

- Optimize all study traffic signals;
- Increase left-turn lane storage capacity at all study intersections; and
- Channelize the right-turn out at the north driveway of the Immigration Facility.

Left-turn Lane Storage

Where queues are likely to be an issue, storage bays were calculated using the recommended lengths as described in the FDOT 2008 Design Standard Index No. 301. A copy of Index No. 301 and required storage lengths can be found in Appendix F.

Intersection Level of Service

Table 22 depicts the Synchro intersection analysis results. As can be seen from the table, the signalized intersections, within the immediate area of influence of the immigration facility, are operating at acceptable levels-of-service with the exception of NW 79th Street and NW 95th Street.

Table 10: 2030 Build Intersection Conditions

#	North-South Road		East-West Road	CONTROL TYPE	AM Peak Hour		PM Peak Hour	
					Delay (s)	LOS	Delay (s)	LOS
1	NW 7 Ave	&	NW 79 St	Signal	99.1	F	122.3	F
2	NW 7 Ave	&	NW 81 St	Signal	17.3	B	20.5	C
3	NW 7 Ave	&	Little River Dr.	Signal	3.8	A	6.8	A
4	NW 7 Ave	&	N Driverway	Stop	10.1	B	9.3	A
5	NW 7 Ave	&	NW 95 St	Signal	83.2	F	69.5	E

2030 Build Conditions – Immigration Facility Driveways Performance

The north and south (Little River Drive) driveways of NW 7th Avenue with the Immigration Facility are expected to continue to operate at acceptable level-of-service.

Table 23 shows a comparison of the driveway westbound approach at each study horizon..

Table 23: Immigration Facility Driveway Performance

NW 7th Avenue & Little River Drive Westbound Approach							
Condition	Year	Period	Delay (s)	LOS	Queue Length (ft)		Vehicle Length
					50th	95th	
No Build	2009	AM	49.3	D	11	27	2
		PM	44.6	D	11	17	1
	2015	AM	52.1	D	11	87	5
		PM	43.9	D	42	42	3
	2030	AM	50	D	22	37	2
		PM	45.7	D	60	58	3
Build	2030	AM	62.2	E	29	46	3
		PM	80.7	F	98	78	5

NW 7th Avenue & North Driveway Westbound Approach							
Condition	Year	Period	Delay (s)	LOS	Queue Length (ft)		Vehicle Length
					50th	95th	
No Build	2009	AM	11.5	B		8	1
		PM	9.9	A		1	1
	2015	AM	9.8	A		4	1
		PM	8.9	A		1	1
	2030	AM	9.7	A		6	1
		PM	9.6	A		1	1
Build	2030	AM	10.1	B		6	1
		PM	9.3	A		1	1

As can be seen from the above table, the level of service of the westbound movement at the south driveway may deteriorate to LOS F; however, the queues at the north driveway are not expected to exceed one (1) vehicle length and no more than five (5) vehicle lengths at the south drive/Little River Drive.

Roadway Segment Level of Service

Table 24 below depicts the analysis results of NW 7th Avenue roadway for the Year 2030 Build Conditions. As the table shows, generally the roadway segments delineated by the signalized intersections are operating at acceptable level-of-service with the exception of the north and southbound approaches to NW 79th Street during the AM and PM peak hour periods; the southbound approach to NW 95th Street during the AM peak hour; as well as the northbound approach during the PM peak hour.

Table 12: 2030 Build Arterial Conditions

2030 AM NW 7 Avenue (Build)										
NB	Travel Time (s)	87.5	NW 79 ST	16.7	NW 81 ST	52.2	LITTLE RIVER	55.2	NW 95 ST	-
	LOS	E		D		B		C		-
SB	Travel Time (s)	-	NW 79 ST	125.1	NW 81 ST	61.1	LITTLE RIVER	56.7	NW 95 ST	109.0
	LOS	-		F		B		B		F

2030 PM NW 7 Avenue (Build)										
NB	Travel Time (s)	147.6	NW 79 ST	27.6	NW 81 ST	56.4	LITTLE RIVER	125.2	NW 95 ST	-
	LOS	F		D		B		E		-
SB	Travel Time (s)	-	NW 79 ST	50.7	NW 81 ST	73.2	LITTLE RIVER	56.8	NW 95 ST	58.2
	LOS	-		F		C		B		D

Diagram 4: 2030 Build Arterial LOS

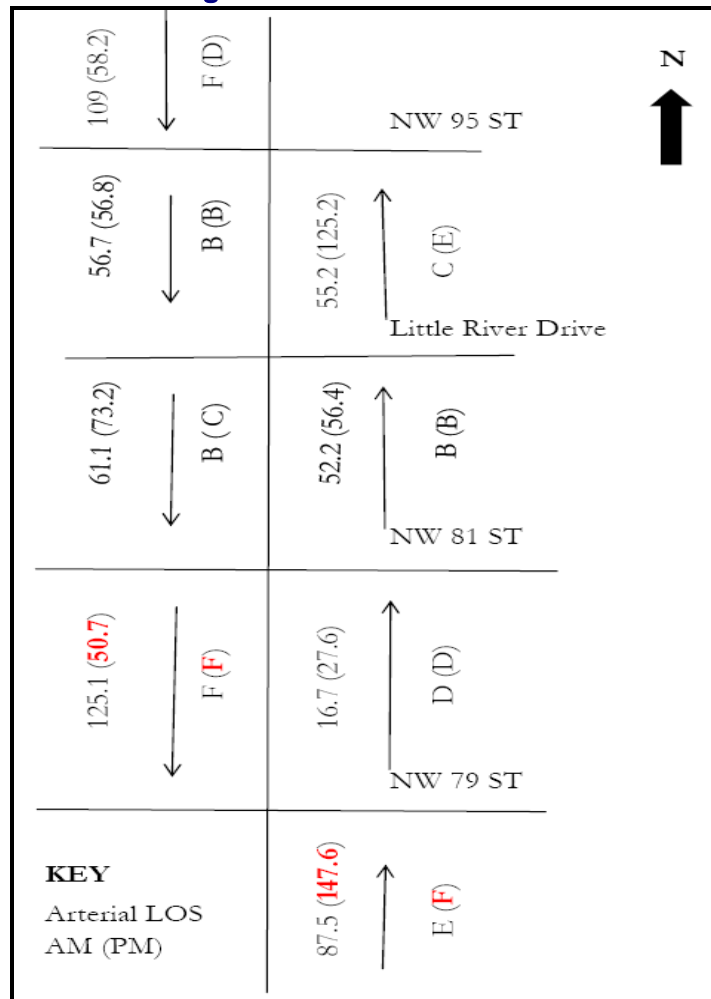


Table 25: 2030 No Build to Build Conditions Comparison

#	North-South Road		East-West Road	CONTROL TYPE	2030 No Build				2030 Build			
					AM PK HR		PM PK HR		AM PK HR		PM PK HR	
					Delay (s)	LOS	Delay (s)	LOS	Delay (s)	LOS	Delay (s)	LOS
1	NW 7 Ave	&	NW 79 St	Signal	120.8	F	144.6	F	99.1	F	122.3	F
2	NW 7 Ave	&	NW 81 St	Signal	25.2	C	32.6	C	17.3	B	20.5	C
3	NW 7 Ave	&	Little River Dr.	Signal	6.8	A	8.6	A	3.8	A	6.8	A
4	NW 7 Ave	&	N Driverway	Stop	9.7	A	9.6	A	10.1	B	9.3	A
5	NW 7 Ave	&	NW 95 St	Signal	122.5	F	107.9	F	83.2	F	69.5	E

Review of Table 25 shows that optimizing the signal timing and increasing the storage capacity of the left turn lanes reduces intersection delay hence improving the level-of-service.

Conclusions and Recommendations

Growth along the study corridor has shown a negative growth. However, a conservative growth rate of two percent (2%) was assumed within the study area.

Based on the Synchro analysis conducted, the intersections are operating at acceptable levels-of-service (LOS) for the Existing and Year 2015 conditions. However, the north and southbound approaches to NW 79th Street may be at LOS F.

By the Year 2030, the intersections of NW 79th Street and NW 95th Street with NW 7th Avenue may be operating at LOS F.

The 2030 build option would decrease delay, increase capacity minimally and improve access management at the Immigration Facility. However, the intersections of NW 79th Street and NW 95th Street would still be failing.

Operational issues at major intersections such as delays can be addressed by adding roadway capacity, by separating intersection turn movements from the through movements or by removing trips from the roadway network.

The proposed alternative recommends:

- Periodic traffic signal optimization for all signalized intersections within the area of influence of the Immigration Facility;
- Increasing the left-turn lanes storage capacity by year 2015 to meet the demands of Year 2030.

Additional strategies to reduce delays and improve roadway level of service include:

- Add roadway capacity by procuring right-of-way and adding through lanes or lanes to separate turning movements from through movements;
- Investigate student transportation, via school buses instead of private vehicles;

- Transportation System Management strategies such as revision of speed limit throughout corridor, review pavement markings at major intersections, review street lighting with focus on crosswalks, restrict on-street parking;
- Travel Demand Management Strategies such as ridesharing, increased transit service, encourage vanpooling and carpooling, provide a guaranteed ride home to those who take transit, provide showers and other necessary amenities to those who bike to work, flex-time, coordinate bus routes and scheduling and other methods to decrease the peak period traffic demand;
- Study increased visibility for pedestrians, bicyclists and drivers, reduction of conflicts at intersection which can enhance, minimally, corridor output at major intersections;
- Provide alternative walking and biking routes to remove non-motorized and pedestrian traffic from major intersections, this could provide relief for peak period traffic delays due to pedestrians and vehicular conflicts at intersections;
- Remove pedestrian and bicycle traffic from grade crossings;
- Manage driveway access along roadway segment by combining adjacent driveways and allowing adjacent properties to share property line driveways and provide shared parking policies incentives;
- Design and construct lighting that not only serves the private vehicle drivers and buses but as well as the pedestrians and bicyclists;
- Design and construct right-turn in/out channelization at key driveways with high volumes of traffic;
- Procure right-of-way, design and construct additional lanes at NW 95th and NW 79th Streets to install dual left-turns north and southbound.

7TH AVENUE TRAFFIC AND PEDESTRIAN STUDY

TASK 4 ANALYSIS OF PEDESTRIAN ACTIVITY AND NEEDS

Introduction

Task 2 evaluated several aspects of the corridor which led to the identification of pedestrian activity areas for this task. This was done through an initial site visit to evaluate general sidewalk locations and widths along the corridor, as well as other pedestrian amenities, including identification of areas of high pedestrian activity, as well as the evaluation of transit activity and land use.

Typically the corridor is a 5 to 7 lane facility with turning lanes, moderate vehicular volumes, keeping the level of service at a generally acceptable level. Transit is prevalent with Rt. 77 and the various cross routes using NW 7th Avenue. Nine intersections along the corridor account for over half of the total “ons and offs” along the corridor. The land uses are commercial along the corridor and low density residential off of the corridor. Pedestrian level of service is generally high, yet pedestrian activity is sparse along the entire length of the corridor.

Areas of intensity of use, either in commercial or residential activity were sought to be selected as specific study areas.

Over all there were pedestrian counts at 25 intersections along the corridor. These range from a high of 209 pedestrian crossings at 79th Street to a low of 15 pedestrian crossings at 66 St. In order to determine locations that warranted further study, it was decided to examine intersections where pedestrian activity exceeded 1% of vehicular volume at individual intersections.

It is recommended that many of the bus stops have bus shelters. It is noted that all shelters must be in compliance with ADA standards. Additionally, this recommendation is made in accordance with the MPO's *Bus Shelter Installation Study*. Generally sufficient right-of-way exists to implement shelters, but the implementing agency must conduct a site-by-site surveying prior to design.

As a result of on-site observation, the analysis of existing potential pedestrian activity from higher intensity land uses planned in the corridor, and the analysis of transit on and off activity, and actual pedestrian counts, 14 intersections were selected for more intensive study in Task 4: Analysis of Pedestrian Activity and Needs. These include:

- | | |
|----------|------------|
| 1. 17 St | 8. 69 St |
| 2. 20 St | 9. 75 St |
| 3. 23 St | 10. 79 St |
| 4. 32 St | 11. 88 St |
| 5. 46 St | 12. 95 St |
| 6. 54 St | 13. 125 St |
| 7. 62 St | 14. 183 St |

17th Street



This is an intersection surrounded immediately by a great deal of vacant land. However, just beyond most of the vacant land is the Miami Health District. The Health District is one of the largest employment generators not only in Miami-Dade County but in all of south Florida. About 1,904 cars use this intersection in the morning, and 2,324 in the afternoon peak hours. The most prevalent movement is a south bound through on 7th avenue in the morning. The most prevalent turning movement is a southbound right turn in the morning and a westbound left in the afternoon. This segment of road carries roughly 22,000 vehicles per day. It operates at

level of service “C”. The area is serviced by four routes at four stops. Route 21, Route 77, Route 113 and Route 277 all make stops in this area, accounting for 429 ons and offs, with 224 coming from Route 77, which has 104 people getting on, and 120 getting off. Traffic counts show that about 65 pedestrians cross this intersection each day. Of these 30 do it in the morning and 35 in the afternoon. Over the past three years of collected data there have been 14 crashes. One of these involved a pedestrian and none involved a bicycle.

Table 1: Pedestrian Summary - 17th Street

Intersection	Volume		Pedestrian Volume		Ped (Total)	AM %	PM %
	AM	PM	AM	PM			
NW 7 AVE & NW 17 ST	1,904	2,324	30	35	65	1.58%	1.51%

Table 2: MDT APC Ridership Statistics – 17th Street

Stop Location	Route	Direction				On	Off	Total / Stop	Total / St
7th Ave @		N	S	E	W				
17 St	21		x			26	13	39	429
17 St	21	x				9	26	35	
17 ST	77		x			45	103	148	
17 ST	77	x				59	17	76	
17 St	113				x	5	16	21	
17 St	113			x		13	7	20	
17 ST	277		x			7	43	50	
17 ST	277	x				32	8	40	

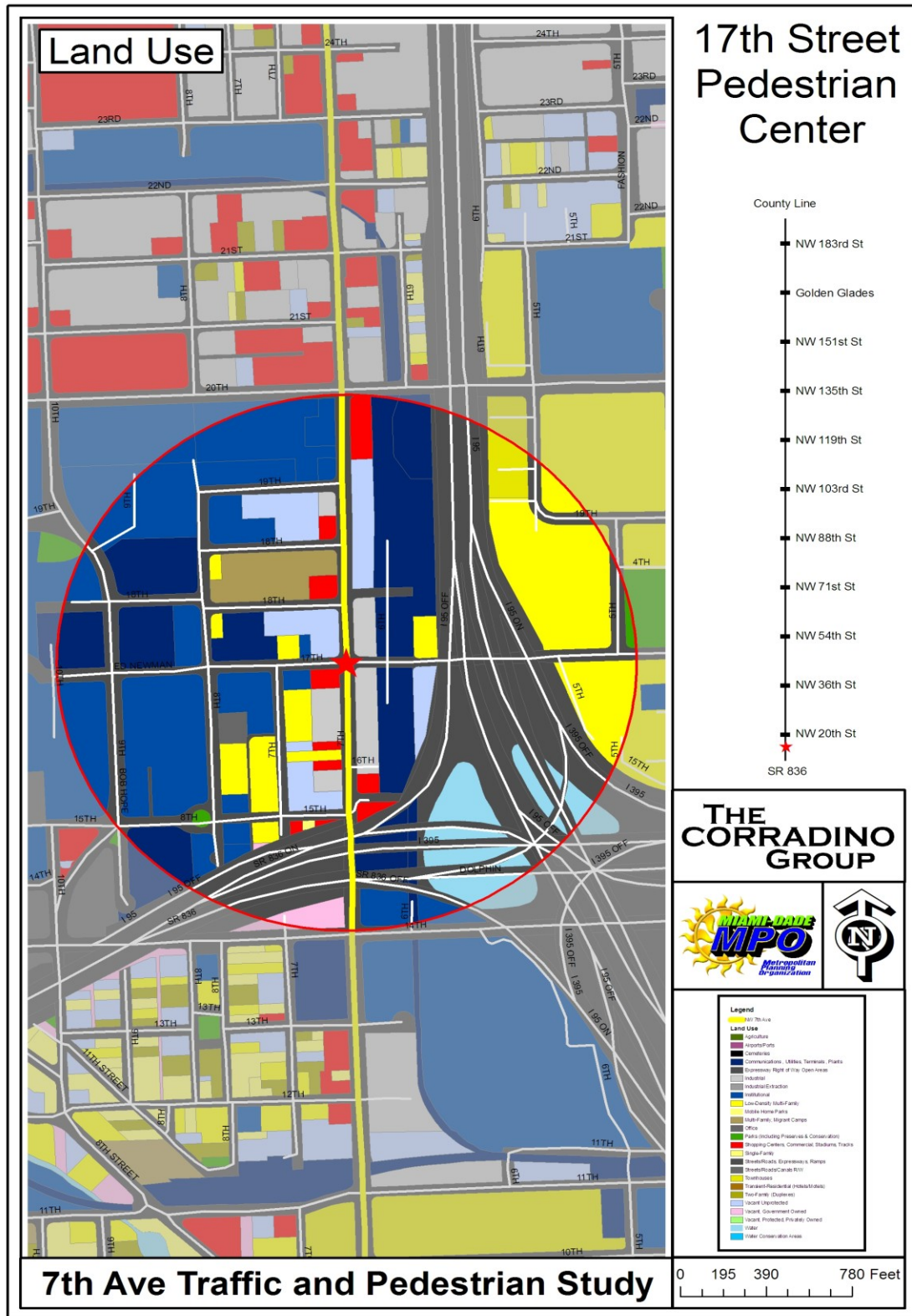
The intersection is well treated with pedestrian amenities. It contains thermoplastic paver like crosswalks across all 4 sides of the intersection. Bus stops exist southbound on the south west corner, northbound on the southeast corner, westbound stops on the northeast corner and eastbound on the southwest corner of the intersection. The stop for Route 77

on the southbound southwest corner has a bench, as well as a trash can. No shelter exists at the stop on northbound 7th Ave. Crossing is done rarely out side of the crosswalks across both 7th Ave and 20th Street. The crosswalks are used in most cases. Adequate 6' sidewalks also exist stemming in all directions from the intersection.

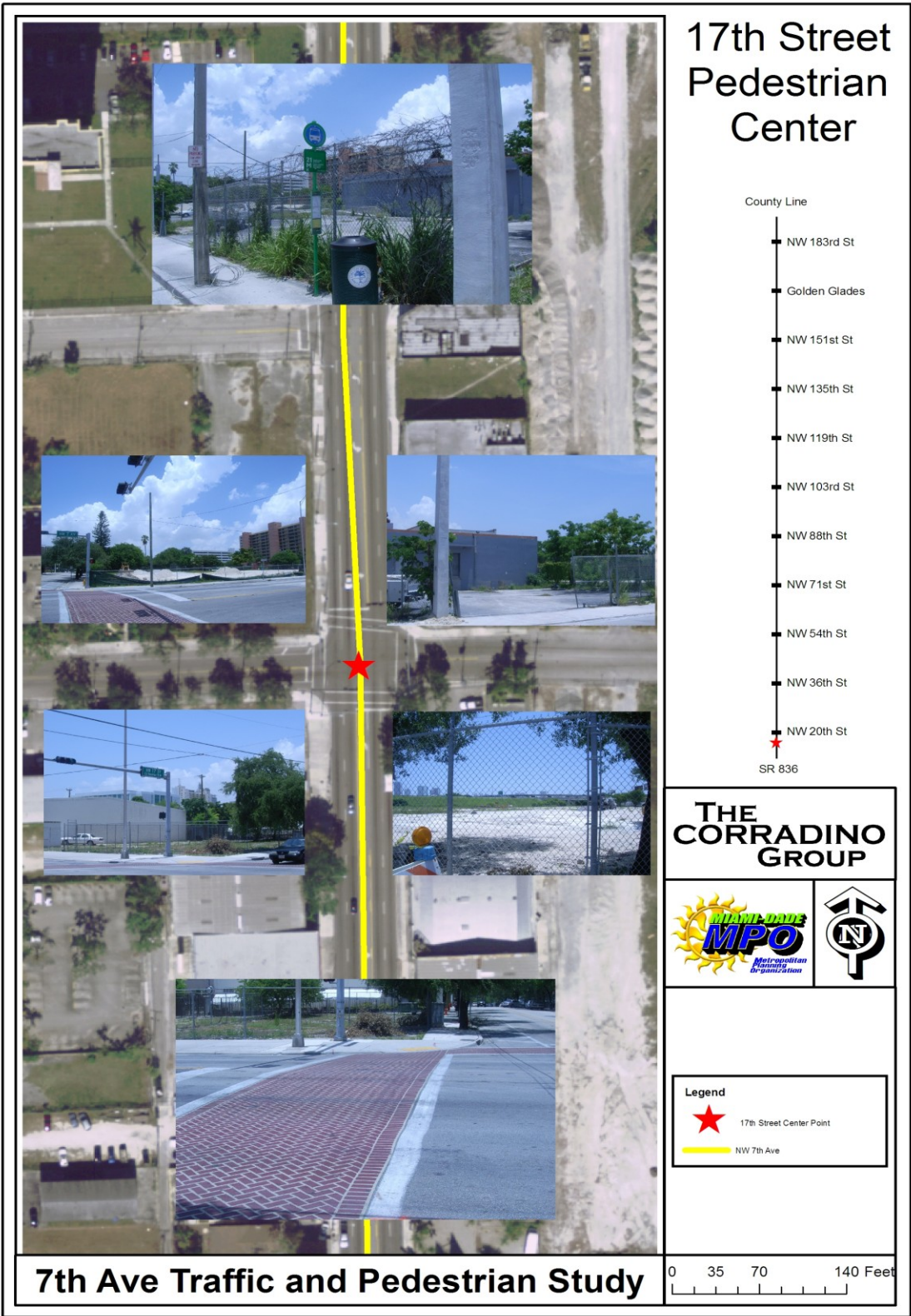


It is recommended that bus stops have shelters, additional benches and trash cans. The northbound stop especially has high levels of use and does not even include a bench. Possibly a shelter is needed at this location as well. Many of these pedestrians are people traveling to and from the Health District and its many facilities. Perhaps pedestrian count down signals can be installed at the intersection. No other needs have been found at this time.

Map 1: Land Use – 17th Street Pedestrian Center

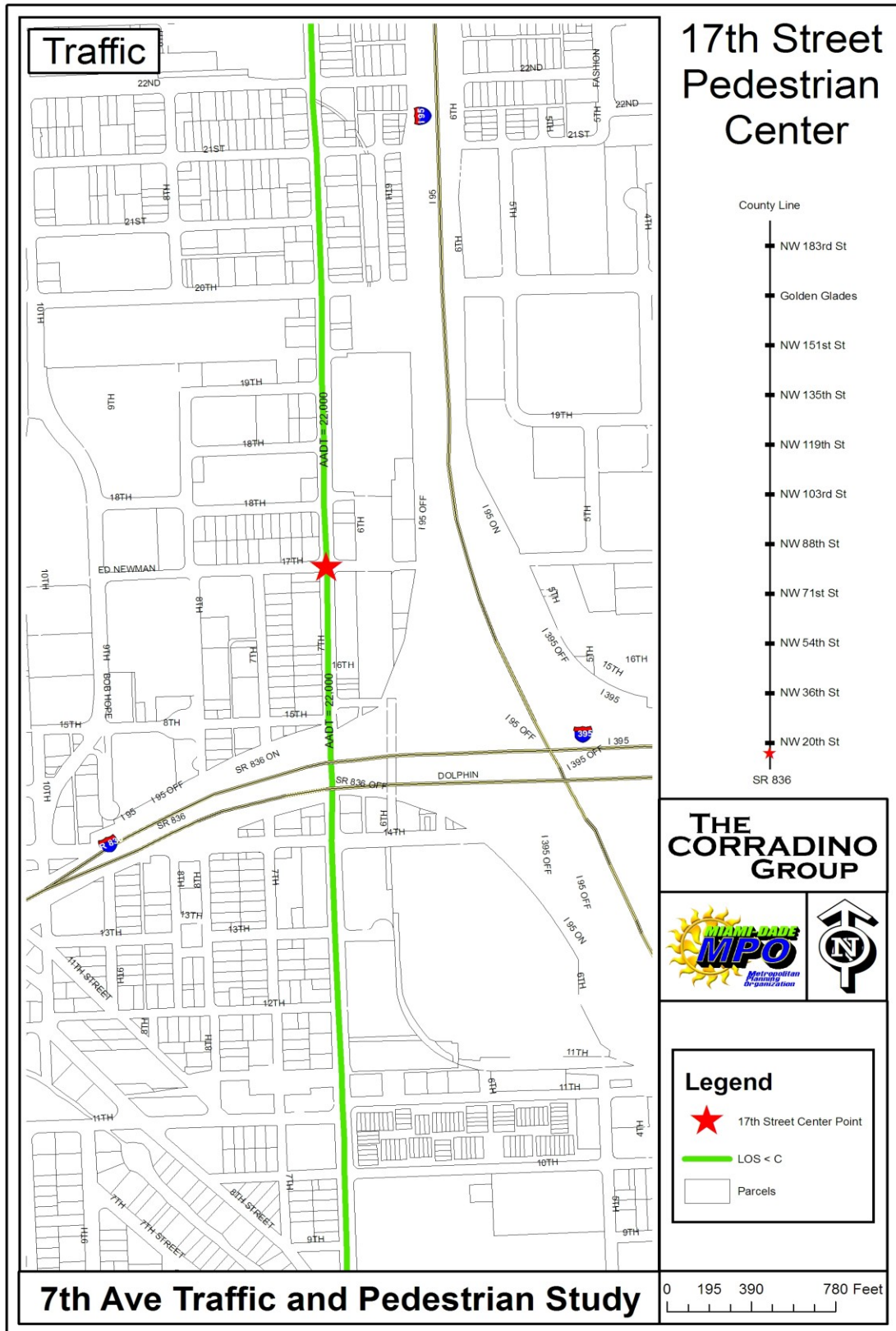


Map 2: 17th Street Pedestrian Center

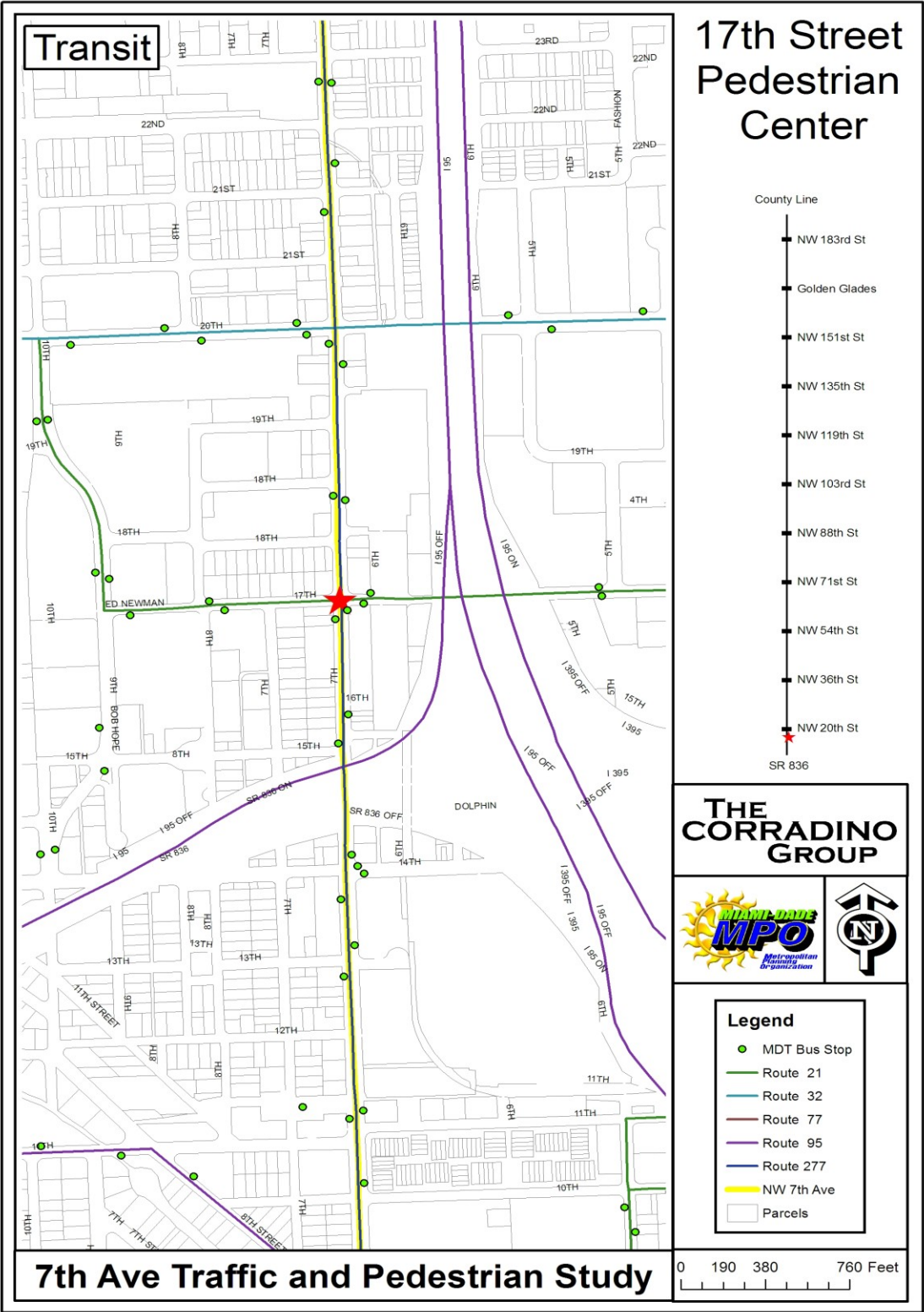


7th Avenue Traffic and Pedestrian Study
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Map 3: Traffic – 17th Street Pedestrian Center



Map 4: Transit – 17th Street Pedestrian Center



20th Street

This is an intersection surrounded by commercial and institutional uses including a vacant lot on the south east corner, Pinguinos Auto Care on the north west corner, a vacant commercial building on the north east corner and Lindsay Hopkins Technical Education Center on the south west corner. About 2,861 cars use this intersection in the morning, and 3,738 in the afternoons. The most prevalent movement is a south bound through on 7th avenue in the morning. The most prevalent turning movement is a eastbound right turn in the morning. This segment of road carries approximately 22,000 vehicles per day. It operates at level of service “C”. The area is serviced by 3 routes at four stops. Route 32, Route 77, and Route 277 all make stops in this area, accounting for 641 ons and offs, with 289 coming from Route 77, which has 123 people getting on, and 166 getting off. Traffic counts show that about 53 pedestrians cross this intersection each day. Of these 25 do it in the morning and 28 in the afternoon. Over the past three years of collected data there have been 89 crashes. One of these involved pedestrians and 1 involved a bicycle.



Table 3: Pedestrian Summary – 20th Street

Intersection	Volume		Pedestrian Volume		Ped (Total)	AM %	PM %
	AM	PM	AM	PM			
NW 7 AVE & NW 20 ST	2,861	3,738	25	28	53	0.87%	0.75%

The intersection is well treated with pedestrian amenities. It contains thermoplastic paver like crosswalks across all 4 legs of the intersection. Bus stops exist on the south bound south west corner, north bound on the north east corner, west bound stops on the north west corner and east bound on the south west corner of the intersection. The stop for Route 32 on the eastbound south west corner has a shelter and a bench, as well as a trash can. The southbound southwest corner has a stop but no shelter and no bench, but it does have a trash can, and a sign. No shelter exists at the stop on north bound 7th Ave. Crossing is done at random out side of the crosswalks across both 7th Ave and 20th Street. However, the crosswalks are used occasionally. Adequate 6’ sidewalks also exist stemming in all directions from the intersection.

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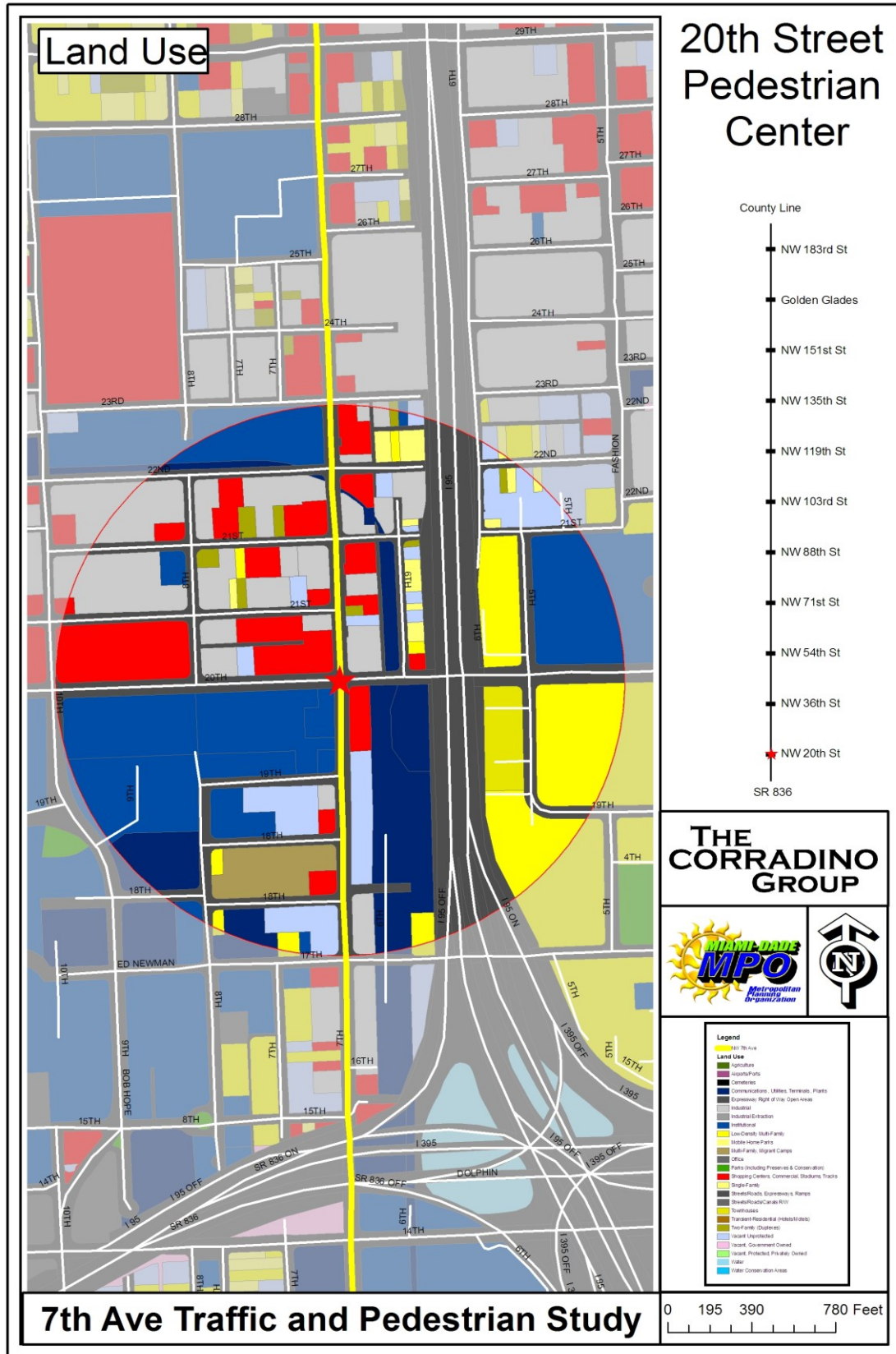
Table 4: MDT APC Stop Ridership Statistics – 20th Street

Stop Location	Route	Direction				On	Off	Total / Stop	Total / St
7th Ave @		N	S	E	W				
20 St	32		x			62	51	113	641
20 St	32	x				66	50	116	
20 ST	77		x			61	151	212	
20 ST	77	x				62	15	77	
20 ST	277	x				26	13	39	
20 ST	277		x			14	70	84	

It is recommended that all bus stops have shelters, additional benches and trash cans. The eastbound stop especially has problems of overcrowding under the shelter. Possibly a second shelter is needed at this location. Many of these pedestrians are students at Lindsay Hopkins Technical Education Center. Perhaps pedestrian count down signals can be installed at the intersection. No other needs have been found.

7th Avenue Traffic and Pedestrian Study
Task 4: Analysis of Pedestrian Activity and Needs

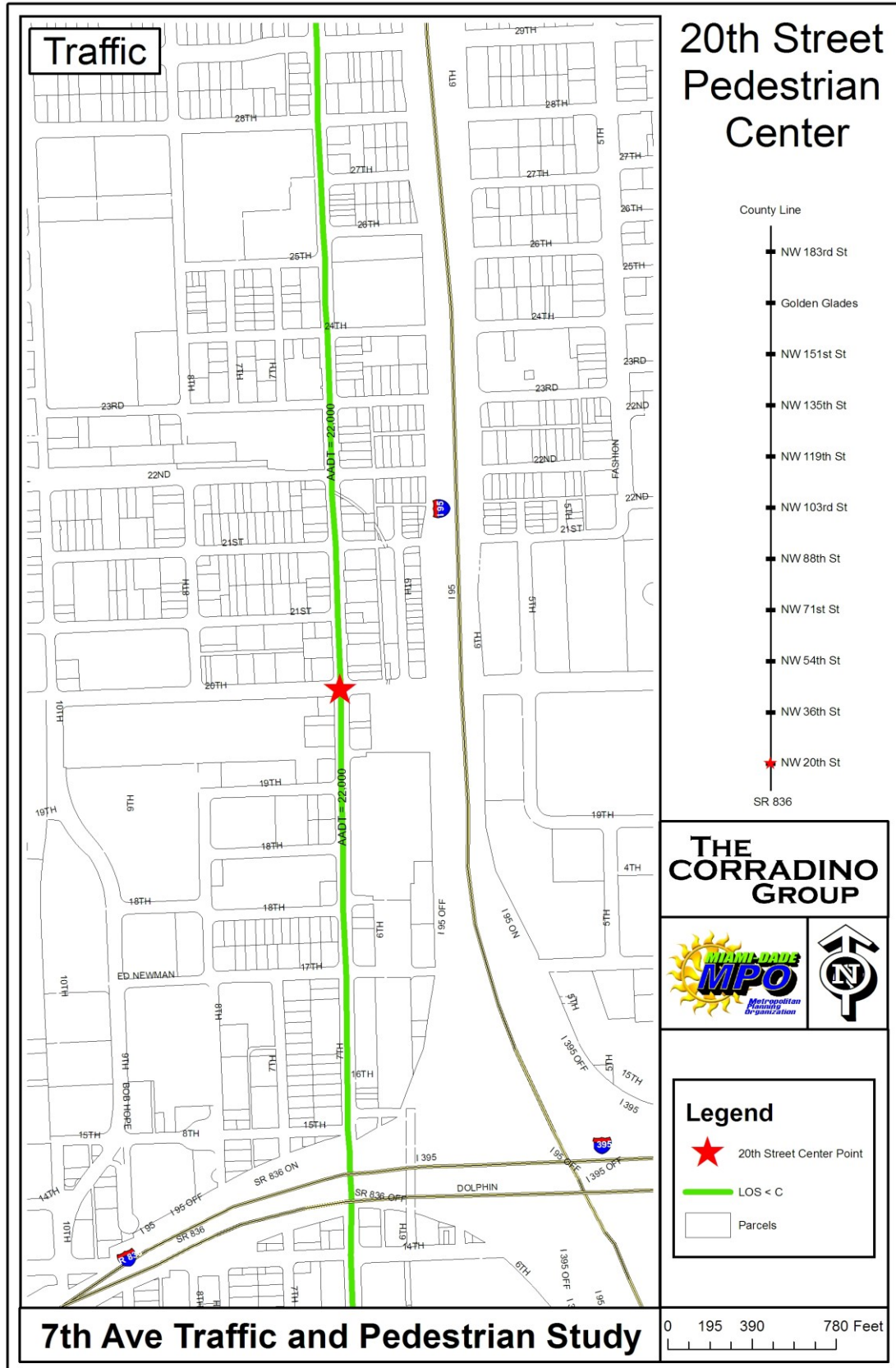
Map 5: Land Use – 20th Street Pedestrian Center



Map 6:20th Street Pedestrian Center

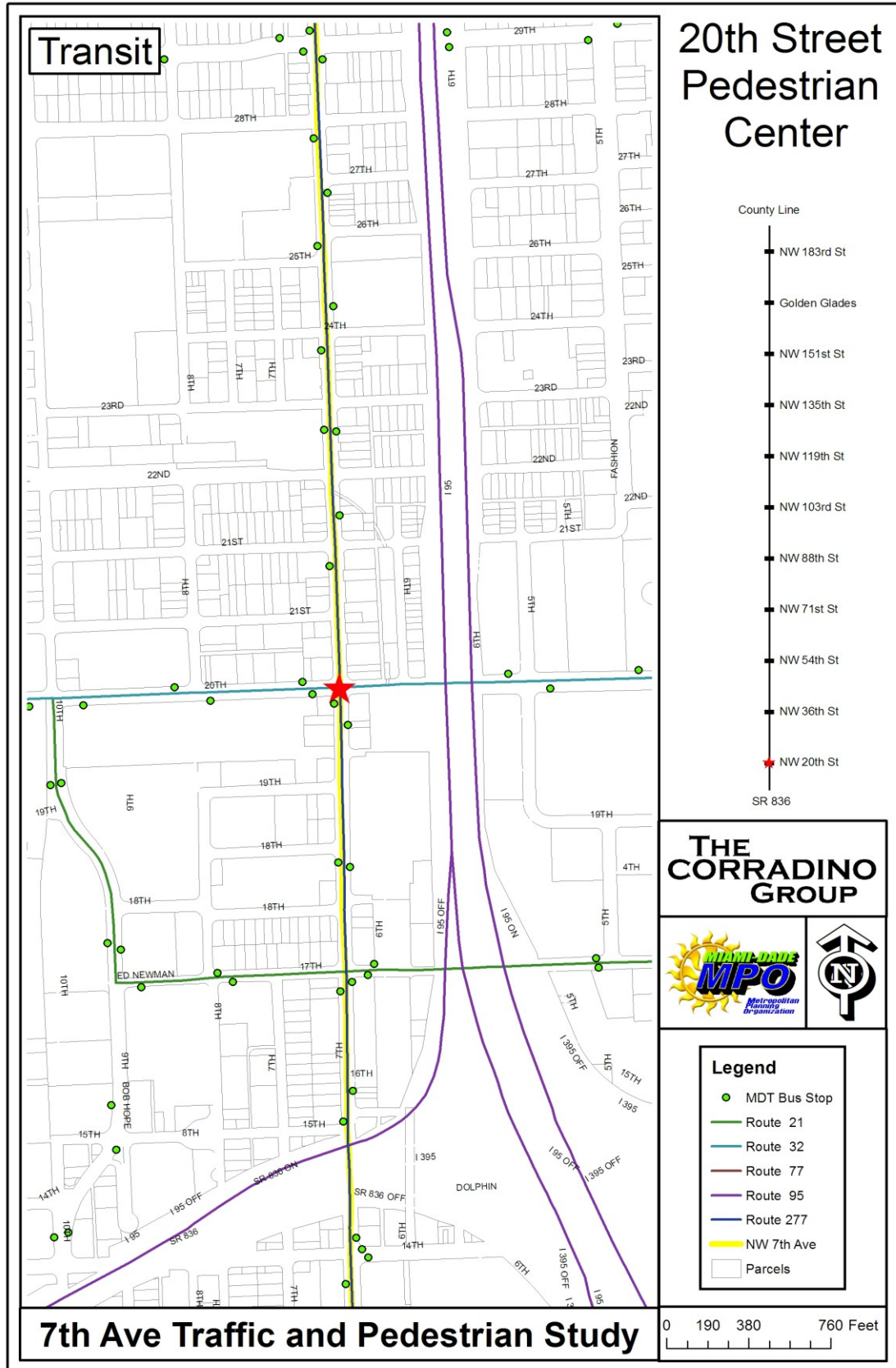


Map 7: Traffic – 20th Street Pedestrian Center

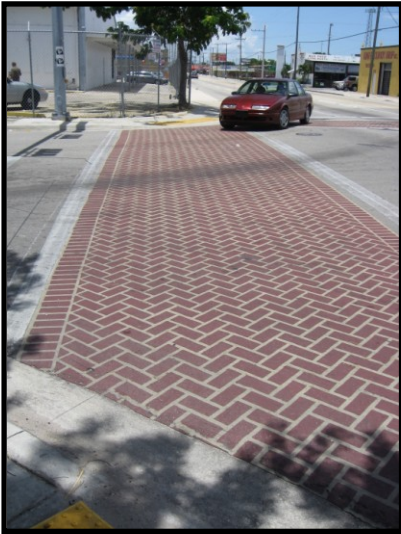


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Task 4: Analysis of Pedestrian Activity and Needs

Map 8 : Transit – 20th Street Pedestrian Center



23rd Street



This is an intersection surrounded almost completely by commercial and manufacturing use. There are restaurants, as well as several small manufacturing plants. Plus there is a large correctional facility complex on the southwest corner of the intersection. About 2,313 cars use this intersection in the morning, and 2,206 in the afternoon peak hours. The most prevalent movement is a southbound through on 7th avenue in the morning and in the evening. The most prevalent turning movement is a eastbound right turn in the morning as well as in the afternoon. This segment of road carries roughly 21,000 vehicles per day. It operates at level of service “C”. The area is serviced by only 1 stop. Route 77 is the only route to make stops in this area, accounting for 14 ons and offs, with all coming from

Route 77. Traffic counts show that about 42 pedestrians cross this intersection each day. Of these 25 do it in the morning and 17 in the afternoon. Over the past three years of collected data there have been 25 crashes. One of these involved a pedestrian and none involved a bicycle.

Table 5: Pedestrian Summary – 23rd Street

Intersection	Volume		Pedestrian Volume		Ped (Total)	AM %	PM %
	AM	PM	AM	PM			
NW 7 AVE & NW 23 ST	2,313	2,206	25	17	42	1.08%	0.77%

Table 6: MDT APC Ridership Statistics – 23rd Street

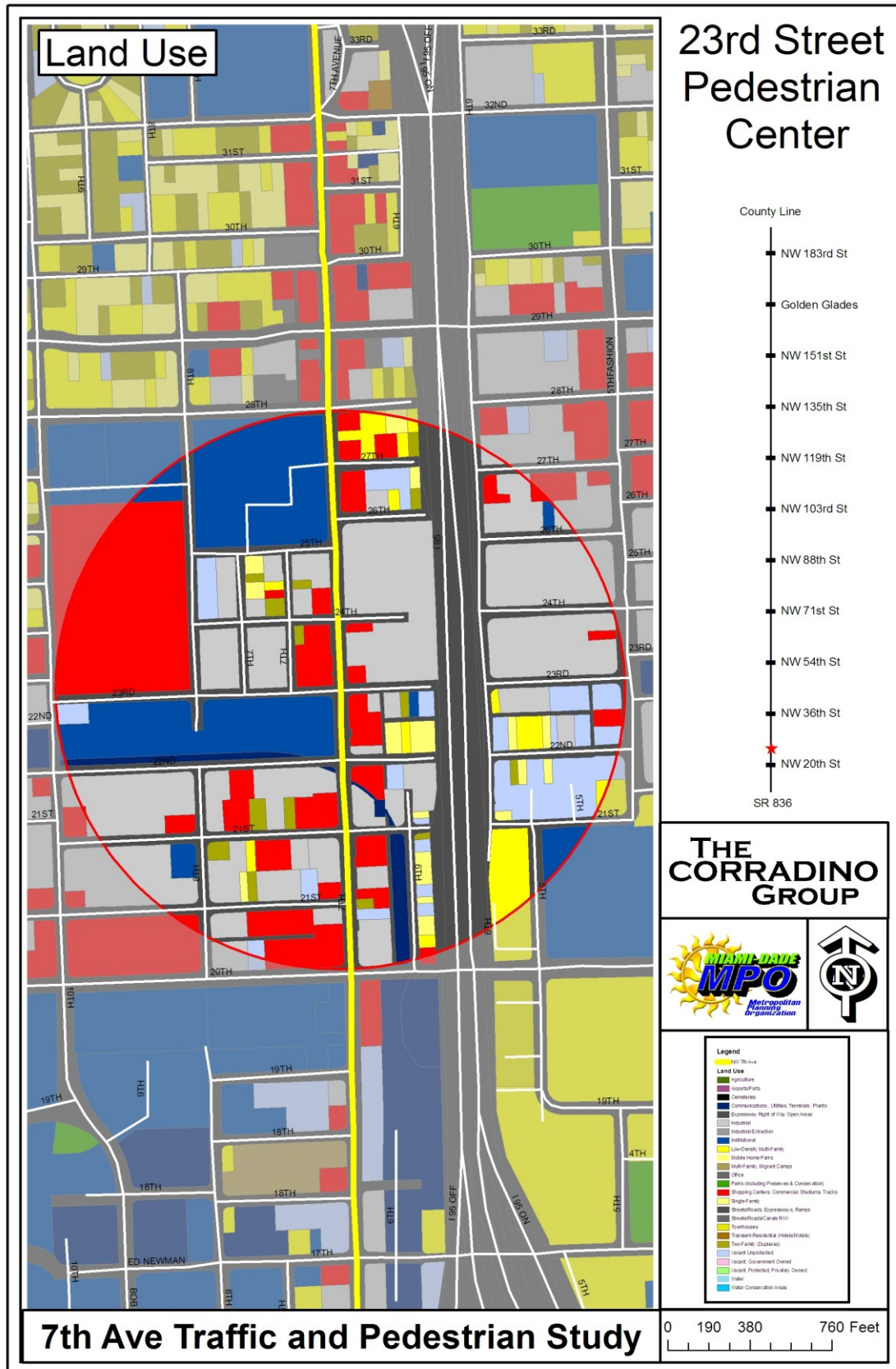
Stop Location	Route	Direction				On	Off	Total / Stop	Total / St
7th Ave @		N	S	E	W				
23 ST	77		x			10	4	14	14



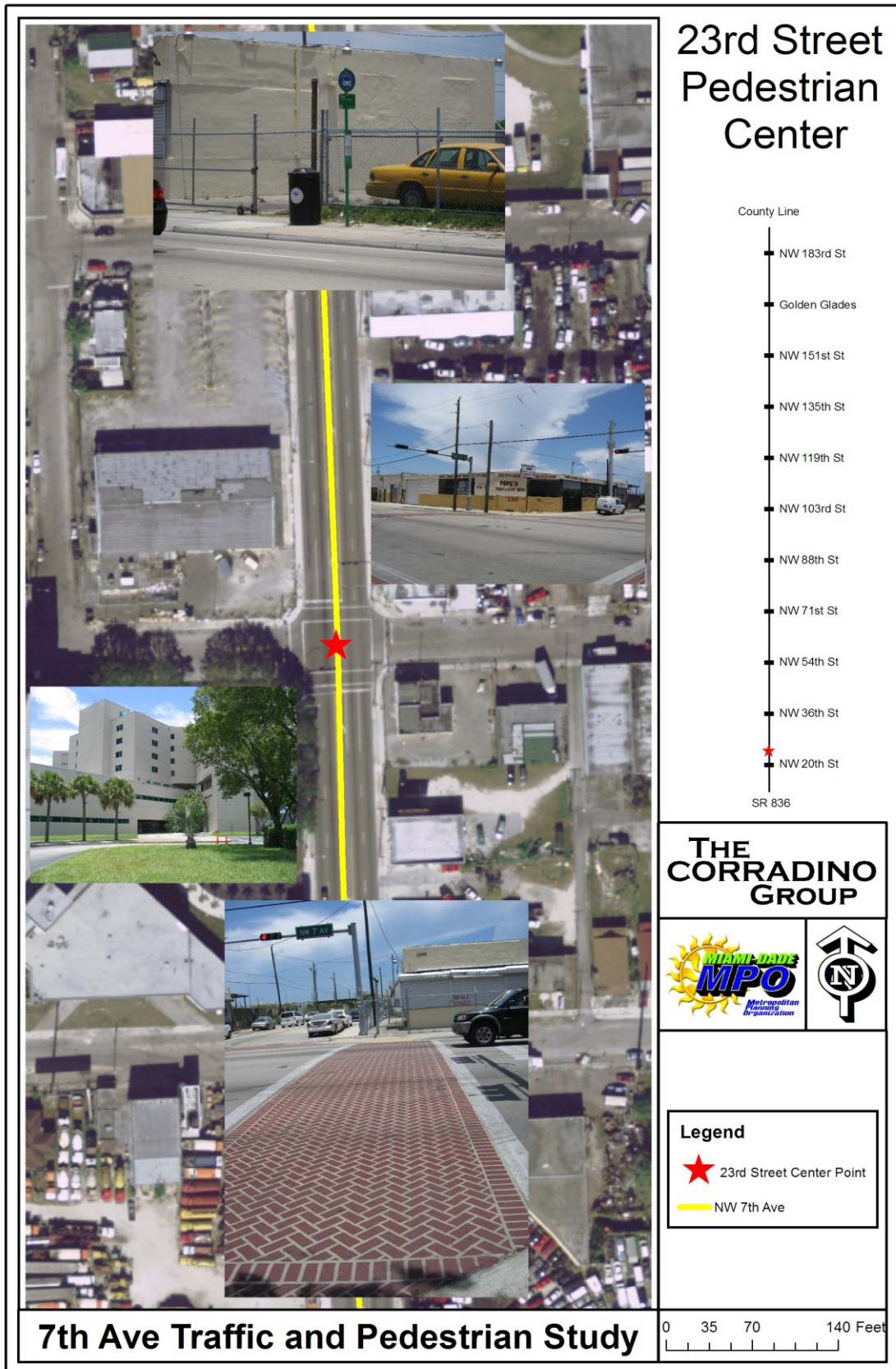
The intersection is well treated with pedestrian amenities in terms of crossings. It contains thermoplastic paver like crosswalks across all 4 sides of the intersection. Bus stops exist southbound on the southwest corner, northbound on the southeast corner. These stops are for Route 77 and on both stops have a sign as well as a trash can. No shelter or bench exists at either stop. Crossing is done rarely out side of the crosswalks across both 7th Ave and 23rd Street. The crosswalks are used in most cases. Adequate 6' sidewalks also exist stemming in all directions from the intersection.

It is recommended that all bus stops have shelters, additional benches and trash cans. The eastbound stop especially has problems of overcrowding under the shelter. Many of these pedestrians are students at Lindsay Hopkins Technical Education Center. Perhaps pedestrian count down signals can be installed at the intersection. No other needs have been found.

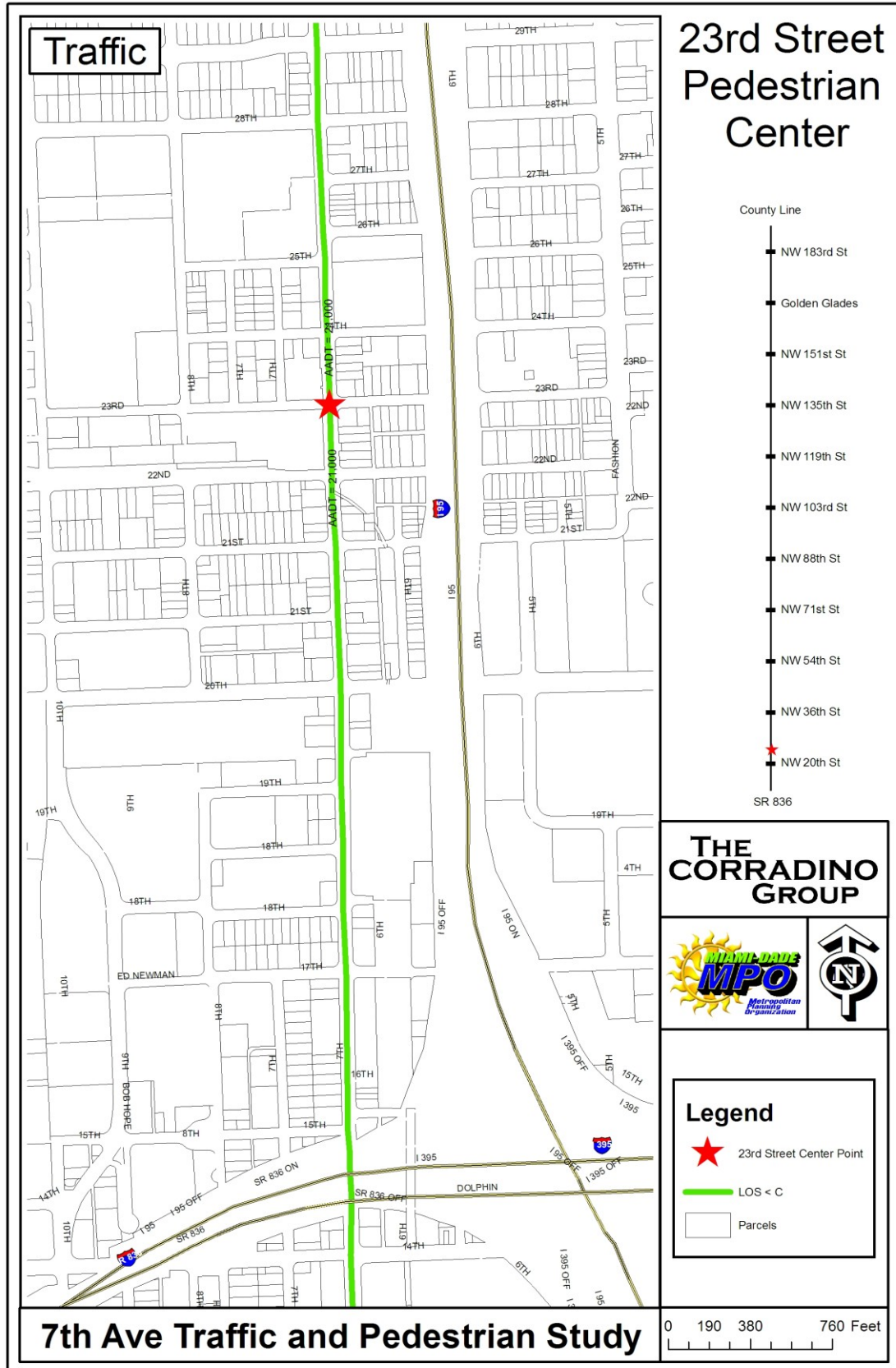
Map 9: Land Use -23rd Street Pedestrian Center



Map 10: 23rd Street Pedestrian Center

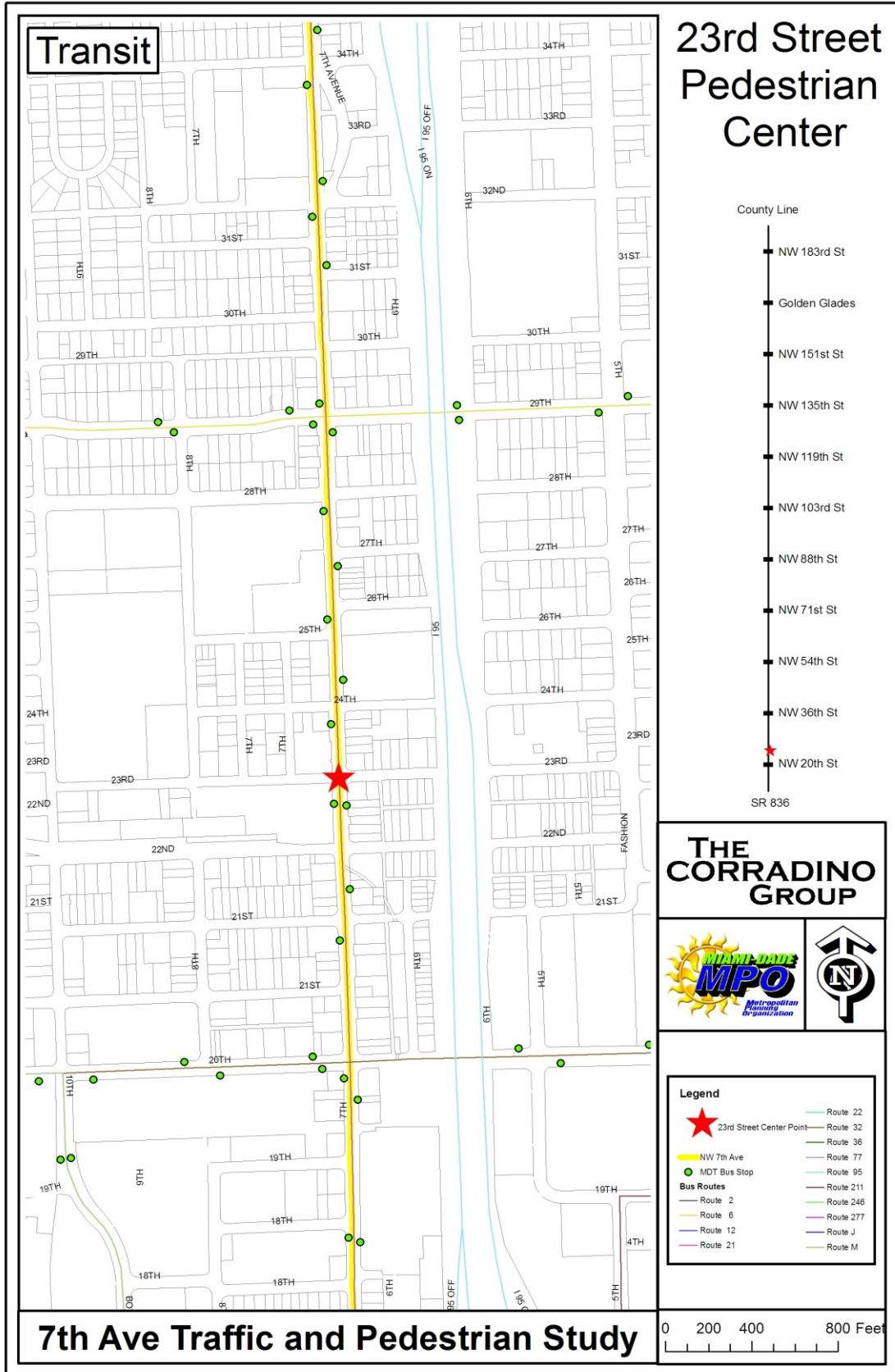


Map 11: Traffic – 23rd Street Pedestrian Center



7th Avenue Traffic and Pedestrian Study Task 4: Analysis of Pedestrian Activity and Needs

Map 12: Transit – 23rd Street Pedestrian Center



32nd Street



This is an intersection surrounded by commercial uses including multiple small stores on the northeast corner as well as a night club on the southwest corner. It also includes a large Catholic church on the northwest side of the intersection and single family residential on the southeast corner making this intersection truly mixed use. About 2,266 cars use this intersection in the morning, and 2,486 in the afternoons. The most prevalent movement is a south bound through on 7th avenue in the morning and a northbound through movement in the afternoon. The most prevalent turning movement is a eastbound right turn in the morning (78). This segment of road carries approximately 21,000 vehicles per day. It operates at level of service “C”. The area is serviced by only one route at two stops. Route 77 makes stops at this intersection, accounting for 77 ons and

offs, which has 43 people getting on, and 34 getting off. Traffic counts show that about 57 pedestrians cross this intersection each day. Of these 37 do it in the morning and 20 do it in the afternoon. Over the past three years of collected data there have been only 8 crashes. However, both bicycles and pedestrians have been involved in these crashes.

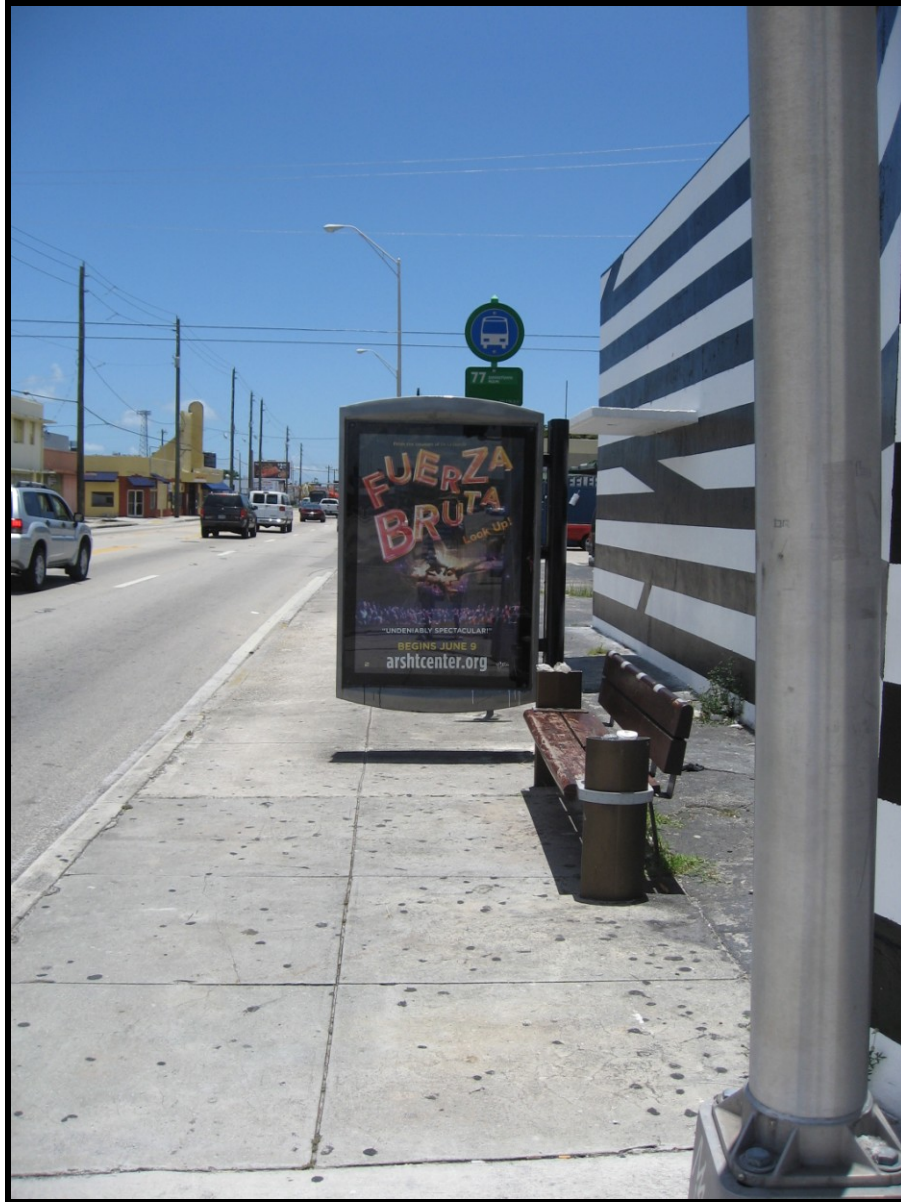
Table 7: Pedestrian Summary – 32nd Street

Intersection	Volume		Pedestrian Volume		Ped (Total)	AM %	PM %
	AM	PM	AM	PM			
NW 7 AVE & NW 32 ST	2,266	2,486	37	20	57	1.63%	0.80%

Table 8: MDT APC Ridership Statistics – 32nd Street

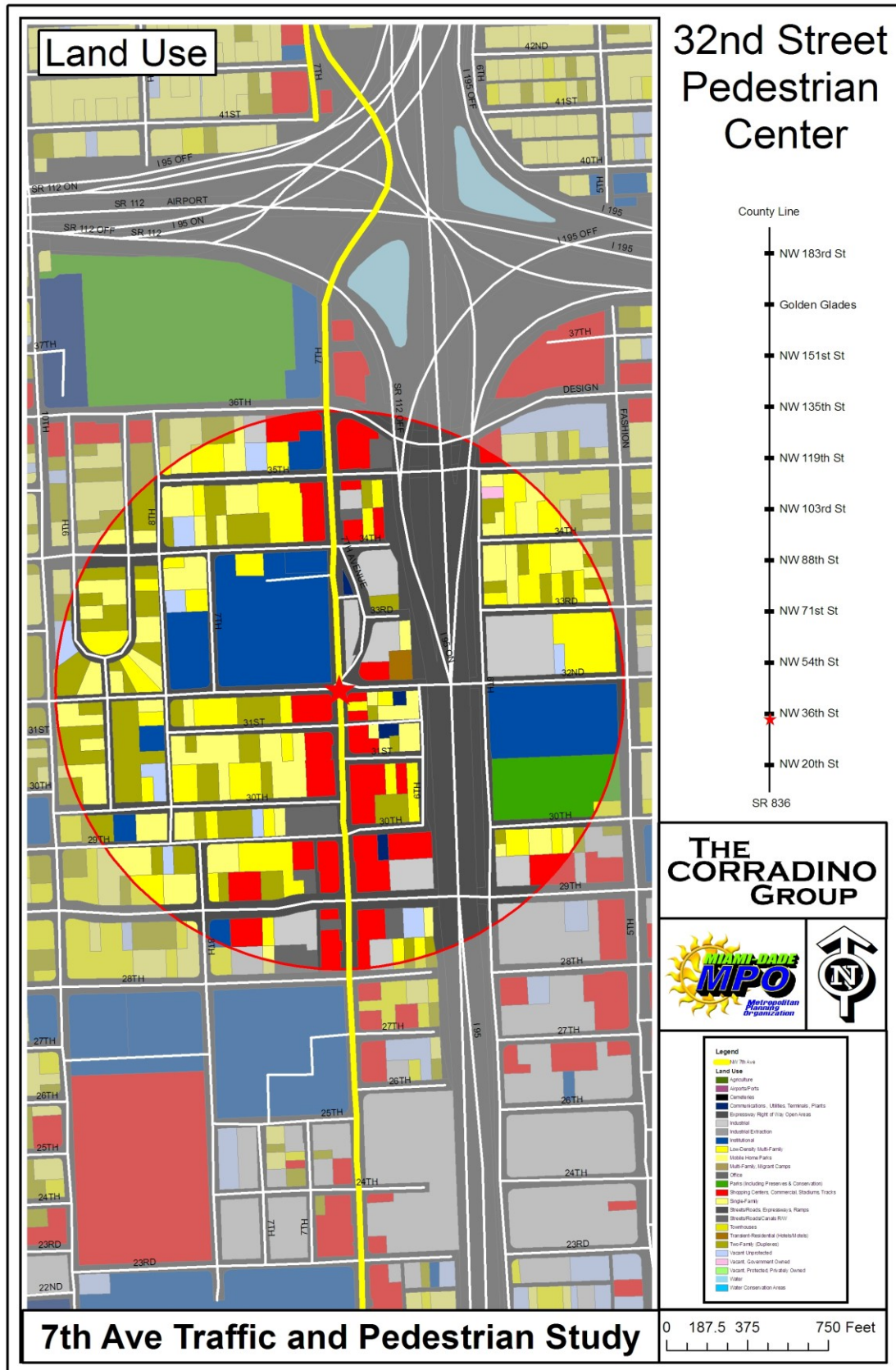
Stop Location	Route	Direction				On	Off	Total / Stop	Total / St
7th Ave @		N	S	E	W				
32 ST	77		x			32	27	59	77
32 ST	77	x				11	7	18	

The intersection is poorly treated with pedestrian amenities. It contains crosswalk striping and electronic walk/don't walk signage only. Textured handicapped raps exist as well. Bus stops exist on the southbound southwest corner, northbound on the northeast corner of the intersection. The stop for Route 77 on the northeast corner has a shelter and a bench as well as a trash can. The southbound southwest corner has a stop but no shelter. It includes only a bench and a sign. There is also a advertising sign at this location that blocks the view of the MDT sign. This advertisement sign should be relocated behind the sign that identifies the stop. This location is filthy, as trash is strewn all around the immediate area. No other pedestrian amenities exist. Adequate 6' sidewalks exist in all directions.

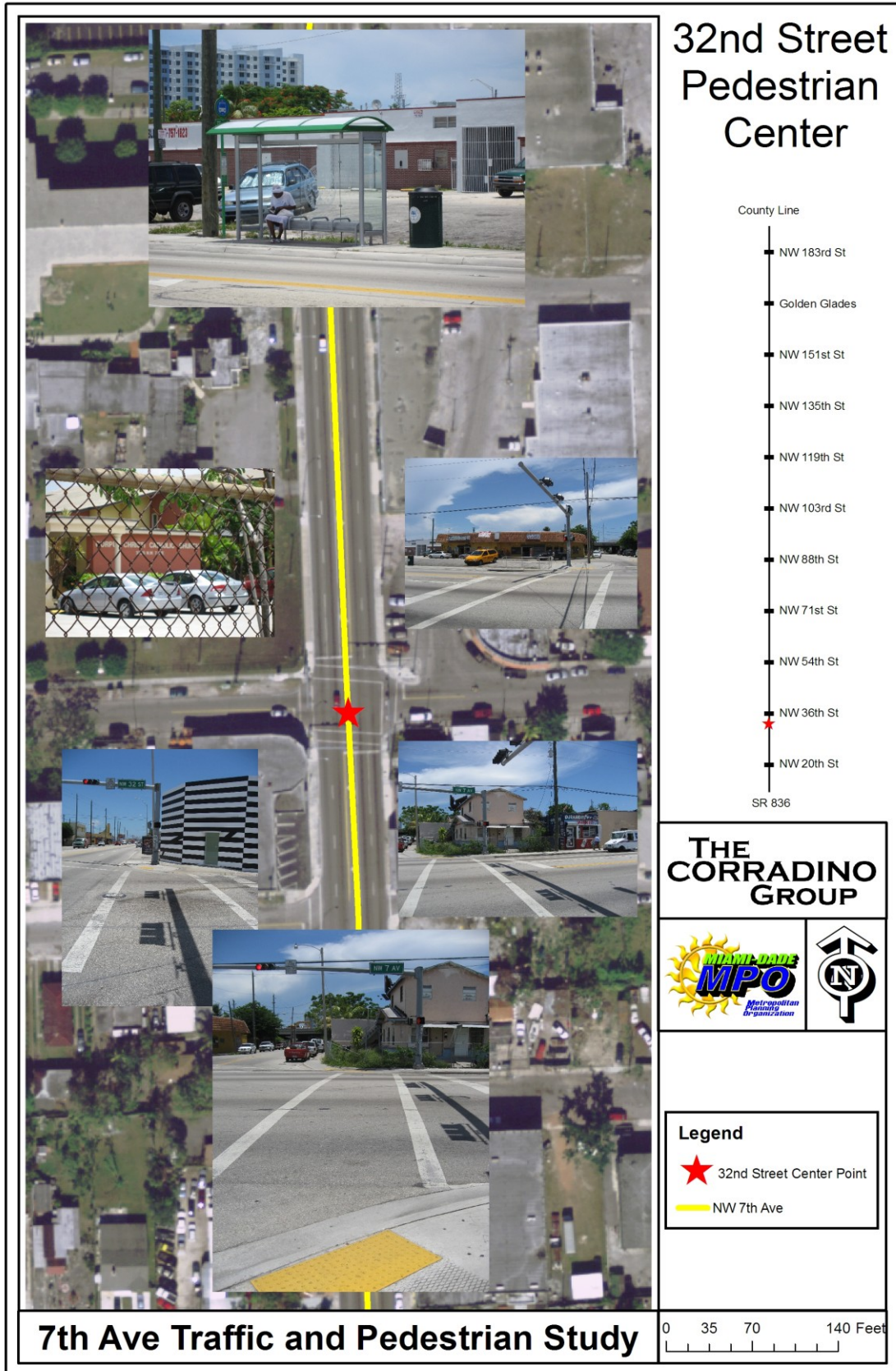


It is recommended that all bus stops have shelters, additional benches and trash cans. Perhaps pedestrian count down signals can be installed at the intersection in place of the more traditional walk/don't walk signage. It is also recommended that the crosswalks get thermoplastic treatment in place of the simple striping, making it easier for motorists to identify and safer for pedestrians.

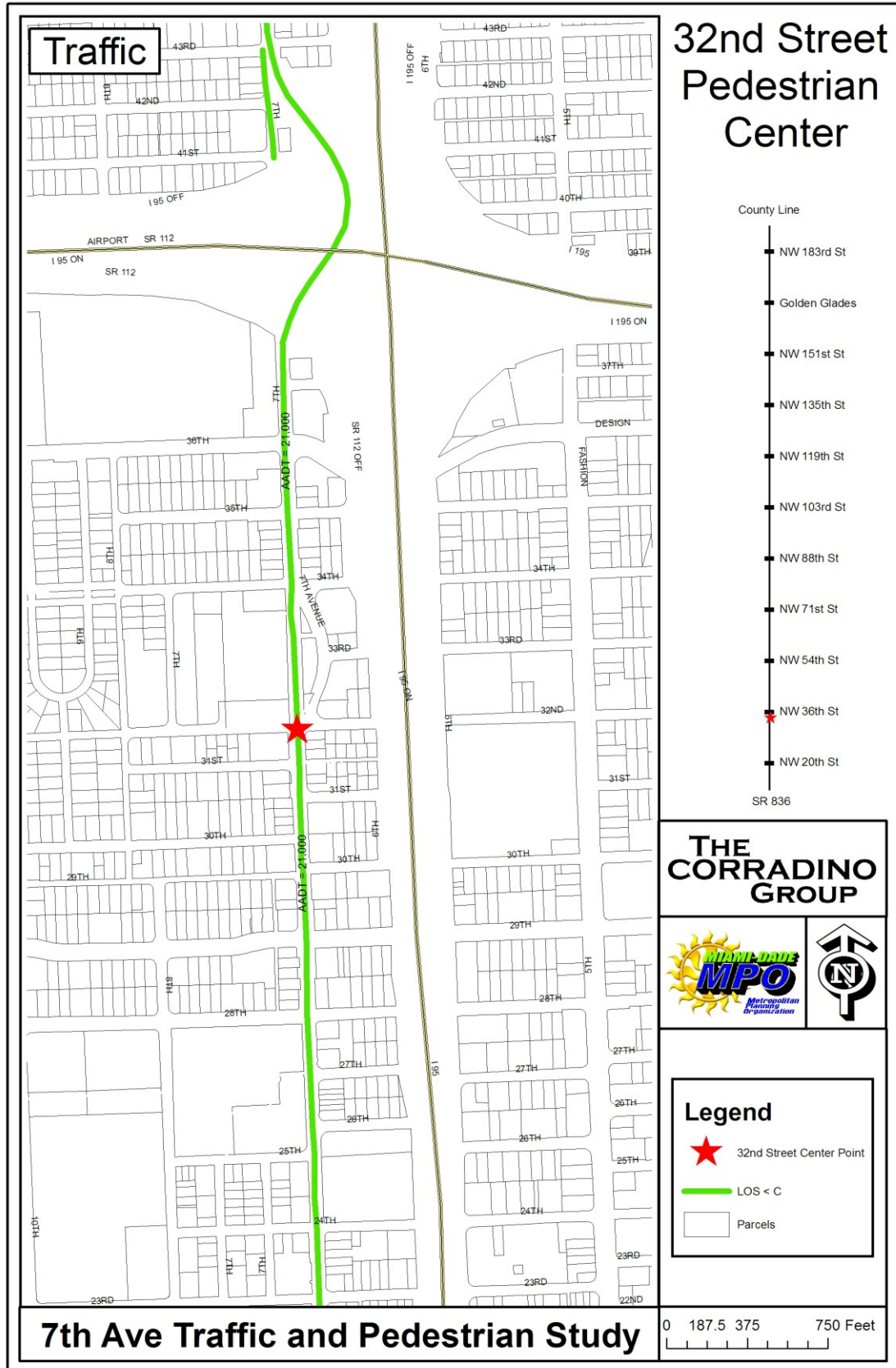
Map 13: Land Use – 32nd Street Pedestrian Center



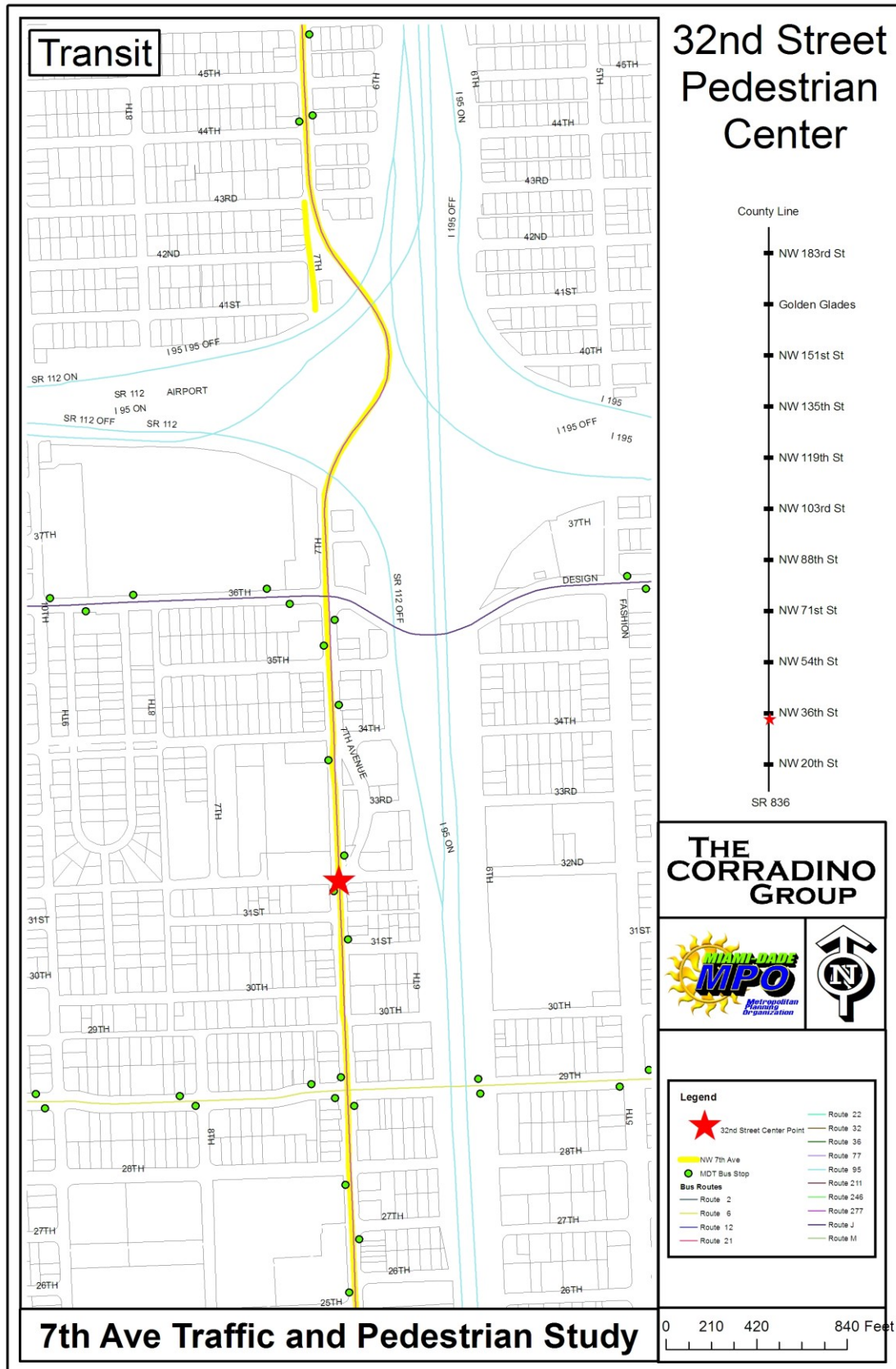
Map 14: 32nd Street Pedestrian Center



Map 15: Traffic – 32nd Street Pedestrian Center



Map 16: Transit – 32nd Street Pedestrian Center



46th Street

This is an intersection surrounded by multiple uses including two commercial uses. On the northeast side there is a convenience store called Kwic Pic. On the southeast corner there is a restaurant called Esther Restaurant. There appears to be a vacant building on the northwest corner and residential usage on the southeast corner. About 2,376 cars use this intersection in the morning, and 2,730 in the afternoons. The most prevalent movement is a southbound through on 7th avenue in the morning and a northbound through in the afternoon. The most prevalent turning movement is a southbound left turn in the morning (94). This segment of road carries between 21,000 and 24,500 vehicles per day. It operates at level of service “C”. The area is serviced by just one route with one stop. Route 77 is the only route in this area, accounting for 24 ons and offs. This includes 10 ons and 14 offs. Traffic counts show that about 95 pedestrians cross this intersection each day. Of these 50 do it in the morning and 45 in the afternoon. Over the past three years of collected data there have been 30 crashes. One of these crashes involved a pedestrian.

Table 9: Pedestrian Summary – 46th Street

Intersection	Volume		Pedestrian Volume		Ped (Total)	AM %	PM %
	AM	PM	AM	PM			
NW 7 AVE & NW 46 ST	2,376	2,730	50	45	95	2.10%	1.65%

Table 10: MDT APC Ridership Statistics – 46th Street

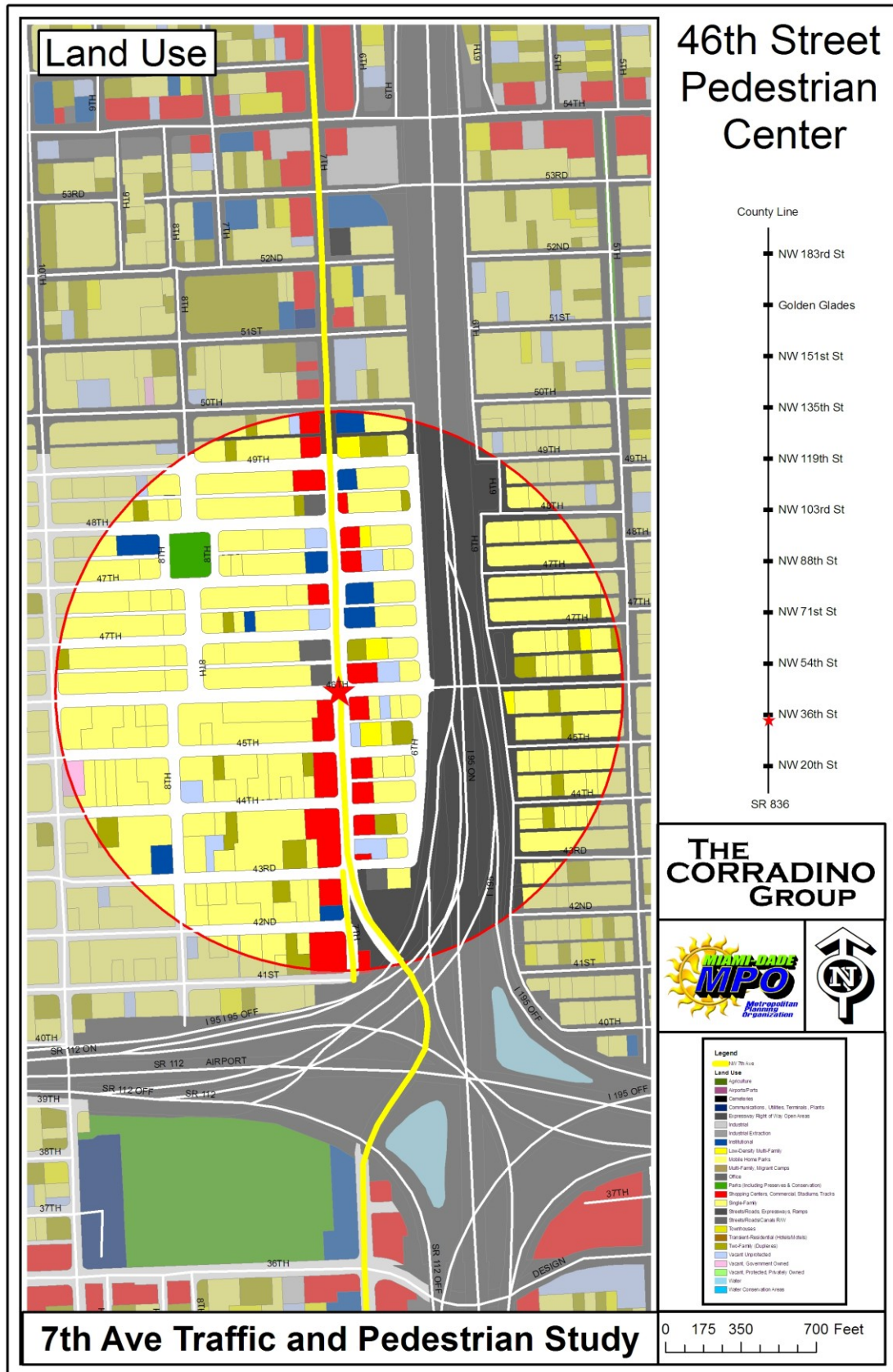
Stop Location	Route	Direction				On	Off	Total / Stop	Total / St
7th Ave @		N	S	E	W				
46 ST	77	x				10	14	24	24

The intersection is well treated with pedestrian amenities. It contains thermoplastic paver like crosswalks across all 4 legs of the intersection. Textured handicapped wraps exist as do pedestrian head signals. Only one bus stop exists, northbound on the southeast corner of the intersection. The stop for Route 77 has a shelter, trash can, sign and a bench but no other amenities. Crossing is done at random out side of the crosswalks across both 7th Ave and 95th Street. Adequate 6’ sidewalks exist in all directions stemming from the intersection on both sides of the street.

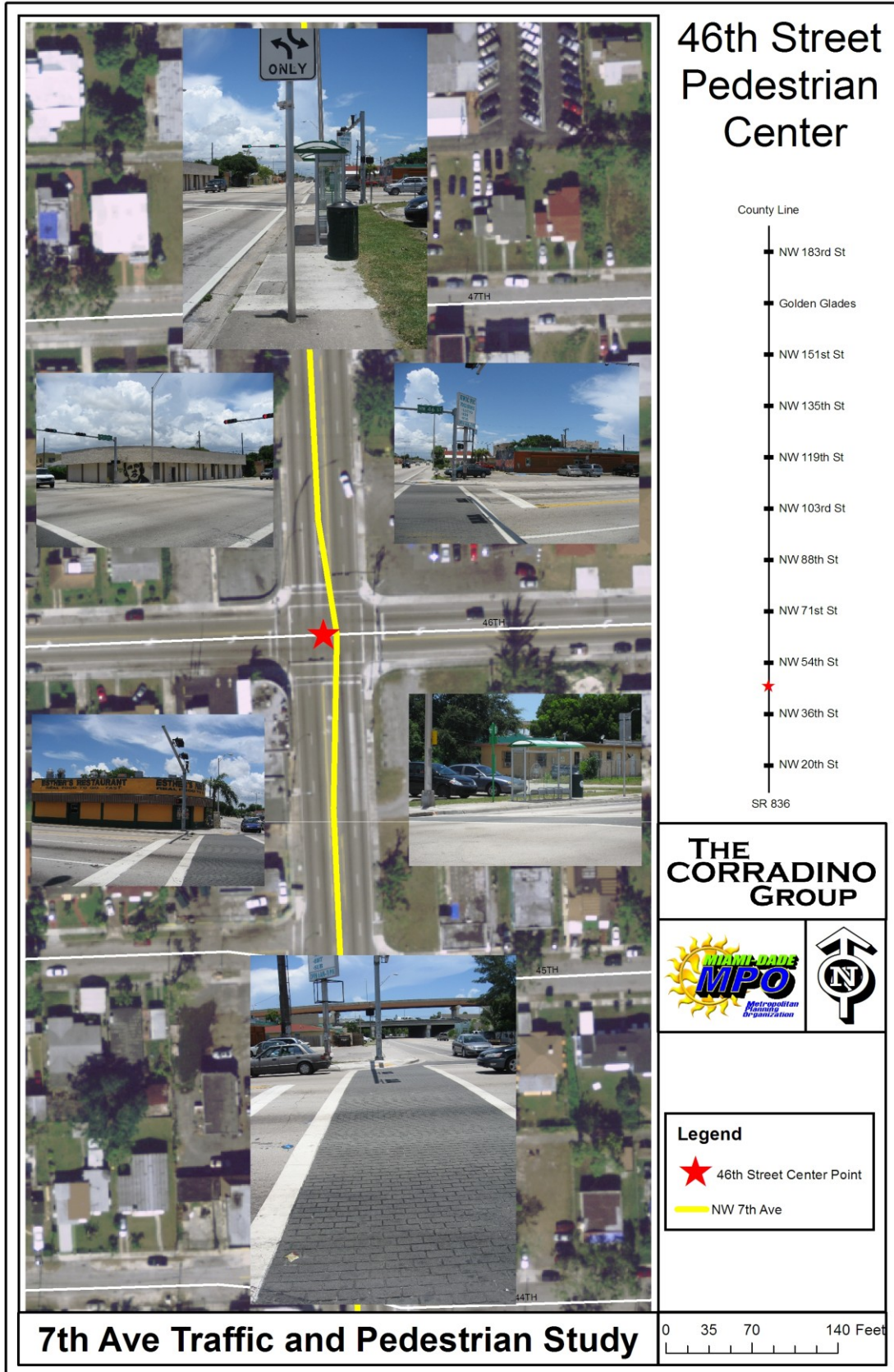


It is recommended that this bus stop have additional benches. No other needs have been found.

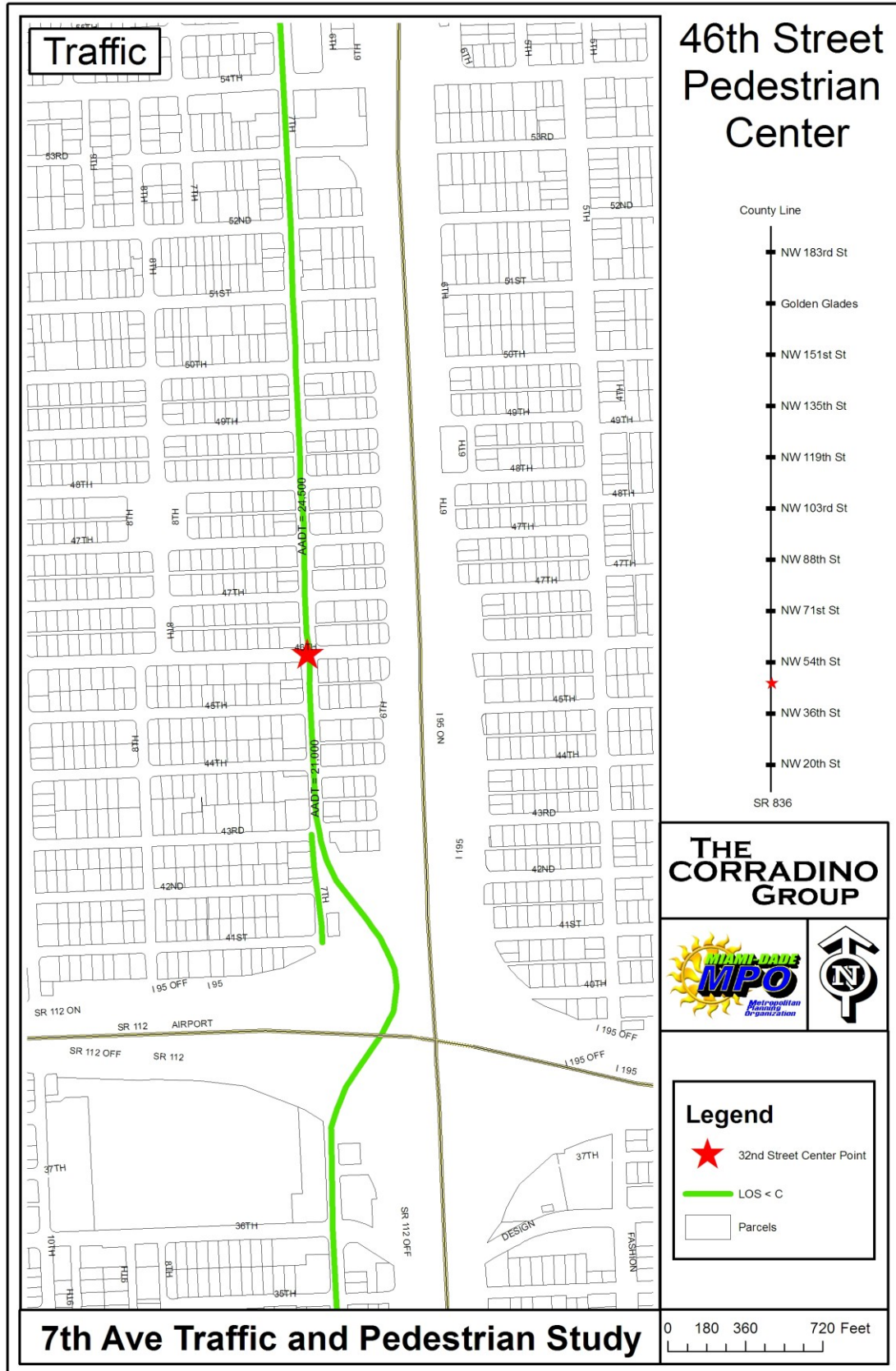
Map 17: Land Use – 46th Street Pedestrian Center



Map 18: 46th Street Pedestrian Center

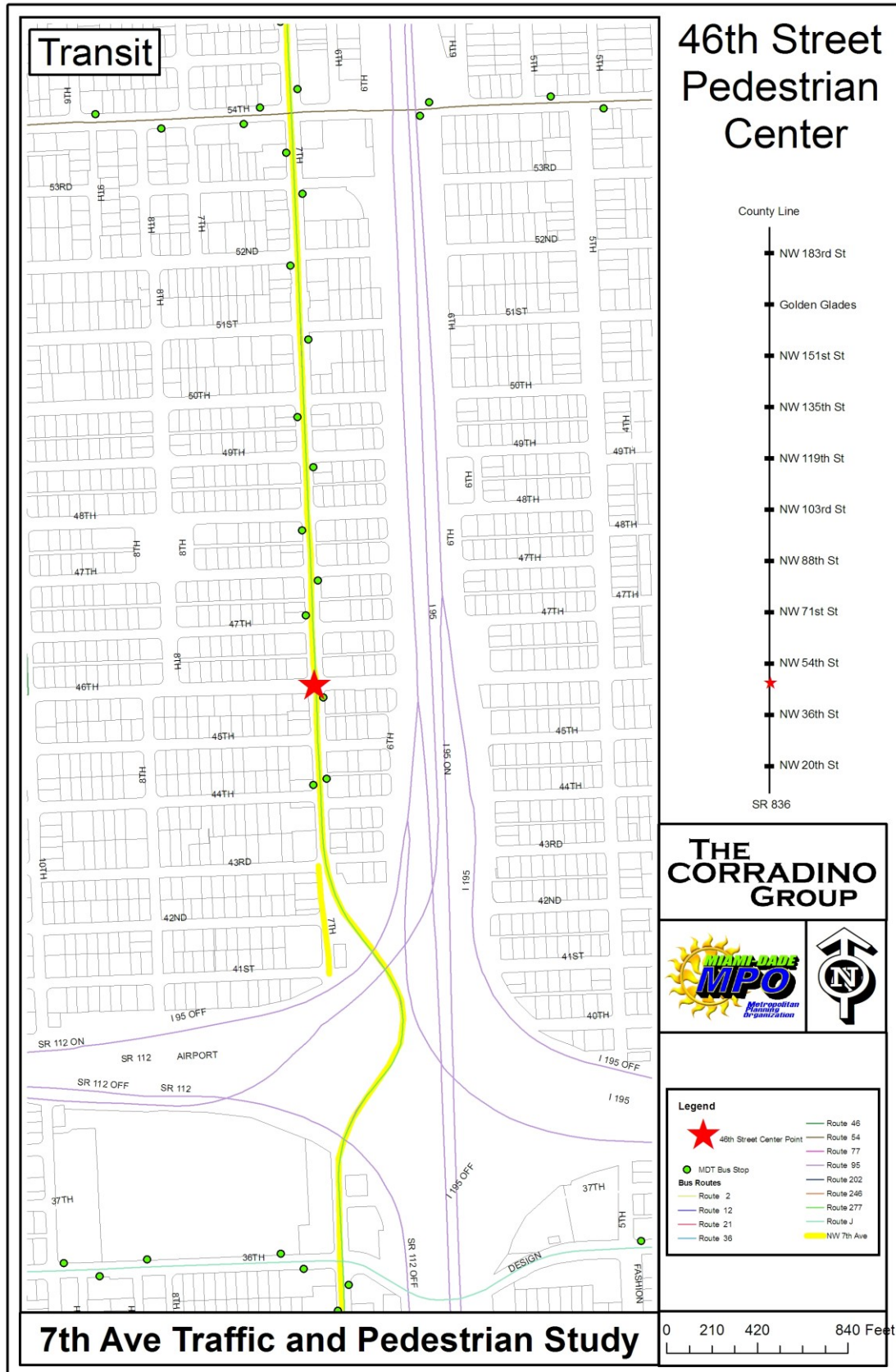


Map 19: Traffic – 46th Street Pedestrian Center



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Map 20: Transit – 46th Street Pedestrian Center



54th Street

This is an intersection surrounded by commercial uses including two gas stations. On the southeast side, as well as the northwest corner. There is also a Burger King restaurant on the northeast corner and an Auto Zone retail store on the southwest corner of the intersection. About 4,354 cars use this intersection in the morning, and 4,711 in the afternoons. The most prevalent movement is a southbound through on 7th avenue in the morning and a northbound through in the afternoon rush hour. The most prevalent turning movement is a eastbound right turn in the morning (233). This segment of road carries between 21,000 and 24,500 vehicles per day. It operates at level of service “C”. The area is serviced by three routes at four stops. Route 54, 77, and 277 all make stops in this area, accounting for 517 ons and offs, with 245 coming from Route 54, which has 135 people getting on, and 110 getting off. Traffic counts show that about 74 pedestrians cross this intersection each day. Of these 36 do it in the morning and 38 in the afternoon. Over the past three years of collected data there have been 34 crashes. One of those crashes included a vehicle on pedestrian accident.



Table 11: Pedestrian Summary – 54th Street

Intersection	Volume		Pedestrian Volume		Ped (Total)	AM %	PM %
	AM	PM	AM	PM			
NW 7 AVE & NW 54 ST	4,354	4,711	36	38	74	0.83%	0.81%

Table 12: MDT APC Ridership Statistics -54th Street

Stop Location	Route	Direction				On	Off	Total / Stop	Total / St
7th Ave @		N	S	E	W				
54 St	54				x	31	68	99	517
54 St	54			x		104	42	146	
54 ST	77		x			52	50	102	
54 ST	77	x				54	34	88	
54 ST	277		x			19	25	44	
54 ST	277	x				23	15	38	

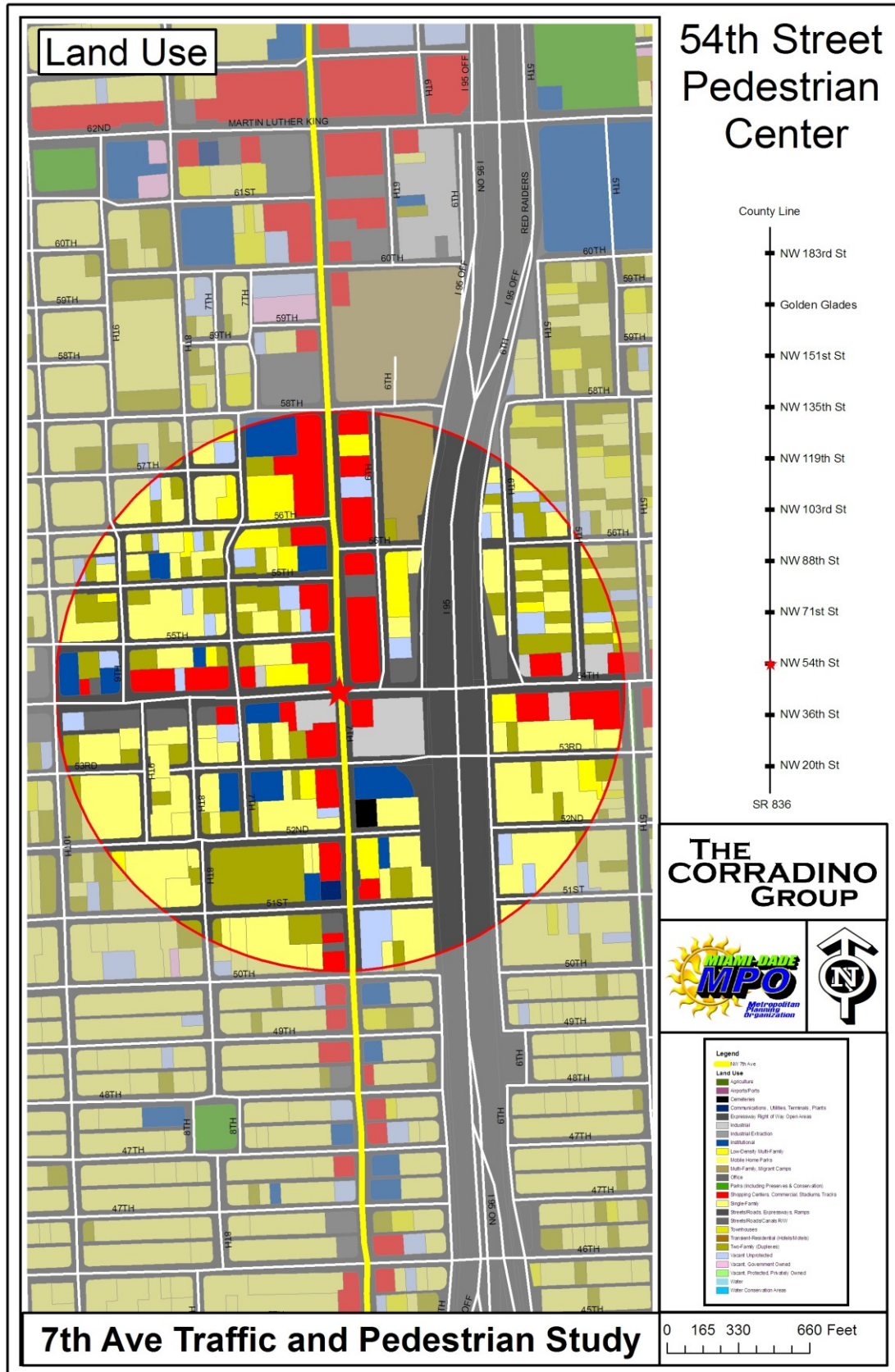
The intersection is well treated with pedestrian amenities. It contains thermoplastic paver like crosswalks across all 4 legs of the intersection. Textured handicapped raps exist in most places as do pedestrian head signals. Bus stops exist southbound on the southwest corner, northbound on the northeast corner, westbound on the northwest corner and eastbound on the southwest corner of the intersection. The stop for Route 77 and 277 on the northbound northeast corner has a shelter, bench, sign and trash can. However, the

trash can is too far away from the shelter causing people to throw the trash on the ground. The southbound southwest corner has a stop but no shelter, just a bench, a trash can and a sign. This location is highly used and could use a shelter. Crossing is done for the most part within the crosswalks across both 7th Ave and 54th Street. Adequate 6' sidewalks exist in all areas.



It is recommended that all bus stops have shelters, additional benches and trash cans. Perhaps pedestrian count down signals can be installed at the intersection, as opposed to the walk/don't walk signals that currently exist. This is also a location where an emergency phone should be placed as it is one of the most used stops in the area.

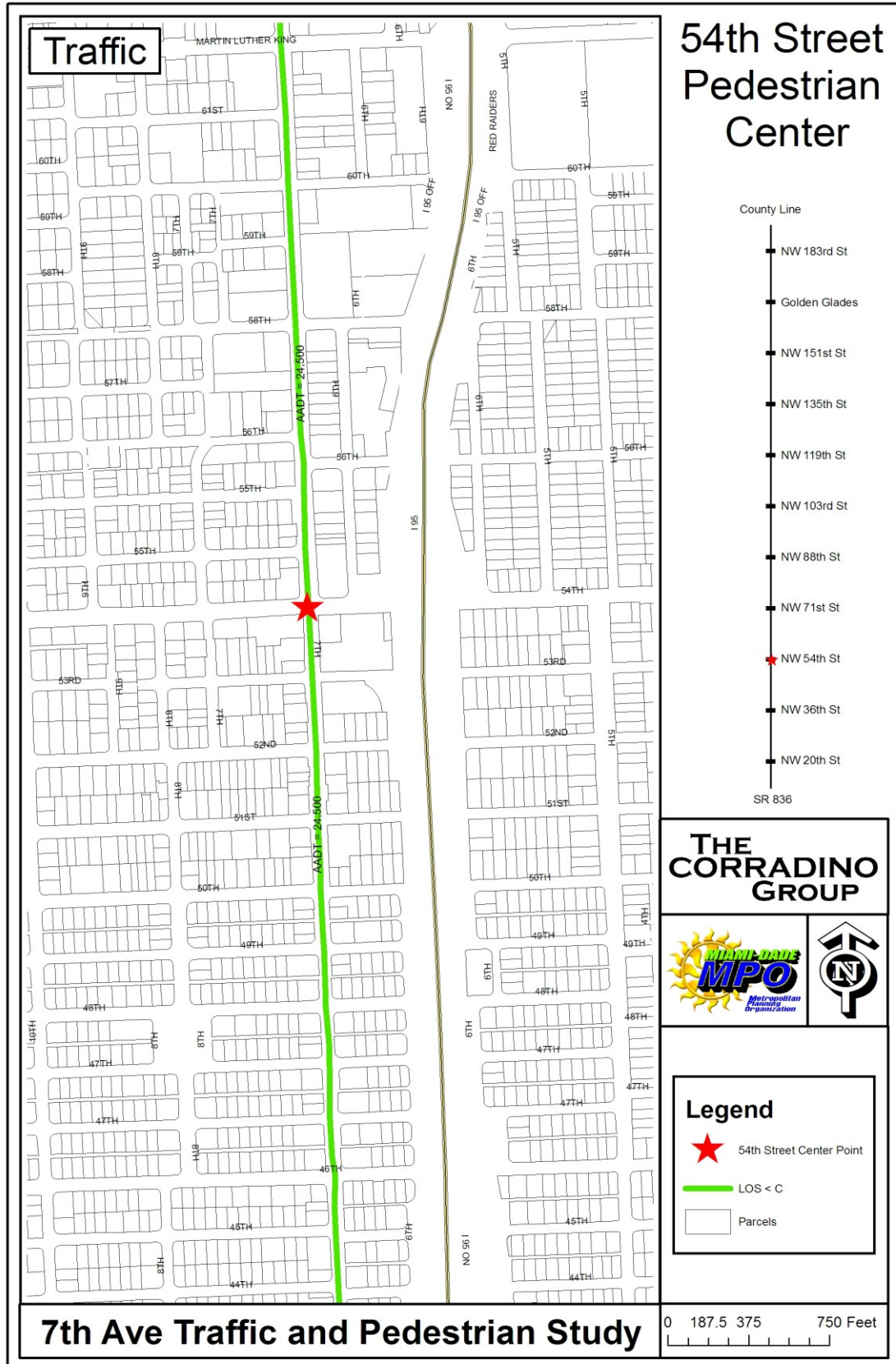
Map 21: Land Use – 54th Street Pedestrian Center



Map 22: 54th Street Pedestrian Center

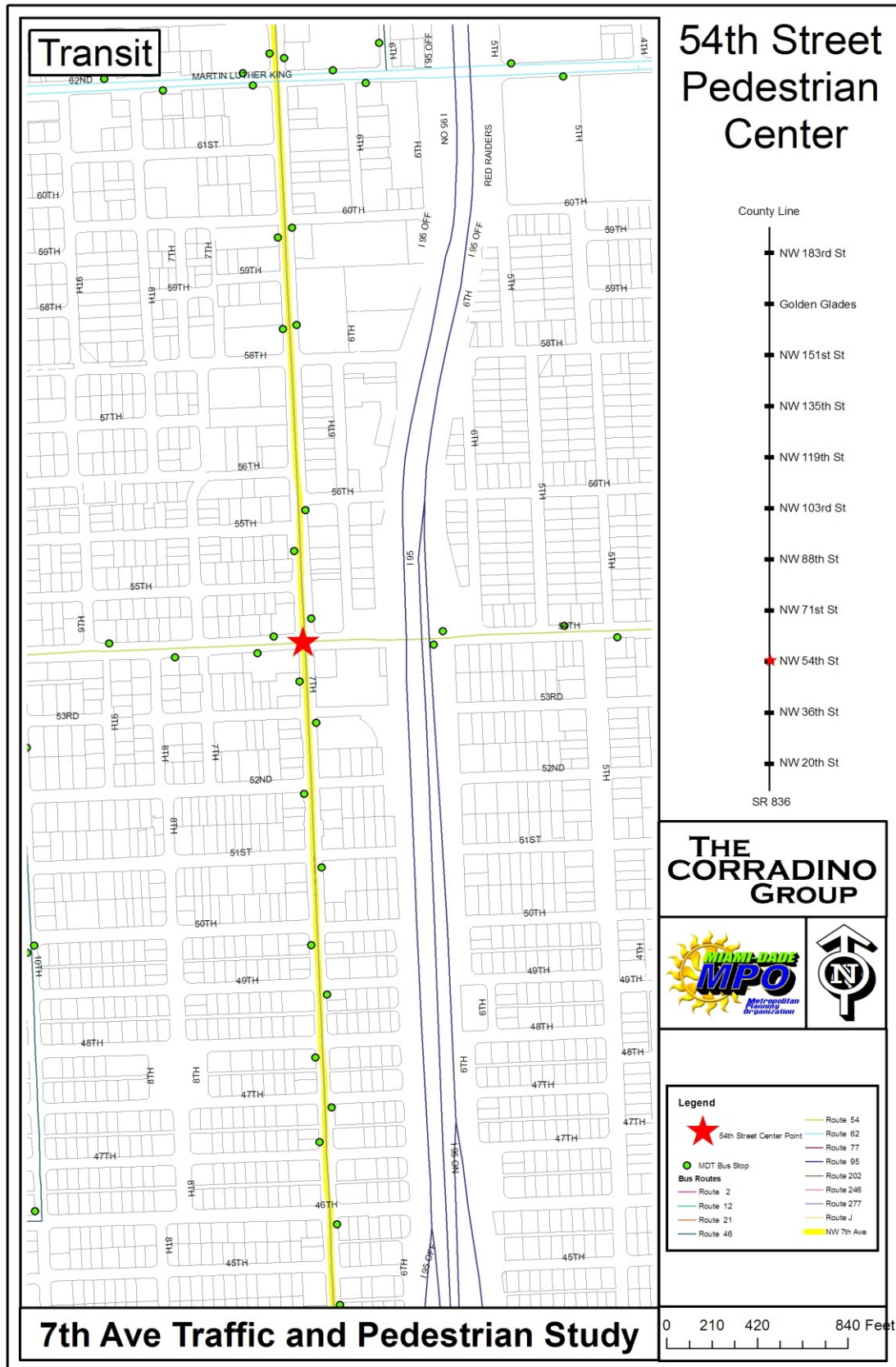


Map 23 : Traffic - 54th Street Pedestrian Center



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Map 24: Transit – 54th Street Pedestrian Center



62nd Street

This is an intersection surrounded by completely by commercial uses. This includes a new strip mall complex just east of the intersection that includes several restaurants and retail stores. Immediately surrounding the intersection is a Walgreens on the northwest corner, a liquor store on the southwest corner, a family dollar store on the northeast corner and Liberty Tax Service on the southeast corner of the intersection at NW 7th Ave and NW 62nd Street. The area also includes a large Miami-Dade College facility. About



4,129 cars use this intersection in the morning, and 3,875 in the afternoons. The most prevalent movement is a southbound through on 7th avenue in the morning as well as a northbound through in the evening. The most prevalent turning movement is a southbound left turn in the morning (309). This segment of road carries between 21,500 and 24,500 vehicles per day. It operates at level of service "C". The area is serviced by four routs at four stops. Routes 46, 62, 77, and 277 all make

stops in this area, accounting for 1,190 ons and offs, with 638 coming from Route 62, which has 387 people getting on, and 251 getting off. Traffic counts show that about 42 pedestrians cross this intersection each day. Of these 20 do it in the morning and 22 in the afternoon. Over the past three years of collected data there have been 54 crashes. Five of these have involved pedestrians making it a dangerous intersection.

Table 13: Pedestrian Summary – 62nd Street

Intersection	Volume		Pedestrian Volume		Ped (Total)	AM %	PM %
	AM	PM	AM	PM			
NW 7 AVE & NW 62 ST	4,129	3,875	20	22	42	0.48%	0.57%

Table 14: MDT APC Ridership Statistics – 62nd Street

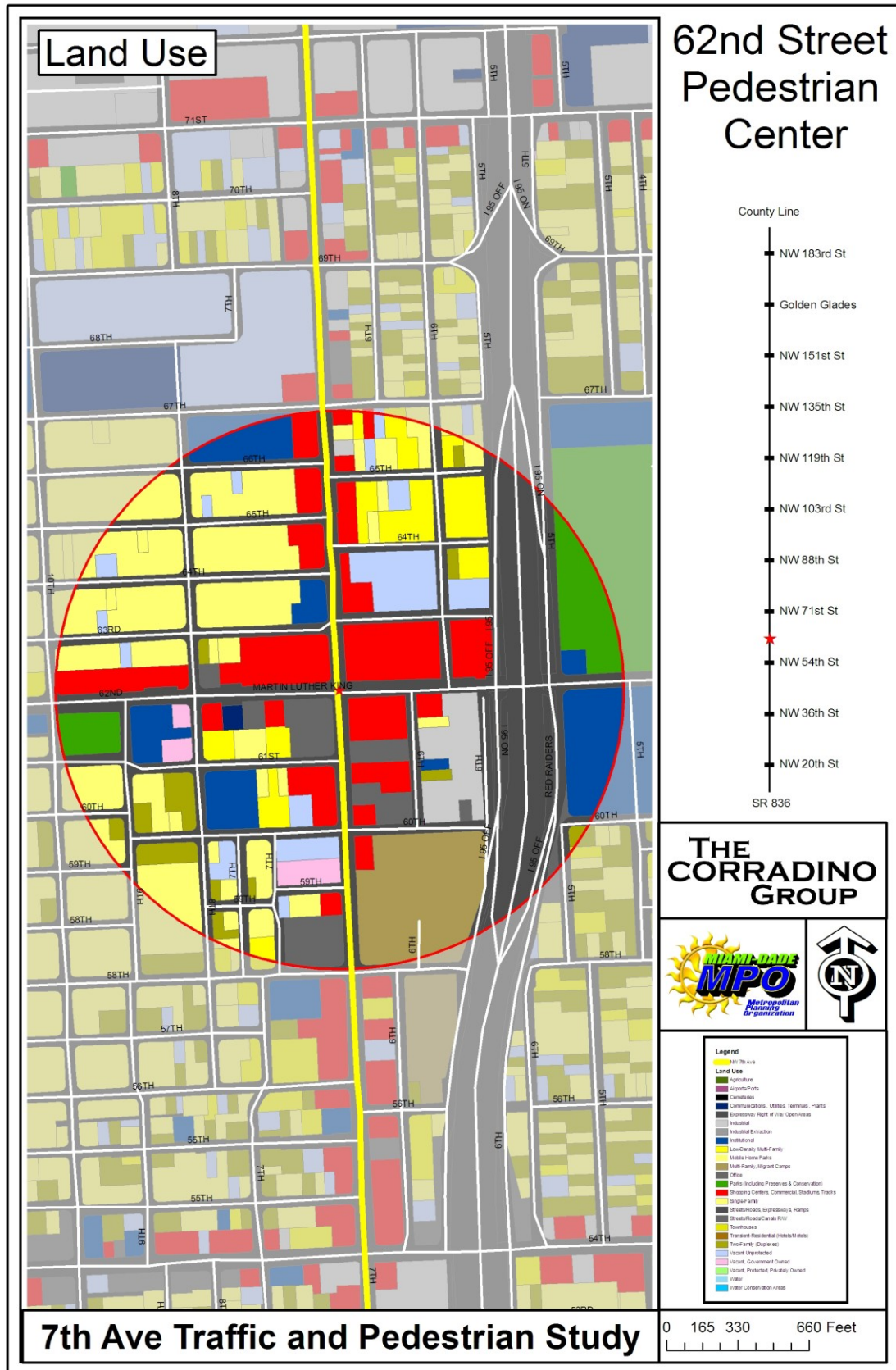
Stop Location	Route	Direction				On	Off	Total / Stop	Total / St
7th Ave @		N	S	E	W				
62 St	46				x	0	0	0	1190
62 St	46			x		6	0	6	
62 St	62				x	167	161	328	
62 St	62			x		220	90	310	
62 ST	77		x			134	173	307	
62 ST	77	x				76	34	110	
62 ST	277		x			34	41	75	
62 ST	277	x				33	21	54	
62 St (EOL)	46				x	0	0	0	

The intersection is well treated with pedestrian amenities. It contains thermoplastic paver like crosswalks across all 4 legs of the intersection. Textured handicapped raps exist as do pedestrian head signals. Bus stops exist southbound on the northwest corner, northbound on the northeast corner, westbound on the southwest corner and eastbound on the northwest corner of the intersection. The westbound stop for Route 62 has a shelter, a bench, a sign and even an emergency phone. Yet, there is no trash can. This location is dirty from time to time, as trash is often strewn all around the stop area. Crossing is done at random out side of the crosswalks across on 7th Ave but mostly within the crosswalks. However, on NW 62nd Street jaywalking is very prevalent. Adequate 6' sidewalks exist.

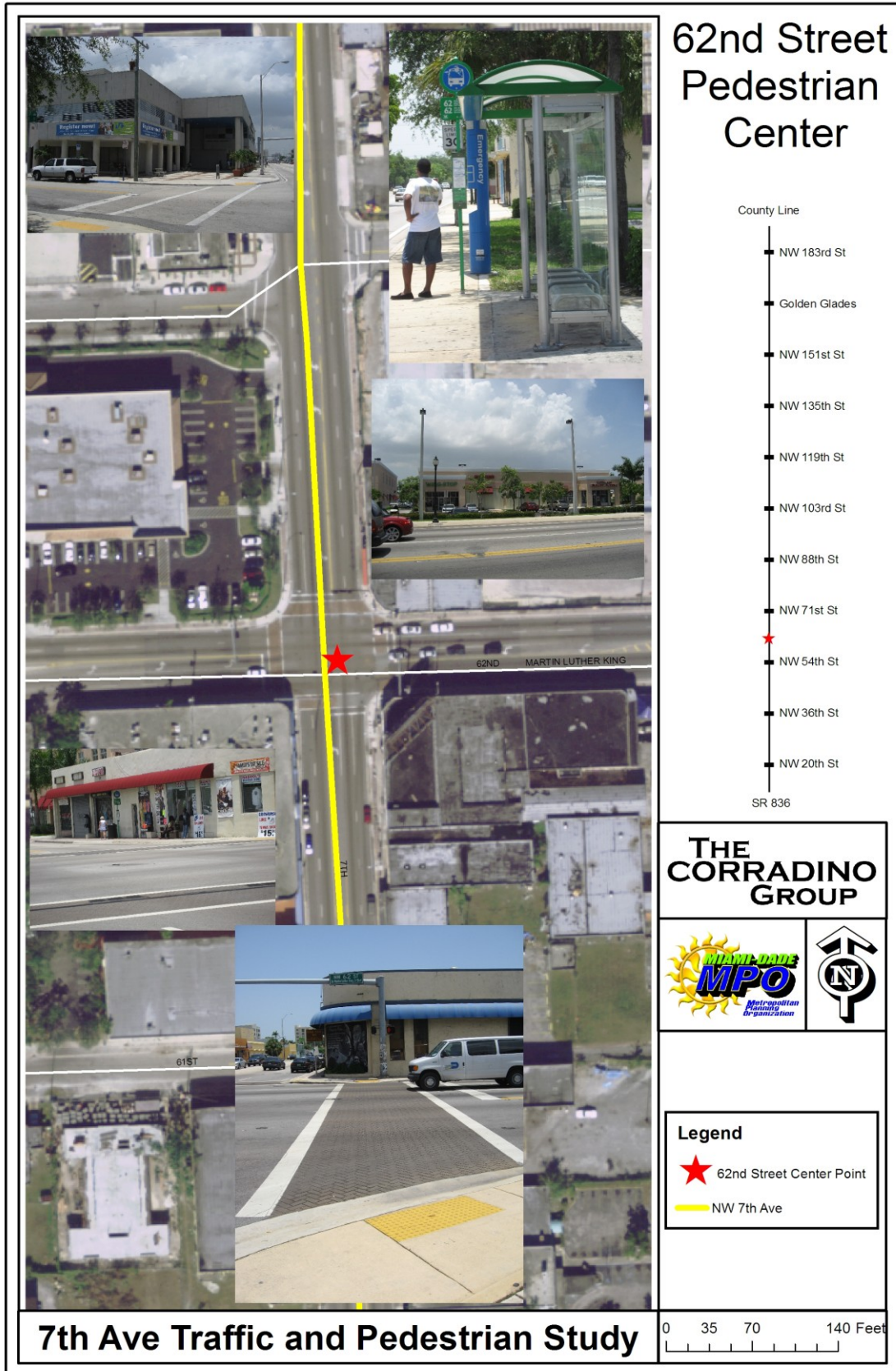


It is recommended that all bus stops have shelters, additional benches and trash cans. Perhaps pedestrian count down signals can be installed at the intersection. No other needs have been found.

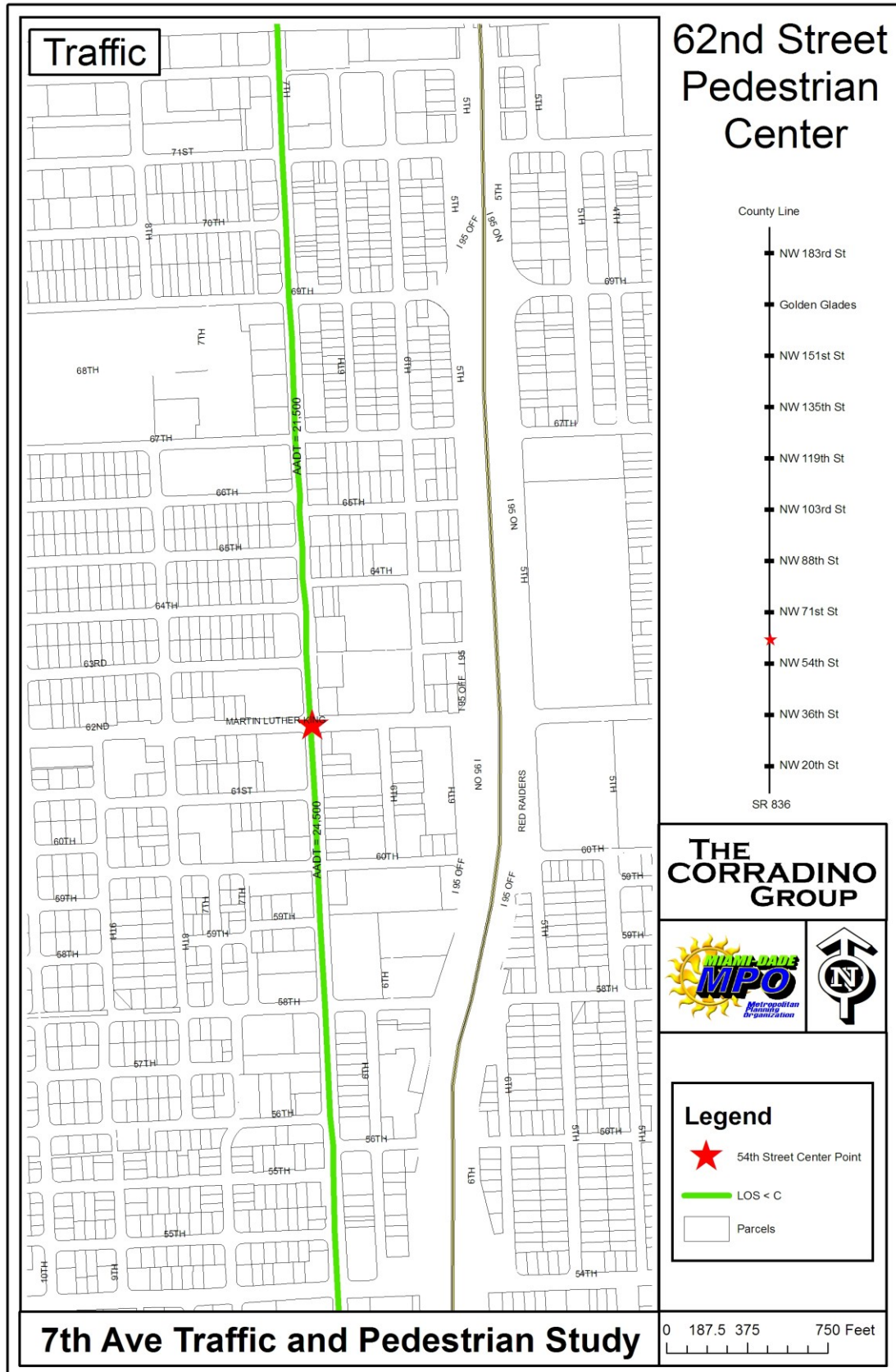
Map 25: Land Use – 62nd Street Pedestrian Center



Map 26: 62nd Street Pedestrian Center

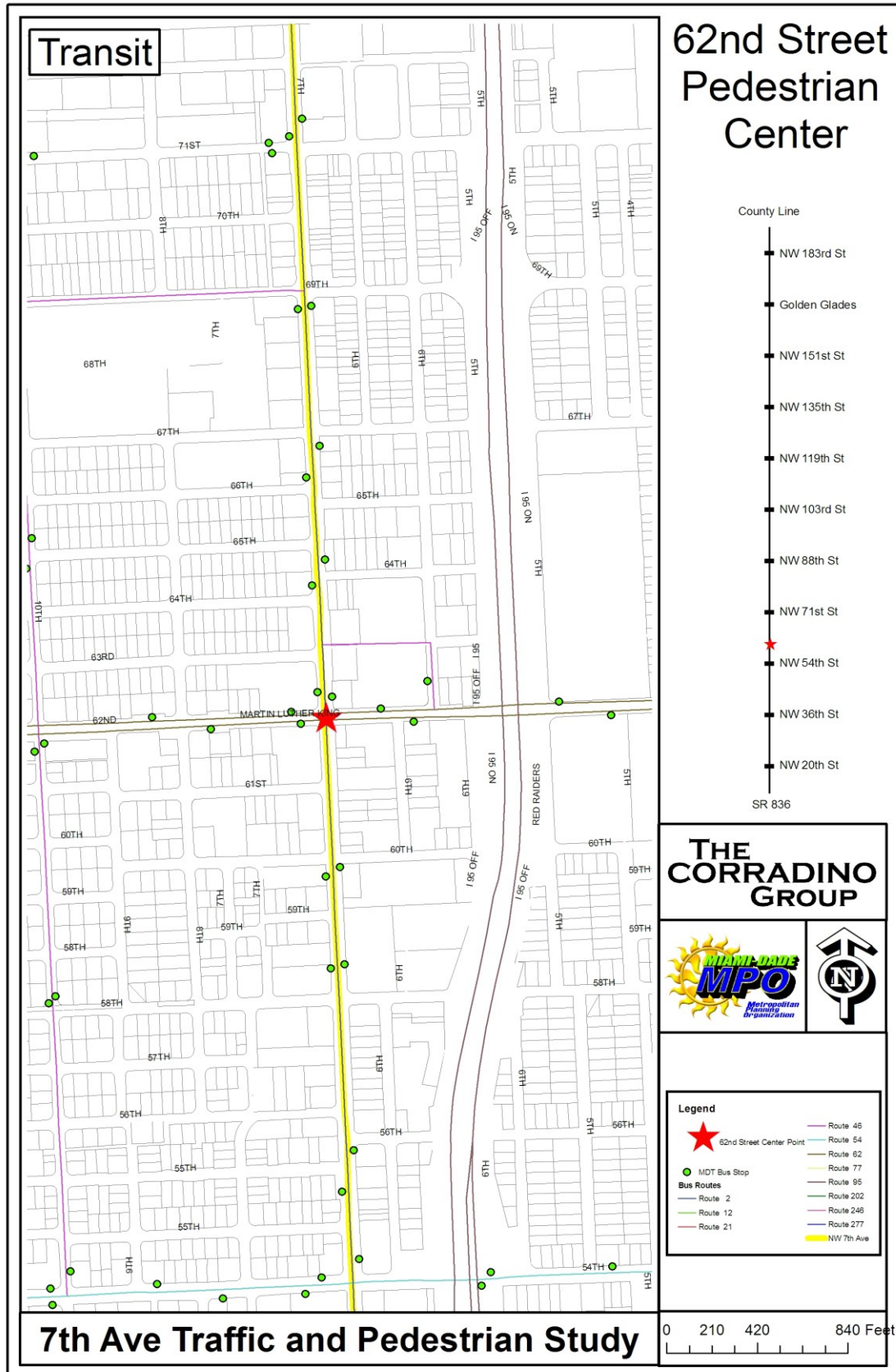


Map 27: Traffic - 62nd Street Pedestrian Center



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Map 28: Transit – 62nd Street Pedestrian Center



69th Street

This is an intersection surrounded mostly by commercial uses, some of which is vacant. It also includes a vacant lot on the southwest corner. On the northwest corner there is a grocery store as well as a beauty supply store. About 2,952 cars use this intersection in the morning, and 2,654 in the afternoons. The most prevalent movement is a southbound through in the morning and a northbound through in the afternoon, both on NW 7th Ave. The most prevalent turning movement is a southbound left turn in the morning (58). This segment of road carries roughly 21,500 vehicles per day. It operates at level of service “C”. The area is serviced by two routes at two stops. Route 46 and route 77 make stops in this area, accounting for 90 ons and offs, with 74 coming from Route 77, which has 43 people getting on, and 31 getting off. Traffic counts show that about 46 pedestrians cross this intersection each day. Of these 38 do it in the morning and 8 in the afternoon making the directional split very disproportionate. Over the past three years of collected data there have been 16 crashes. none of these have involved pedestrians or bicycles.

Table 15: Pedestrian Summary – 69th Street

Intersection	Volume		Pedestrian Volume		Ped (Total)	AM %	PM %
	AM	PM	AM	PM			
NW 7 AVE & NW 69 ST	2,952	2,654	38	8	46	1.29%	0.30%

Table 16: MDT APC Ridership Statistics – 69th Street

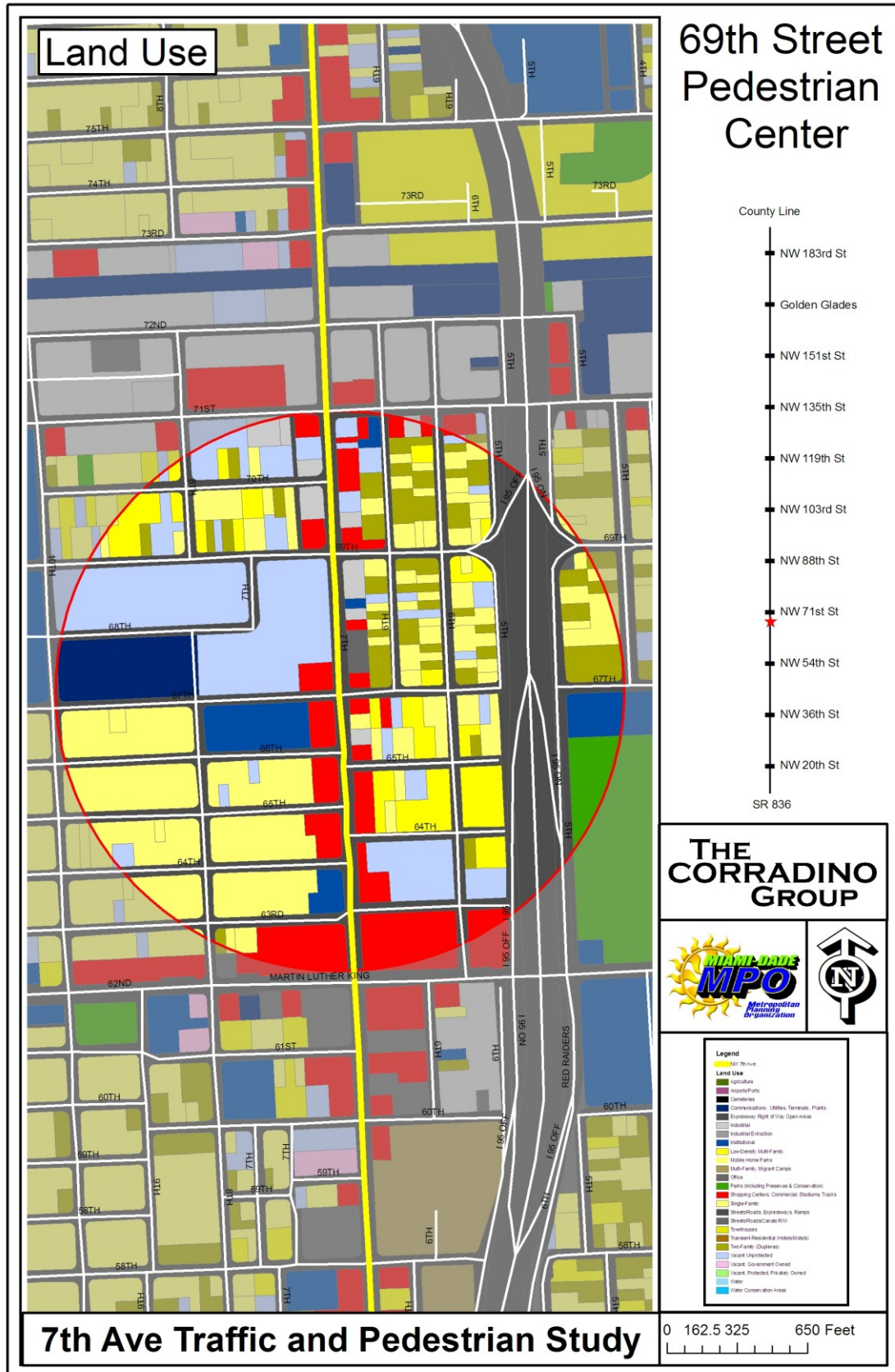
Stop Location	Route	Direction				On	Off	Total / Stop	Total / St
7th Ave @		N	S	E	W				
69 ST	46				x	0	7	7	90
69 St	46			x		8	1	9	
69 ST	77		x			35	19	54	
69 ST	77	x				8	12	20	

The intersection does not support pedestrian travel very well. It contains thermoplastic paver like crosswalks across all 4 legs of the intersection. Textured handicapped raps exist as well. Bus stops exist both northbound and southbound on the north side of the intersection. Both stops include only a sign. This would leave pedestrians at the mercy of the weather, which in Miami can be severe at times. Crossing is done almost exclusively in the crosswalks across both 7th Ave and 69th Street. Adequate 6’ sidewalks exist.



It is recommended that all NB/SB bus stops have shelters, additional benches and trash cans. Perhaps pedestrian count down signals can be installed at the intersection. This intersection is one of the worst in terms of pedestrian and transit amenities in the entire corridor.

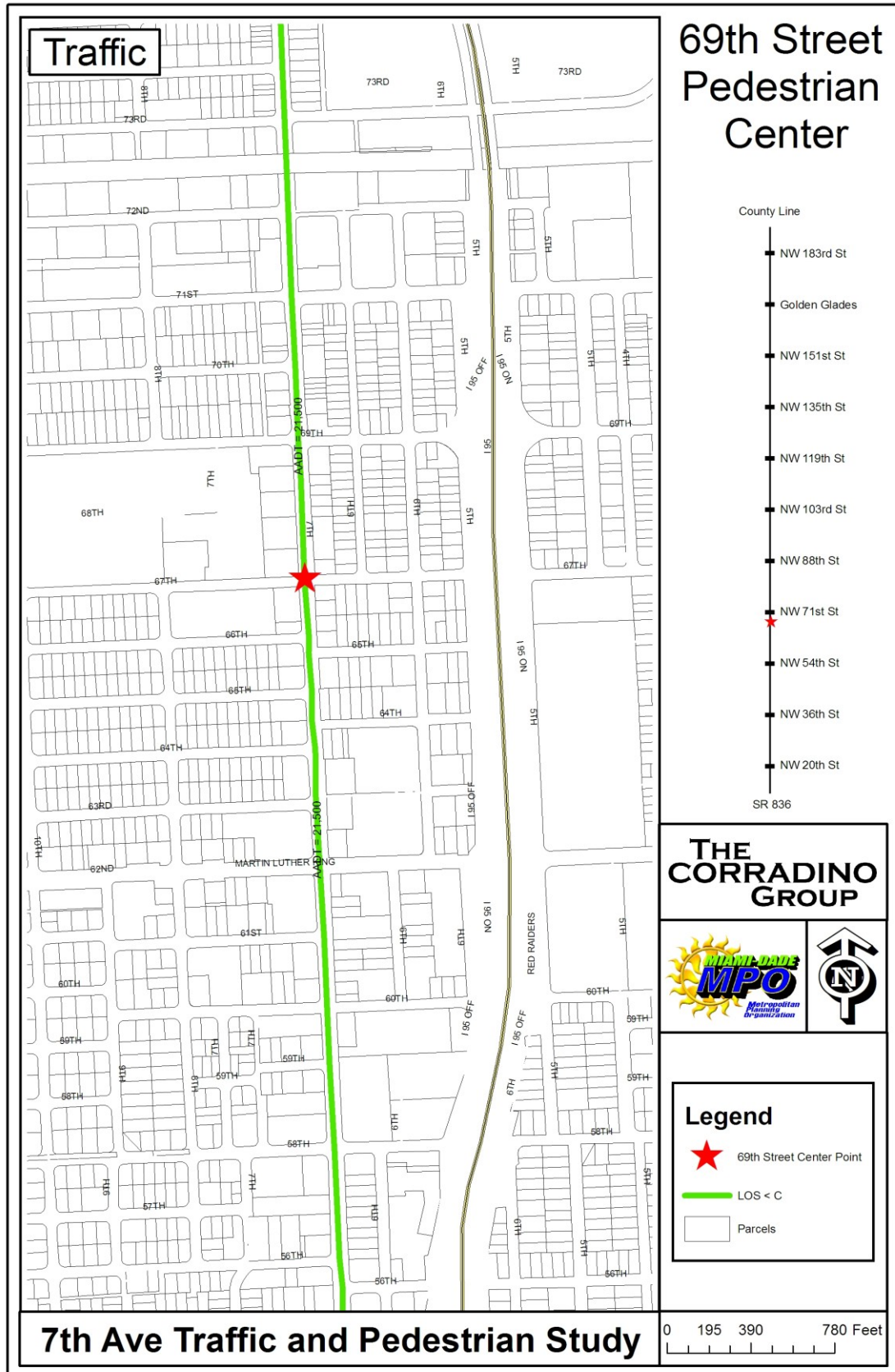
Map 29: Land Use – 69th Street Pedestrian Center



Map 30: 69th Street Pedestrian Center



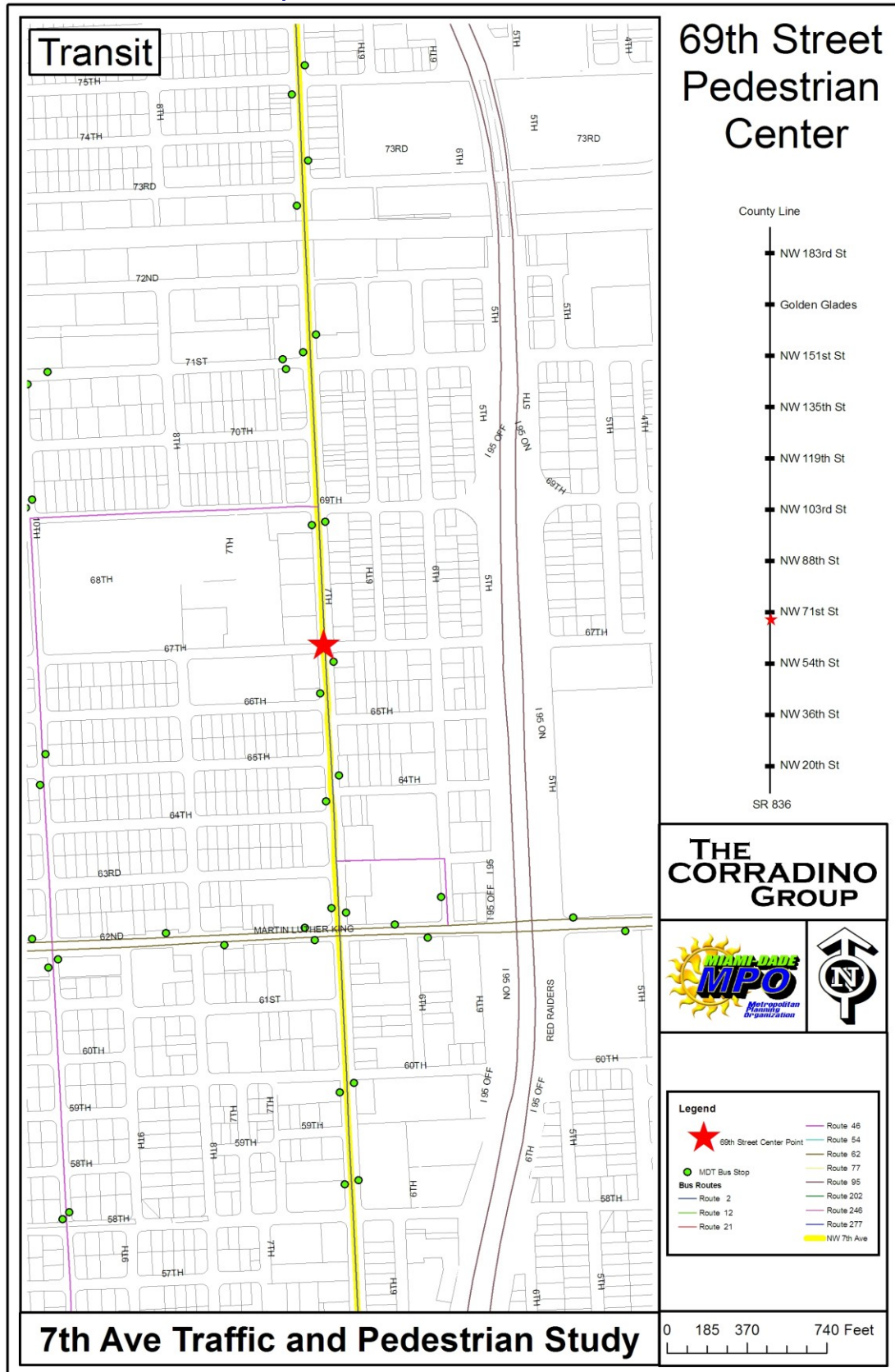
Map 31: Traffic – 69th Street Pedestrian Center



7th Avenue Traffic and Pedestrian Study

Task 4: Analysis of Pedestrian Activity and Needs

Map 32: Transit – 69th Street Pedestrian Center



75th Street

This intersection has two major pedestrian generators. There is a busy diner on the northeast corner of the intersection called Jumbos Restaurant. The other major generator is on the southeast corner. It is a local grocery store called Bubbba's Supermarket. About 2,245 cars use this intersection in the morning, and 2,565 in the afternoons. The most prevalent movement is a southbound through on 7th avenue in the morning and northbound through in the evening rush hour. The most prevalent turning movement is a eastbound right turn in the morning (58). This segment of road carries approximately 21,500 vehicles per day. It operates at level of service "C". The area is serviced by one route with two stops. Route 77 is the only one that stops in this area, accounting for all 89 ons and offs, with 53 people getting on, and 36 getting off. Traffic counts show that about 57 pedestrians cross this intersection each day. Of these 30 do it in the morning and 27 in the afternoon. Over the past three years of collected data there have been 23 crashes. One of these crashes involved a pedestrian.

Table 17: Pedestrian Summary – 75th Street

Intersection	Volume		Pedestrian Volume		Ped (Total)	AM %	PM %
	AM	PM	AM	PM			
NW 7 AVE & NW 75 ST	2,245	2,565	30	27	57	1.34%	1.05%

Table 18: MDT APC Ridership Statistics – 75th Street

Stop Location	Route	Direction				On	Off	Total / Stop	Total / St
7th Ave @		N	S	E	W				
75 ST	77		x			43	30	73	89
75 ST	77	x				10	6	16	

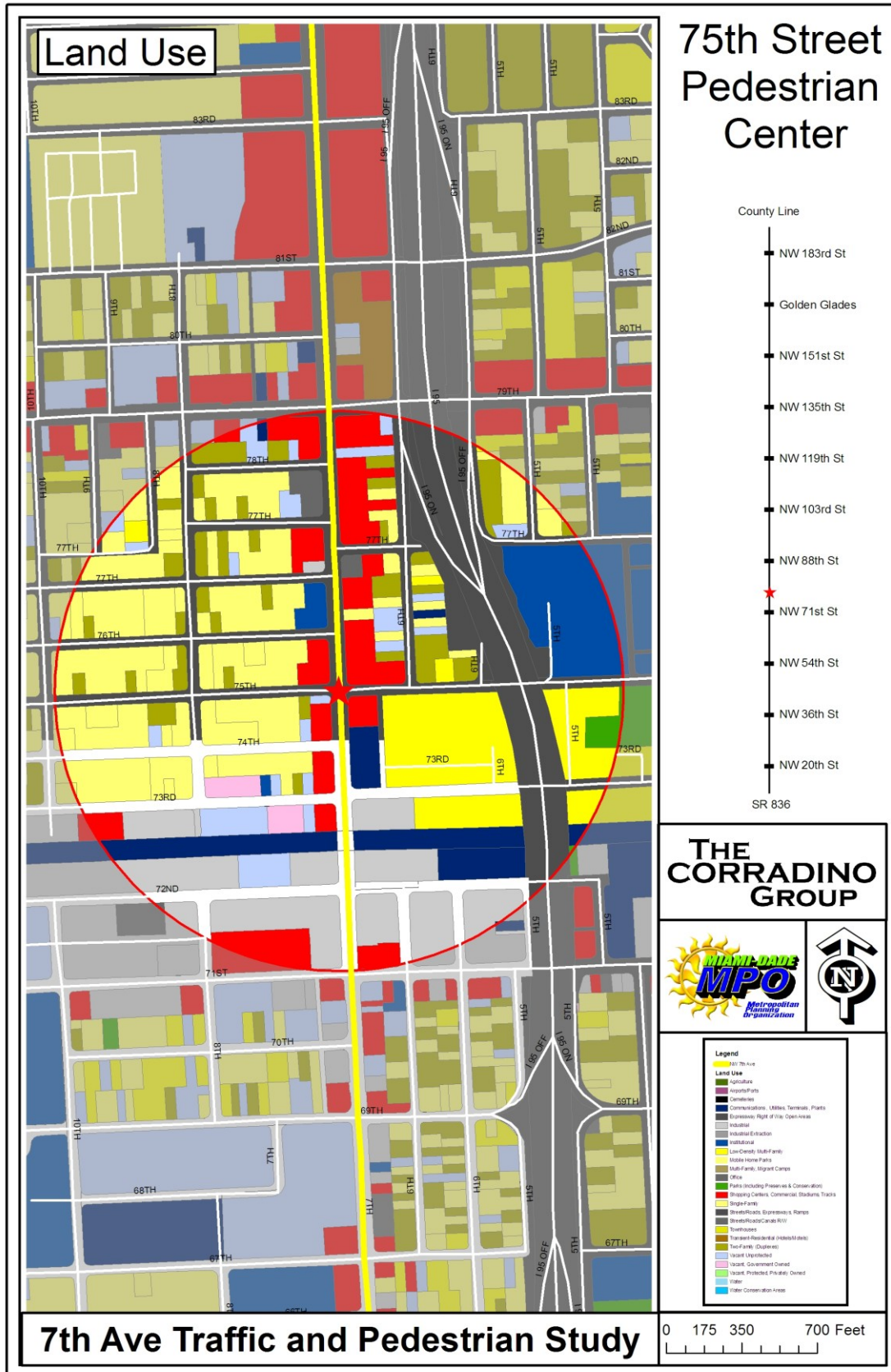
The intersection contains thermoplastic paver like crosswalks across all 4 legs of the intersection. Textured handicapped raps exist as well. Bus stops exist southbound on the southwest corner and northbound on the northeast corner. The stop for Route 77 on the southbound southwest corner has a sign and no other amenities. The northbound stop on the northeast corner has a sign and a newspaper rack, nothing more. No bench or shelter exists on the west side of 7th Ave, nor does a trash can, thus making it rather dirty. Crossing is done at random out side of the crosswalks across both 7th Ave and 75th Street. Adequate 6' sidewalks exist.



It is recommended that all bus stops have shelters, benches and trash cans. Perhaps pedestrian count down signals can be installed at the intersection. No other needs have been found at this time.

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Map 33: Land Use – 75th Street Pedestrian Center

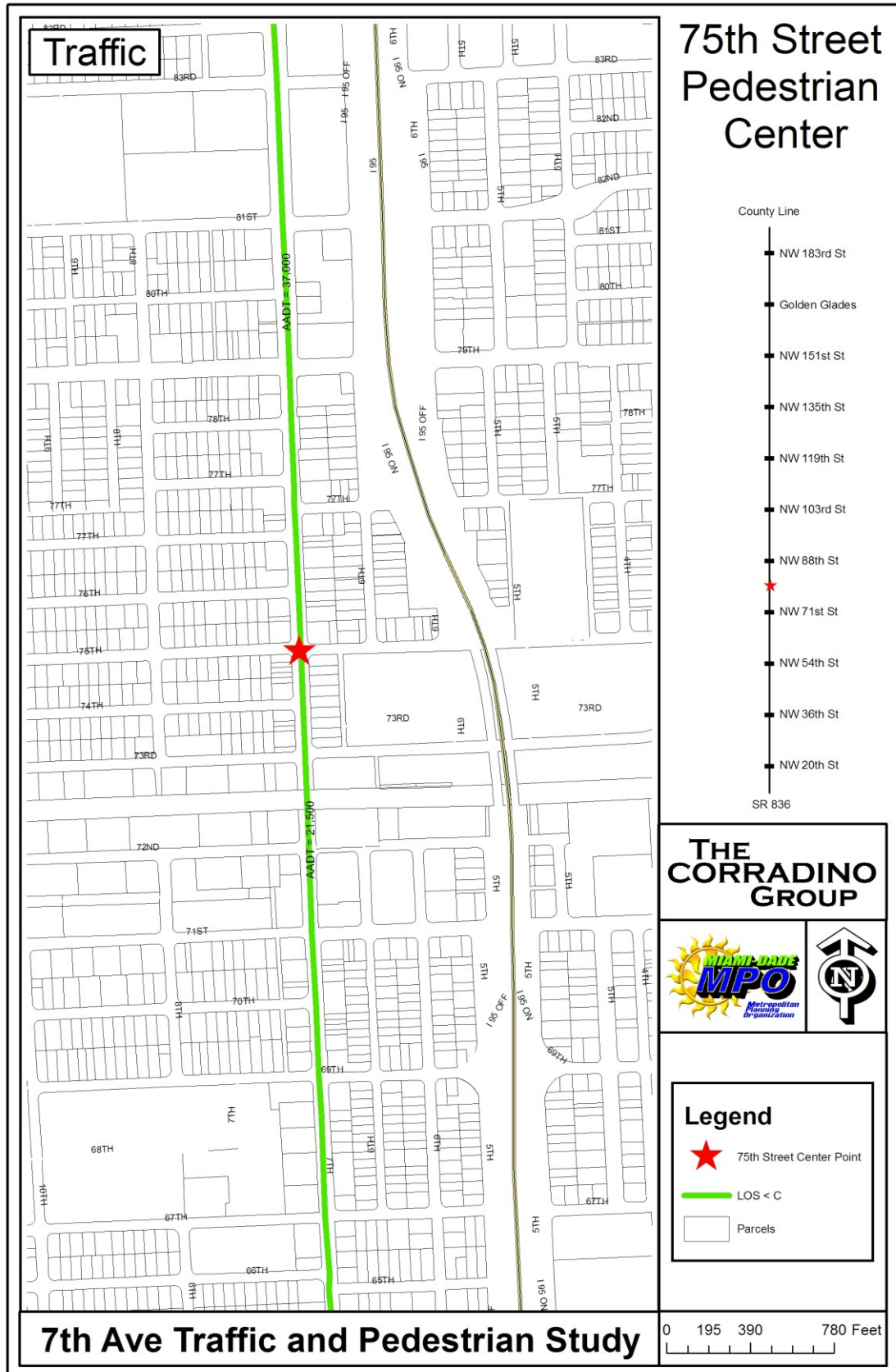


Map 34: 75th Street Pedestrian Center



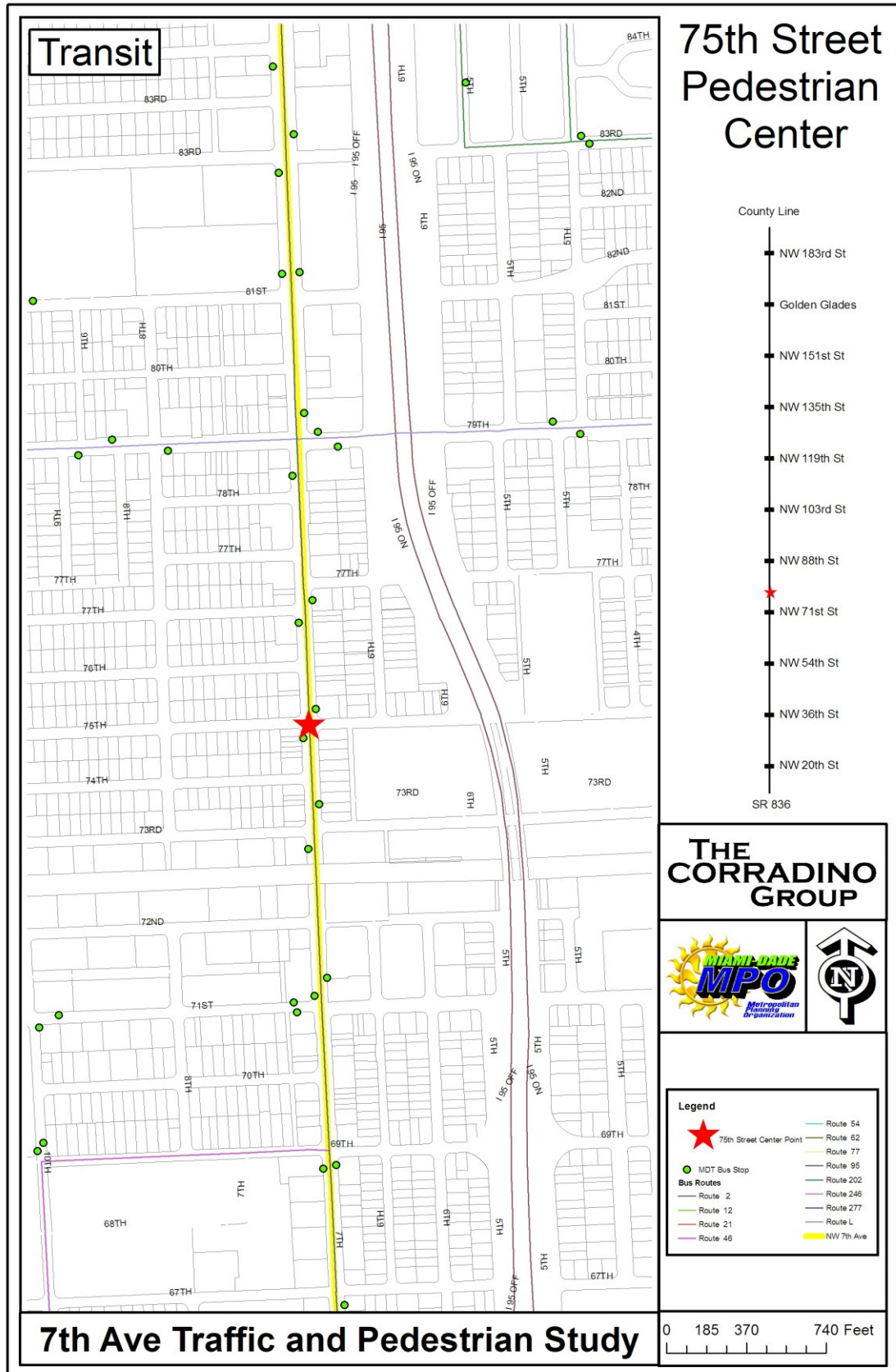
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Map 35: Traffic – 75th Street Pedestrian Center



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Task 4: Analysis of Pedestrian Activity and Needs

Map 36: Transit – 75th Street Pedestrian Center



79th Street



This is an intersection surrounded by mixed use. There is a large apartment complex on the northeast corner and a café on the northwest corner. Both of the southern corners of the intersection contain financial institutions. About 3,595 cars use this intersection in the morning, and 3,953 in the afternoons. The most prevalent movement is a southbound through on 7th avenue in the morning and a northbound through in the afternoon. The most prevalent turning movement is a southbound left turn in the

morning (319). This segment of road carries between 21,500 and 37,000 vehicles per day. It operates at level of service “C”. The area is serviced by three routes at four stops. Routes 77, 112, and 277 all make stops in this area, accounting for 1674 ons and offs, making it the busiest transit intersection in the entire corridor. With 998 coming from Route 112, which has 599 people getting on, and 399 getting off. Traffic counts show that about 209 pedestrians cross this intersection each day. Of these 119 do it in the morning and 90 in the afternoon. Over the past three years of collected data there have been 43 crashes. One of these crashes involved a pedestrian.

Table 19: Pedestrian Summary – 79th Street

Intersection	Volume		Pedestrian Volume		Ped (Total)	AM %	PM %
	AM	PM	AM	PM			
NW 7 AVE & NW 79 ST	3,595	3,953	119	90	209	3.31%	2.28%

Table 20: MDT APC Ridership Statistics – 79th Street

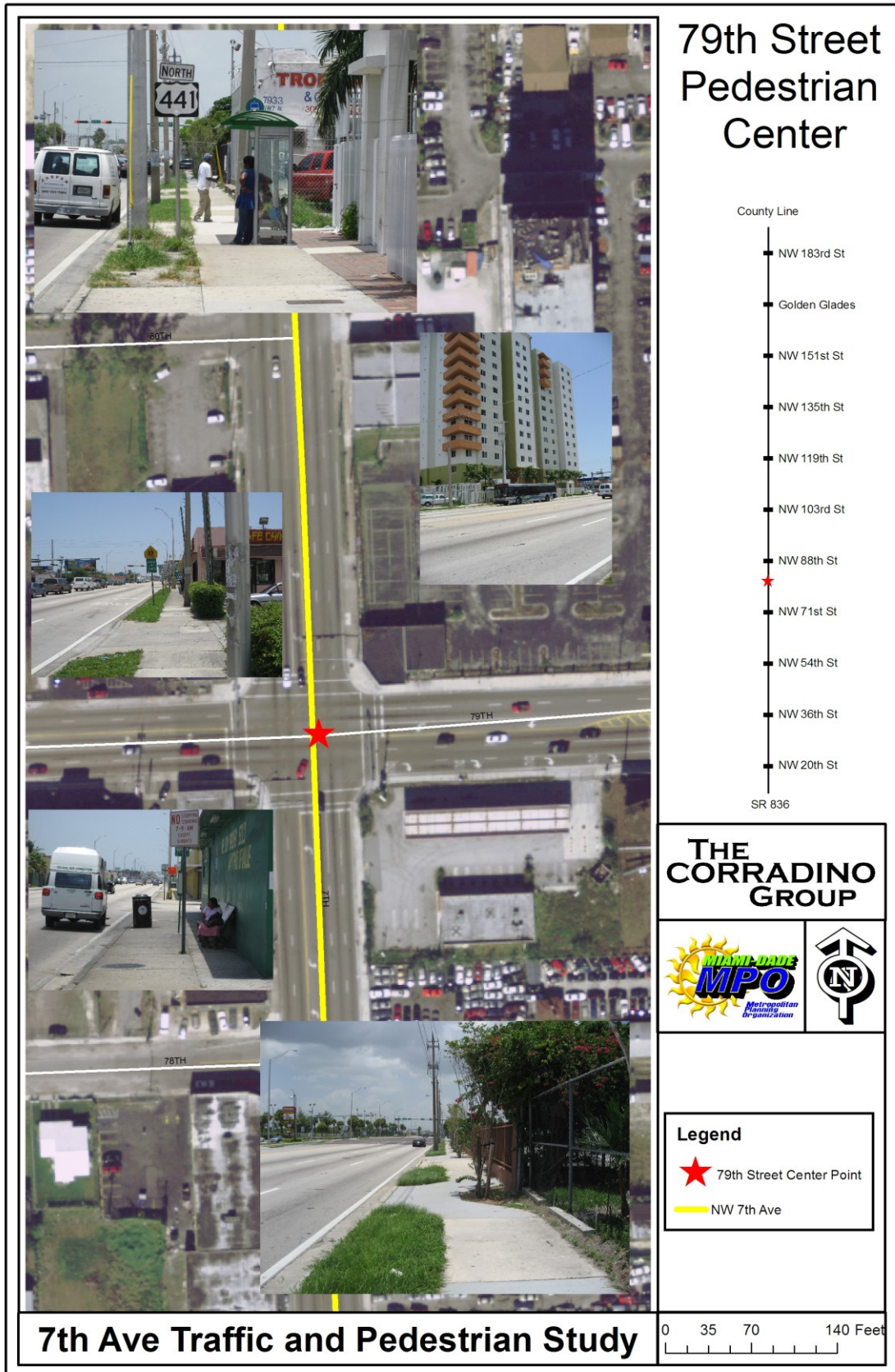
Stop Location	Route	Direction				On	Off	Total / Stop	Total / St
7th Ave @		N	S	E	W				
79 ST	77		x			167	204	371	1674
79 ST	77	x				79	46	125	
79 St	112				x	370	114	484	
79 St	112			x		229	285	514	
79 ST	277		x			68	39	107	
79 ST	277	x				49	24	73	

The intersection is in poor shape in terms of pedestrian and transit facilities in comparison with the number of users. It contains only standard striping of the intersection. Bus stops exist southbound on the southwest corner, northbound on the northeast corner, westbound on the northeast corner and eastbound southeast corner of the intersection. The northbound stop for route 77 and 277 has a shelter, a bench, a trash

can and a sign. No shelter exists at the stop on southbound 7th Ave. Crossing is done both in and out of the crosswalks. Adequate 6' sidewalks exist.

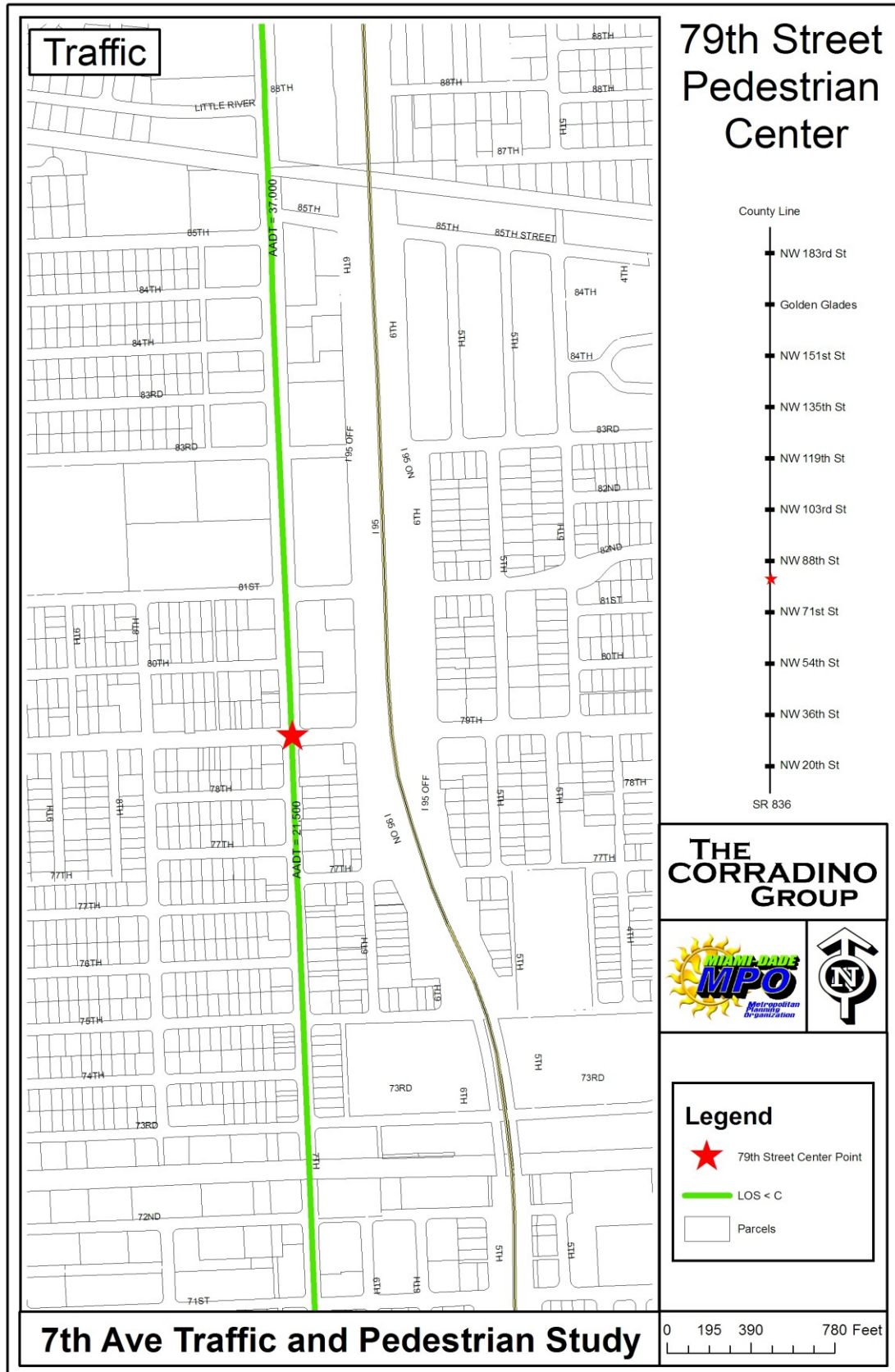
It is recommended that all bus stops have shelters, additional benches and trash cans. Perhaps pedestrian count down signals can be installed at the intersection. An emergency phone is also recommended at this intersection due to the vast number of users.

Map 38: 79th Street Pedestrian Center

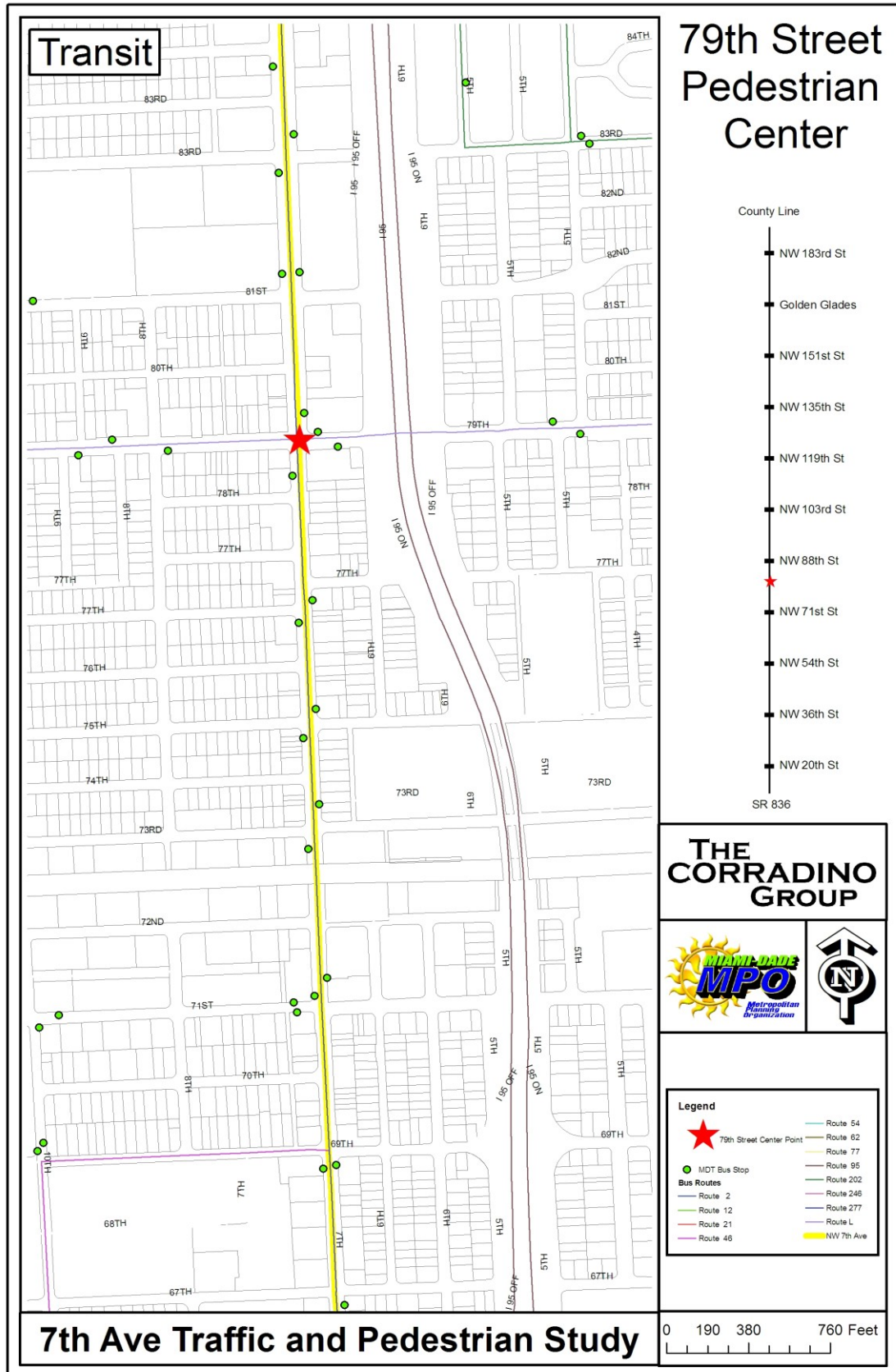


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Map 39: Traffic – 79th Street Pedestrian Center



Map 40: Transit - 79th Street Pedestrian Center



88th Street - Immigration Facility

This facility is nearly brand new, and an example of positive corridor redevelopment. Theoretically it is a pedestrian intensive use as it brings in thousands of people to access its service. This segment of road carries about 37,000 vehicles per day and operates at a level of service "C". About 2,200 vehicles access this intersection each morning. The largest movement is through the intersection south bound. Yet



about 35 cars enter the facility from the north and south in the morning. About 13 pedestrians were counted crossing at this intersection from some of the traffic counts; more (10) in the morning than in the afternoon (3). The facility and intersection are served only by Route 77, which has stops containing shelters, benches, and trash cans, in the north bound and south bound directions, north of the immigration facility. A total of 77 people get on and off the bus at this location. Land uses around the intersection are not particularly pedestrian friendly. Yet the immigration facility is there. To the west there is an immigration attorney and a Save-A-Lot super market. The cominat commercial activity is auto oriented as car dealerships. Over the past three years of data, there have been 12 crashes at the intersection. One of these involved a bicycle.

Table 21: Pedestrian Summary – 88th Street

Intersection	Volume		Pedestrian Volume		Ped (Total)	AM %	PM %
	AM	PM	AM	PM			
NW 7 AVE & LITTLE RIVER DR	3,092	3,181	10	3	13	0.32%	0.09%

Table 22: MDT APC Ridership Statistics – 88th Street

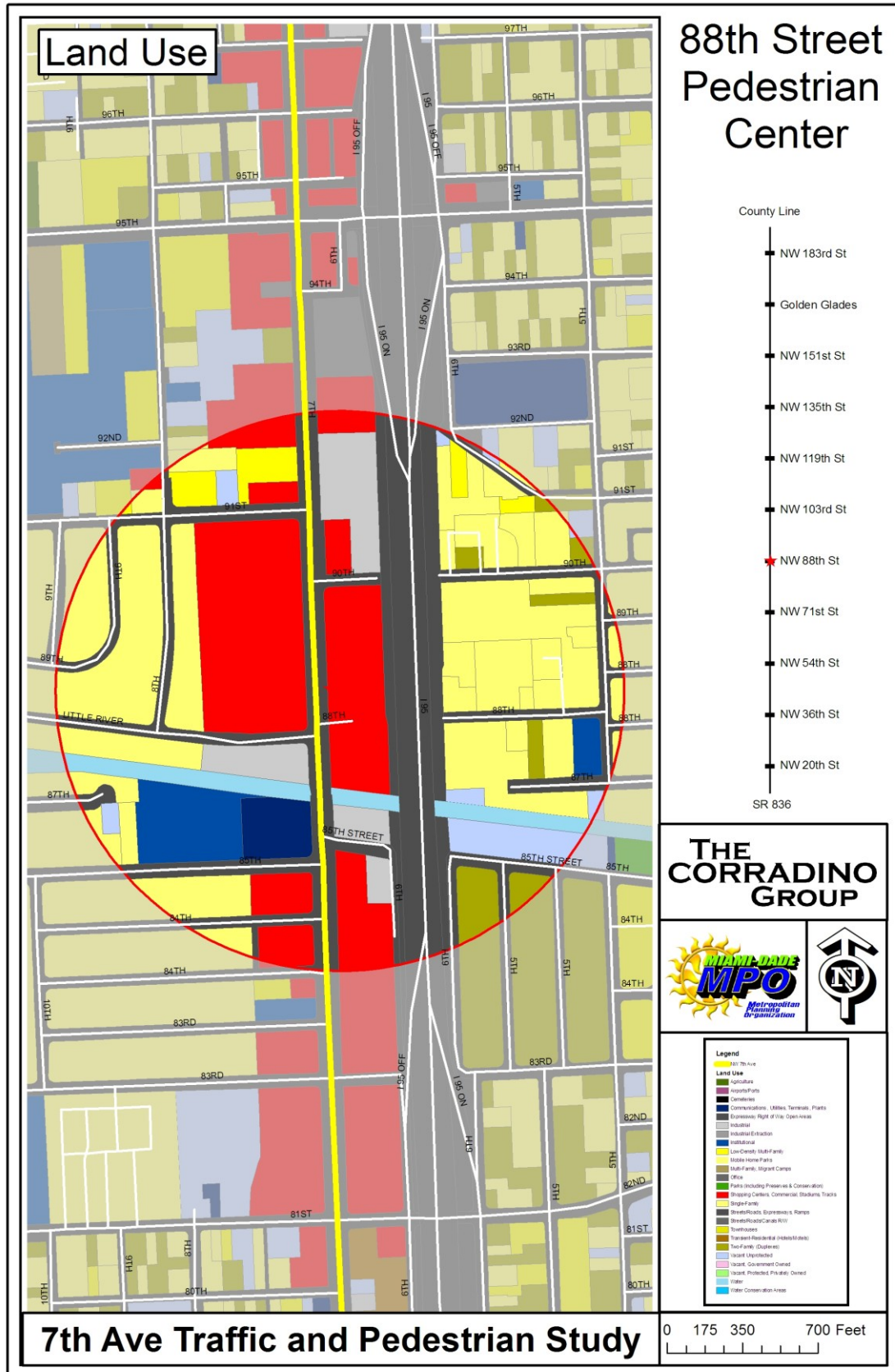
Stop Location	Route	Direction				On	Off	Total / Stop	Total / St
7th Ave @		N	S	E	W				
LITTLE RIVER	77		x			40	20	60	
LITTLE RIVER	77	x				6	11	17	77

On site observation shows that much of the pedestrians crossings are at unmarked areas, mainly between the bus stops, with many people accessing the grocery store. The crossings are random and do not include large groups of people at any given time. The actual Little River Drive intersection has pedestrian amenities, with thermo plastic crosswalks along 3 legs, to resemble pavers, handicapped ramps, and pedestrian signals heads.

Recommendations include either to place a pedestrian actuated signal and crosswalk between the bus stops, or to move the bus stops to the Little River Drive intersection. If the latter is done the northern leg of the intersection should have a crosswalk installed. The area is not as clean as it should be. The smell of urine is prevalent. Perhaps additional trash cans at the bus stops would eliminate the need to through trash on the ground.

7th Avenue Traffic and Pedestrian Study
Task 4: Analysis of Pedestrian Activity and Needs

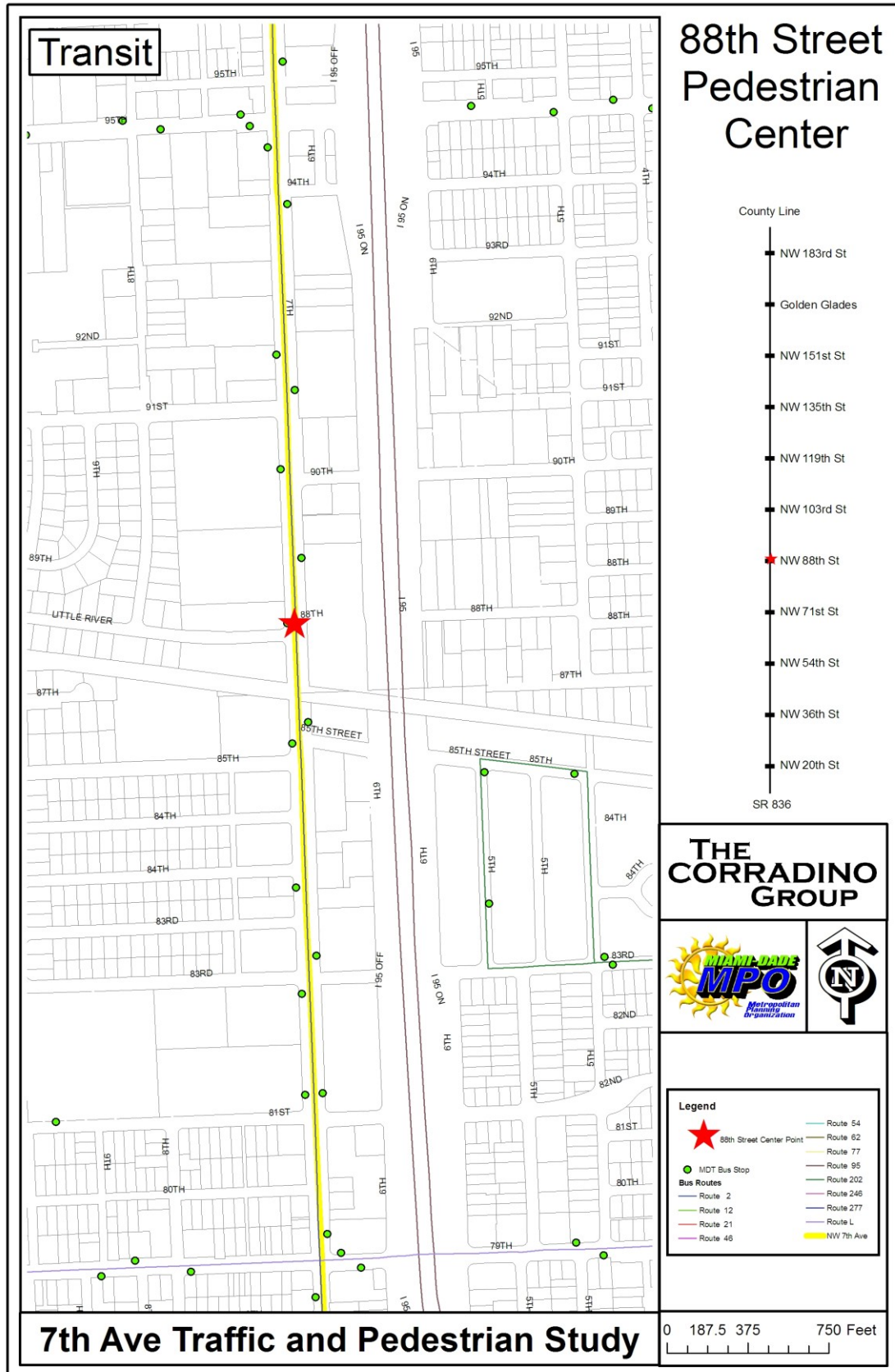
Map 41: Land Use – 88th Street Pedestrian Center



Map 42: 88th Street Pedestrian Center



Map 44: Transit – 88th Street Pedestrian Center



95th Street

This is an intersection surrounded by commercial uses including two gas stations on the east side, miscellaneous commercial on the north west corner, that appeared closed during the site visit and a Walgreens store on the south west corner. About 4,470 cars use this intersection in the morning, and 3,280 in the afternoons. The most prevalent movement is a south bound through on 7th avenue in the morning. The most prevalent turning movement is a southbound right turn in the morning (322). This segment of road carries between 33,000 and 38,000 vehicles per day. It operates at level of service “C”. The area is serviced by 3 routs at two stops. Route 33, 77, and 277 all make stops in this area, accounting for 413 ons and offs, with 240 coming from Route 77, which has 159 people getting on, and 81 getting off. Traffic counts show that about 28 pedestrians cross this intersection each day. Of these 17 do it in the morning and 11 in the afternoon. Over the past three years of collected data there have been 74 crashes. Five of these have involved pedestrians and 2 have involved bicycles.

Table 23: Pedestrian Summary – 95th Street

Intersection	Volume		Pedestrian Volume		Ped (Total)	AM %	PM %
	AM	PM	AM	PM			
NW 7 AVE & NW 95 ST	4,566	4,908	17	11	28	0.37%	0.22%

Table 24: MDT APC Ridership Statistics – 95th Street

Stop Location	Route	Direction				On	Off	Total / Stop	Total / St
7th Ave @		N	S	E	W				
95 St	33	x				32	89	121	413
95 St	77		x			159	81	240	
95 ST	277		x			38	14	52	

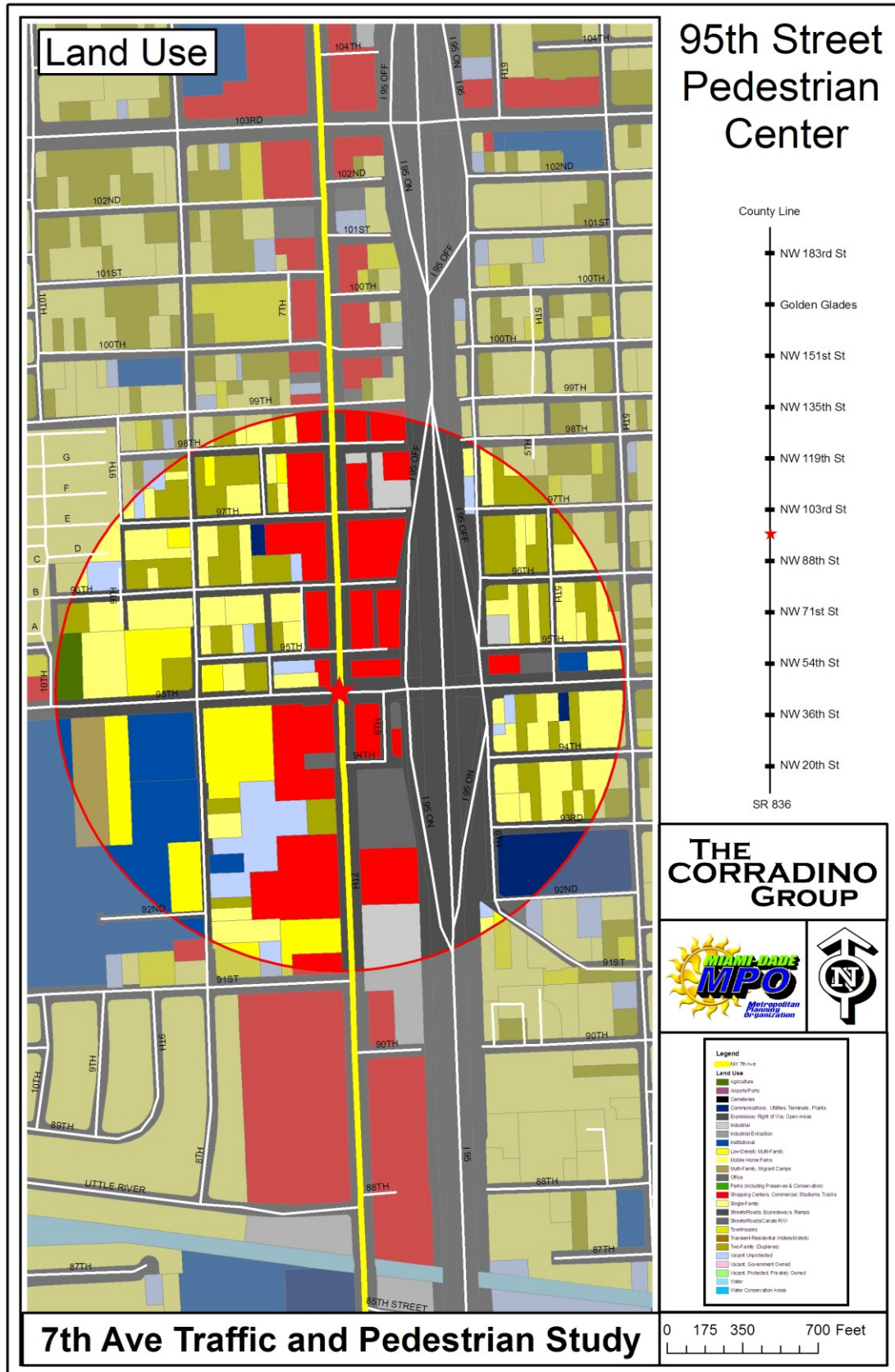
The intersection is well treated with pedestrian amenities. It contains thermoplastic paver like crosswalks across all 4 legs of the intersection. Textured handicapped wraps exist as do pedestrian head signals. Bus stops exist on the south bound south west corner, north bound east corner and east bound northwest corner of the intersection. The stop for Route 33 on the eastbound south west corner has a shelter and a bench but no other amenities. The southbound southwest corner has a stop but no shelter a bench a trash can and a sign. This location is filthy, as trash is strewn all around the stop area. No shelter exists at the stop on north bound 7th Ave. Crossing is done at random out side of the crosswalks across both 7th Ave and 95th Street. Adequate 6’ sidewalks exist.



It is recommended that all bus stops have shelters, additional benches and trash cans. Perhaps pedestrian count down signals can be installed at the intersection. No other needs have been found.

7th Avenue Traffic and Pedestrian Study
Task 4: Analysis of Pedestrian Activity and Needs

Map 45: Land Use – 95th Street Pedestrian Center



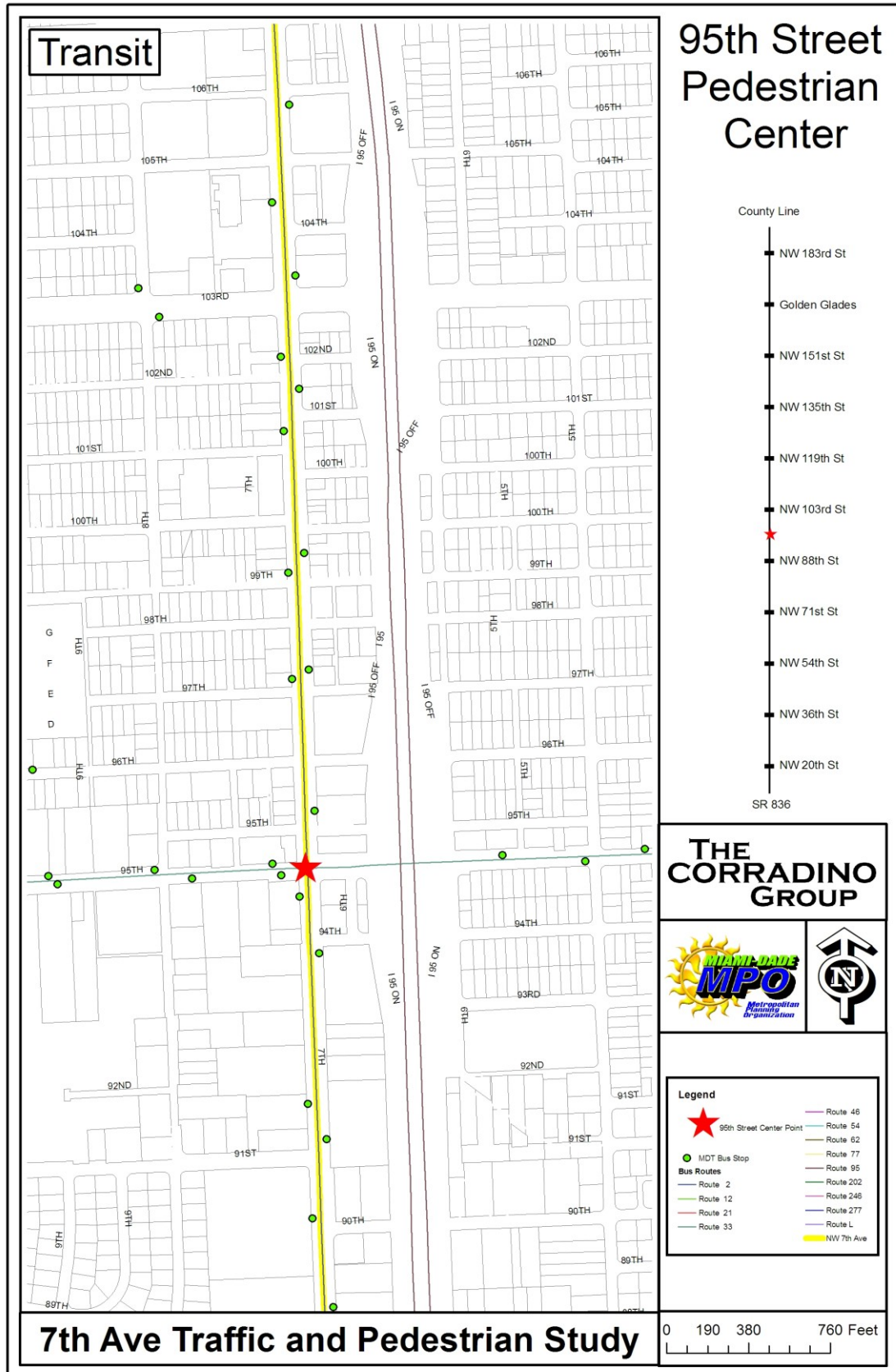
7th Avenue Traffic and Pedestrian Study
Task 4: Analysis of Pedestrian Activity and Needs

Map 46: Traffic- 95th Street Pedestrian Center



7th Avenue Traffic and Pedestrian Study
Task 4: Analysis of Pedestrian Activity and Needs

Map 47: Transit – 95th Street Pedestrian Center



125th Street

This is an intersection surrounded by commercial uses including a gas station on the northwest side, a commercial building on the northeast side and two fast food places on the southern two corners. About 2,590 cars use this intersection in the morning, and 2,590 in the afternoons. The most prevalent movement is a southbound through on 7th avenue in the morning and a northbound through in the pm rush hour. This segment of road carries between 27,500 and 34,000 vehicles per day. It operates at level of service “C”. The area is serviced by 3 routs at four stops. Routes 107, 77, and 277 all make stops in this area, accounting for 728 ons and offs, with 370 coming from Route 107, which has 218 people getting on, and 152 getting off. Traffic counts show that about 135 pedestrians cross this intersection each day. Of these 61 do it in the morning and 74 in the afternoon.

Table 25 – Pedestrian Summary – 125th Street

Intersection	Volume		Pedestrian Volume		Ped (Total)	AM %	PM %
	AM	PM	AM	PM			
NW 7 AVE & NW 125 ST*	2,590		61	74	135	3%	

Table 26: MDT APC Ridership Statistics – 125th Street

Stop Location	Route	Direction				On	Off	Total / Stop	Total / St
7th Ave @		N	S	E	W				
125 St	77		x			119	61	180	728
125 ST	77	x				35	38	73	
125 St	107				x	159	38	197	
125 St	107			x		59	114	173	
125 ST	277		x			48	11	59	
125 ST	277	x				21	25	46	



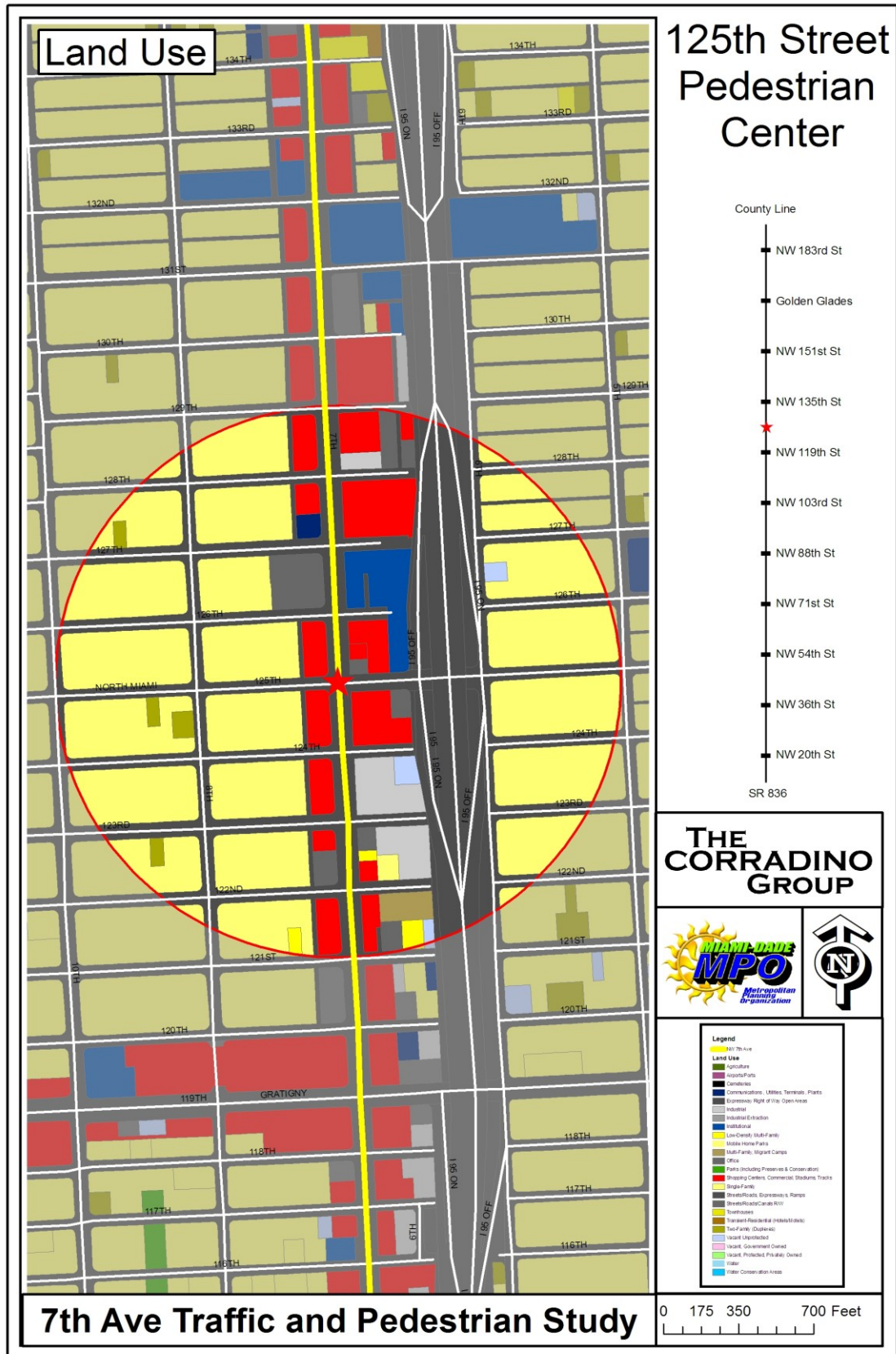
The intersection is well treated with pedestrian amenities. It contains thermoplastic paver like crosswalks across all 4 legs of the intersection. Textured handicapped wraps exist as do pedestrian head signals. Bus stops exist southbound on the southwest corner, northbound on the southeast corner, westbound on the northwest corner and eastbound on the southwest corner of the intersection. All stops include a sign, a bench and a trash can. No shelter exists at this intersection. Crossing is done primarily inside of the crosswalks across both 7th Ave and 125th Street. Adequate 6' sidewalks exist.

It is recommended that all bus stops have shelters, additional benches and trash cans. Perhaps pedestrian count down signals can be installed at the intersection as well as an emergency phone.

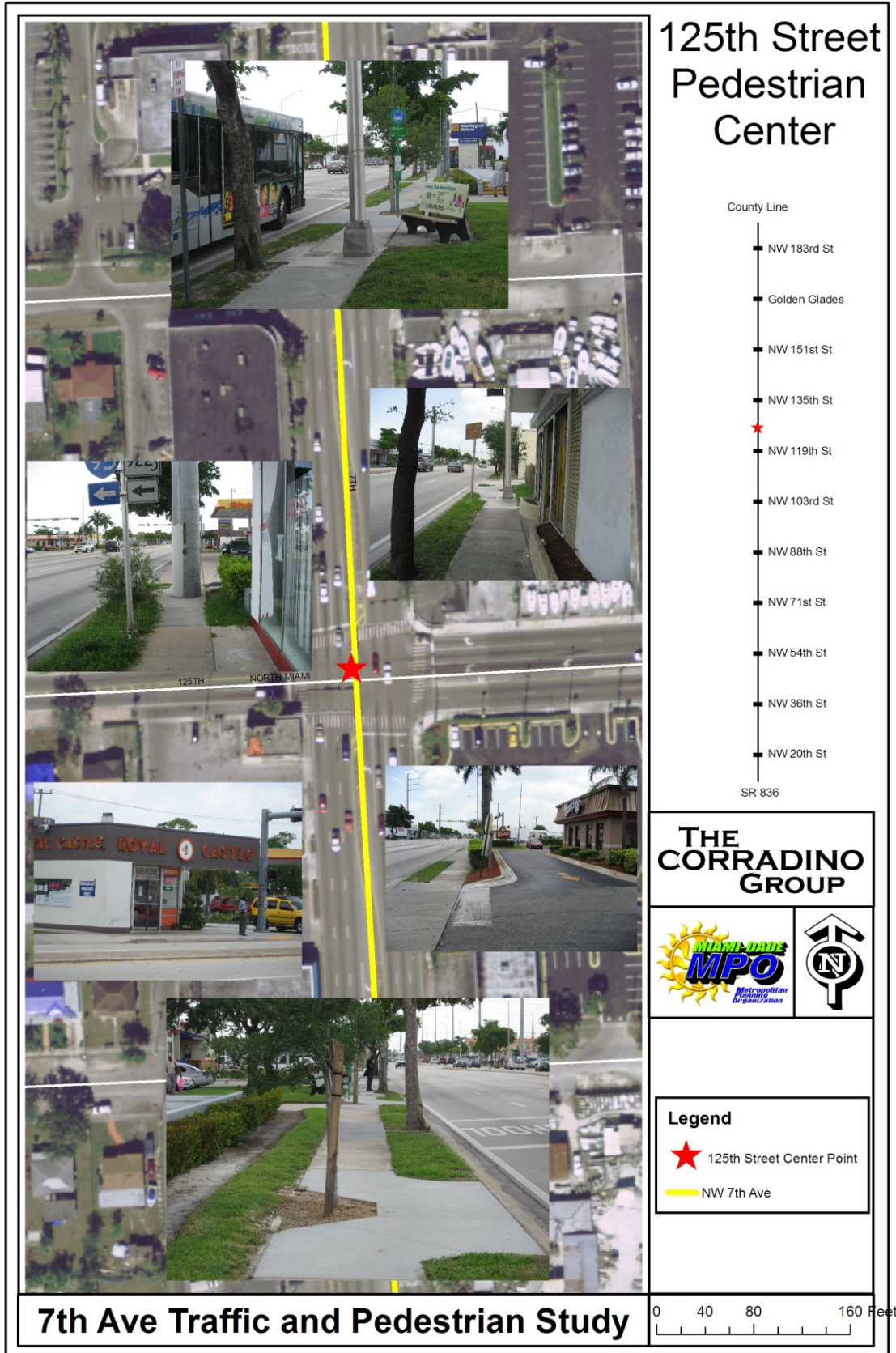
7th Avenue Traffic and Pedestrian Study

Task 4: Analysis of Pedestrian Activity and Needs

Map 48: Land Use – 125th Street Pedestrian Center

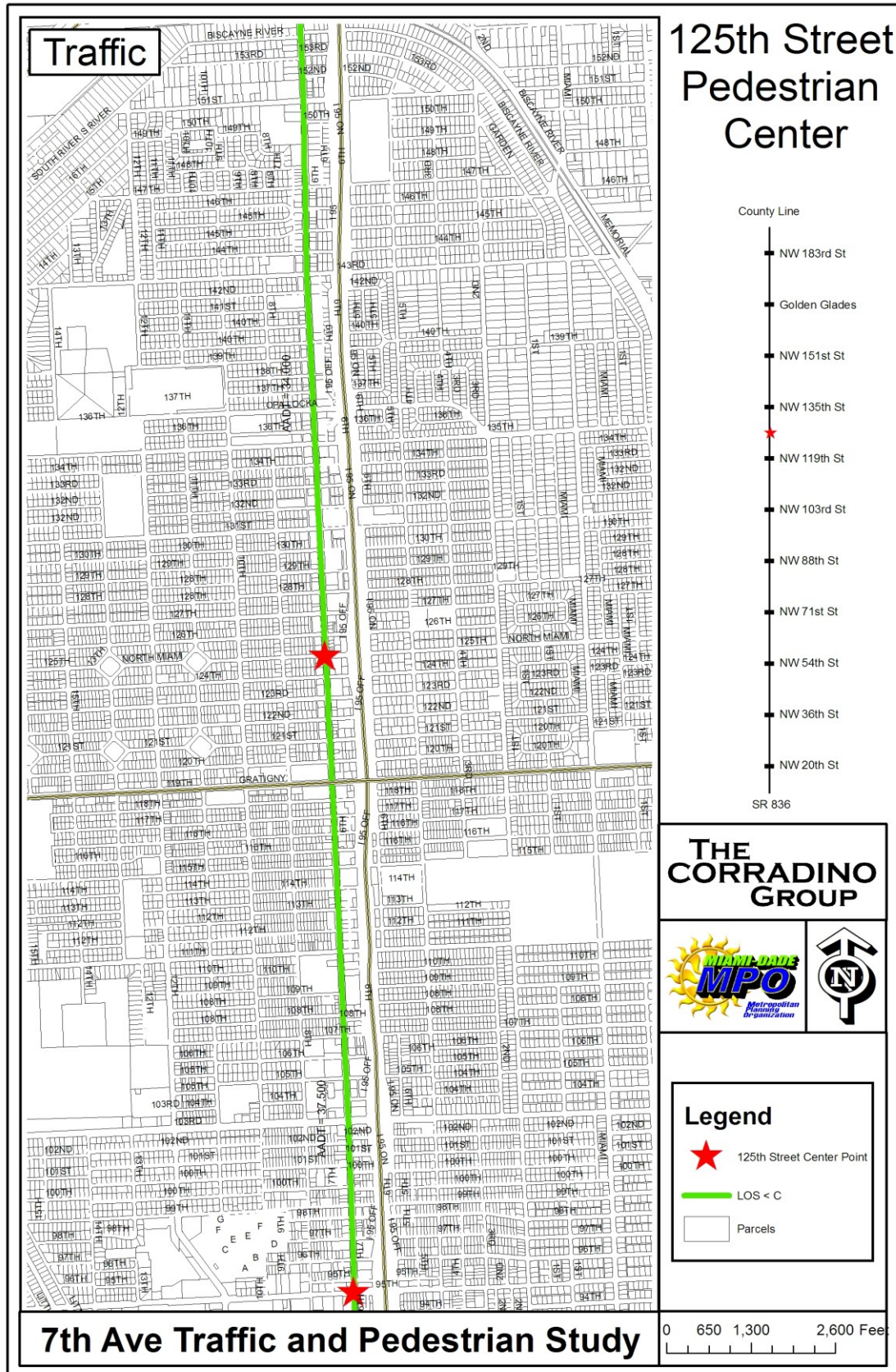


Map 49: 125th Street Pedestrian Center



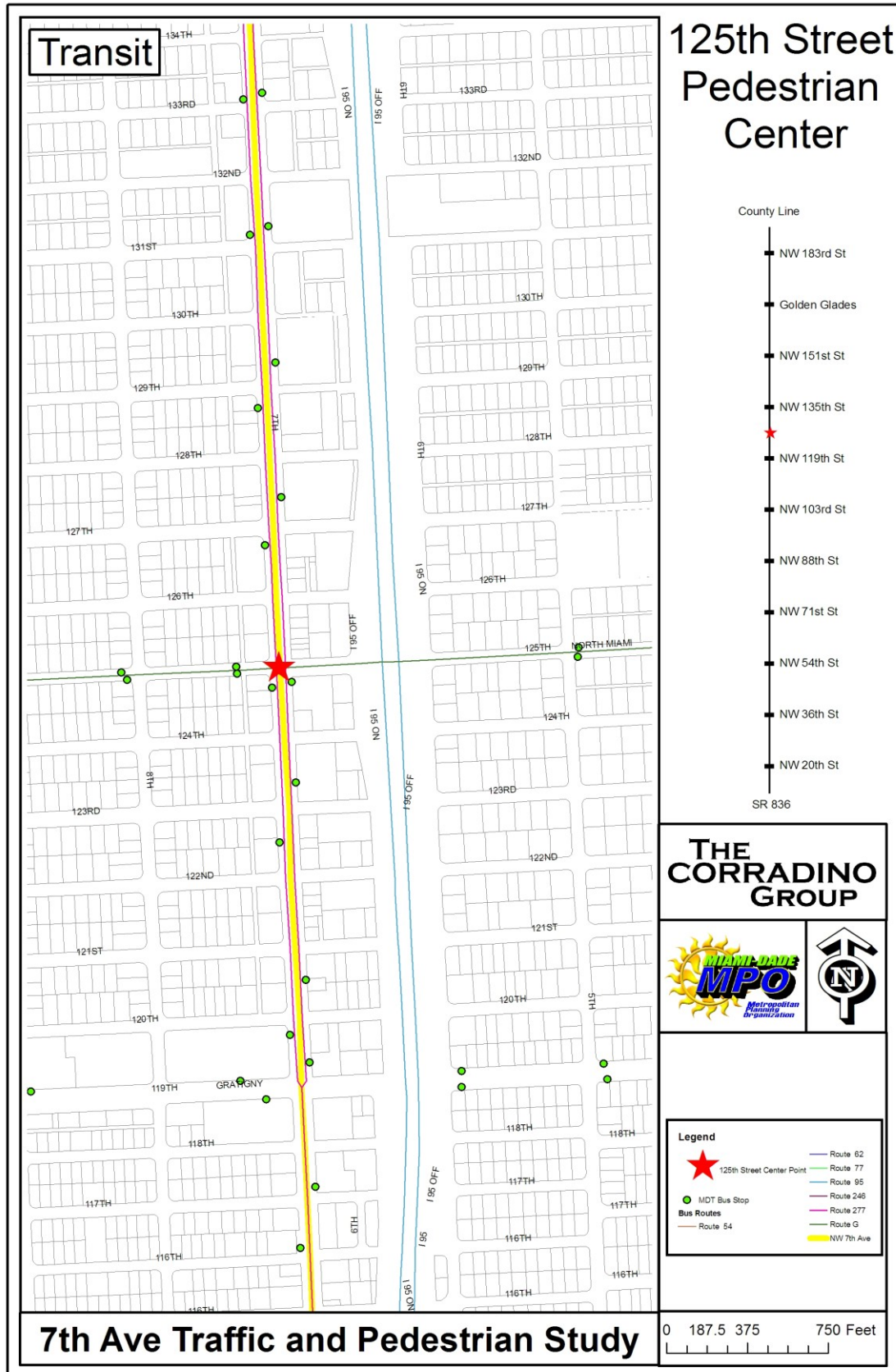
7th Avenue Traffic and Pedestrian Study
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Map 50: Traffic - 125th Street Pedestrian Center



7th Avenue Traffic and Pedestrian Study
Task 4: Analysis of Pedestrian Activity and Needs

Map 51: Transit – 125th Street Pedestrian Center



183rd Street

This is an intersection surrounded by mixed uses including a medical facility. There are also many other commercial uses at this intersection including restaurants and retail as well as an adult entertainment facility. About 3,529 cars use this intersection in the morning, and 3,529 in the afternoons. The most prevalent movement is a southbound through on 7th avenue in the morning and a northbound through in the pm rush hour. This segment of road carries between 57,500 and 58,000 vehicles per day. It operates at level of service “F”. The area is serviced by five routs at four stops. Routes 17, 75, 77, 83 and 95 all make stops in this area, accounting for 900 ons and offs, with 371 coming from Route 77, which has 282 people getting on, and 89 getting off. This area is also served by Broward County Transit. Traffic counts show that about 188 pedestrians cross this intersection each day. Of these 106 do it in the morning and 82 in the afternoon.



Table 27: Pedestrian Summary – 183rd Street

Intersection	Volume		Pedestrian Volume		Ped (Total)	AM %	PM %
	AM	PM	AM	PM			
NW 7 AVE & NW 183 ST*	3,529		106	82	188	3%	

Table 28: MDT APC Ridership Statistics – 183rd Street

Stop Location	Route	Direction				On	Off	Total / Stop	Total / St
7th Ave @		N	S	E	W				
183 St	17		x			112	5	117	900
183 St	17	x				3	0	3	
183 St	75		x			20	16	36	
183 St	75		x			16	13	29	
183 St	75	x				43	27	70	
183 St	77		x			270	10	280	
183 St	77		x			12	0	12	
183 St	83				x	58	23	81	
183 St	83			x		33	39	72	
183 St	95		x			19	1	20	
183 St	95		x			3	0	3	
183 St	95	x				4	6	10	
183 St (EOL)	17	x				0	88	88	
183 St (EOL)	77	x				0	79	79	

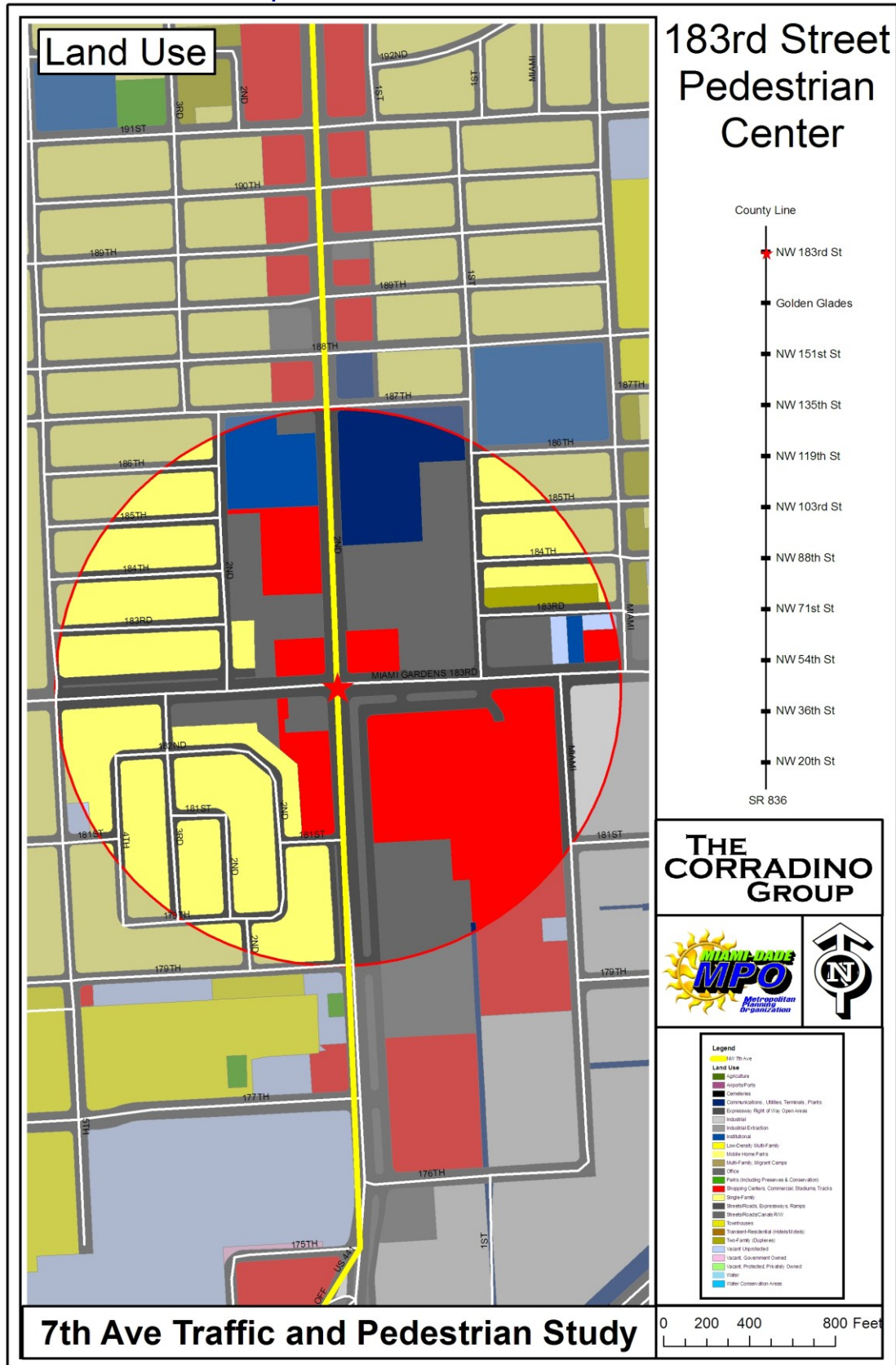
The intersection is well treated with pedestrian amenities. It does not however, contain thermoplastic paver like crosswalks across all 4 legs of the intersection. This is highly recommended for an intersection of this volume. Textured handicapped wraps exist as do

pedestrian head signals. Bus stops exist southbound on the southwest corner, northbound on the southeast corner, westbound on the northwest corner and eastbound on the southeast corner of the intersection. All stops include a sign, a bench and a trash can. The southbound stop also includes a shelter. Crossing is done primarily inside of the crosswalks across both 7th Ave and 183rd Street. Adequate 6' sidewalks exist in all directions.

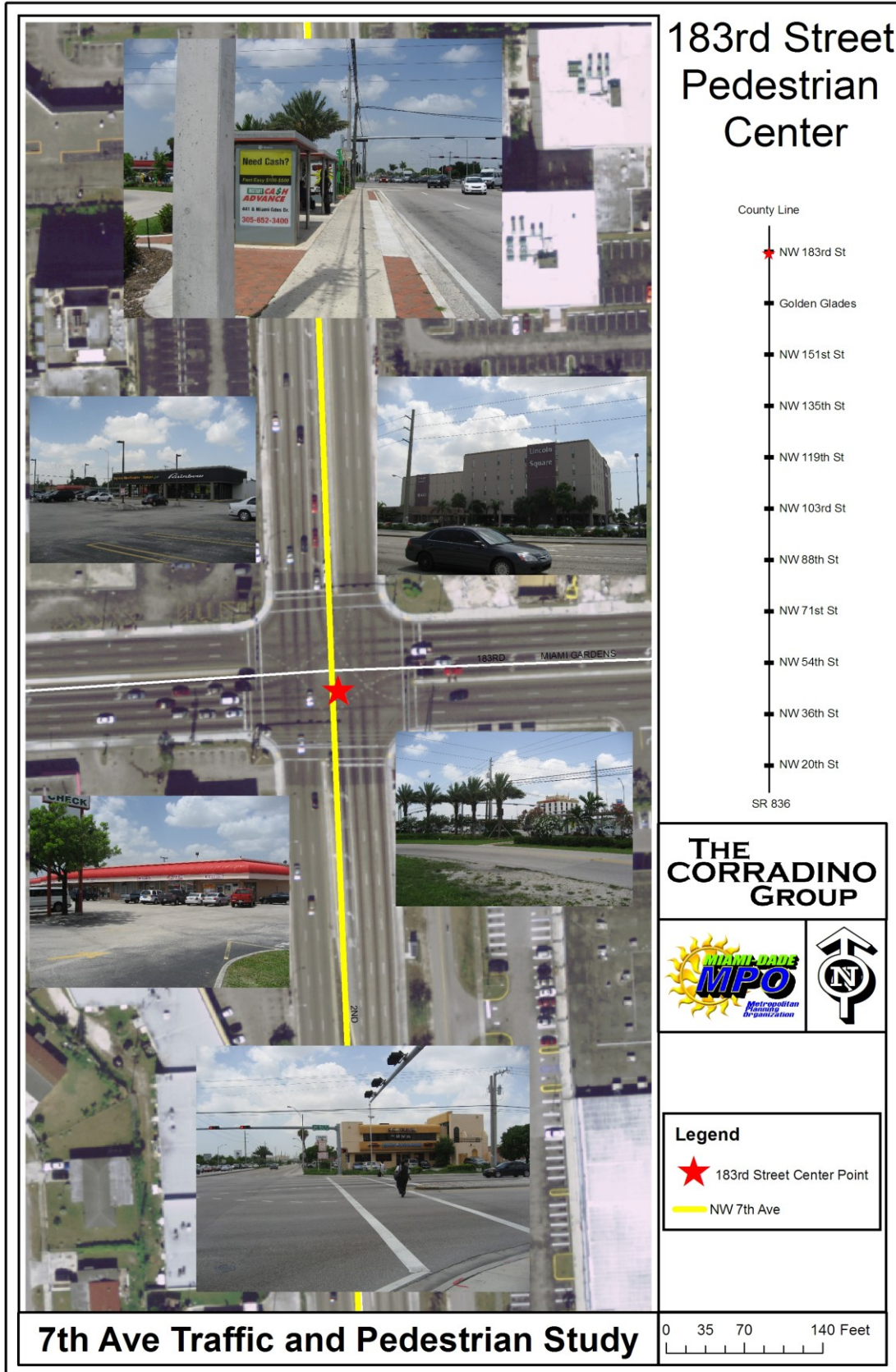


It is recommended that all bus stops have shelters, additional benches and trash cans. Perhaps pedestrian count down signals can be installed at the intersection as well as an emergency phone.

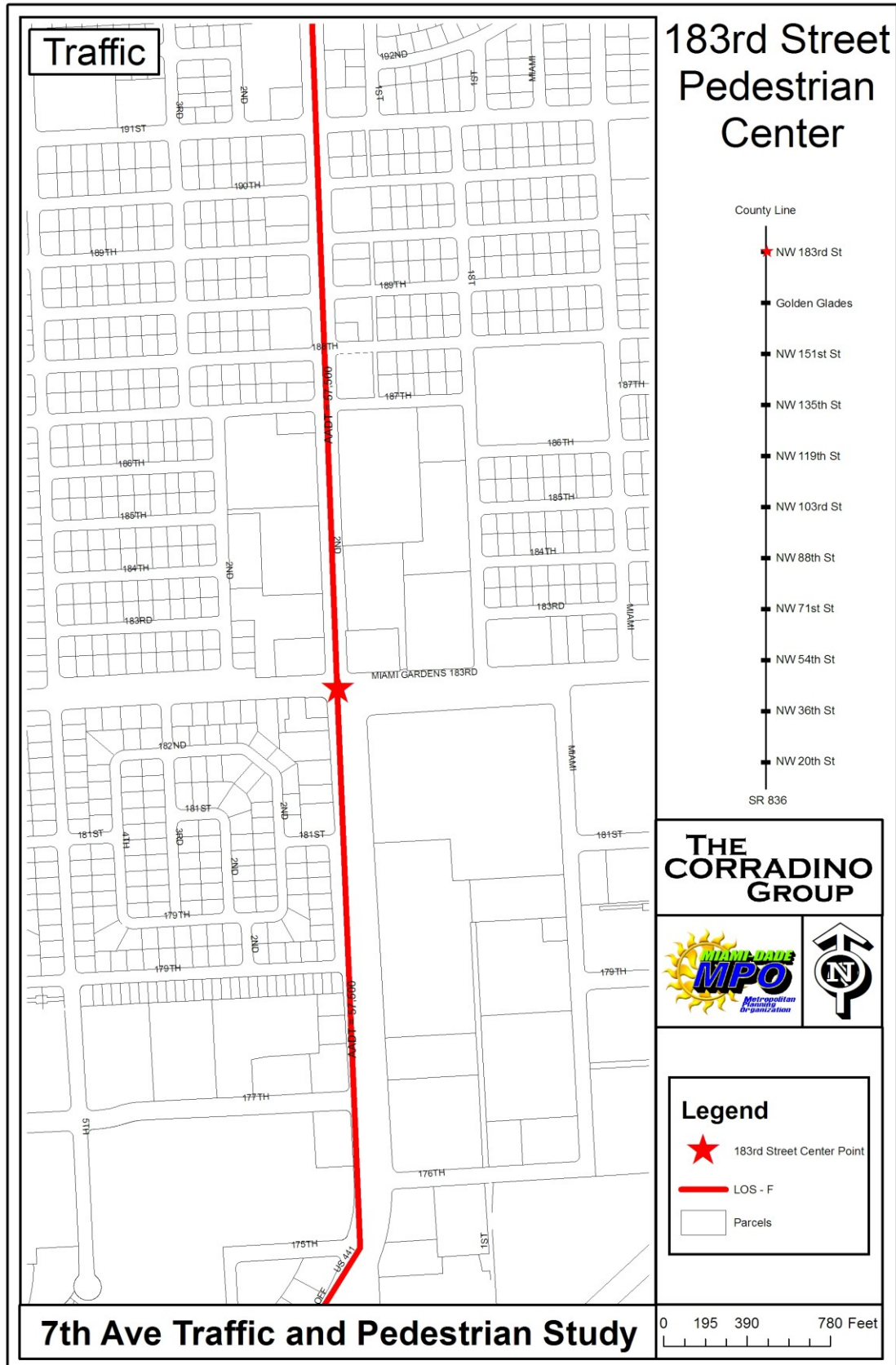
Map 52: Land Use – 183rd Street Pedestrian Center



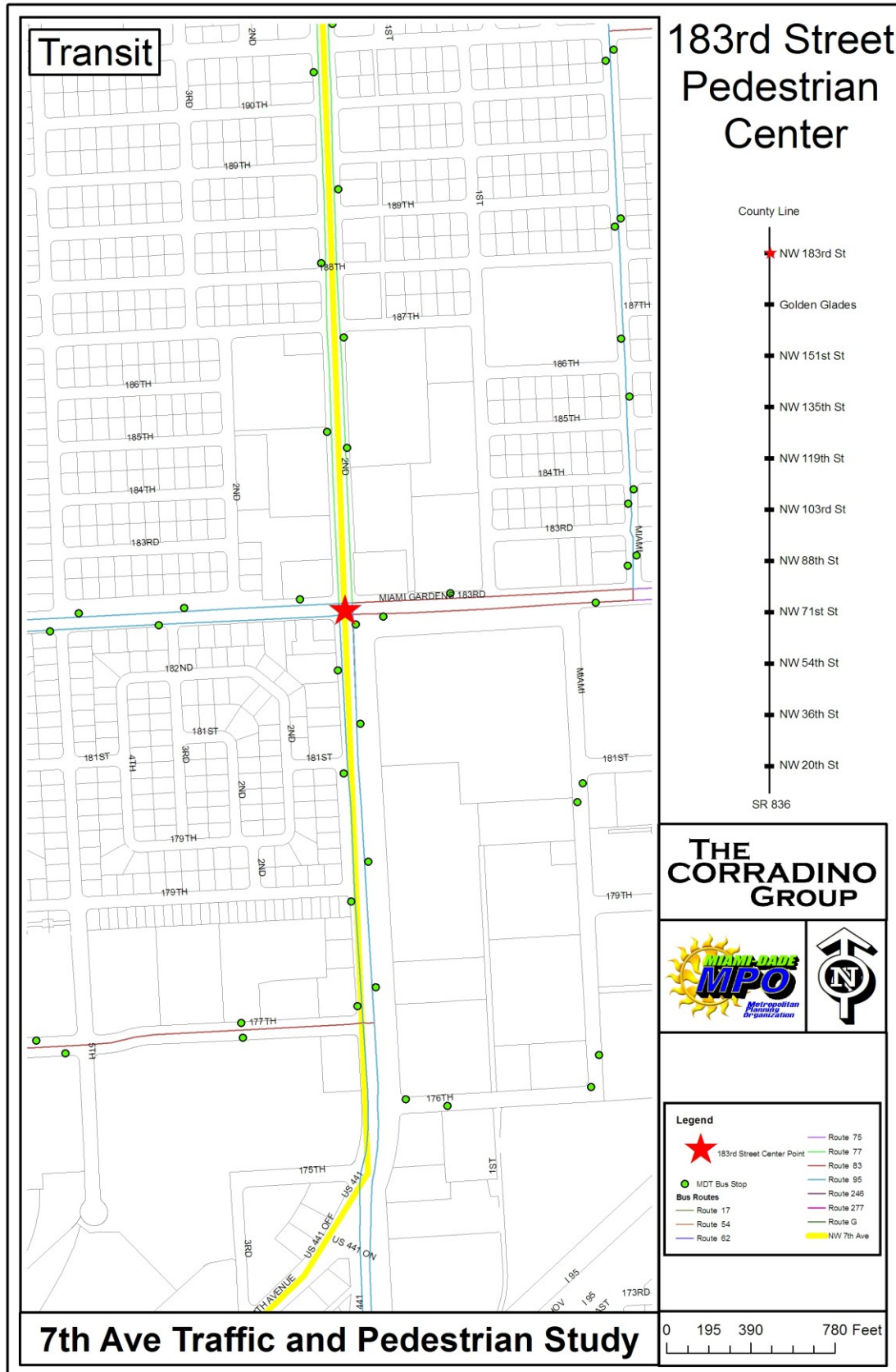
Map 53: 20th Street Pedestrian Center



Map 54: Traffic – 183rd Street Pedestrian Center



Map 55: Transit - 183rd Street Pedestrian Center



Conclusion

This corridor contains many areas of high volume pedestrian activity. Many of the intersections have adequate facilities for the most part. However, many of the intersections are lacking and some are seriously behind the standards that they should have. It is recommended that all bus stops have shelters, benches, trash cans, and newspaper racks, along with signs. Some intersections are busier than others and would justify the need for an emergency phone as well as pedestrian countdown signals. This is one of the most traveled pedestrian corridors in all of Miami and it should be safe for pedestrians so that the neighboring communities and businesses have ample opportunity to flourish.

This corridor has no on street parking, yet parked cars are scattered throughout the corridor and they are, for the most part, not ticketed or shown any form of enforcement. These cars make it difficult for drivers and thus it takes away some of their attention for the near by pedestrians. It is recommended that enforcement of these rules take place. Just having a police presence in the area should alleviate much of the problem.

Another major concern was that of the crosswalks. First, all major intersections should have thermoplastic paver like crosswalks across all 4 legs of the intersection. This gives the intersection high visibility and thus makes it safer for crossing pedestrians. Second, it is suggested that these crosswalks also have some sort of reflective device so as to make them visible to drivers at night time. This will enhance the crosswalk from an aesthetic point of view as well.

7TH AVENUE TRAFFIC AND PEDESTRIAN STUDY

TASK 5 FUTURE IMPACTS

Introduction

This task was developed to examine traffic impacts of a future land use/growth scenario along the Corridor. The Miami Dade County Department of Planning and Zoning (DPZ) was consulted and it was determined to examine the future land use scenario which is currently mapped in the Miami Dade County Comprehensive Plan's Future Land Use Map. The existing SERPM model was used as the basis for the analysis. The analysis consisted of assessing impact of future growth and mitigating that impact through roadway or transit projects.

Summary

This task determined the existing and future conditions and traffic volumes for the study corridor under evaluation. It showed the adopted Level of Service standard in the existing and future conditions by link. It determined which links will exceed the LOS standard in the future, and what it will take in terms of projects to mitigate that excessive traffic.

Multiple sources were used to determine the base year traffic volumes, these included:

- Year 2005 FDOT AADT's
- Year 2008 FDOT AADT's
- South East Regional Planning Model (SERPM) 6.5 with 2005 base year
- Historical AADT between Year 2002 and Year 2008

Year 2008 AADT's were used to determine Year 2009 volumes at locations where Year 2008 AADT's were available with slight adjustments. However, Year 2008 AADT's were not available on the entire length of the study corridor. The information gaps were filled out by using SERPM6.5 Time of Day (TOD) model volumes. From this, volumes were developed for 2009 and 2030.

Daily volumes were converted into directional hourly volumes and roadway level of service was obtained by matching the volumes with the roads capacities obtained from the FDOT LOS Handbook at the designated LOS thresholds of E, E+20%, and E+ 50% dependant on the proximity to various levels of transit service.

Because the facility is constrained and few opportunities exist for additional lanes, several scenarios were examined. These included existing and future conditions. In the future a no-build scenario was tested, as were alternatives examining mitigation through the additional of physical capacity, the addition of improved bus service.

It is observed for the existing condition (Year 2009) all the roadway segments operate within the allowable threshold of LOS E+ 20%. In the future no build scenario, the roadway LOS analysis indicates that the eight segments of the corridor exceed the allowable threshold and operate at LOS F. This degradation of LOS is due to ambient growth and not the immigration facility. To mitigate these capacity deficits through traditional means, additional lanes were tested. Essentially, the failing segments could be brought into compliance through the addition of one lane in each direction. In order to improve the LOS in the study corridor without increasing the number of lanes, improved

bus service was introduced in mixed traffic, as well as in exclusive lanes. It was observed that by introducing improved transit service at 7.5 and 15 minute headways, all the roadway segments operate within the allowable standards of LOS E+ 50%.

Methodology and Modeling

SERPM6.5 Post Processing

SERPM 6.5 model results were reviewed in the study corridor. When compared against Year 2005 AADT's the model, in general, underestimated daily traffic volumes. Using model volumes directly is not recommended; hence, a post processing procedure was developed to put Year 2005 model volumes in line with Year 2005 AADT's. The corridor was divided into logical segments based on combining links with similar volumes.

Determining Growth Rates per Year

Year 2005 AADT's and Year 2008 AADT's were collected for all the available segments. Growth rates per year were calculated. It was observed that most of the roadway segments showed a negative growth rate between Year 2005 and Year 2008. Therefore, historical AADT's for these segments were collected and reviewed. It was observed that the AADT's at these locations were decreasing steadily from Year 2005 to Year 2008. To be conservative a default growth rate of 1.0% was assumed at locations where negative growth was observed.

Determining Year 2009 Traffic Volumes

In order to obtain Year 2009 projected volumes, the adjusted growth rates were applied to Year 2008 AADT, where available. At locations where Year 2008 AADT was not available and Year 2005 AADT was available, the adjusted growth rates were applied to Year 2005 AADT. At locations where both Year 2005 and Year 2008 AADT's were not available, the adjusted growth rates were applied to the Year 2005 post processed volumes to obtain the Year 2009 projected model volumes. Projected volumes range from just over 21,000 vpd south of 46th Street to just over 61,100 vpd on 2nd Ave north of NW 183rd Street, as shown in Table 1

Table 1: Determining Year 2009 (Existing) Projected Volumes In Study Corridor

Roadway Segment	Location	Y2005 AADT	Y2008 AADT	Y2005 Post Processed Volumes	Growth Rate (%)	Adj Growth Rate (%)	Y2009 Projected Model Volumes
NW 2nd Ave	N of NW 199th St	70,000	58,000	70,000	-5.71	1.00	58,580
	N of NW 183rd St	61,000	60,500	61,000	-0.27	1.00	61,105
	S of 183rd St	60,500	57,500	60,500	-1.65	1.00	58,075
NW 7th Ave - SB	SB 200' N of I-95	25,000	24,000	25,000	-1.33	1.00	24,240
NW 7th Ave - NB	NB Under I-95	38,500	25,500	38,500	-11.26	1.00	25,755
NW 7th Ave	S of NW 151st St	24,500	27,500	24,500	4.08	4.08	28,622
	N of 119th St	35,000	34,000	35,000	-0.95	1.00	34,340
	S of 119th St	39,500	37,500	39,500	-1.69	1.00	37,875
	N of NW 95th St	33,000	32,000	33,000	-1.01	1.00	32,320
	N of NW 81st St	38,500	37,000	38,500	-1.30	1.00	37,370
	S of NW 79th St	36,132		36,132	-6.41	1.00	36,992
	N of NW 62nd St	25,000	21,500	25,000	-4.67	1.00	21,715
	N of NW 54th St	23,500	24,500	23,500	1.42	1.42	24,848
	S of NW 46th St	23,000	21,000	23,000	-2.90	1.00	21,210
	N of NW 20th St	25,000	22,000	25,000	-4.00	1.00	22,220
	S of NW 20th St	29,252		29,252	-12.40	1.00	31,003

Determining Year 2030 Traffic Volumes

The SERPM6.5 2030 model was used to estimate the Year 2030 traffic projections. Growth rates from the model were applied to the existing year traffic estimates (2009) to project traffic volumes for year 2030. Where projections were unreasonable, an average annual growth rate of 3% was applied. The projected Year 2030 volumes are presented in Table 5.2. Volumes range from 17,734vpd on 7th Avenue between 151st Street and 135th Street, to 83,546vpd on NW 2nd Ave, between 183rd Street and the NW 7th Ave Ext.

7th Avenue Traffic and Pedestrian Study
Task 5: Future Impacts

Table 2: Computed Growth Rates for Obtaining Year 2030 Projected Volumes

Roadway Segment	From	To	Year 2005 Model Volumes	Year 2030 Model Volumes	Average Annual Segment Growth Rate (%)	Adjusted Average Annual Segment Growth Rate (%)
NW 2nd Ave	SW 41st St	NW 199th St	57,585	63,857	0.44	0.44
	NW 199th St	NW 183rd St	66,745	73,732	0.42	0.42
	NW 183rd St	NW 7th Ave Ext	76,393	83,546	0.37	0.37
NW 7th Ave -SB	NW 7th Ave Ext	NW 159th St	15,968	19,096	0.78	0.78
NW 7th Ave -NB	NW 7th Ave Ext	NW 159th St	21,651	25,082	0.63	0.63
NW 7th Ave	Golden Glades Int	NW 151st St	18,082	29,649	2.56	2.56
	NW 151st St	NW 135th St	6,457	17,734	6.99	3.00
	NW 135th St	NW 119th St	16,524	33,776	4.18	3.00
	NW 119th St	NW 103rd St	19,425	38,464	3.92	3.00
	NW 103rd St	NW 95th St	23,305	40,472	2.95	2.95
	NW 95th St	NW 81st St	27,332	47,130	2.90	2.90
	NW 81st St	NW 71st St	15,905	32,091	4.07	3.00
	NW 71st St	NW 62nd St	13,112	28,259	4.62	3.00
	NW 62nd St	NW 54th St	21,242	30,173	1.68	1.68
	NW 54th St	NW 43rd St	27,588	37,959	1.50	1.50
	NW 43rd St	NW 20th St	22,225	29,855	1.37	1.37
	NW 20th St	SR 836	16,262	31,750	3.81	3.00

Roadway Level of Service Analysis

Four scenarios were evaluated to measure impacts and improvements along the corridor. Level of Service analysis was performed for roadway segments throughout the study corridor. LOS analysis was performed for existing (Year 2009), future (Year 2030) conditions, the future year with physical capacity improvements, the future with bus service improvements in mixed traffic and the future with Bus Rapid Transit on an exclusive lane. Improved transit service alternatives were examined because the facility can be considered constrained. The addition of lanes would be difficult, expensive, disruptive to the local business and residents as well as time consuming. If lanes were to be added, it would be prudent to allow them to carry as many people as possible. Generally this means placing higher capacity vehicles on them. The analysis is tabulated in Table 3 below.

The roadway LOS analysis was performed for the following scenarios:

Scenario 1: Existing Conditions (Year 2009)

Volumes obtained for existing conditions were used to perform the LOS analysis. Because the corridor is in the Urban Infill Area, it is allowed to operate at LOS E+ 20% because mass transit service with headways of 20 minutes or less are provided within ½ mile of the corridor. In this scenario all of the links operate within the acceptable levels of service of E+20%. In fact of the 38 locations examined 8, or 15% are at the threshold. 84% of the locations have a level of service of D or less. Twenty five locations (65%) are LOS C.

Scenario 2: Future Conditions (Year 2030)

The future projected highway volumes were used to perform the LOS analysis. LOS E+ 20% was used as capacity threshold. By 2030, 8 or 15% of the locations operate at LOS F, or worse than the acceptable LOS. The declining LOS is due to ambient growth and not the immigration facility. The failing road segments include:

- NW 2nd Avenue South of Ives Dairy Road
- NW 2nd Avenue North of 191st Street
- NW 7th Avenue south of 125th Street
- NW 7th Avenue north of 111th Street
- NW 7th Avenue south of 111th Street
- NW 7th Avenue south of 81st Street
- NW 7th Avenue north of 81st Street
- NW 7th Avenue south of 20th Street.

Eleven locations (27%) operate at the threshold, and 19 locations, (47%) operate better than the threshold. Therefore 15% of the locations would need to be improved and brought up to an acceptable level of service.

Mitigating these deficiencies can be done with the addition of travel lanes. Essentially the addition of one lane in each direction would bring the deficient segments into compliance to operate at no worse than LOS E +20%. The improvements required are as follows.

- NW 2nd Avenue South of Ives Dairy Road
 - 6 lanes divided to 8 lanes divided
 - LOS F to LOS E
- NW 2nd Avenue North of 191st Street
 - 6 lanes divided to 8 lanes divided
 - LOS F to LOS E
- NW 7th Avenue south of 125th Street
 - 6 lanes divided to 8 lanes divided
 - LOS F to LOS E+20%
- NW 7th Avenue north of 111th Street
 - 6 lanes divided to 8 lanes divided
 - LOS F to LOS E

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- NW 7th Avenue south of 111th Street
 - 6 lanes divided to 8 lanes divided
 - LOS F to LOS E+20%
- NW 7th Avenue south of 81st Street
 - 6 lanes divided to 8 lanes divided
 - LOS F to LOS E
- NW 7th Avenue north of 81st Street
 - 6 lanes divided to 8 lanes divided
 - LOS F to LOS E
- NW 7th Avenue south of 20th Street.
 - 4 lanes divided to 6 lanes divided
 - LOS F to LOS D

Scenario 3: Future Conditions (Year 2030) with Enhanced Bus Service in Mixed Traffic

In order to improve the LOS in the study corridor without increasing the number of lanes, enhanced bus service was introduced in the study corridor. The service was introduced in mixed traffic. It was observed that by introducing enhanced bus service all the roadway segments operate at LOS E+ 50% due to increased transit ridership.

This bus service was coded in the mixed traffic with headways of 7.5 minutes in peak hour and 15 minutes in off peak hour in the study corridor. The projected highway volumes obtained from this scenario were used in performing the LOS analysis. The capacity threshold was able to be increased to LOS E+ 50% because within the infill area, where extraordinary transit service such as commuter rail or express bus service exists, parallel roadways within ½ mile are allowed to operate at no greater than 150 percent of LOS E. If enhanced bus service is implemented, no locations exceed the acceptable level of service. Nineteen (50%) of the locations are at the standard of E+50%. Nineteen locations (50%) are less than the standard. Mixed Traffic BRT will mitigate future LOS deficiencies.

Scenario 4: Future Conditions (Year 2030) with Bus Service on Exclusive Lanes

Bus service was coded on exclusive lanes in the study corridor with headways of 7.5 in peak hour and 15 in off peak hour. No additional lanes would be added. The projected highway volumes obtained from this scenario were used in performing the LOS analysis. LOS E+ 50% was used as capacity. In this scenario there is no significant difference from BRT in mixed traffic. Levels of service at each location match or perform better than the acceptable standard.

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Table 3: Roadway Link Capacity / Level-of-Service Analysis for Existing and Future Conditions																								
Existing (Year 2009) Conditions				Year 2030 Condition				Year 2030 Condition With BRT in Mixed Traffic								Year 2030 Condition With BRT on Exclusive								
Location	Number of Lanes	AADT-2008	Peak-Hr Peak Direction K Fac	Yr 2009 Vol	Year 2009 Peak Hr		Year 2009 Peak Hr Peak Dir		Prop Imp	LOS after Prop Imp	Year 2030 Peak Hr		Year 2030 Peak Hr Peak Dir		Year 2030 Volumes	Year 2030 Peak Hr		Year 2030 Peak Hr Peak Dir		Year 2030 Volumes	Year 2030 Peak Hr		Year 2030 Peak Hr Peak Dir	
					2-Way Volume (vph)	LOS	Volume (vph)	Peak Hr Direction (vph)			LOS	Volume (vph)	Peak Hr Direction (vph)	LOS		2-Way Volume (vph)	LOS	Volume (vph)	Peak Hr Direction (vph)		LOS	2-Way Volume (vph)	LOS	Volume (vph)
NW 2 Ave N. of Iles Dairy Rd	6LD	58,000	0.09	0.528	58,580	5,272	E+20%	2,784	E+20%	63,887	5,750	E+20%	3,036	E+20%	63,547	5,719	E+50%	3,020	E+50%	63,924	5,753	E+50%	3,038	E+50%
NW 2 Ave S. of Iles Dairy Rd	6LD		0.09	0.528	63,750	5,738	E+20%	3,029	E+20%	69,585	6,263	F	3,307	F	69,143	6,223	E+50%	3,286	E+50%	69,624	6,266	E+50%	3,309	E+50%
NW 2 Ave N. of 191 St	6LD		0.09	0.528	64,260	5,783	E+20%	3,053	E+20%	70,130	6,312	F	3,333	F	69,686	6,272	E+50%	3,311	E+50%	70,169	6,315	E+50%	3,334	E+50%
NW 2 Ave S. of 191 St	6LD		0.09	0.528	61,970	5,577	E+20%	2,945	E+20%	67,642	6,088	F	3,214	E+20%	67,212	6,049	E+50%	3,194	E+50%	67,679	6,051	E+50%	3,216	E+50%
NW 2 Ave N. of M-Gardens Dr	6LD	60,500	0.09	0.528	61,105	5,499	E+20%	2,904	E+20%	66,301	5,967	F	3,151	E+20%	65,861	5,928	E+50%	3,130	E+50%	66,339	5,971	E+50%	3,152	E+50%
NW 2 Ave S. of M-Gardens Dr	6LD	57,500	0.09	0.528	58,705	5,383	E+20%	2,790	E+20%	62,176	5,996	E+20%	2,955	E+20%	62,087	5,958	E+50%	2,950	E+50%	62,125	5,991	E+50%	2,952	E+50%
NW 7 Ave SB	2L	24,000	0.09		24,340	2,182	E+20%			28,343	2,551	F			28,143	2,533	E+50%			28,286	2,546	E+50%		
NW 7 Ave NB	2L	25,500	0.09		25,755	2,318	E+20%			29,391	2,645	F			29,207	2,611	E+50%			29,450	2,650	E+50%		
NW 7 Ave N. of 151 St	6LD		0.09	0.528	29,821	2,684	C	1,417	C	46,407	4,177	D	2,205	D	46,212	4,069	D	2,148	D	46,719	4,205	D	2,220	D
NW 7 Ave S. of 151 St	6LD	27,500	0.09	0.528	28,622	2,576	C	1,360	C	45,650	4,109	D	2,169	D	45,650	4,109	D	2,169	D	45,650	4,109	D	2,169	D
NW 7 Ave N. of 143 St	6LD		0.09	0.528	24,385	2,195	C	1,159	C	39,748	3,577	C	1,889	C	39,748	3,577	C	1,889	C	39,748	3,577	C	1,889	C
NW 7 Ave S. of 143 St	6LD		0.09	0.528	36,853	3,317	C	1,751	C	60,070	5,406	E+20%	2,855	E+20%	60,070	5,406	E+50%	2,855	E+50%	60,070	5,406	E+50%	2,855	E+50%
NW 7 Ave N. of 135 St	6LD		0.09	0.528	30,405	2,735	C	1,445	C	49,561	4,460	D	2,355	D	49,561	4,460	D	2,355	D	49,561	4,460	D	2,355	D
NW 7 Ave S. of 135 St	6LD		0.09	0.528	29,871	2,688	C	1,419	C	48,650	4,382	D	2,314	D	48,650	4,382	D	2,314	D	48,650	4,382	D	2,314	D
NW 7 Ave N. of 125 St	6LD		0.09	0.528	35,531	3,198	C	1,688	C	57,916	5,212	E+20%	2,752	E+20%	57,916	5,212	E+50%	2,752	E+50%	57,916	5,212	E+50%	2,752	E+50%
NW 7 Ave S. of 125 St	6LD		0.09	0.528	47,769	4,301	D	2,271	D	77,896	7,011	F	3,702	F	77,896	7,011	E+50%	3,702	E+50%	77,896	7,011	E+50%	3,702	E+50%
NW 7 Ave N. of 119 St	6LD	34,000	0.09	0.528	34,340	3,091	C	1,532	C	56,440	5,080	E+20%	2,682	E	56,440	5,080	E+50%	2,682	E	56,440	5,080	E+50%	2,682	E
NW 7 Ave S. of 119 St	6LD	37,500	0.09	0.528	37,875	3,409	C	1,800	C	62,250	5,603	E+20%	2,958	E+20%	62,250	5,603	E+50%	2,958	E+50%	62,250	5,603	E+50%	2,958	E+50%
NW 7 Ave N. of 111 St	6LD		0.09	0.528	42,701	3,643	D	2,029	C	69,602	6,264	F	3,308	F	69,602	6,264	E+50%	3,308	E+50%	69,602	6,264	E+50%	3,308	E+50%
NW 7 Ave S. of 111 St	6LD		0.09	0.528	44,556	4,010	D	2,117	D	72,627	6,536	F	3,451	F	72,627	6,536	E+50%	3,451	E+50%	72,627	6,536	E+50%	3,451	E+50%
NW 7 Ave N. of 111 St	6LD		0.09	0.528	37,800	3,402	C	1,796	C	61,613	5,545	E+20%	2,928	E+20%	61,613	5,545	E+50%	2,928	E+50%	61,613	5,545	E+50%	2,928	E+50%
NW 7 Ave S. of 111 St	6LD		0.09	0.528	34,377	3,094	C	1,534	C	56,034	5,043	E+20%	2,663	E	56,034	5,043	E+50%	2,663	E	56,034	5,043	E+50%	2,663	E
NW 7 Ave N. of 95 St	6LD	32,000	0.09	0.528	32,320	2,909	C	1,536	C	53,120	4,781	E	2,524	D	53,120	4,781	E	2,524	D	53,120	4,781	E	2,524	D
NW 7 Ave S. of 95 St	6LD		0.09	0.528	37,217	3,350	C	1,769	C	60,041	5,004	E+20%	2,853	E+20%	59,569	5,361	E+50%	2,831	E+50%	59,769	5,379	E+50%	2,840	E+50%
NW 7 Ave N. of 81 St	6LD	37,000	0.09	0.528	37,370	3,363	C	1,776	C	60,772	5,470	E+20%	2,888	E+20%	60,281	5,425	E+50%	2,865	E+50%	60,489	5,444	E+50%	2,874	E+50%
NW 7 Ave S. of 81 St	6LD		0.09	0.528	42,926	3,683	D	2,040	C	69,969	6,297	F	3,325	F	69,969	6,297	E+50%	3,325	E+50%	69,969	6,297	E+50%	3,325	E+50%
NW 7 Ave N. of 71 St	4LD		0.09	0.528	32,830	2,955	D	1,560	D	53,513	4,916	F	2,543	F	53,513	4,916	E+50%	2,543	E+50%	53,513	4,916	E+50%	2,543	E+50%
NW 7 Ave S. of 71 St	4LD		0.09	0.528	25,944	2,335	C	1,233	C	42,289	3,006	E+20%	2,010	E+20%	42,288	3,006	E+50%	2,010	E+50%	42,288	3,006	E+50%	2,010	E+50%
NW 7 Ave N. of 62 St	4LD	21,500	0.09	0.528	21,715	1,954	C	1,032	C	35,650	3,212	E	1,656	D	35,650	3,212	E	1,656	D	35,650	3,212	E	1,656	D
NW 7 Ave S. of 62 St	4LD		0.09	0.528	25,808	2,323	C	1,226	C	35,701	3,213	E	1,697	D	35,333	3,180	E	1,679	D	35,567	3,201	E	1,690	D
NW 7 Ave N. of 54 St	4LD	24,500	0.09	0.528	24,848	2,036	C	1,181	C	34,339	3,091	D	1,632	D	33,973	3,058	D	1,614	D	34,205	3,078	D	1,625	D
NW 7 Ave S. of 54 St	4LD		0.09	0.528	23,463	2,112	C	1,115	C	30,989	2,769	D	1,473	D	30,860	2,777	D	1,466	D	31,303	2,817	D	1,488	D

Table 3: Roadway Link Capacity / Level-of-Service Analysis for Existing and Future Conditions

Location	Number of Lanes	AADT-2008	Peak Hr Direction D K Fac	Yr 2005 Peak Vol	Existing (Year 2008) Conditions				Year 2030 Condition						Year 2030 Condition With BRT in Mixed Traffic				Year 2030 Condition With BRT on Exclusive Guideways					
					Year 2008 Peak Hr		Year 2008 Peak Hr Peak Dir		Year 2030 Peak Hr	Year 2030 Peak Hr Peak Dir	Prop Imp	LOS after Prop Imp	Year 2030 Peak Hr	Year 2030 Peak Hr Peak Dir	Year 2030 Peak Hr	Year 2030 Peak Hr Peak Dir	Year 2030 Peak Hr	Year 2030 Peak Hr Peak Dir	Year 2030 Peak Hr	Year 2030 Peak Hr Peak Dir				
					2-Way Volume (Vph)	LOS	Volume (Vph)	LOS													2-Way Volume (Vph)	LOS	2-Way Volume (Vph)	LOS
NW 7 Ave N. of 46 St	4LD		0.09	0.528	23,910	2,152	C	1,135	C	31,580	2,842	D	1,501	D	31,448	2,830	D	1,494	D	31,900	2,871	D	1,516	D
NW 7 Ave S. of 46 St	4LD	21,000	0.09	0.528	21,210	1,909	C	1,008	C	28,057	2,525	D	1,333	C	27,935	2,514	D	1,327	C	28,351	2,552	D	1,347	C
NW 7 Ave N. of 36 St	4LD		0.09	0.528	27,760	2,498	D	1,319	C	35,047	3,244	E	1,713	E	35,673	3,211	E	1,695	D	35,840	3,226	E	1,703	D
NW 7 Ave S. of 36 St	4LD		0.09	0.528	24,102	2,169	C	1,145	C	31,298	2,817	D	1,487	D	30,973	2,788	D	1,472	D	31,118	2,801	D	1,479	D
NW 7 Ave N. of 29 St	4LD		0.09	0.528	22,762	2,049	C	1,082	C	29,558	2,660	D	1,405	D	29,251	2,633	D	1,390	D	29,388	2,645	D	1,397	D
NW 7 Ave S. of 29 St	4LD		0.09	0.528	26,417	2,378	C	1,255	C	34,303	3,087	D	1,630	D	33,947	3,055	D	1,613	D	34,106	3,070	D	1,621	D
NW 7 Ave N. of 20 St	4LD	22,000	0.09	0.528	22,220	2,000	C	1,056	C	28,881	2,599	D	1,372	D	28,570	2,571	D	1,358	C	28,708	2,584	D	1,364	C
NW 7 Ave S. of 20 St	4LD		0.09	0.528	31,003	2,790	D	1,473	D	50,535	4,548	F	2,401	F	50,535	4,548	E+50%	2,401	E+50%	50,535	4,548	E+50%	2,401	E+50%

- FDOT Quality / Level of Service Handbook - Generalized Capacity / LOS Tables

Peak Hour Two-Way Volume									
(Table 4-4, Class II State Arteri: 4 Lanes Divided)	LOS C	LOS D	LOS E	LOS +20%E	LOS+50%E	LOS+50%E	LOS+50%E	LOS+50%E	LOS+50%E
2470	3,110	3,270	3,924	4,905					
(Table 4-4, Class II State Arteri: 6 Lanes Divided)	LOS C	LOS D	LOS E	LOS +20%E	LOS+50%E	LOS+50%E	LOS+50%E	LOS+50%E	LOS+50%E
3830	4,680	4,920	5,904	7,380					
(Table 4-4, Class II State Arteri: 8 Lanes Divided)	LOS C	LOS D	LOS E	LOS +20%E	LOS+50%E	LOS+50%E	LOS+50%E	LOS+50%E	LOS+50%E
5060	6,060	6,360	7,632	9,540					
Peak Hour Peak-Direction Volumes									
(Table 4-7, Class II State Arteri: 2 Lanes Divided)	LOS C	LOS D	LOS E	LOS +20%E	LOS+50%E	LOS+50%E	LOS+50%E	LOS+50%E	LOS+50%E
1360	1,710	1,800	2,160	2,700					
(Table 4-7, Class II State Arteri: 3 Lanes Divided)	LOS C	LOS D	LOS E	LOS +20%E	LOS+50%E	LOS+50%E	LOS+50%E	LOS+50%E	LOS+50%E
2110	2,570	2,710	3,252	4,065					
Peak Hour Volumes for One Ways									
(Table 4-7, Class II State Arteri: 2 Lanes Divided)	LOS C	LOS D	LOS E	LOS +20%E	LOS+50%E	LOS+50%E	LOS+50%E	LOS+50%E	LOS+50%E
1482	1,866	1,952	2,354	2,943					
(Table 4-7, Class II State Arteri: 3 Lanes Divided)	LOS C	LOS D	LOS E	LOS +20%E	LOS+50%E	LOS+50%E	LOS+50%E	LOS+50%E	LOS+50%E
2298	2,808	2,952	3,542	4,428					

7TH AVENUE TRAFFIC AND PEDESTRIAN STUDY

TASK 6 RECOMMENDATIONS

Recommendations

Tasks 3, 4 and 5 were used to develop a set of recommendations for mitigating the effects of the pedestrian, bicycle and vehicular traffic generated as well as to improve the existing conditions of transit facilities. The tasks included extensive field observations, data collection, simulation models and scenario analyses.

This study recommends bus shelters at certain locations in line with the MPO's *Bus Shelter Installation Study*, which recommends bus shelters should be provided at:

- Any stop with at least 25 boardings a day.
- Stops that are major generators of peak hour transit ridership or are major transfer points between routes.
- Stops that attract large concentrations of young, elderly, or temporarily or permanently disabled patrons.
- Stops located at universities, recreation centers, senior citizen housing facilities, or hospitals should be sheltered.

Importantly shelters must conform to FDOT and ADA requirements. If FDOT and ADA standard shelters do not fit in the ROW then the implementing agency will need to make the decision on whether to not acquire the ROW to make them fit. The analysis has shown that typically enough space exists in the corridor to accommodate shelters.

Shelter design must conform to the Florida Administrative Code 12-20-003. Generally this states that they need to be accessible to people in wheelchairs must have a minimum clear floor or ground space area 30" wide and 48" deep entirely within the shelter. Access entry points should not have less than a 36" wide clearance. Additional clearance on the outside of the shelter of 36." There should be no steps between the sidewalk or bus pad and the shelter. Unless otherwise specified, the clear floor or ground space shall be positioned for either forward or parallel approach to an element. From a spatial footprint, this points to a minimum dept of 8.5'. The 7th Ave corridor typically has 6' sidewalks but these often have planting strips which make the area between the curb and ROW line +/- 15'

It is recommended that the implementing agency evaluate each site to determine whether enough space actually exists within the ROW or whether additional space should be acquired.

Intersection Modifications in the Vicinity of the Immigration Facility

- Periodic traffic signal optimization for all signalized intersections within the area of influence of the Immigration Facility.
- Increase the left-turn lanes storage capacity by year 2015 to meet the demands of Year 2030;
- Study increased visibility for pedestrians, bicyclists and drivers;
- Reduction of conflicts at intersection which can enhance corridor throughput at major intersections.

Immigration Facility Parking Access Improvements

- Channelized north driveway to prevent eastbound left movements to increase safety;
- Investigate south driveway right-of-way to provide for northbound right lane into immigration property

Bus Stop Improvements in the Vicinity of the Immigration Building

- NW 79th Street: It is recommended that all bus stops have shelters, additional benches, and trash cans. Pedestrian countdown signals should be installed at the intersection. An emergency phone is also recommended at this intersection due to the number of users.
- NW 88th Street: Recommendations include a pedestrian actuated signal and crosswalk between the bus stops, or move the bus stops to the Little River Drive intersection. If the latter is done the northern leg of the intersection should have a crosswalk installed. Additional trash cans at the bus stops would help eliminate some of the trash on the ground. Newspaper racks should be moved to a closer proximity to the shelters or the immigration facility itself. Pedestrian countdown signals should be installed at all crosswalks.
- NW 95th Street: It is recommended that all bus stops have shelters, additional benches, and trash cans. Pedestrian countdown signals should be installed at the intersection. No other needs have been found.

Pedestrian and Safety Improvements in the Vicinity of the Immigration Building

- Install countdown signals at signalized intersections;
- Provide high visibility crosswalk pavement marking at signalized intersections;
- Install reflective crosswalk delineators at high volume crosswalks;

General Pedestrian Guidelines for the Entire Corridor

- This corridor contains many areas of high volume pedestrian activity. For the most part, the intersections have adequate facilities. It is recommended that many bus stops have shelters, benches, trash cans, along with signs. Some intersections are busier than others and would justify the need for an emergency phone as well as pedestrian countdown signals.
- All major intersections should have visible crosswalks across all 4 legs of the intersection. This gives the intersection high visibility and thus makes it safer for crossing pedestrians. Second, it is suggested that these crosswalks also have some sort of reflective device so as to make them visible to drivers at night time. This will enhance the crosswalk from an aesthetic point of view as well.
- Relocate obstructions from sidewalks to maintain a minimum 4' clearance.
- Provide a path from the Culmer Metrorail Station to Booker T Washington.
- Improve tree canopy along sidewalks.
- Reconstruct zigzag sidewalk to provide a continuous straight path.

Specific Improvements in Major Pedestrian Areas

- NW 17th Street: It is recommended that bus stops have shelters, additional benches, and trash cans. Pedestrian countdown signals should be installed at the intersection.
- NW 20th Street: It is recommended that bus stops have shelters, additional benches, and trash cans. The eastbound stop especially has problems of overcrowding under the shelter. Many of these pedestrians are students at Lindsay Hopkins Technical Education Center. Pedestrian countdown signals should be installed at the intersection. No other needs have been found.
- NW 23rd Street: It is recommended that bus stops have additional benches, and trash cans. The eastbound stop especially has problems of overcrowding under the shelter. Possibly a second shelter is needed at this location. Many of these pedestrians are students at Lindsay Hopkins Technical Education Center. Pedestrian countdown signals should be installed at the intersection. No other needs have been found.
- NW 32nd Street: It is recommended that southbound bus stops have shelters, additional benches, and trash cans. Pedestrian countdown signals should be installed at the intersection.. It is also recommended that the crosswalks get thermoplastic treatment in place of the simple striping, making it easier for motorists to identify and safer for pedestrians.
- NW 46th Street: It is recommended that this bus stop have additional benches. No other needs have been found. Pedestrian countdown signals are also recommended for pedestrians to cross in a safer fashion.
- NW 54th Street: It is recommended that bus stops have shelters, additional benches, and trash cans. Pedestrian countdown signals should be installed at the intersection, as opposed to the walk/don't walk signals that currently exist. This is also a location where an emergency phone should be placed as it is one of the most used stops in the area.
- NW 62nd Street: It is recommended that bus stops have shelters, additional benches, and trash cans. Pedestrian countdown signals should be installed at the intersection.
- NW 69th Street: It is recommended that northbound and southbound bus stops have shelters, additional benches, and trash cans. Pedestrian countdown signals should be installed at the intersection.
- NW 75th Street: It is recommended that all bus stops have shelters, benches and trash cans. Pedestrian countdown signals should be installed at the intersection.
- NW 125th Street: It is recommended that all bus stops have shelters, additional benches and trash cans. Pedestrian countdown signals should be installed at the intersection as well as an emergency phone.
- NW 183rd Street: It is recommended that southbound bus stop have a shelter, additional benches, and trash cans. Pedestrian countdown signals should be installed at the intersection as well as an emergency phone. Thermoplastic paver-like crosswalks should be installed on all legs of the intersection.

Roadway and Transit Improvements

- This corridor has limited on-street parking, which is limited in the peak period and peak direction, yet parked cars are scattered throughout the corridor and they are for the most part not ticketed or shown any form of enforcement. These cars make it difficult for drivers and thus it takes away some of their attention for the nearby pedestrians. It is recommended that enforcement of these rules take place. Just having a police presence in the area should alleviate much of the problem.
- Transportation System Management strategies such as revision of speed limit throughout corridor, review pavement markings at major intersections, review street lighting with focus on crosswalks, restrict on-street parking.
- Travel Demand Management Strategies such as ridesharing, increased transit service, encourage vanpooling and carpooling, provide a guaranteed ride home to those who take transit, provide showers and other necessary amenities to those who bike to work, flex-time, coordinate bus routes and scheduling and other methods to decrease the peak period traffic demand.
- Add roadway capacity by procuring right-of-way and adding through lanes or lanes to separate turning movements from through movements.
- Provide alternative walking and biking routes to remove non-motorized and pedestrian traffic from major intersections, this could provide relief for peak period traffic delays due to pedestrians and vehicular conflicts at intersections.
- Manage driveway access along roadway segment to lessen driveways per mile by combining adjacent driveways and allowing adjacent properties to share property line driveways and provide shared parking policies incentives.
- Design and construct lighting that not only serves the private vehicle drivers and buses but as well as the pedestrians and bicyclists.
- Design and construct right-turn in/out channelization at key driveways with high volumes of traffic;
- Procure right-of-way, design and construct additional lanes at NW 95th and NW 79th Streets to install dual left-turns north and southbound where feasible.
- Enforcement of parking restrictions along corridor;
- Addition of Physical Capacity
 - The analysis showed that future level of service deficiencies could be mitigated by the addition of one lane on various segments of road. These recommendations include:
 - NW 2nd Avenue South of Ives Dairy Road
 - 6 lanes divided to 8 lands divided
 - NW 2nd Avenue North of 191 Street
 - 6 lanes divided to 8 lands divided
 - NW 7th Avenue south of 125th Street
 - 6 lanes divided to 8 lands divided
 - NW 7th Avenue north of 111th Street
 - 6 lanes divided to 8 lands divided
 - NW 7th Avenue south of 111th Street
 - 6 lanes divided to 8 lands divided

- NW 7th Avenue south of 81st Street
 - 6 lanes divided to 8 lanes divided
- NW 7th Avenue north of 81st Street
 - 6 lanes divided to 8 lanes divided
- NW 7th Avenue south of 20th Street.
 - 4 lanes divided to 6 lanes divided
- Improved Bus Service
 - In order to improve the LOS in the study corridor without increasing the number of lanes, improved service can be introduced in mixed traffic. It was by providing improved service with headways of 7.5 minutes in peak hour and 15 minutes in off peak hour all the roadway segments can operate at LOS E+ 50%.

7TH AVENUE TRAFFIC AND PEDESTRIAN STUDY APPENDICES

Appendices

Appendix A – Scope of Works

Appendix B – Field Observations

Appendix C – Seasonal Factors, TAZ Map, Trip Distribution

Appendix D – NW 7th Avenue 2009 AADT Volumes

Appendix E – Intersection Turning Movement Counts

Appendix F – Existing Queue Analysis

Appendix G – Existing Signal Phasing and Timing

Appendix H – Synchro Analysis Results

Appendix A – Scope of Works

Task 3: Impacts of Immigration Facility

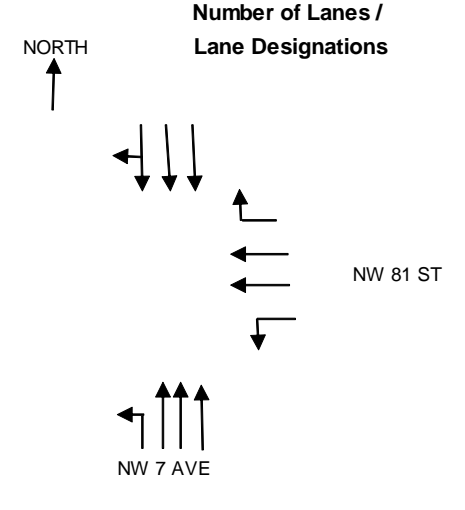
The purpose of this task is to determine the impacts of the Immigration Facility recently opened at the intersection of NW 7th Avenue and 88th Street.

- The consultant will collect all information available regarding the proposed federal immigration facility at NW 7th Avenue and 88th Street, including total square footage, total parking, estimated employees, estimated visitors, traffic generated, exterior waiting areas, security, ground floor plazas and set-backs.
- The consultant will visit existing immigration facilities and observe operating procedures and the impact on the neighborhoods.
- The consultant will estimate trips generated for the facility and apply that information, along with the detailed traffic count information (collected above), and perform a micro-simulation of the area for existing conditions plus the project.
- The micro-simulation must include traffic access to parking. The consultant will identify any changes in level of service at the intersections in the corridor based upon the construction of the federal immigration facility. FRANCISCO. Build and develop this simulation based on geometry and the counts.
 - **NEEDED RESULT:** Necessary intersection modifications related to the traffic generated by the immigration facility;
 - Necessary channelization modifications necessary to access parking;
- Using the methodology based on the 2000 Highway Capacity Manual (HCM 2000), Corradino shall determine the roadway's existing and proposed level of service for the existing conditions. The existing conditions ~~plus the project analysis~~ will be performed using the latest version Synchro/SimTraffic software. The software will analyze peak hour the level of service (LOS) for the individual intersection within the study area and the driveways that access the existing immigration facilities. Existing geometry and signal phasing and timings will be used as well as truck percentages and pedestrian volumes. In addition to existing roadway and existing roadway and plus project conditions, **Corradino will model up to two improvement alternatives to mitigate identified issues if any.**
- Based on discussions with the MPO, the consultant may additionally export those files to Highway Capacity Software (HCS), and then to CORSIM or VISSIM for additional animation or simulation analysis.

Appendix B – Field Observations

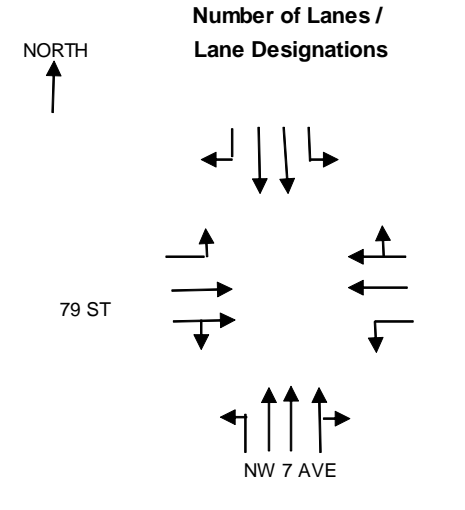
FIELD OBSERVATIONS

Project: NW 7 Avenue Traffic & Pedestrian Study

Number of Lanes / Lane Designations	Intersection NW 7 AVE / 81 ST	
	Date: 6/4/2009	Time: 7:30-8:30 AM
 <p>NORTH</p> <p>NW 81 ST</p> <p>NW 7 AVE</p>	Pavement condition: Good conditions all 4 approaches.	
	Pavement markings / signs: Ped xing markings on all 4 approaches in good conditions.	
	Traffic flow and operations:	

Additional observations / Notes

Wheel chair ramps with anti-skid mats at all 4 corners ped xings.
Do not appear to have R/W for road widening at intersection.
Ped xing signals and activation buttons at all 4 corners.
Very few pedestrians observed.

Number of Lanes / Lane Designations	Intersection NW 7 AVE / 79 ST	
	Date: 6/4/2009	Time: 7:30-8:30 AM
 <p>NORTH</p> <p>79 ST</p> <p>NW 7 AVE</p>	Pavement condition: Good conditions all 4 approaches.	
	Pavement markings / signs: Ped xing markings on all 4 approaches in good conditions. Color pavers at all 4 ped xings.	
	Traffic flow and operations:	

Additional observations / Notes

Wheel chair ramps with anti-skid mats at all 4 corners ped xings.
Do not appear to have R/W for road widening at intersection.
Ped xing signals and activation buttons at all 4 corners.
Very few pedestrians observed.

Project: NW 7 Avenue Traffic & Pedestrian StudyAdditional observations / Notes

Wheel chair ramps with anti-skid mats at all 4 corners ped xings.
Do not appear to have R/W for road widening at intersection.
Ped xing signals and activation buttons at all 4 corners.
Very few pedestrians observed.

Additional observations / Notes

Wheel chair ramps with anti-skid mats at all 4 corners ped xings.
Do not appear to have R/W for road widening at intersection.
Ped xing signals and activation buttons at all 4 corners.
Very few pedestrians observed.

FIELD OBSERVATIONS

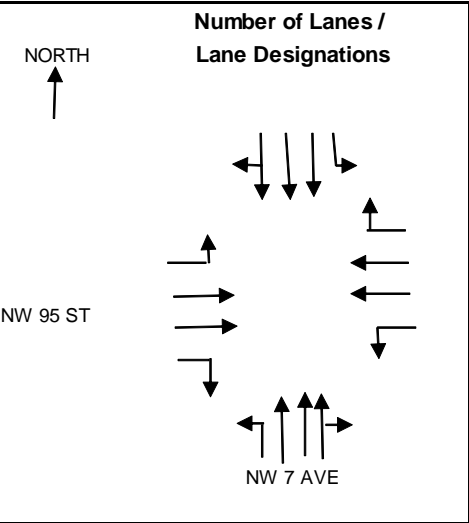
Project: NW 7 Avenue Traffic & Pedestrian Study

Intersection NW 7 Ave / 95 St	
Date: 6/4/2009	Time: 7:30-8:30 AM
Pavement condition: Good conditions all 4 approaches.	
Pavement markings / signs: Ped xing markings on all 4 approaches in good conditions. Color pavers at all 4 ped xings.	
Traffic flow and operations:	

NORTH
↑

NW 95 ST

Number of Lanes / Lane Designations



Additional observations / Notes

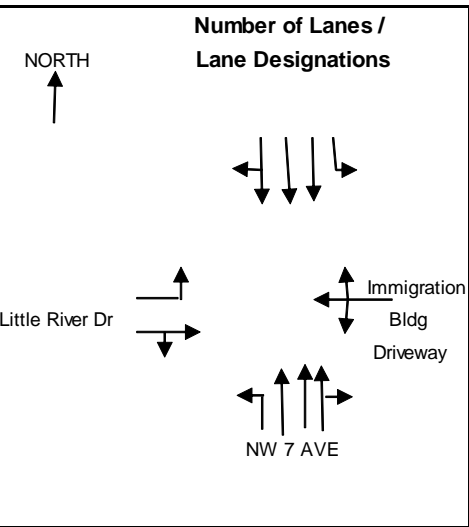
Wheel chair ramps with anti-skid mats at all 4 corners ped xings.
Do not appear to have R/W for road widening at intersection.
Ped xing signals and activation buttons at all 4 corners.
Very few pedestrians observed.

Intersection NW 7 Ave / Little River Dr	
Date: 6/4/2009	Time: 7:30-8:30 AM
Pavement condition: Good conditions all 4 approaches.	
Pavement markings / signs: Ped xing markings at south side of intersection only and in good condition.	
Traffic flow and operations:	

NORTH
↑

Little River Dr

Number of Lanes / Lane Designations

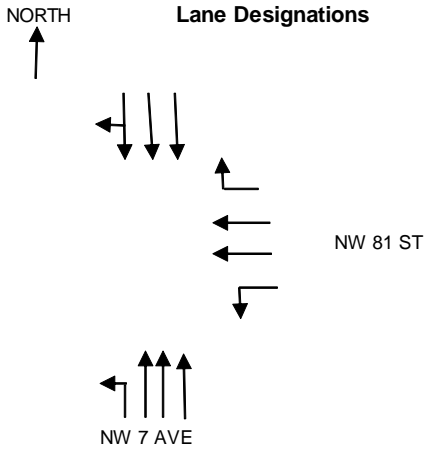


Additional observations / Notes

Wheel chair ramps with anti-skid mats at the south side xing (only one at the intersection).
Do not appear to have R/W for road widening at intersection.
Ped xing signals and activation buttons at existing xing.
NO pedestrians observed.

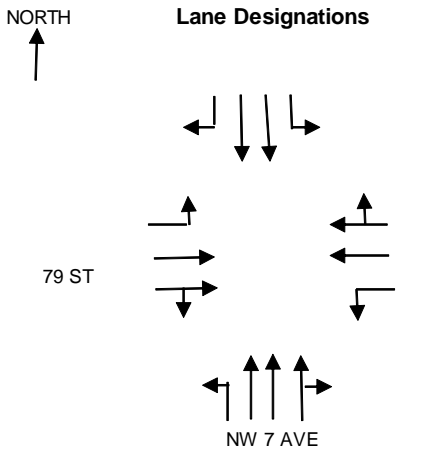
FIELD OBSERVATIONS

Project: NW 7 Avenue Traffic & Pedestrian Study

Number of Lanes / Lane Designations	Intersection
	NW 7 AVE / 81 ST
 <p>NORTH</p> <p>NW 81 ST</p> <p>NW 7 AVE</p>	Date: 6/18/2009 Thursday Time: 2:45 - 4:00 PM
	Pavement condition: Good conditions all 4 approaches.
	Pavement markings / signs: Ped xing markings on all 4 approaches in good conditions.
Traffic flow and operations: Traffic flow was good in all directions with no significant delays. Heavy veh volumes both direction on NW 7 Ave; however, cleared within 1 signal cycle. Very light ped traffic.	

Additional observations / Notes

Wheel chair ramps with anti-skid mats at all 4 corners ped xings.
Do not appear to have R/W for road widening at intersection.
Ped xing signals and activation buttons at all 4 corners.
Very few pedestrians observed.

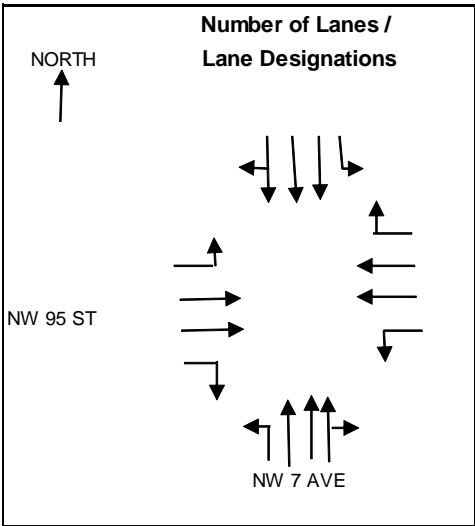
Number of Lanes / Lane Designations	Intersection
	NW 7 AVE / 79 ST
 <p>NORTH</p> <p>79 ST</p> <p>NW 7 AVE</p>	Date: 6/18/2009 Thursday Time: 2:45 - 4:00 PM
	Pavement condition: Good conditions all 4 approaches.
	Pavement markings / signs: Ped xing markings on all 4 approaches in good conditions. Color pavers at all 4 ped xings.
Traffic flow and operations: Very long veh queues EB NW 7 Ave needing 2 or more signal cycles to clear. Long NB veh queues, cleared within 1 cycle most of the time. Occassional EB veh queues from I-95 backs up blocking intersection not allowing N-S movements. I-95 traffic signals contribute to this. Light ped traffic.	

Additional observations / Notes

Wheel chair ramps with anti-skid mats at all 4 corners ped xings.
Do not appear to have R/W for road widening at intersection.
Ped xing signals and activation buttons at all 4 corners.
Very few pedestrians observed.

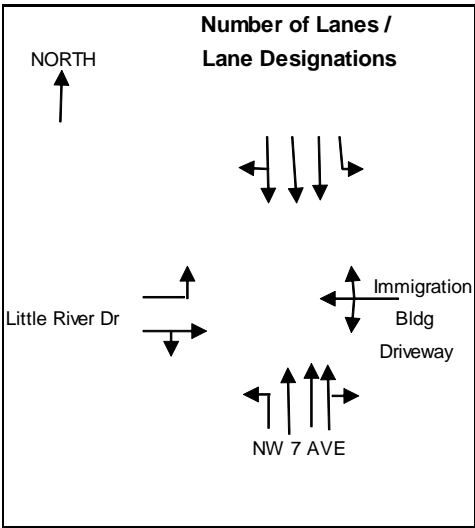
FIELD OBSERVATIONS

Project: NW 7 Avenue Traffic & Pedestrian Study

Number of Lanes / Lane Designations	Intersection
	NW 7 Ave / 95 St
	Date: 6/4/2009 Thursday Time: 4:45 to 5:45 PM
	Pavement condition: Good conditions all 4 approaches.
	Pavement markings / signs: Ped xing markings on all 4 approaches in good conditions. Color pavers at all 4 ped xings.
	Traffic flow and operations: Traffic moved well on all 4 approaches. There were long veh queues at the 7 Ave NB approach, but cleared within 1 signal cycle.

Additional observations / Notes

Wheel chair ramps with anti-skid mats at all 4 corners ped xings.
Do not appear to have R/W for road widening at intersection.
Ped xing signals and activation buttons at all 4 corners.
Very few pedestrians observed.

Number of Lanes / Lane Designations	Intersection
	NW 7 Ave / Little River Dr
	Date: 6/4/2009 Thursday Time: 4:45 to 5:45 PM
	Pavement condition: Good conditions all 4 approaches.
	Pavement markings / signs: Ped xing markings at south side of intersection only and in good condition.
	Traffic flow and operations: Traffic moved well along NW 7 Ave with no delays. Traffic volume on Little River Dr was very low. Only 4 veh observed exiting the immigration bldg.

Additional observations / Notes

Wheel chair ramps with anti-skid mats at the south side xing (only one at the intersection).
Do not appear to have R/W for road widening at intersection.
Ped xing signals and activation buttons at existing xing.
NO pedestrians observed.

FIELD OBSERVATIONS

Project: NW 7 Avenue Traffic & Pedestrian Study

<div data-label="Diagram"> <p>The diagram illustrates the intersection of NW 7 Ave and NW 95 St. A north arrow is located in the top left corner. NW 95 St runs horizontally across the middle of the diagram, with traffic flowing from left to right. NW 7 Ave runs vertically through the center, with traffic flowing from bottom to top. The intersection is a four-way stop. Lane designations are as follows: NW 95 St has two through lanes and two stop lanes; NW 7 Ave has two through lanes and two stop lanes. Pedestrian crossings are marked on all four approaches. The pavement condition is noted as 'Good conditions all 4 approaches.' The date and time of the observation are '6/18/2009 Thursday' and '2:45 - 4:00 PM'. The traffic flow and operations are noted as 'Traffic moved well in all directions. No significant delays. No ped activity observed.'</p> </div>	<div data-label="Text"> <p>Intersection NW 7 Ave / 95 St</p> <p>Date: 6/18/2009 Thursday Time: 2:45 - 4:00 PM</p> <p>Pavement condition: Good conditions all 4 approaches.</p> <p>Pavement markings / signs: Ped xing markings on all 4 approaches in good conditions. Color pavers at all 4 ped xings.</p> <p>Traffic flow and operations: Traffic moved well in all directions. No significant delays. No ped activity observed.</p> </div>
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Additional observations / Notes

Wheel chair ramps with anti-skid mats at all 4 corners ped xings.

Do not appear to have R/W for road widening at intersection.

Ped xing signals and activation buttons at all 4 corners.

Very few pedestrians observed.

<p>Number of Lanes / Lane Designations</p> <p>NORTH</p> <p>Little River Dr</p> <p>Immigration Bldg Driveway</p> <p>NW 7 AVE</p>	<p>Intersection NW 7 Ave / Little River Dr</p> <p>Date: 6/18/2009 Thursday Time: 2:45 - 4:00 PM</p> <p>Pavement condition: Good conditions all 4 approaches.</p> <p>Pavement markings / signs: Ped xing markings at south side of intersection only and in good condition.</p> <p>Traffic flow and operations: Traffic moved well in all directions. No significant delays. Light traffic on Little River Dr and in/out of Immigration bldg. Veh operations exiting both bldg driveways are good, except that 4 veh were observed turning left from the north DW eventhough there is signage to prevent LT movements, but no significant safety concerns were observed.</p> <p>Very light ped traffic.</p>
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Additional observations / Notes

Wheel chair ramps with anti-skid mats at the south side xing (only one at the intersection).

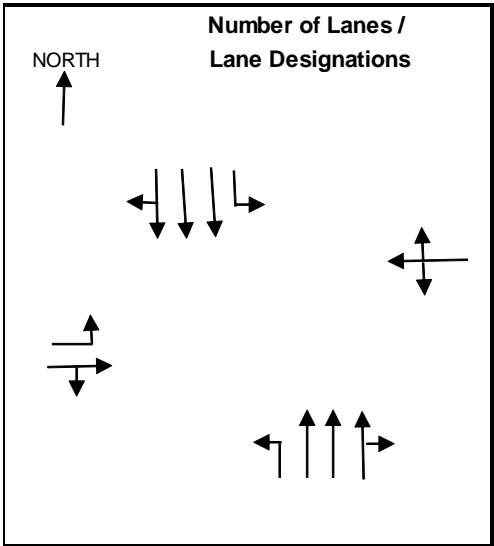
Do not appear to have R/W for road widening at intersection.

Ped xing signals and activation buttons at existing xing.

NO pedestrians observed.

FIELD OBSERVATIONS

Project: NW 7 Ave/US-441 Pedestrian Corridor Study



Intersection Little River Dr & NW 7 Ave
Date: 7/15/2009 Time: 12:00

Pavement condition:

- Excellent pavement conditions at intersection. Approaches are about average condition.
- Approaches are about average to below average condition.

Pavement markings / signs:

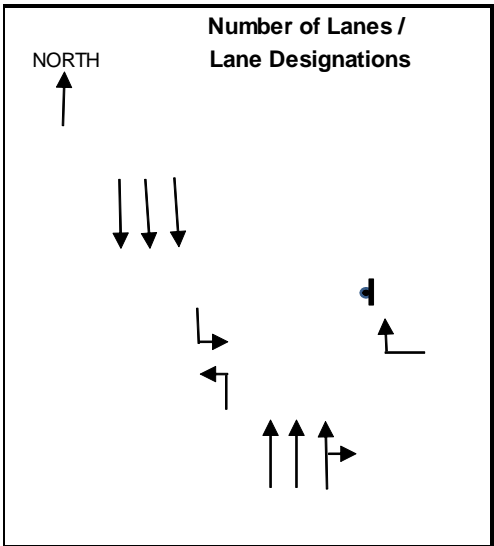
- Pedestrian crossing, with stamped pavement, on south and west sides of the intersection.
- Ped countdown and buttons present on South side of intersection only.
- ADA ramps pads exist at every crossing.

Traffic flow and operations:



Additional observations / Notes

- 30 MPH posting on Little River Dr.
- 40 MPH posted speed limit on NW 7 Ave.
- NB exclusive turn left lane stretches about 122 ft.
- SB exclusive turn left lane stretches about 140 ft.
- EB exclusive turn left lane stretches about 86 ft.



Intersection Immigration Building Northern Drive-way
Date: 7/15/2009 Time: 12:00

Pavement condition:

- NW 7 Ave pavement is at or below average.

Pavement markings / signs:

- EB movement has only turn right sign

Traffic flow and operations:

- At location, NW 7 Ave is free flow while the drive-way is controled by a stop sign.

Additional observations / Notes

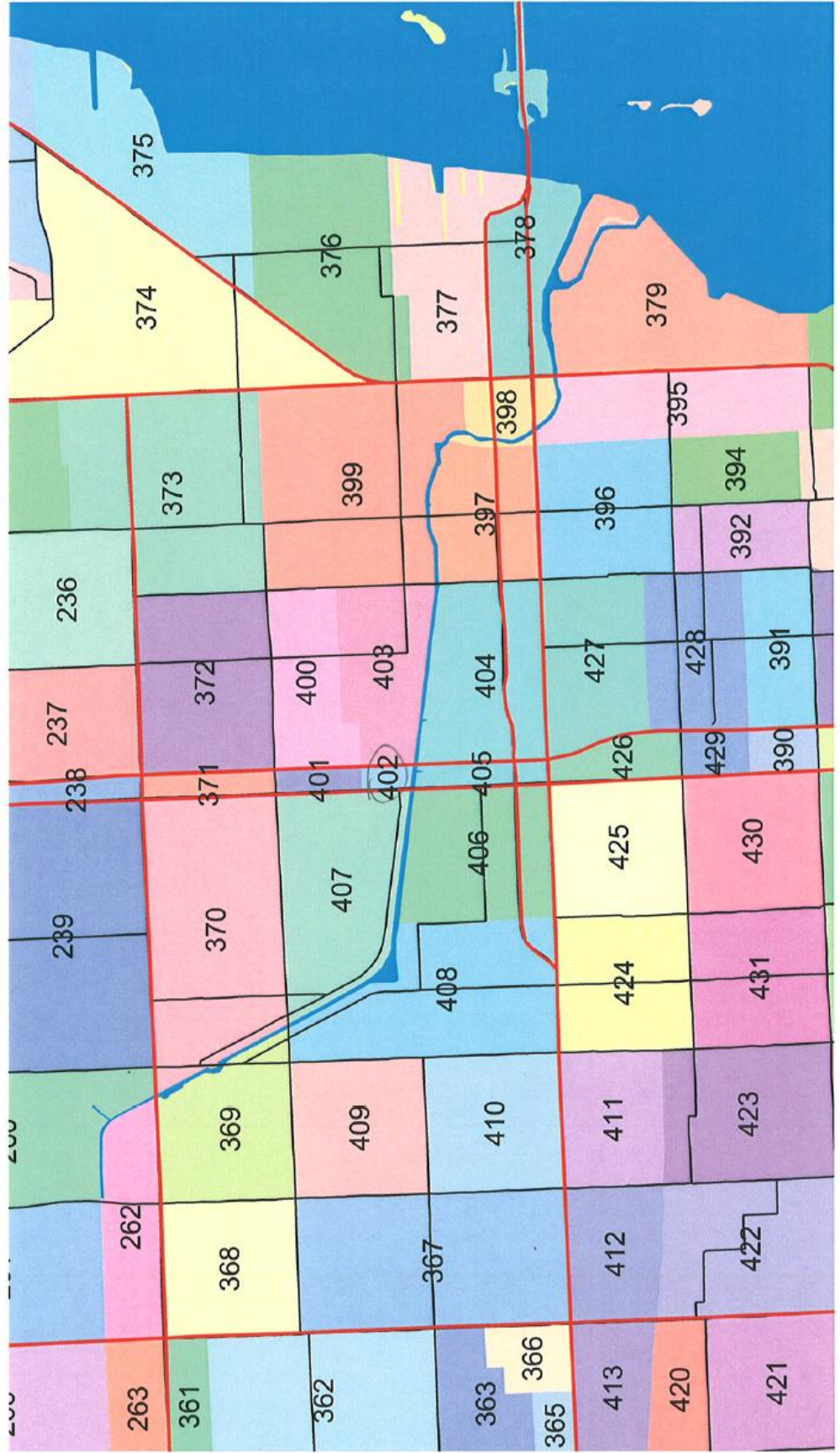
- Drive-way is located 270 ft North of Little River Dr & NW 7 Ave Intersection.
- NW 7th Ave is a 7 lane arterial in which the middle lane is used as a dual left turn lane.

**Appendix C – Seasonal Factors, TAZ Map, Trip
Distribution & FDOT Design Standards
(Left Turns)**

2007 Peak Season Factor Category Report - Report Type: ALL
Category: 8700 MIAMI DADE NORTH

Week	Dates	SF	PSCF
1	01/01/2007 - 01/06/2007	1.00	1.04
2	01/07/2007 - 01/13/2007	0.99	1.03
3	01/14/2007 - 01/20/2007	0.98	1.02
* 4	01/21/2007 - 01/27/2007	0.97	1.01
* 5	01/28/2007 - 02/03/2007	0.97	1.01
* 6	02/04/2007 - 02/10/2007	0.96	1.00
* 7	02/11/2007 - 02/17/2007	0.95	0.99
* 8	02/18/2007 - 02/24/2007	0.95	0.99
* 9	02/25/2007 - 03/03/2007	0.95	0.99
*10	03/04/2007 - 03/10/2007	0.95	0.99
*11	03/11/2007 - 03/17/2007	0.95	0.99
*12	03/18/2007 - 03/24/2007	0.96	1.00
*13	03/25/2007 - 03/31/2007	0.96	1.00
*14	04/01/2007 - 04/07/2007	0.97	1.01
*15	04/08/2007 - 04/14/2007	0.97	1.01
*16	04/15/2007 - 04/21/2007	0.98	1.02
17	04/22/2007 - 04/28/2007	0.98	1.02
18	04/29/2007 - 05/05/2007	0.99	1.03
19	05/06/2007 - 05/12/2007	0.99	1.03
20	05/13/2007 - 05/19/2007	0.99	1.03
21	05/20/2007 - 05/26/2007	1.00	1.04
22	05/27/2007 - 06/02/2007	1.01	1.05
23	06/03/2007 - 06/09/2007	1.02	1.06
24	06/10/2007 - 06/16/2007	1.03	1.07
25	06/17/2007 - 06/23/2007	1.04	1.08
26	06/24/2007 - 06/30/2007	1.04	1.08
27	07/01/2007 - 07/07/2007	1.04	1.08
28	07/08/2007 - 07/14/2007	1.04	1.08
29	07/15/2007 - 07/21/2007	1.04	1.08
30	07/22/2007 - 07/28/2007	1.04	1.08
31	07/29/2007 - 08/04/2007	1.03	1.07
32	08/05/2007 - 08/11/2007	1.03	1.07
33	08/12/2007 - 08/18/2007	1.03	1.07
34	08/19/2007 - 08/25/2007	1.03	1.07
35	08/26/2007 - 09/01/2007	1.03	1.07
36	09/02/2007 - 09/08/2007	1.04	1.08
37	09/09/2007 - 09/15/2007	1.04	1.08
38	09/16/2007 - 09/22/2007	1.04	1.08
39	09/23/2007 - 09/29/2007	1.03	1.07
40	09/30/2007 - 10/06/2007	1.03	1.07
41	10/07/2007 - 10/13/2007	1.02	1.06
42	10/14/2007 - 10/20/2007	1.02	1.06
43	10/21/2007 - 10/27/2007	1.02	1.06
44	10/28/2007 - 11/03/2007	1.01	1.05
45	11/04/2007 - 11/10/2007	1.01	1.05
46	11/11/2007 - 11/17/2007	1.00	1.04
47	11/18/2007 - 11/24/2007	1.00	1.04
48	11/25/2007 - 12/01/2007	1.00	1.04
49	12/02/2007 - 12/08/2007	1.00	1.04
50	12/09/2007 - 12/15/2007	1.00	1.04
51	12/16/2007 - 12/22/2007	0.99	1.03
52	12/23/2007 - 12/29/2007	0.99	1.03
53	12/30/2007 - 12/31/2007	0.98	1.02

* Peak Season



NW 7 Avenue
AM Trip Distribution

100	1,300	250	WBR	50			0.8	WBR						
			WBT	400			99	WBT						
SBR	SBT	SBL	WBL	200	NW 95TH ST		SBR	SBT	SBL	WBL	15			
	80	EBL	NBL	NBT	NBR				EBL	NBL	NBT	NBR	1,590	
	450	EBT	70	350	150				EBT	1	3	1	570	
	90	EBR					0.1	7	EBR	12%	61%			
			WBR	30				50%	WBR	3			60%	50
0	1,600	30	WBT	0			61	61	WBT					60
SBR	SBT	SBL	WBL	10	N DWY		SBR	SBT	SBL	WBL	0		N DWY	0%
	0	EBL	NBL	NBT	NBR				EBL	NBL	NBT	NBR		
	0	EBT	0	650	30				EBT	2	65			60
	0	EBR							EBR		50%			
			WBR	20					WBR	2				40%
10	1,600	30	WBT	0				61	WBT					
SBR	SBT	SBL	WBL	10	LITTLE RIVER DR		SBR	SBT	SBL	WBL	9		LITTLE RIVER DR	100%
	10	EBL	NBL	NBT	NBR				EBL	NBL	NBT	NBR		
	0	EBT	20	650	30				EBT	65	65			
	60	EBR							EBR					
			WBR	150			5%	##	WBR	28				
80	1,400	0	WBT	400			0	9	WBT					1,480
SBR	SBT	SBL	WBL	150	NW 81ST ST		SBR	SBT	SBL	WBL			NW 81ST ST	
	0	EBL	NBL	NBT	NBR		0	0	EBL	NBL	NBT	NBR		
	0	EBT	10	550	0				EBT	102				700
	0	EBR							EBR	0.79				
			WBR	70			##	##	WBR	13				
200	1,100	300	WBT	250			1	6	2	WBT				1,600
SBR	SBT	SBL	WBL	60	NW 79TH ST		SBR	SBT	SBL	WBL			NW 79TH ST	
	150	EBL	NBL	NBT	NBR		0.3	27	EBL	NBL	NBT	NBR		
	800	EBT	40	350	150				EBT	63				570
	40	EBR							EBR	0.61				

Existing Conditions

Committed Development

NW 7 Avenue
PM Trip Distribution

60 550 200	SBR	SBT	SBL	WBR 150	NW 95TH ST
				WBT 450	
				WBL 200	
				NBL NBT NBR	
150	EBL			150 1,100 250	
450	EBT				
90	EBR				
0 850 0	SBR	SBT	SBL	WBR 10	N DWY
				WBT 0	
				WBL 0	
				NBL NBT NBR	
0	EBL			0 1,600 10	
0	EBT				
0	EBR				
30 850 10	SBR	SBT	SBL	WBR 10	LITTLE RIVER DR
				WBT 0	
				WBL 10	
				NBL NBT NBR	
20	EBL			60 1,600 10	
0	EBT				
50	EBR				
150 750 0	SBR	SBT	SBL	WBR 250	NW 81ST ST
				WBT 550	
				WBL 150	
				NBL NBT NBR	
0	EBL			60 1,400 0	
0	EBT				
0	EBR				
150 500 250	SBR	SBT	SBL	WBR 80	NW 79TH ST
				WBT 350	
				WBL 80	
				NBL NBT NBR	
300	EBL			100 1,100 150	
750	EBT				
60	EBR				

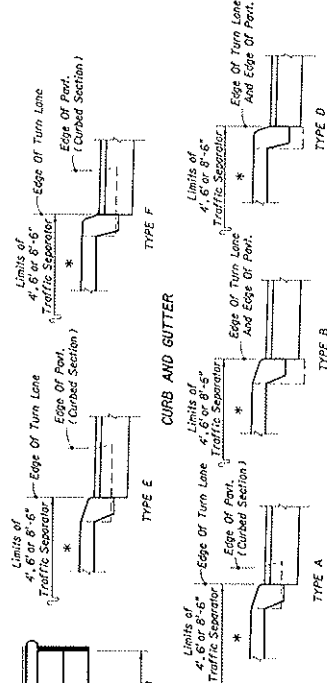
Existing Conditions

0.7 9	SBR	SBT	SBL	WBR	NW 95TH ST	
				WBT		
				WBL 3		
				NBL NBT NBR		840
				EBL		
				EBT 2 16 4		1,500
0.1	2	EBR		10% 73%		
0%	SBR	SBT	SBL	WBR 11	N DWY	50% 20
				WBT		10
				WBL 0		0%
				NBL NBT NBR		
				EBL		
				EBT 11 7		20
				EBR		50%
14	SBR	SBT	SBL	WBR 11	LITTLE RIVER DR	50%
				WBT		
				WBL 25		100%
				NBL NBT NBR		
				EBL		
				EBT 7 7		
				EBR		
## 4	SBR	SBT	SBL	WBR 2	NW 81ST ST	
				WBT		900
				WBL		
				NBL NBT NBR		
0	0	EBL				
		EBT		12		1,650
		EBR		0.85		
## 3	SBR	SBT	SBL	WBR 1	NW 79TH ST	
				WBT		900
				WBL		
				NBL NBT NBR		
0.2	2	EBL				
		EBT		9		1,480
		EBR		0.74		

Committed Development

TURN LANES • CURBED AND UNCURBED MEDIANS

URBAN CONDITIONS				RURAL CONDITIONS			
Design Speed (mph)	Entry Clearance L_1	Brake To Stop Distance L_2	Total Decel. Distance L_3	Brake To Stop Distance L_2	Total Decel. Distance L_3	Clearance L_4	Clearance L_5
35	25	70'	145'	80'	160'	—	—
40	30	80'	155'	120'	180'	—	—
45	35	90'	165'	135'	195'	—	—
50	40/44	105'	180'	160'	220'	180'	180'
55	48	125'	205'	185'	245'	225'	225'
60	52	145'	225'	210'	265'	265'	265'
65	55	170'	250'	235'	290'	290'	290'

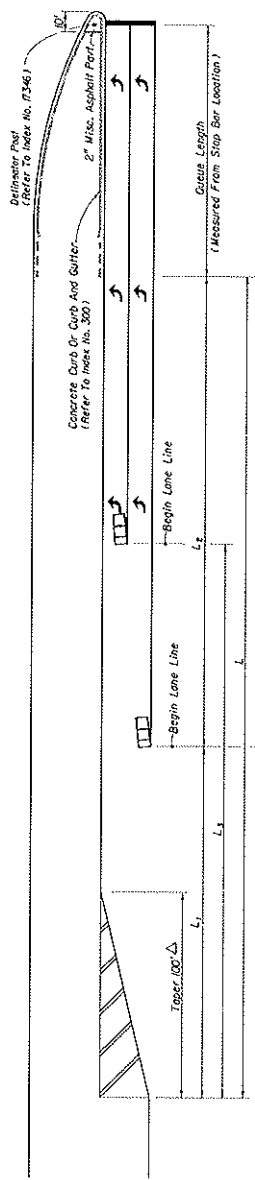


MEDIAN CURB AND TRAFFIC SEPARATOR JUNCTURE DETAILS

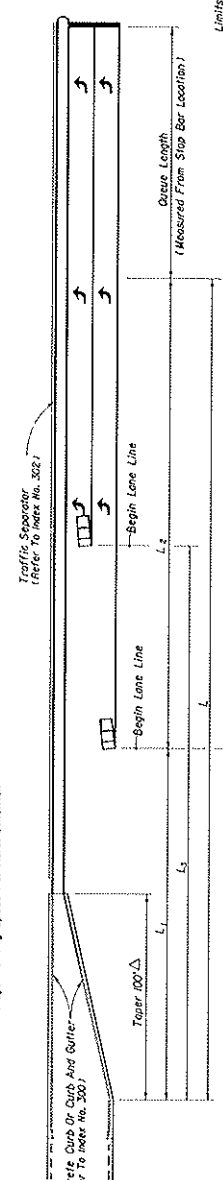
- GENERAL NOTES**
- The plan views shown are for turn lane taper shapes and dimensions for use only, they do not prescribe the use of curb, curb and gutter, shoulders nor separators specifically to either rural or urban conditions. Total deceleration distances must not be reduced except where lesser values are imposed by uncollectable control points.
 - Right turn lane tapers and distances applied to left turn lanes under stop control conditions.
 - These left turn configurations apply to continuous left turn lanes only where specifically called for in the plans.
 - For pavement markings see Index No. 17346.

DESIGN NOTES

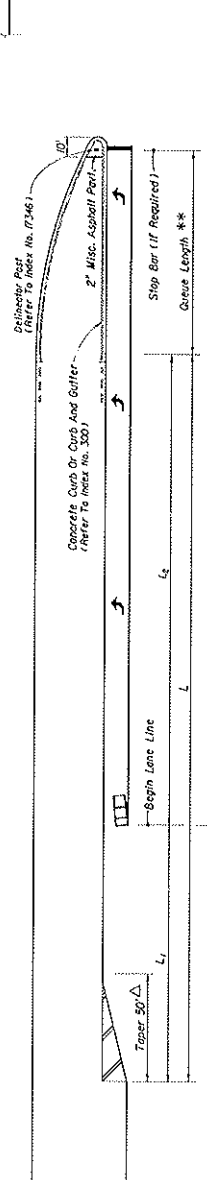
- Basic for turn lane configurations:
 - Minimum 10' wide.
 - Stop bar (if required) with or without stop control.
 - Reaction preceding entry point.
 - Minimum braking distance for urban conditions.
 - 75 min. for L_2 .
 - Minimum deceleration rates for rural conditions (AASHTO 2000 threshold rate of 11.2 ft/s²).



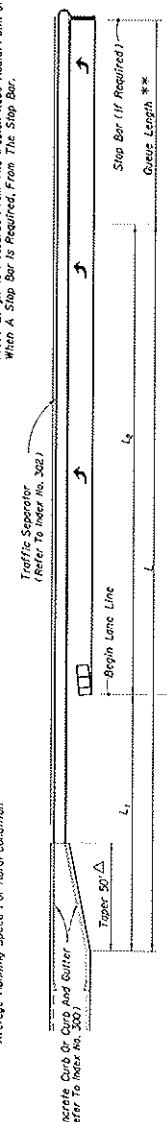
FLUSH AND/OR CURBED SEPARATION



RAISED SEPARATION DOUBLE LEFT TURNS



FLUSH AND/OR CURBED SEPARATION



RAISED SEPARATION SINGLE LEFT TURNS

DESIGN NOTES

- The length of taper may be increased to L_1 for single left turns and L_2 for double left turns when:
 - a. left turn lanes are not used for through traffic.
 - b. through vehicle queues will not block access to left turn lane.
 - c. Approved by District Design Engineer.

**Appendix D – NW 7th Avenue 2009 AADT
Volumes**

NW 7th Avenue-Existing Conditions

NW 7th Avenue between Broward County line and SR 836 in Miami-Dade county is the study corridor under evaluation. NW 7 Avenue is a five lane roadway between SR 836 and NW 79th street with a continuous left turn lane. It is a seven lane roadway between NW 79th Street to NW 159th street and from NW 7th avenue extension to Broward County line with a continuous left turn lane.

This report determines the existing conditions and traffic volumes for the study corridor under evaluation. Multiple sources were utilized to determine the existing conditions as traffic counts for the entire length of the study corridor were not available. The following sources were used to determine the existing traffic volumes

- ☐ Year 2008 FDOT AADT's
- ☐ Year 2005 FDOT AADT's
- ☐ South East Regional Planning Model (SERPM) 6.5 with 2005 Base Year
- ☐ Historical AADT between Year 2002 and Year 2008

Year 2008 AADT's were used to determine Year 2009 volumes at locations where Year 2008 AADT's were available with slight adjustments. However, Year 2008 AADT's were not available on the entire length of the study corridor. The information gaps were filled out by using SERPM6.5 Time of Day (TOD) model volumes.

SERPM6.5 Post Processing

SERPM 6.5 model results were reviewed in the study corridor. When compared against Year 2005 AADT's, as shown in Table 1, the model, in general, underestimated daily traffic volumes. Using model volumes directly is not recommended. Hence, a post processing procedure was developed to make Year 2005 model volumes in line with Year 2005 AADT's. Since Year 2005 AADT's are not available throughout, the study corridor has been divided into 16 segments for analysis purpose. Each segment was identified using daily volumes as basis. In other words, continuous links with similar volumes were identified as one segment for analysis purpose. The different roadway

segments, Year 2005 model volumes and Year 2005 post processed model volumes have been presented in Figure 1.

Table 1: Comparison of Year 2005 AADT and SERPM Model Volumes

Roadway Segment	Location	Y2005 AADT	Y2005 Model Volumes	Vol/Cnt Ratio
	N of NW 199th St	70,000	58,568	0.84
NW 2nd Ave	N of NW 183rd St	61,000	67,128	1.10
	S of 183rd St	60,500	75,628	1.25
NW 7th Ave SB	SB 200' N of I-95	25,000	24,210	0.97
NW 7th Ave NB	NB Under I-95	38,500	26,425	0.69
	S of NW 151st St	24,500	4,120	0.17
	N of 119th St	35,000	20,259	0.58
	S of 119th St	39,500	17,970	0.45
	N of NW 95th St	33,000	23,267	0.71
	N of NW 81st St	38,500	26,598	0.69
NW 7th Ave	S of NW 79th St	36,132	15,655	0.43
	N of NW 62nd St	25,000	12,880	0.52
	N of NW 54th St	23,500	20,925	0.89
	S of NW 46th St	23,000	27,887	1.21
	N of NW 20th St	25,000	21,657	0.87
	S of NW 20th St	29,252	16,571	0.57

Determining Growth Rates per Year

Year 2005 AADT’s and Year 2008 AADT’s were collected for all the available segments and growth rates per year were calculated as shown in Table 2. It is observed from Table 2 that most of the roadway segments showed a negative growth rate between Year 2005 and Year 2008. Hence, historical AADT’s for these segments were collected and reviewed. It was observed that the AADT’s at these locations were decreasing steadily from Year 2005 to Year 2008. Hence, a default growth rate of 1.0 was assumed at locations where negative growth was observed.

Determining Year 2009 Traffic Volumes

The calculated growth rates as shown in Table 2 were applied to Year 2005 post processed model volumes to obtain Year 2009 traffic volumes at locations, where Year 2008 AADT's were not available. Growth rates were also applied to Year 2008 AADT's at locations, where Year 2008 AADT's were available to obtain Year 2009 model volumes. The computed Year 2009 model volumes are tabulated in Table 2 and presented in Figure 2.

Table 2: Computed Growth Rates and Year 2009 Computed Model Volumes for roadway segments in Study Area

Sno	Roadway Segment	From	To	Y2005 AADT	Y2008 AADT	Y2007 AADT	Growth Rate (%)	Adj Growth Rate (%)	Y2009 Computed Model Volumes
1		SW 41st St	NW 199th St	70,000	58,000		-5.71	1.00	58,580
2	NW 2nd Ave	NW 199th St	NW 183rd St	61,000	60,500		-0.27	1.00	61,105
3		NW 183rd St	NW 7th Ave Ext	60,500	57,500		-1.65	1.00	58,075
4	NW 7th Ave -SB	NW 7th Ave Ext	NW 159th St	25,000	24,000		-1.33	1.00	24,240
5	NW 7th Ave -NB	NW 7th Ave Ext	NW 159th St	38,500	25,500		-11.26	1.00	25,755
6		Golden Glades Int	NW 135th St	24,500	27,500		4.08	4.08	28,622
7		NW 135th St	NW 119th St	35,000	34,000		-0.95	1.00	34,340
8		NW 119th St	NW 103rd St	39,500	37,500		-1.69	1.00	37,875
9		NW 103rd St	NW 95th St	33,000	32,000		-1.01	1.00	32,320
10		NW 95th St	NW 81st St	38,500	37,000		-1.30	1.00	37,370
11	NW 7th Ave	NW 81st St	NW 71st St	36,132	0	31,500	-6.41	1.00	36,992
12		NW 71st St	NW 62nd St	25,000	21,500		-4.67	1.00	21,715
13		NW 62nd St	NW 54th St	23,500	24,500		1.42	1.42	24,848
14		NW 54th St	NW 43rd St	23,000	21,000		-2.90	1.00	21,210
15		NW 43rd St	NW 20th St	25,000	22,000		-4.00	1.00	22,220
16		NW 20th St	SR 836	29,252	0	22,000	-12.40	1.00	31,003

Figure 1(Contd) : Year 2005 AADT, Year 2005 Model Volumes and Post Processed Model

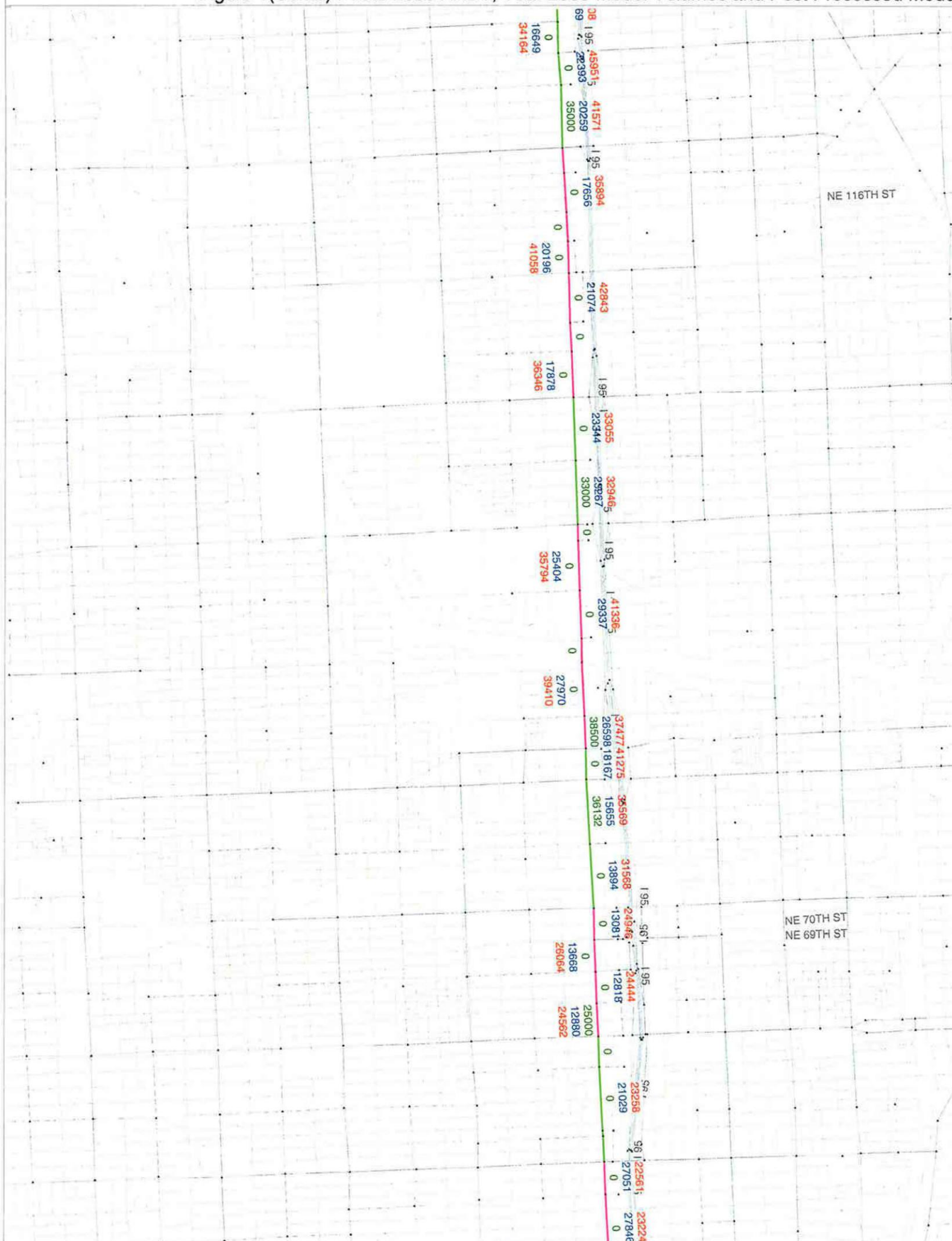
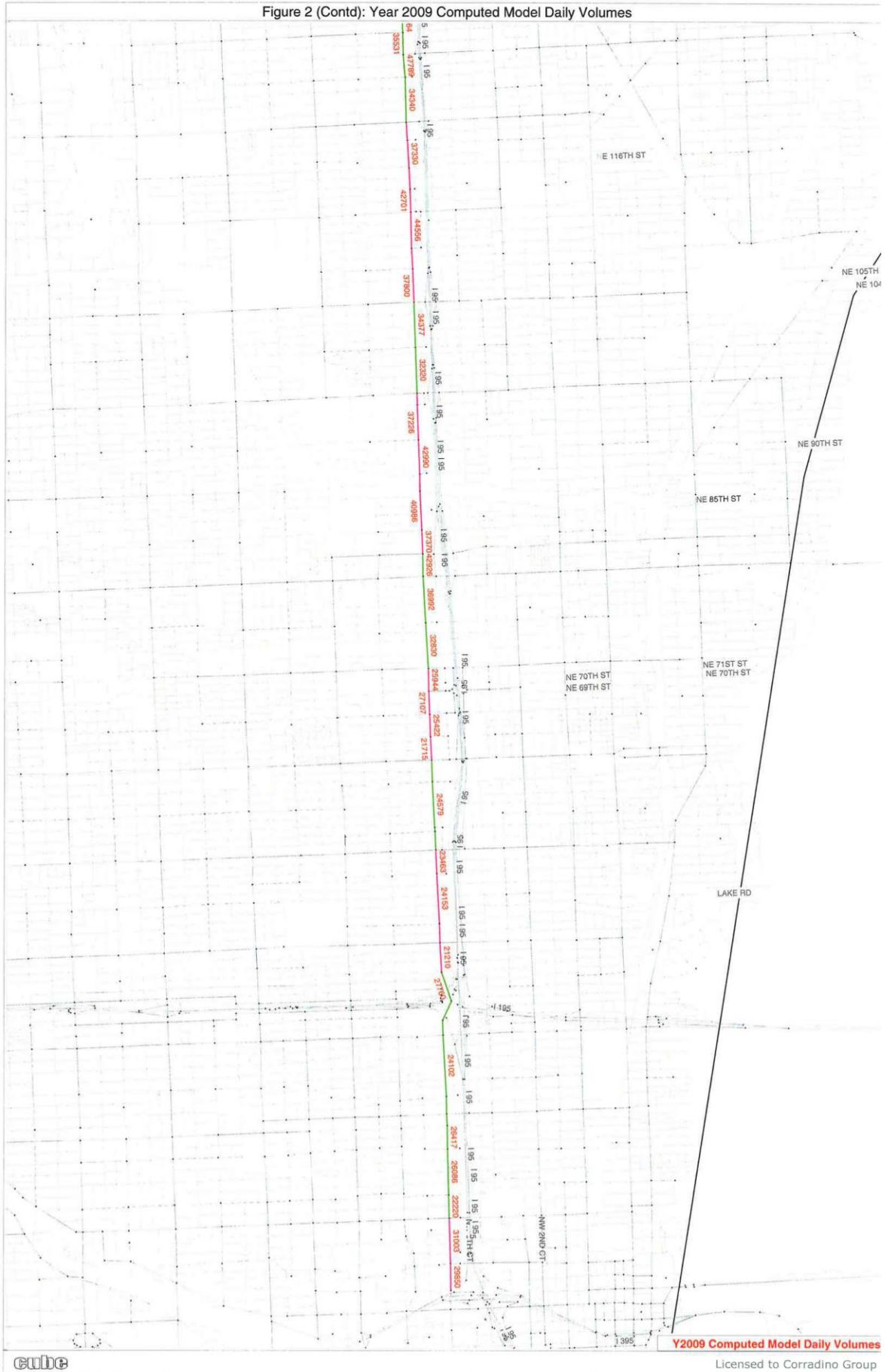


Figure 2: Year 2009 Computed Model Daily Volumes



Figure 2 (Contd): Year 2009 Computed Model Daily Volumes



Appendix E – Intersection Turning Movement Counts

AM Movement Counts

**AM PEAK HOUR VOLUMES
SUMMARY OF VEHICLE MOVEMENTS**

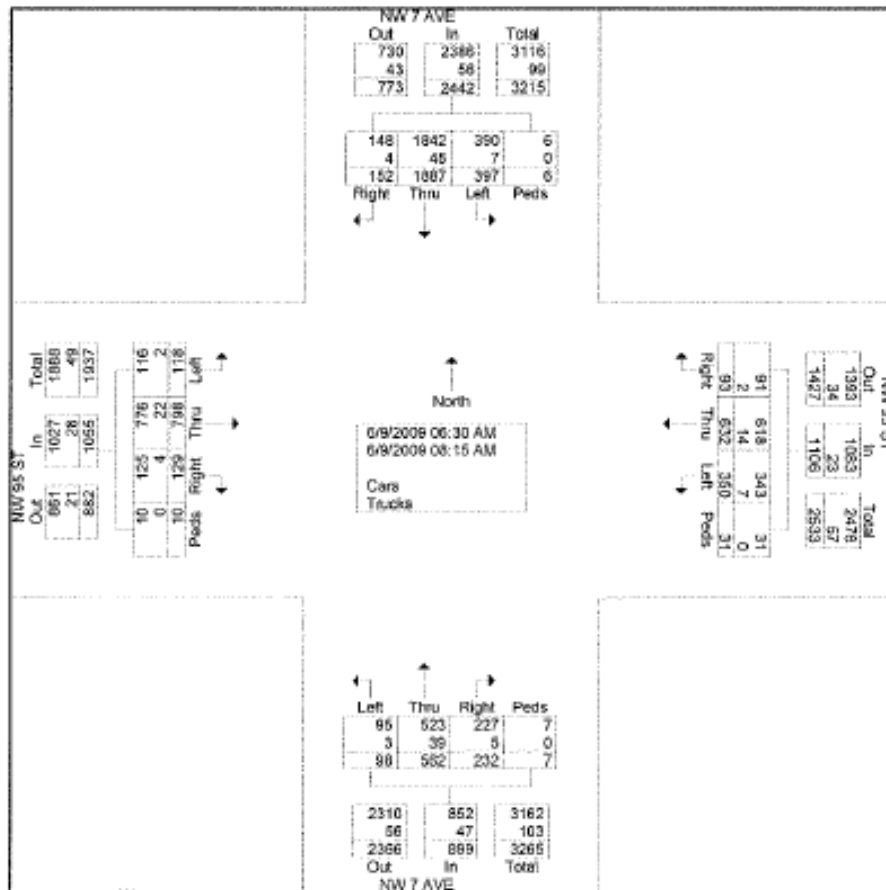
Location	Move	2009 Existing							
		PHF	Peds	Total Vehs	Trucks	Cars	Truck %	2007 SF	2009 Prj Vol
				Volume					Adj Vol ¹
1	NBL			31	1	30	4%	1.02	32
	NBT	0.85	6	321	21	300	7%	1.02	328
	NBR			116	14	102	13%	1.02	119
NW 7 AVE & NW 79 ST	SBL			265	7	258	3%	1.02	271
	SBT	0.91	6	1072	21	1,051	2%	1.02	1,094
	SBR			156	2	154	2%	1.02	160
7:30 - 8:30 AM	EBL			144	6	138	5%	1.02	147
	EBT	0.93	26	749	88	661	12%	1.02	764
	EBR			37	3	34	9%	1.02	38
06/09/09	WBL			51	4	47	8%	1.02	53
	WBT	0.93	15	220	18	202	9%	1.02	225
	WBR			59	2	57	4%	1.02	61
2	NBL			6	1	5	17%	1.02	7
	NBT	0.84	5	506	28	478	6%	1.02	517
	NBR			0	0	0	0%	1.02	0
NW 7 AVE & NW 81 ST	SBL			0	0	0	0%	1.02	0
	SBT	0.91	7	1370	37	1,333	3%	1.02	1,398
	SBR			77	4	73	6%	1.02	79
7:30 - 8:30 AM	EBL			0	0	0	0%	1.02	0
	EBT	0.63	5	0	0	0	0%	1.02	0
	EBR			0	0	0	0%	1.02	0
06/09/09	WBL			119	0	119	0%	1.02	122
	WBT	0.90	1	350	19	331	6%	1.02	357
	WBR			114	3	111	3%	1.02	117
3	NBL			10	1	9	10%	1.02	11
	NBT	0.88	6	609	28	581	5%	1.02	622
	NBR			27	1	26	4%	1.02	28
NW 7 AVE & LITTLE RIVER DR	SBL			25	0	25	0%	1.02	26
	SBT	0.90	8	1512	37	1,475	3%	1.02	1,543
	SBR			6	0	6	0%	1.02	7
7:30 - 8:30 AM	EBL			5	0	5	0%	1.02	6
	EBT	0.88	0	0	0	0	0%	1.02	0
	EBR			51	0	51	0%	1.02	53
06/09/09	WBL			7	0	7	0%	1.02	8
	WBT	0.64	0	0	0	0	0%	1.02	0
	WBR			11	0	11	0%	1.02	12
4	NBL			0	0	0	0%	1.02	0
	NBT	0.89	5	593	27	566	5%	1.02	605
	NBR			22	0	22	0%	1.02	23
NW 7 AVE & IMMIGRAT	SBL			26	0	26	0%	1.02	27
	SBT	0.91	0	1474	34	1,440	3%	1.02	1,504
	SBR			0	0	0	0%	1.02	0
7:30 - 8:30 AM	EBL			0	0	0	0%	1.02	0
	EBT	0.25	4	0	0	0	0%	1.02	0
	EBR			0	0	0	0%	1.02	0
06/09/09	WBL			3	0	3	0%	1.02	4
	WBT	0.70	2	0	0	0	0%	1.02	0
	WBR			23	0	23	0%	1.02	24
5	NBL			66	3	63	5%	1.02	68
	NBT	0.91	4	343	19	324	6%	1.02	350
	NBR			132	1	131	1%	1.02	135
NW 7 AVE & NW 95 ST	SBL			238	2	236	1%	1.02	243
	SBT	0.92	1	1225	25	1,200	3%	1.02	1,250
	SBR			89	1	88	2%	1.02	91
7:30 - 8:30 AM	EBL			70	1	69	2%	1.02	72
	EBT	0.84	7	432	13	419	4%	1.02	441
	EBR			85	4	81	5%	1.02	87
06/09/09	WBL			190	2	188	2%	1.02	194
	WBT	0.90	19	361	8	353	3%	1.02	369
	WBR			49	1	48	3%	1.02	50

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Groups Printed- Cars - Trucks

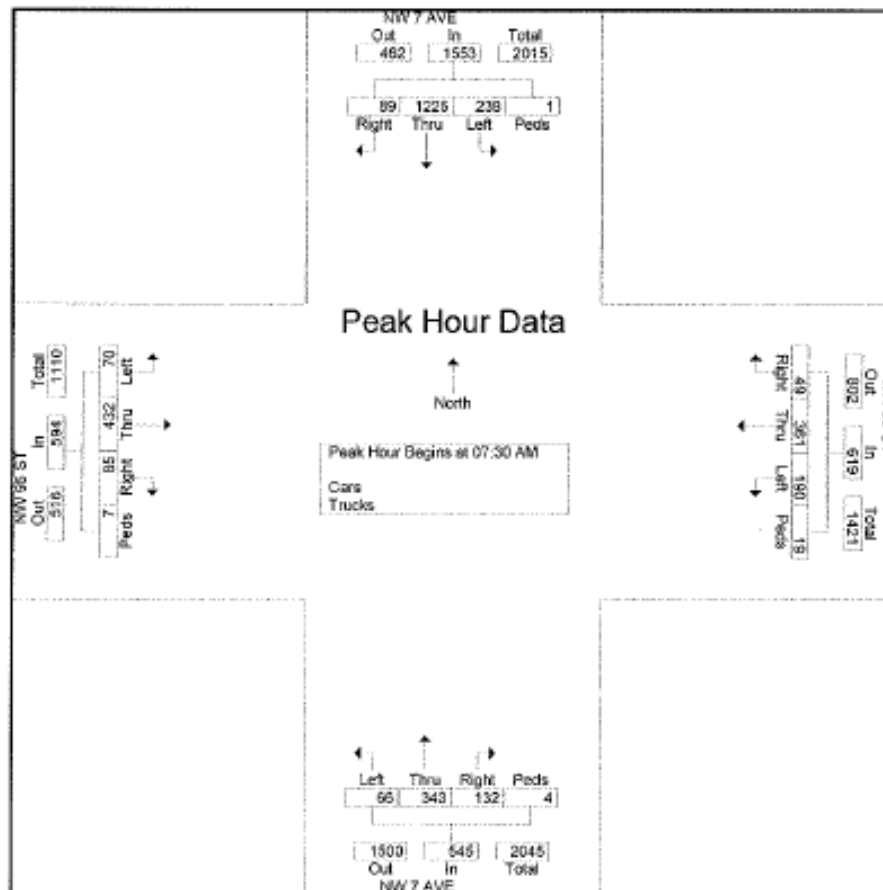
	NW 7 AVE Southbound					NW 95 ST Westbound					NW 7 AVE Northbound					NW 95 ST Eastbound					Int. Total	
	Right	Thru	Left	Peds	App. Tot	Right	Thru	Left	App. Tot	Peds	Right	Thru	Left	Peds	App. Tot	Right	Thru	Left	Peds	App. Tot		
06:30 AM	17	154	42	0	213	9	70	27	0	1	107	21	44	8	0	73	10	66	9	0	85	478
06:45 AM	19	148	35	1	203	10	81	42	4	0	137	16	53	5	0	74	5	101	14	0	120	534
Total	36	302	77	1	416	19	151	69	4	1	244	37	97	13	0	147	15	167	23	0	205	1012
07:00 AM	12	147	38	1	198	10	58	51	1	3	123	34	67	10	3	114	14	70	12	2	98	533
07:15 AM	15	213	44	3	275	15	62	40	3	0	120	29	55	9	0	93	15	129	13	1	158	646
07:30 AM	24	263	56	0	343	10	92	41	3	0	146	31	77	11	0	119	21	143	11	2	177	785
07:45 AM	19	288	59	0	366	10	91	44	3	2	150	33	93	20	4	150	24	114	12	5	155	821
Total	70	911	197	4	1182	45	303	176	10	5	539	127	292	50	7	476	74	456	48	10	588	2785
08:00 AM	18	339	63	0	420	8	86	54	2	1	151	35	90	20	0	145	28	86	8	0	122	838
08:15 AM	28	335	60	1	424	21	92	51	6	2	172	33	83	15	0	131	12	89	39	0	140	867
Grand Total	152	1897	397	6	2442	93	832	350	22	9	1106	232	562	96	7	899	129	798	118	10	1055	5502
Approch %	6.2	77.3	16.3	0.2		8.4	57.1	31.6	2	0.8		25.8	62.5	10.9	0.8		12.2	75.6	11.2	0.9		
Total %	2.8	34.3	7.2	0.1	44.4	1.7	11.5	6.4	0.4	0.2	20.1	4.2	10.2	1.8	0.1	16.3	2.3	14.5	2.1	0.2	19.2	
Cars	148	1842	390	6	2386	91	818	343	22	9	1083	227	523	95	7	852	125	776	116	10	1027	5348
% Cars	97.4	97.6	98.2	100	97.7	97.8	97.8	98	100	100	97.9	97.8	93.1	95.9	100	94.8	96.9	97.2	98.3	100	97.3	97.2
Trucks	4	45	7	0	56	2	14	7	0	0	23	5	39	3	0	47	4	22	2	0	28	154
% Trucks	2.6	2.4	1.8	0	2.3	2.2	2.2	2	0	0	2.1	2.2	6.9	3.1	0	5.2	3.1	2.8	1.7	0	2.7	2.8



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	NW 7 AVE Southbound					NW 95 ST Westbound					NW 7 AVE Northbound					NW 95 ST Eastbound						
Start Time	Right	Thru	Left	Peds	App. Totl	Right	Thru	Left	U-Turn	Peds	App. Totl	Right	Thru	Left	Peds	App. Totl	Right	Thru	Left	Peds	App. Totl	Vt. Total
Peak Hour Analysis From 06:30 AM to 08:15 AM - Peak 1 of 1																						
Peak Hour for Entire Intersection Begins at 07:30 AM																						
07:30 AM	24	263	56	0	343	10	92	41	3	0	146	31	77	11	0	119	21	143	11	2	177	785
07:45 AM	19	288	59	0	366	10	91	44	3	2	150	33	93	20	4	150	24	114	12	5	155	821
08:00 AM	18	339	63	0	420	8	86	54	2	1	151	35	90	20	0	145	28	86	8	0	122	838
08:15 AM	28	336	60	1	424	21	92	51	6	2	172	33	83	15	0	131	12	89	39	0	140	867
Total Volume	89	1225	238	1	1553	49	361	190	14	5	619	132	343	66	4	545	85	432	70	7	594	3311
% App. Total	5.7	78.9	15.3	0.1		7.9	58.3	30.7	2.3	0.8		24.2	62.9	12.1	0.7		14.3	72.7	11.8	1.2		
PHF	795	903	944	250	916	583	981	880	583	625	900	943	922	825	250	908	759	765	449	350	839	955

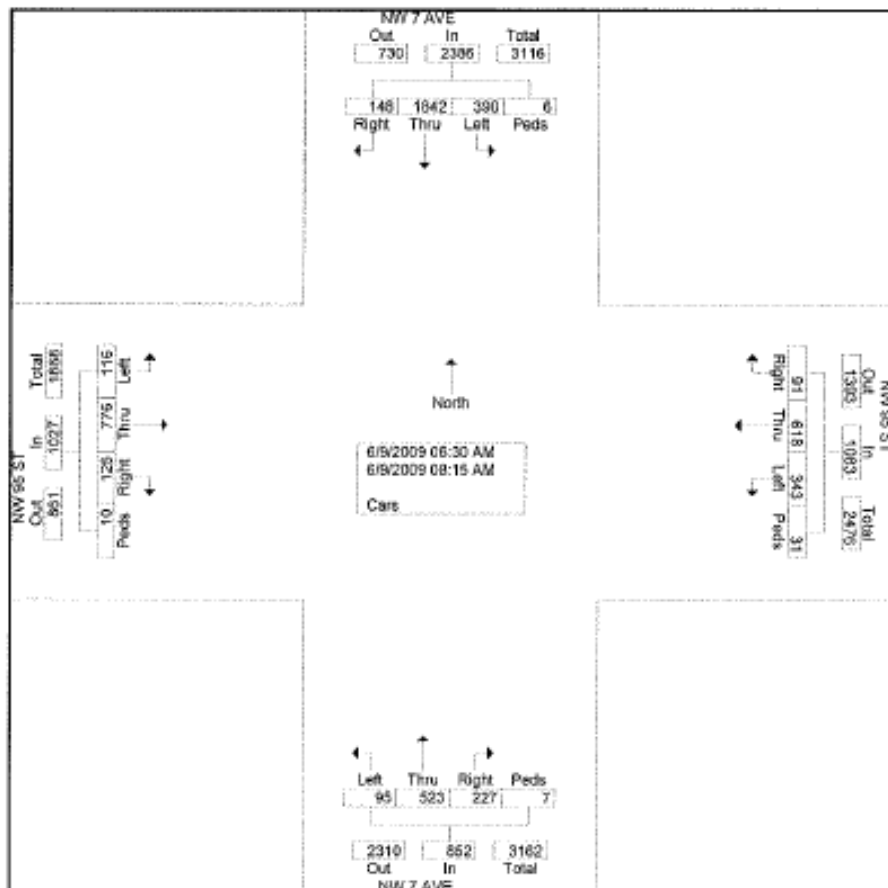


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Groups Printed- Cars

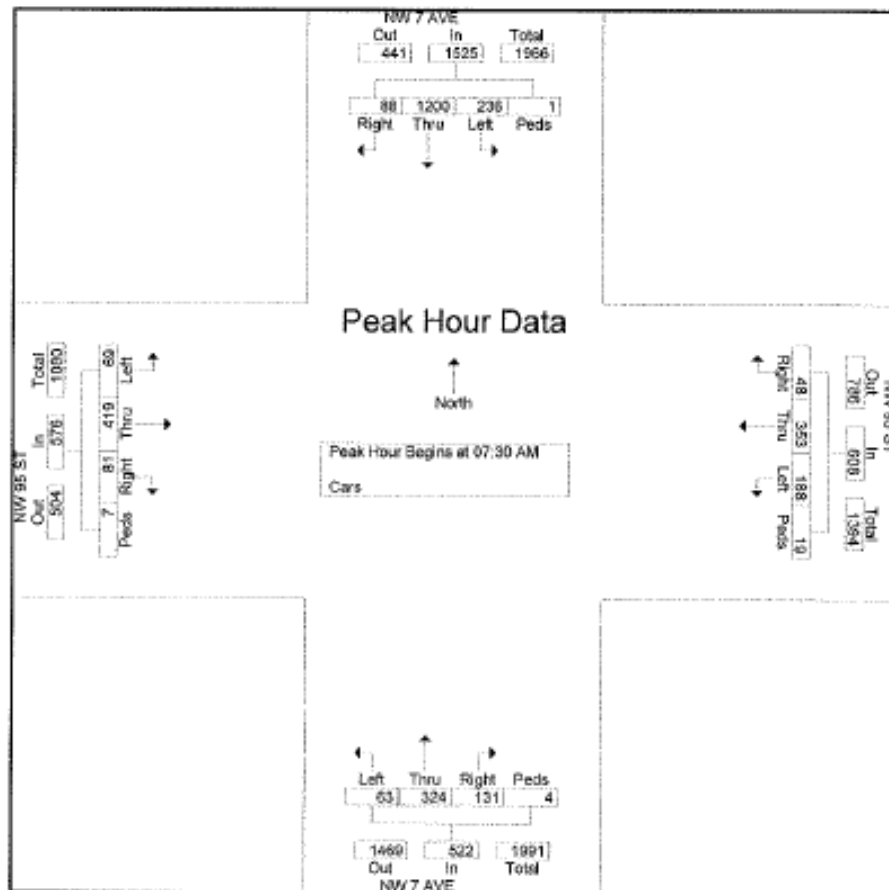
	NW 7 AVE					NW 95 ST						NW 7 AVE					NW 95 ST					Int. Total
	Southbound				App. Total	Westbound				Northbound		App. Total	Eastbound				App. Total					
Start Time	Right	Thru	Left	Peds		Right	Thru	Left	U-Turn	Peds	App. Total		Right	Thru	Left	Peds		Right	Thru	Left	Peds	App. Total
06:30 AM	17	151	41	0	209	8	69	26	0	1	104	21	39	8	0	68	10	63	9	0	82	463
06:45 AM	18	141	33	1	193	10	79	39	4	0	132	15	47	5	0	67	5	99	13	0	117	509
Total	35	292	74	1	402	18	148	65	4	1	236	36	86	13	0	135	15	162	22	0	199	972
07:00 AM	12	143	37	1	193	10	56	50	1	3	120	32	62	10	3	107	14	67	12	2	95	515
07:15 AM	13	207	43	3	266	15	61	40	3	0	119	28	51	9	0	88	15	128	13	1	157	630
07:30 AM	24	258	55	0	337	9	90	40	3	0	142	31	74	10	0	115	21	141	11	2	175	769
07:45 AM	19	283	59	0	361	10	90	44	3	2	149	32	87	20	4	143	24	107	12	5	148	801
Total	68	891	194	4	1157	44	297	174	10	5	530	123	274	49	7	453	74	443	48	10	575	2715
08:00 AM	18	332	63	0	413	8	83	53	2	1	147	35	85	19	0	139	24	86	8	0	118	817
08:15 AM	27	327	59	1	414	21	90	51	6	2	170	33	78	14	0	125	12	85	38	0	135	844
Grand Total	148	1642	390	6	2386	91	618	343	22	9	1063	227	523	95	7	852	125	776	116	10	1027	5348
Approch %	6.2	77.2	16.3	0.3		8.4	67.1	31.7	2	0.8		26.6	61.4	11.2	0.8		12.2	75.6	11.3	1		
Total %	2.8	34.4	7.3	0.1	44.6	1.7	11.6	6.4	0.4	0.2	20.3	4.2	9.8	1.8	0.1	15.9	2.3	14.6	2.2	0.2	19.2	



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	NW 7 AVE Southbound					NW 95 ST Westbound					NW 7 AVE Northbound					NW 95 ST Eastbound						
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 08:30 AM to 08:15 AM - Peak 1 of 1																						
Peak Hour for Entire Intersection Begins at 07:30 AM																						
07:30 AM	24	258	55	0	337	9	90	40	3	0	142	31	74	10	0	115	21	141	11	2	175	769
07:45 AM	19	283	59	0	361	10	90	44	3	2	149	32	87	20	4	143	24	107	12	5	148	801
08:00 AM	18	332	63	0	413	8	83	53	2	1	147	38	85	19	0	139	24	86	8	0	118	817
08:15 AM	27	327	59	1	414	21	90	51	6	2	170	33	78	14	0	125	12	85	38	0	135	844
Total Volume	88	1200	236	1	1525	48	353	188	14	5	608	131	324	63	4	522	81	419	69	7	576	3231
% App. Total	5.8	78.7	15.5	0.1		7.9	68.1	30.9	2.3	0.8		25.1	62.1	12.1	0.8		14.1	72.7	12	1.2		
PHF	.815	.904	.937	.250	.921	.571	.981	.887	.583	.625	.894	.938	.931	.788	.260	.913	.844	.743	.454	.350	.823	.957

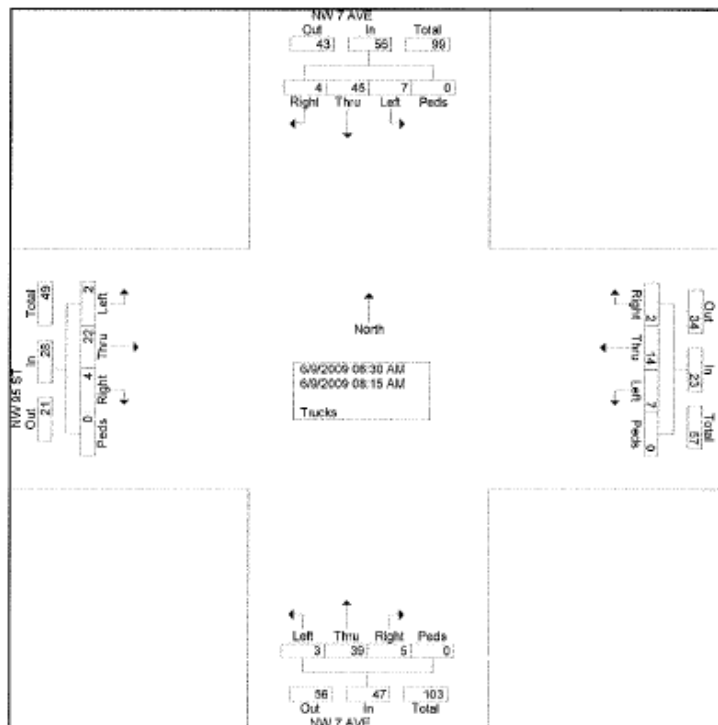


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Groups Printed- Trucks

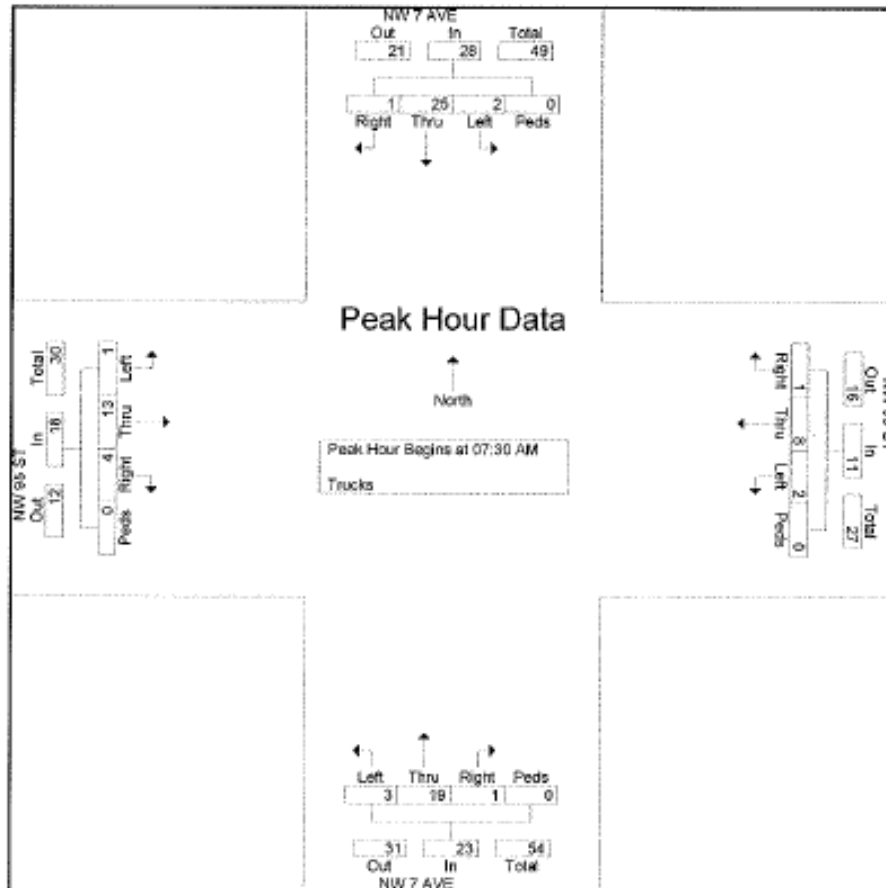
Start Time	NW 7 AVE Southbound					NW 95 ST Westbound					NW 7 AVE Northbound					NW 95 ST Eastbound					Hr. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
06:30 AM	0	3	1	0	4	1	1	1	0	3	0	5	0	0	5	0	3	0	0	3	15
06:45 AM	1	7	2	0	10	0	2	3	0	5	1	6	0	0	7	0	2	1	0	3	25
Total	1	10	3	0	14	1	3	4	0	8	1	11	0	0	12	0	5	1	0	6	40
07:00 AM	0	4	1	0	5	0	2	1	0	3	2	5	0	0	7	0	3	0	0	3	18
07:15 AM	2	6	1	0	9	0	1	0	0	1	1	4	0	0	5	0	1	0	0	1	16
07:30 AM	0	5	1	0	6	1	2	1	0	4	0	3	1	0	4	0	2	0	0	2	16
07:45 AM	0	5	0	0	5	0	1	0	0	1	1	6	0	0	7	0	7	0	0	7	20
Total	2	20	3	0	25	1	6	2	0	9	4	18	1	0	23	0	13	0	0	13	70
08:00 AM	0	7	0	0	7	0	3	1	0	4	0	5	1	0	6	4	0	0	0	4	21
08:15 AM	1	8	1	0	10	0	2	0	0	2	0	5	1	0	6	0	4	1	0	5	23
Grand Total	4	45	7	0	56	2	14	7	0	23	5	39	3	0	47	4	22	2	0	26	154
Approach %	7.1	80.4	12.5	0		8.7	60.9	30.4	0		10.6	83	6.4	0		14.3	78.6	7.1	0		
Total %	2.6	29.2	4.5	0	36.4	1.3	9.1	4.5	0	14.9	3.2	25.3	1.9	0	30.5	2.6	14.3	1.3	0	18.2	



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	NW 7 AVE Southbound					NW 95 ST Westbound						NW 7 AVE Northbound					NW 95 ST Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	U-Turn	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 06:30 AM to 08:15 AM - Peak 1 of 1																						
Peak Hour for Entire Intersection Begins at 07:30 AM																						
07:30 AM	0	5	1	0	6	1	2	1	0	0	4	0	3	1	0	4	0	2	0	0	2	16
07:45 AM	0	5	0	0	5	0	1	0	0	0	1	1	6	0	0	7	0	7	0	0	7	20
08:00 AM	0	7	0	0	7	0	3	1	0	0	4	0	5	1	0	6	4	0	0	0	4	21
08:15 AM	1	8	1	0	10	0	2	0	0	0	2	0	5	1	0	6	0	4	1	0	5	23
Total Volume	1	25	2	0	28	1	6	2	0	0	11	1	19	3	0	23	4	13	1	0	18	80
% App. Total	3.6	89.3	7.1	0		9.1	72.7	18.2	0	0		4.3	82.6	13	0		22.2	72.2	5.6	0		
PHF	.250	.781	.500	.000	.700	.250	.667	.500	.000	.000	.688	.250	.792	.750	.000	.821	.250	.464	.250	.000	.643	.870

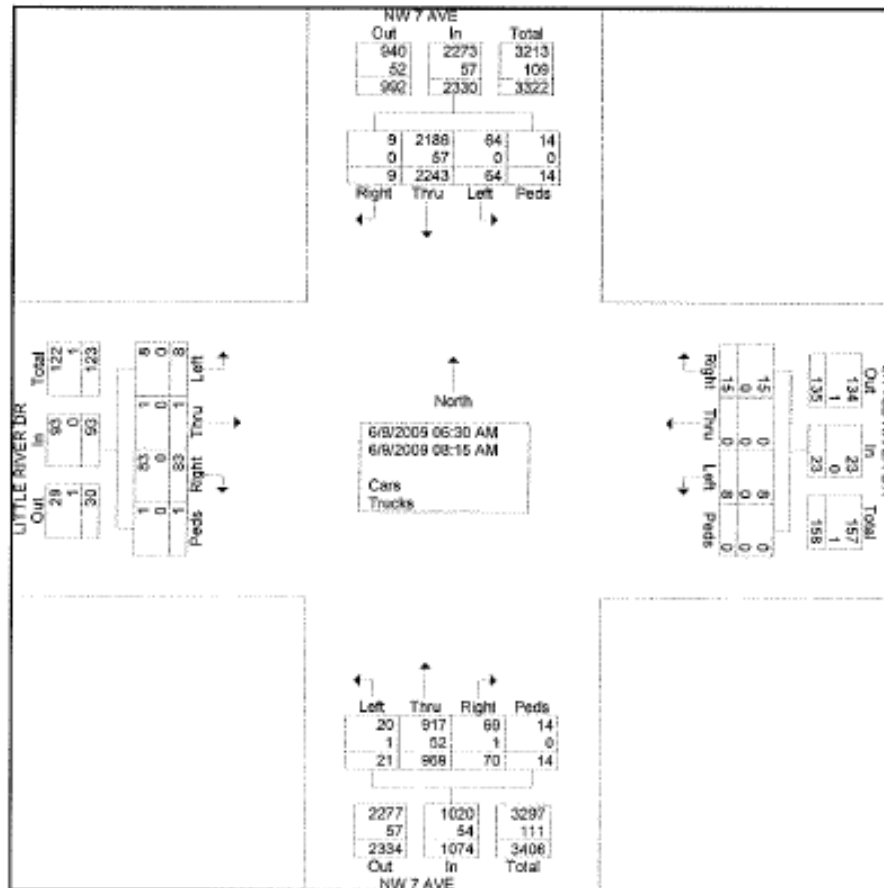


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Groups Printed- Cars - Trucks

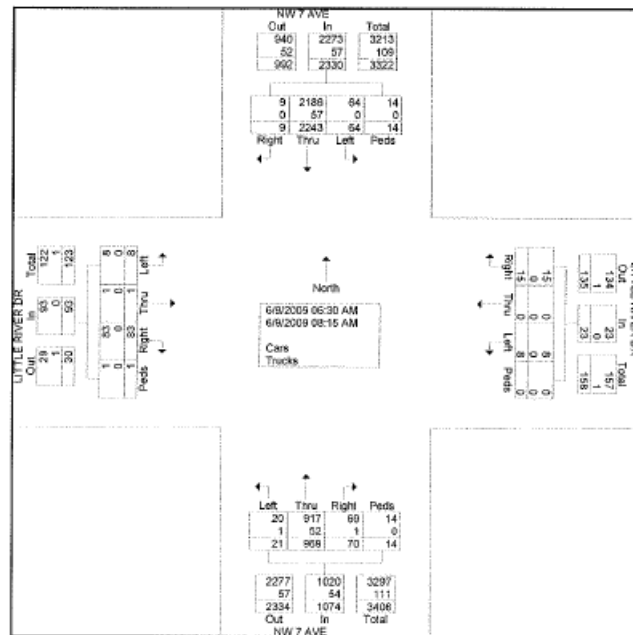
	NW 7 AVE Southbound						LITTLE RIVER DR Westbound					NW 7 AVE Northbound						LITTLE RIVER DR Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total		Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total	
06:30 AM	0	172	8	1	2	183	0	0	0	0	0	7	65	0	0	1	73	8	0	1	0	9	265
06:45 AM	1	188	12	0	2	183	2	0	0	0	2	13	84	5	1	1	104	5	0	0	0	5	294
Total	1	340	20	1	4	366	2	0	0	0	2	20	149	5	1	2	177	13	0	1	0	14	559
07:00 AM	1	168	14	0	0	183	1	0	1	0	2	20	109	2	0	4	135	6	1	0	0	7	327
07:15 AM	1	223	5	0	1	230	1	0	0	0	1	3	102	4	0	1	110	13	0	2	1	16	357
07:30 AM	1	318	11	0	4	334	2	0	2	0	4	7	122	1	0	1	131	15	0	1	0	16	485
07:45 AM	0	368	6	0	2	376	1	0	2	0	3	5	168	4	0	0	175	11	0	0	0	11	565
Total	3	1077	36	0	7	1123	5	0	5	0	10	35	499	11	0	6	551	45	1	3	1	50	1734
08:00 AM	2	407	3	0	0	412	2	0	2	0	4	9	173	2	0	1	185	15	0	1	0	16	617
08:15 AM	3	419	5	0	2	429	6	0	1	0	7	6	148	3	0	4	161	10	0	3	0	13	610
Grand Total	9	2243	64	1	13	2330	15	0	8	0	23	70	969	21	1	13	1074	83	1	8	1	93	3520
Approch %	0.4	96.3	2.7	0	0.6		68.2	0	34.8	0		6.5	90.2	2	0.1	1.2		89.2	1.1	8.6	1.1		
Total %	0.3	63.7	1.8	0	0.4	66.2	0.4	0	0.2	0	0.7	2	27.5	0.6	0	0.4	30.5	2.4	0	0.2	0	2.6	
Cars	9	2186	64	1	13	2273	15	0	8	0	23	69	917	20	1	13	1020	83	1	8	1	93	3409
% Cars	100	97.5	100	100	100	97.6	100	0	100	0	100	98.6	94.6	95.2	100	100	95	100	100	100	100	100	96.8
Trucks	0	57	0	0	0	57	0	0	0	0	0	1	52	1	0	0	54	0	0	0	0	0	111
% Trucks	0	2.5	0	0	0	2.4	0	0	0	0	0	1.4	5.4	4.8	0	0	5	0	0	0	0	0	3.2



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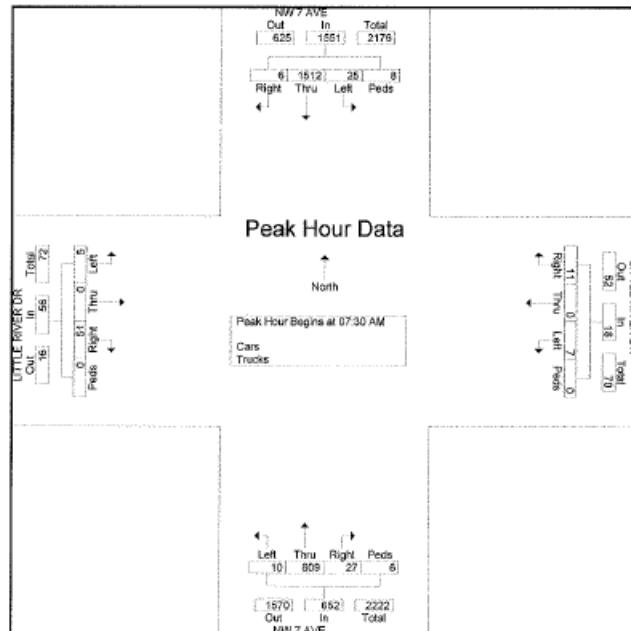
Groups Printed- Cars - Trucks																							
NW 7 AVE Southbound												LITTLE RIVER DR Westbound				NW 7 AVE Northbound				LITTLE RIVER DR Eastbound			
Start Time	Right	Thru	Left	Left	Peds	App Tot	Right	Thru	Left	Peds	App Tot	Right	Thru	Left	Left	Peds	App Tot	Right	Thru	Left	Peds	App Tot	In Total
06:30 AM	0	172	8	1	2	183	0	0	0	0	0	7	65	0	0	1	73	8	0	1	0	9	255
06:45 AM	1	168	12	0	2	183	2	0	0	0	2	13	84	5	1	1	104	5	0	0	0	5	294
Total	1	340	20	1	4	366	2	0	0	0	2	20	149	5	1	2	177	13	0	1	0	14	559
07:00 AM	1	168	14	0	0	183	1	0	1	0	2	20	109	2	0	4	135	6	1	0	0	7	327
07:15 AM	1	223	5	0	1	230	1	0	0	0	1	3	102	4	0	1	110	13	0	2	1	16	357
07:30 AM	1	318	11	0	4	334	2	0	2	0	4	7	122	1	0	1	131	15	0	1	0	16	485
07:45 AM	0	368	6	0	2	376	1	0	2	0	3	5	168	4	0	0	175	11	0	0	0	11	565
Total	3	1077	36	0	7	1123	5	0	5	0	10	35	499	11	0	6	551	45	1	3	1	50	1734
08:00 AM	2	407	3	0	0	412	2	0	2	0	4	9	173	2	0	1	185	15	0	1	0	16	617
08:15 AM	3	419	5	0	2	429	6	0	1	0	7	6	148	3	0	4	161	10	0	3	0	13	610
Grand Total	9	2243	64	1	13	2330	15	0	8	0	23	70	969	21	1	13	1074	83	1	8	1	93	3520
Approch %	0.4	96.3	2.7	0	0.6	65.2	0	34.8	0	0	6.5	90.2	2	0.1	1.2	86.2	1.1	8.6	1.1				
Total %	0.3	63.7	1.8	0	0.4	66.2	0.4	0	0.2	0	0.7	2	27.5	0.6	0	0.4	30.5	2.4	0	0.2	0	2.6	
Cars	9	2166	64	1	13	2273	15	0	8	0	23	69	917	20	1	13	1020	83	1	8	1	93	3409
% Cars	100	97.5	100	100	100	97.6	100	0	100	0	100	98.6	94.6	95.2	100	100	95	100	100	100	100	100	96.8
Trucks	0	57	0	0	0	57	0	0	0	0	0	1	52	1	0	0	54	0	0	0	0	0	111
% Trucks	0	2.5	0	0	0	2.4	0	0	0	0	0	1.4	5.4	4.8	0	0	5	0	0	0	0	0	3.2



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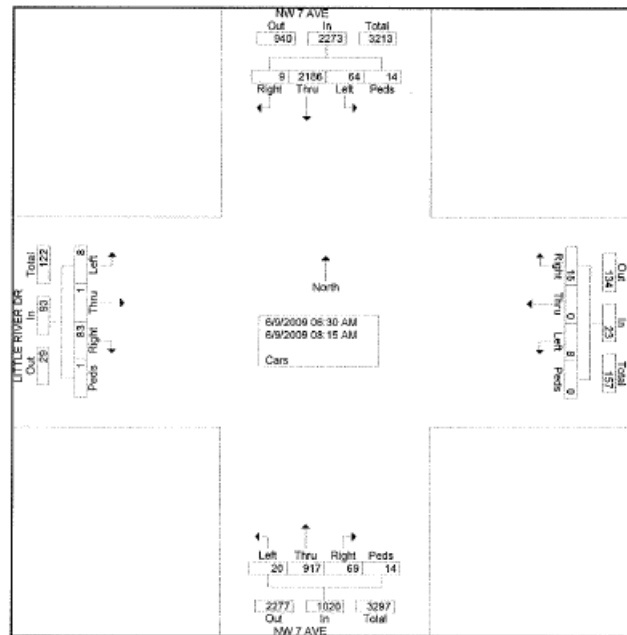
	NW 7 AVE Southbound						LITTLE RIVER DR Westbound						NW 7 AVE Northbound						LITTLE RIVER DR Eastbound					
Start Time	Right	Thru	Left	U-Turn	Peds	App. Tot	Right	Thru	Left	Peds	App. Tot	Right	Thru	Left	U-Turn	Peds	App. Tot	Right	Thru	Left	Peds	App. Tot	Ins. Tot	
Peak Hour for Entire Intersection Begins at 07:30 AM																								
Peak Hour Analysis From 06:30 AM to 08:15 AM - Peak 1 of 1																								
07:30 AM	1	318	11	0	4	334	2	0	2	0	4	7	122	1	0	1	131	15	0	1	0	16	435	
07:45 AM	0	368	6	0	2	376	1	0	2	0	3	5	166	4	0	0	175	11	0	0	0	11	565	
08:00 AM	2	407	3	0	0	412	2	0	2	0	4	9	173	2	0	1	186	15	0	1	0	16	617	
08:15 AM	3	419	5	0	2	429	6	0	1	0	7	6	148	3	0	4	161	10	0	3	0	13	610	
Total Volume	6	1512	25	0	8	1551	11	0	7	0	18	27	609	10	0	6	652	51	0	5	0	56	2277	
% App. Total	0.4	97.5	1.6	0	0.5		61.1	0	38.9	0		4.1	93.4	1.5	0	0.9		91.1	0	8.9	0			
PHF	.500	.302	.568	.000	.500	.904	.458	.000	.075	.000	.643	.750	.690	.625	.000	.375	.881	.850	.000	.417	.000	.875	.923	



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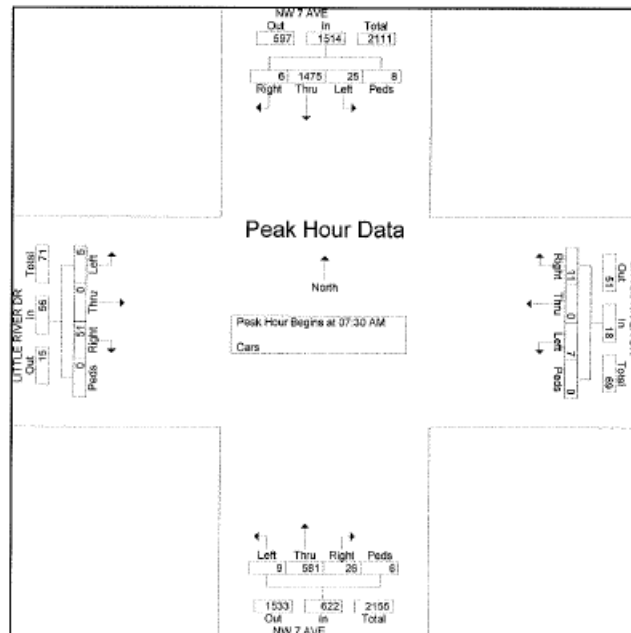
Groups Printed- Cars																								
	NW 7 AVE Southbound						LITTLE RIVER DR Westbound						NW 7 AVE Northbound						LITTLE RIVER DR Eastbound					
Start Time	Right	Thru	Left	U-Turn	Peds	App. Time	Right	Thru	Left	Peds	App. Time	Right	Thru	Left	U-Turn	Peds	App. Time	Right	Thru	Left	Peds	App. Time	No. Total	
06:30 AM	0	169	8	1	2	180	0	0	0	0	0	7	60	0	0	1	68	8	0	1	0	9	257	
06:45 AM	1	161	12	0	2	176	2	0	0	0	2	13	77	5	1	1	97	5	0	0	0	5	280	
Total	1	330	20	1	4	356	2	0	0	0	2	20	137	5	1	2	165	13	0	1	0	14	537	
07:00 AM	1	161	14	0	0	176	1	0	1	0	2	20	104	2	0	4	130	6	1	0	0	7	315	
07:15 AM	1	220	5	0	1	227	1	0	0	0	1	3	95	4	0	1	103	13	0	2	1	16	347	
07:30 AM	1	312	11	0	4	328	2	0	2	0	4	7	117	1	0	1	126	15	0	1	0	16	474	
07:45 AM	0	360	6	0	2	368	1	0	2	0	3	5	156	3	0	0	164	11	0	0	0	11	546	
Total	3	1053	36	0	7	1099	5	0	5	0	10	35	472	10	0	6	523	45	1	3	1	50	1682	
08:00 AM	2	397	3	0	0	402	2	0	2	0	4	8	165	2	0	1	176	15	0	1	0	16	598	
08:15 AM	3	406	5	0	2	416	6	0	1	0	7	6	143	3	0	4	156	10	0	3	0	13	592	
Grand Total	9	2166	64	1	13	2273	15	0	8	0	23	69	917	20	1	13	1020	83	1	8	1	93	3409	
Approach %	0.4	96.2	2.8	0	0.6		65.2	0	34.8	0		6.8	89.9	2	0.1	1.3		89.2	1.1	8.6	1.1			
Total %	0.3	64.1	1.9	0	0.4	65.7	0.4	0	0.2	0	0.7	2	26.9	0.6	0	0.4	29.9	2.4	0	0.2	0	2.7		



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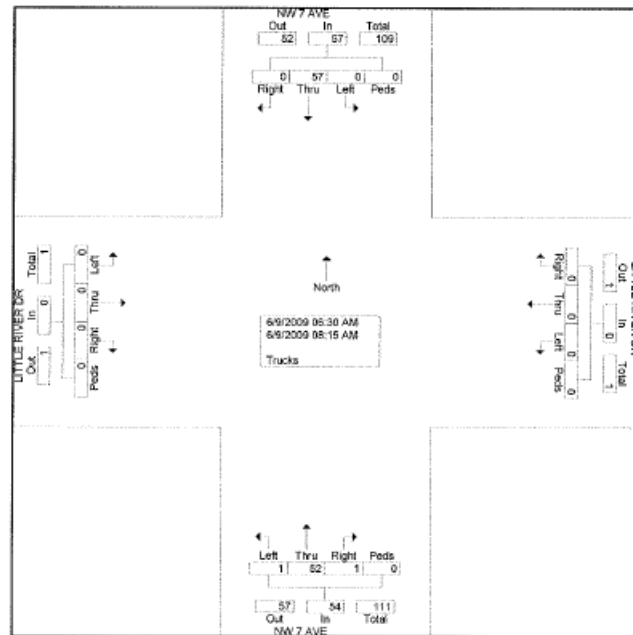
	NW 7 AVE Southbound					LITTLE RIVER DR Westbound					NW 7 AVE Northbound					LITTLE RIVER DR Eastbound							
Start Time	Right	Thru	Left	Peds	App. Tot	Right	Thru	Left	Peds	App. Tot	Right	Thru	Left	Peds	App. Tot	Right	Thru	Left	Peds	App. Tot	Tot. Tot		
Peak Hour Analysis From 06:30 AM to 08:15 AM - Peak 1 of 1																							
Peak Hour for Entire Intersection Begins at 07:30 AM																							
07:30 AM	1	312	11	0	4	328	2	0	2	0	4	7	117	1	0	1	126	15	0	1	16	474	
07:45 AM	0	360	6	0	2	368	1	0	2	0	3	5	156	3	0	0	164	11	0	0	11	546	
08:00 AM	2	397	3	0	0	402	2	0	2	0	4	8	165	2	0	1	176	15	0	1	16	598	
08:15 AM	3	406	5	0	2	416	6	0	1	0	7	6	143	3	0	4	156	10	0	3	13	592	
Total Volume	6	1475	25	0	8	1514	11	0	7	0	18	26	581	9	0	6	622	51	0	5	56	2210	
% App. Total	0.4	97.4	1.7	0	0.5		61.1	0	38.9	0		4.2	93.4	1.4	0	1		91.1	0	8.9	0		
PHF	.500	.509	.588	.000	.509	.910	.658	.000	.875	.000	.543	.813	.880	.750	.000	.375	.884	.850	.000	.417	.000	.875	.924



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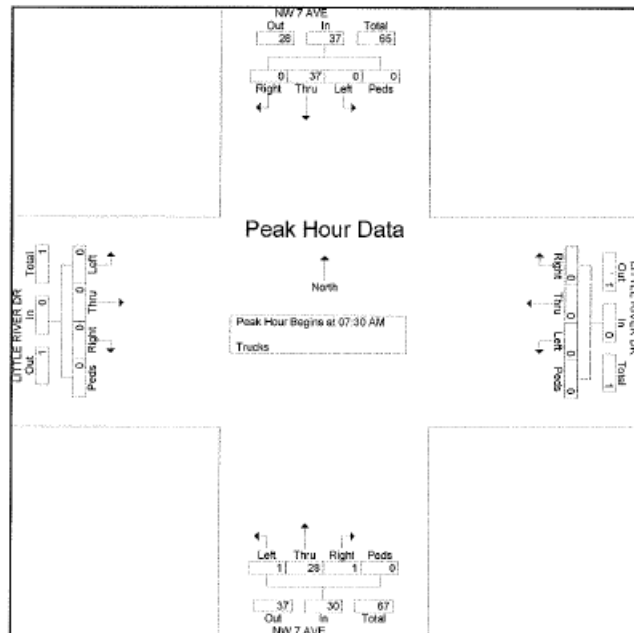
Groups Printed- Trucks																				
Start Time	NW 7 AVE Southbound					LITTLE RIVER DR Westbound					NW 7 AVE Northbound					LITTLE RIVER DR Eastbound				
	Right	Thru	Left	App. Total	Peds	Right	Thru	Left	App. Total	Peds	Right	Thru	Left	App. Total	Peds	Right	Thru	Left	App. Total	Peds
06:30 AM	0	3	0	0	0	3	0	0	0	0	0	5	0	0	0	5	0	0	0	0
06:45 AM	0	7	0	0	0	7	0	0	0	0	0	7	0	0	0	7	0	0	0	0
Total	0	10	0	0	0	10	0	0	0	0	0	12	0	0	0	12	0	0	0	0
07:00 AM	0	7	0	0	0	7	0	0	0	0	0	5	0	0	0	5	0	0	0	0
07:15 AM	0	3	0	0	0	3	0	0	0	0	0	7	0	0	0	7	0	0	0	0
07:30 AM	0	6	0	0	0	6	0	0	0	0	0	5	0	0	0	5	0	0	0	0
07:45 AM	0	8	0	0	0	8	0	0	0	0	0	10	1	0	0	11	0	0	0	0
Total	0	24	0	0	0	24	0	0	0	0	0	27	1	0	0	28	0	0	0	0
08:00 AM	0	10	0	0	0	10	0	0	0	0	0	1	8	0	0	9	0	0	0	0
08:15 AM	0	13	0	0	0	13	0	0	0	0	0	0	5	0	0	5	0	0	0	0
Grand Total	0	57	0	0	0	57	0	0	0	0	0	1	52	1	0	54	0	0	0	0
Approch %	0	100	0	0	0	0	0	0	0	0	0	1.9	98.3	1.9	0	0	0	0	0	0
Total %	0	51.4	0	0	0	51.4	0	0	0	0	0	0.9	48.6	0.9	0	48.6	0	0	0	0



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	NW 7 AVE Southbound						LITTLE RIVER DR Westbound						NW 7 AVE Northbound						LITTLE RIVER DR Eastbound					
Start Time	Right	Thru	Left	U-Turn	Peds	App. Tot	Right	Thru	Left	Peds	App. Tot	Right	Thru	Left	U-Turn	Peds	App. Tot	Right	Thru	Left	Peds	App. Tot	Tot. Tot	
Peak Hour Analysis From 06:30 AM to 08:15 AM - Peak 1 of 1																								
Peak Hour for Entire Intersection Begins at 07:30 AM																								
07:30 AM	0	6	0	0	0	6	0	0	0	0	0	0	5	0	0	0	5	0	0	0	0	0	11	
07:45 AM	0	8	0	0	0	8	0	0	0	0	0	0	10	1	0	0	11	0	0	0	0	0	19	
08:00 AM	0	10	0	0	0	10	0	0	0	0	0	1	8	0	0	0	9	0	0	0	0	0	19	
08:15 AM	0	13	0	0	0	13	0	0	0	0	0	0	5	0	0	0	5	0	0	0	0	0	18	
Total Volume	0	37	0	0	0	37	0	0	0	0	0	1	28	1	0	0	30	0	0	0	0	0	67	
% App. Total	0	100	0	0	0		0	0	0	0		3.3	93.3	3.3	0			0	0	0	0			
PHF	.000	.712	.000	.000	.000	.712	.000	.000	.000	.000	.000	.250	.700	.250	.000	.000	.682	.000	.000	.000	.000	.000	.882	



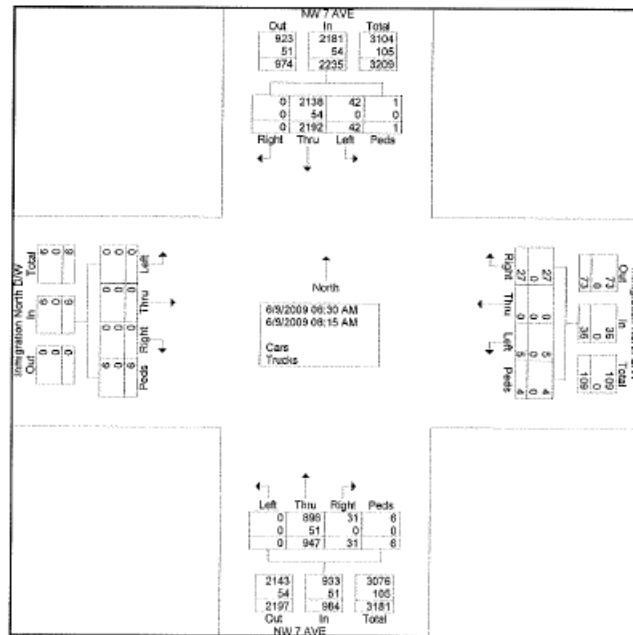
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File Name
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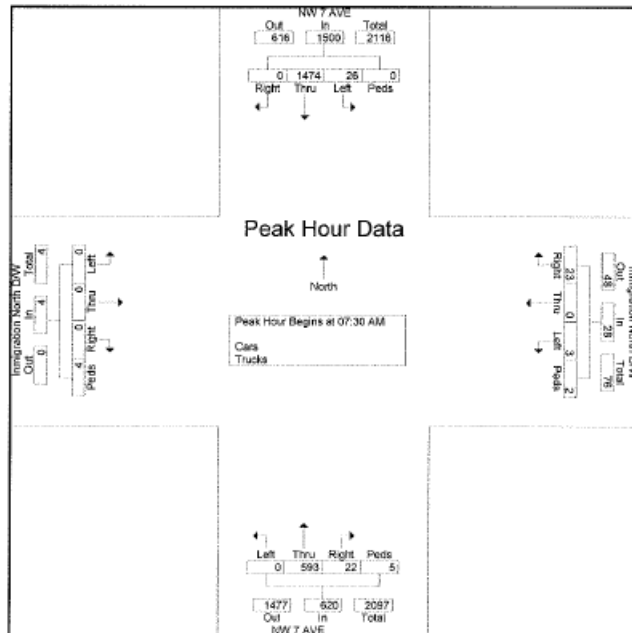
	NW 7 AVE Southbound				Immigration North D/W Westbound				NW 7 AVE Northbound				Immigration North D/W Eastbound			
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Tot. Total
06:30 AM	0	167	1	0	168	0	0	1	0	1	0	67	0	0	67	0
06:45 AM	0	165	7	0	172	0	0	0	0	0	3	82	0	0	85	0
Total	0	332	8	0	340	0	0	1	0	1	3	149	0	0	152	2
07:00 AM	0	168	1	0	169	1	0	0	2	3	2	108	0	1	111	0
07:15 AM	0	218	7	1	226	3	0	1	0	4	4	97	0	0	101	0
07:30 AM	0	306	3	0	311	5	0	0	1	6	3	119	0	1	123	0
07:45 AM	0	359	10	0	369	6	0	1	0	7	2	164	0	0	166	0
Total	0	1083	21	1	1075	15	0	2	3	20	11	488	0	2	501	4
08:00 AM	0	396	10	0	406	5	0	0	0	5	8	165	0	1	174	0
08:15 AM	0	409	3	0	412	7	0	2	1	10	9	145	0	3	157	0
Grand Total	0	2192	42	1	2235	27	0	5	4	36	31	947	0	6	984	0
Apprch %	0	98.1	1.9	0		75	0	13.9	11.1		3.2	96.2	0	0.6		
Total %	0	67.2	1.3	0	68.5	0.8	0	0.2	0.1	1.1	1	29	0	0.2	30.2	0.2
Cars	0	2138														
% Cars	0	97.5	100	100	97.6	100	0	100	100	100	100	94.6	0	100	94.8	
Trucks	0	64	0	0	64	0	0	0	0	0	0	51	0	0	51	0
% Trucks	0	2.5	0	0	2.4	0	0	0	0	0	0	5.4	0	0	5.2	0



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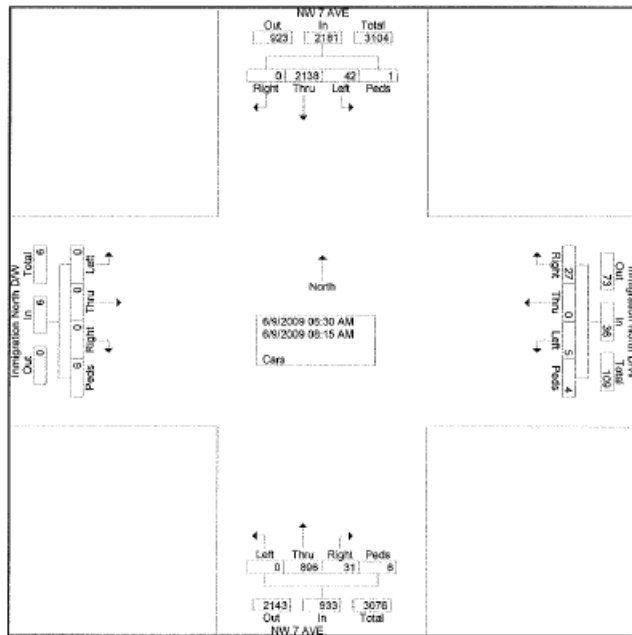
Start Time	NW 7 AVE Southbound					Immigration North D/W Westbound					NW 7 AVE Northbound					Immigration North D/W Eastbound					SE Total	
	Right	Thru	Left	Peds	App Total	Right	Thru	Left	Peds	App Total	Right	Thru	Left	Peds	App Total	Right	Thru	Left	Peds	App Total		
Peak Hour Analysis From 06:30 AM to 08:15 AM - Peak 1 of 1																						
Peak Hour for Entire Intersection Begins at 07:30 AM																						
07:30 AM	0	308	3	0	311	5	0	0	1	6	3	119	0	1	123	0	0	0	4	4	444	
07:45 AM	0	359	10	0	369	6	0	1	0	7	2	164	0	0	166	0	0	0	0	0	542	
08:00 AM	0	398	10	0	408	5	0	0	0	5	8	168	0	1	174	0	0	0	0	0	587	
08:15 AM	0	409	3	0	412	7	0	2	1	10	9	145	0	3	157	0	0	0	0	0	579	
Total Volume	0	1474	26	0	1500	23	0	3	2	28	22	593	0	5	620	0	0	0	4	4	2152	
% App. Total	0	98.3	1.7	0		82.1	0	10.7	7.1		3.5	95.6	0	0.8		0	0	0	100			
PHF	.000	.901	.650	.000	.910	.821	.000	.375	.500	.700	.611	.898	.000	.417	.891	.000	.000	.000	.250	.917		



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Groups Printed- Cars																					
	NW 7 AVE Southbound					Immigration North D/W Westbound					NW 7 AVE Northbound					Immigration North D/W Eastbound					
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	In. Total
06:30 AM	0	164	1	0	165	0	0	1	0	1	0	62	0	0	62	0	0	0	1	1	229
06:45 AM	0	158	7	0	165	0	0	0	0	0	3	75	0	0	78	0	0	0	1	1	244
Total	0	322	8	0	330	0	0	1	0	1	3	137	0	0	140	0	0	0	2	2	473
07:00 AM	0	161	1	0	162	1	0	0	2	3	2	103	0	1	106	0	0	0	0	0	271
07:15 AM	0	215	7	1	223	3	0	1	0	4	4	90	0	0	94	0	0	0	0	0	321
07:30 AM	0	303	3	0	306	5	0	0	1	6	3	114	0	1	118	0	0	0	4	4	434
07:45 AM	0	351	10	0	361	6	0	1	0	7	2	155	0	0	157	0	0	0	0	0	525
Total	0	1030	21	1	1052	15	0	2	3	20	11	462	0	2	475	0	0	0	4	4	1551
08:00 AM	0	389	10	0	399	5	0	0	0	5	8	157	0	1	166	0	0	0	0	0	570
08:15 AM	0	397	3	0	400	7	0	2	1	10	9	140	0	3	152	0	0	0	0	0	562
Grand Total	0	2138	42	1	2181	27	0	5	4	36	31	896	0	6	933	0	0	0	6	6	3156
Approch %	0	98	1.9	0		75	0	13.9	11.1		3.3	96	0	0.6		0	0	0	100		
Total %	0	67.7	1.3	0	69.1	0.9	0	0.2	0.1	1.1	1	28.4	0	0.2	29.6	0	0	0	0.2	0.2	

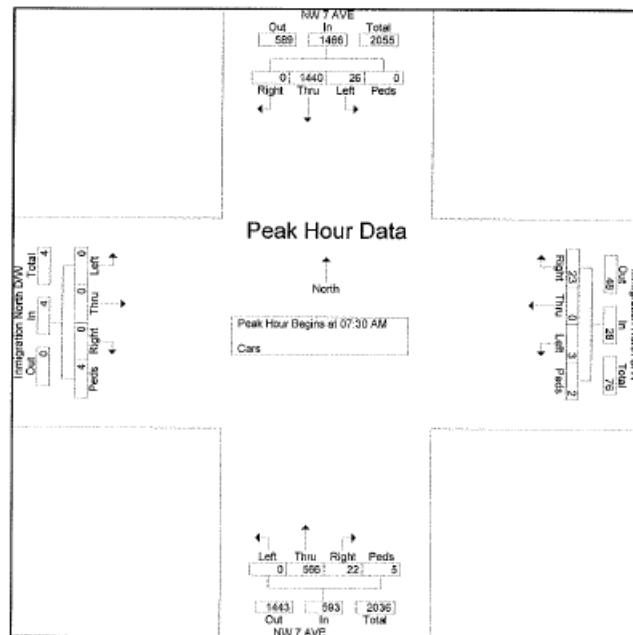


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Start Time	NW 7 AVE Southbound					Immigration North D/W Westbound					NW 7 AVE Northbound					Immigration North D/W Eastbound					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 08:30 AM to 08:15 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30 AM																					
07:30 AM	0	303	3	0	306	5	0	0	1	6	3	114	0	1	118	0	0	0	4	4	434
07:45 AM	0	351	10	0	361	6	0	1	0	7	2	155	0	0	157	0	0	0	0	0	525
08:00 AM	0	389	10	0	399	5	0	0	0	5	8	157	0	1	166	0	0	0	0	0	570
08:15 AM	0	397	3	0	400	7	0	2	1	10	9	140	0	3	152	0	0	0	0	0	562
Total Volume	0	1440	26	0	1466	23	0	3	2	28	22	566	0	5	593	0	0	0	4	4	2091
% App. Total	0	98.2	1.8	0		82.1	0	10.7	7.1		3.7	95.4	0	0.8		0	0	0	100		
PHF	.000	.907	.650	.000	.916	.621	.000	.375	.500	.700	.611	.901	.000	.417	.893	.000	.000	.000	.250	.250	.917

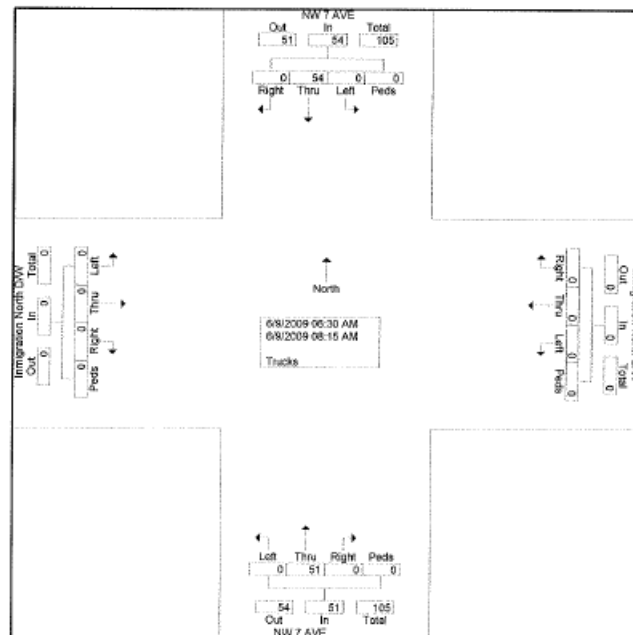


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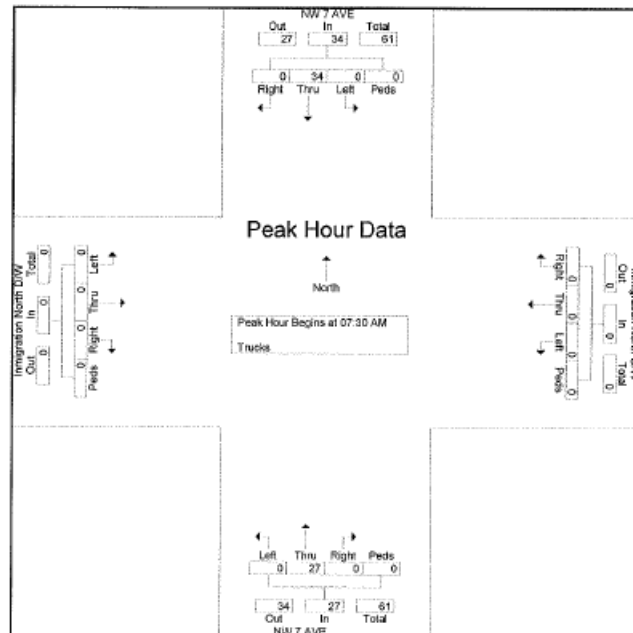
Groups Printed- Trucks																			
NW 7 AVE Southbound					Immigration North D/W Westbound					NW 7 AVE Northbound					Immigration North D/W Eastbound				
Start Time	Right	Thru	Left	Peds	App. Time	Right	Thru	Left	Peds	App. Time	Right	Thru	Left	Peds	App. Time	Right	Thru	Left	Peds
06:30 AM	0	3	0	0	3	0	0	0	0	0	0	5	0	0	5	0	0	0	0
06:45 AM	0	7	0	0	7	0	0	0	0	0	0	7	0	0	7	0	0	0	0
Total	0	10	0	0	10	0	0	0	0	0	0	12	0	0	12	0	0	0	0
07:00 AM	0	7	0	0	7	0	0	0	0	0	0	5	0	0	5	0	0	0	0
07:15 AM	0	3	0	0	3	0	0	0	0	0	0	7	0	0	7	0	0	0	0
07:30 AM	0	5	0	0	5	0	0	0	0	0	0	5	0	0	5	0	0	0	0
07:45 AM	0	8	0	0	8	0	0	0	0	0	0	9	0	0	9	0	0	0	0
Total	0	23	0	0	23	0	0	0	0	0	0	26	0	0	26	0	0	0	0
08:00 AM	0	9	0	0	9	0	0	0	0	0	0	8	0	0	8	0	0	0	0
08:15 AM	0	12	0	0	12	0	0	0	0	0	0	5	0	0	5	0	0	0	0
Grand Total	0	54	0	0	54	0	0	0	0	0	0	51	0	0	51	0	0	0	0
Approch %	0	100	0	0		0	0	0	0		0	100	0	0		0	0	0	0
Total %	0	51.4	0	0	51.4	0	0	0	0	0	0	48.6	0	0	48.6	0	0	0	0



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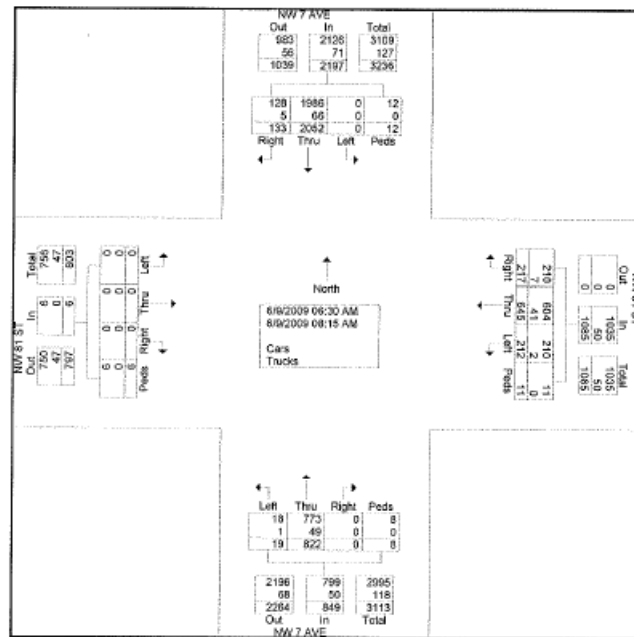
Start Time	NW 7 AVE Southbound					Immigration North D/W Westbound					NW 7 AVE Northbound					Immigration North D/W Eastbound					Std. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 06:30 AM to 08:15 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30 AM																					
07:30 AM	0	5	0	0	5	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	10
07:45 AM	0	8	0	0	8	0	0	0	0	0	0	9	0	0	9	0	0	0	0	0	17
08:00 AM	0	9	0	0	9	0	0	0	0	0	0	8	0	0	8	0	0	0	0	0	17
08:15 AM	0	12	0	0	12	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	17
Total Volume	0	34	0	0	34	0	0	0	0	0	0	27	0	0	27	0	0	0	0	0	61
% App. Total	0	100	0	0		0	0	0	0		0	100	0	0		0	0	0	0		
PHF	.000	.708	.000	.000	.708	.000	.000	.000	.000	.000	.000	.750	.000	.000	.750	.000	.000	.000	.000	.000	.897



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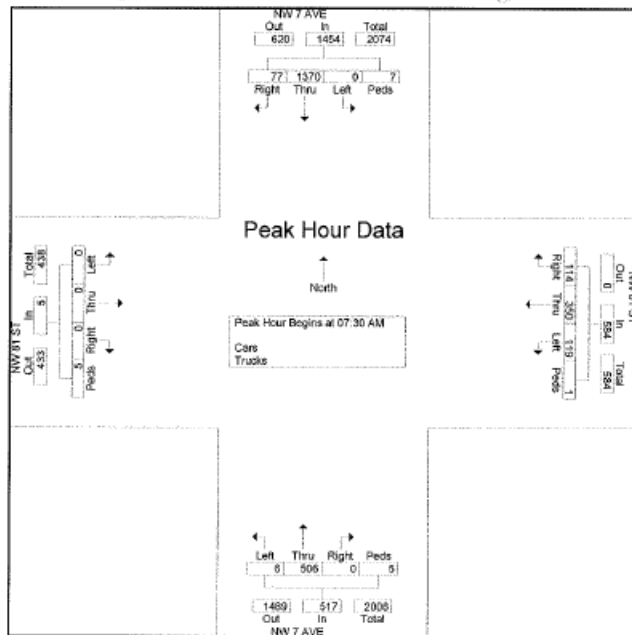
Groups Printed- Cars - Trucks																					
	NW 7 AVE					NW 81 ST					NW 7 AVE					NW 81 ST					
	Southbound					Westbound					Northbound					Eastbound					
Start Time	Right	Thru	Left	Peds	App Total	Right	Thru	Left	Peds	App Total	Right	Thru	Left	Peds	App Total	Right	Thru	Left	Peds	App Total	% Total
06:30 AM	9	167	0	2	178	21	80	21	2	124	0	51	0	1	52	0	0	0	1	1	355
06:45 AM	13	157	0	1	171	28	67	22	3	120	0	84	3	0	87	0	0	0	0	0	378
Total	22	324	0	3	349	49	147	43	5	244	0	135	3	1	139	0	0	0	1	1	733
07:00 AM	17	155	0	1	174	30	74	22	4	130	0	102	7	2	111	0	0	0	0	0	415
07:15 AM	17	202	0	1	220	24	74	28	1	127	0	79	3	0	82	0	0	0	0	0	429
07:30 AM	20	309	0	1	330	26	75	18	0	119	0	104	1	0	105	0	0	0	1	1	555
07:45 AM	18	310	0	3	331	29	80	42	1	152	0	129	2	1	132	0	0	0	1	1	616
Total	72	977	0	6	1055	109	303	110	6	528	0	414	13	3	430	0	0	0	2	2	2015
08:00 AM	19	380	0	1	400	29	102	31	0	162	0	150	1	3	154	0	0	0	1	1	717
08:15 AM	20	371	0	2	393	30	93	28	0	151	0	123	2	1	126	0	0	0	2	2	672
Grand Total	133	2052	0	12	2197	217	645	212	11	1085	0	822	19	8	849	0	0	0	6	6	4137
Approch %	6.1	93.4	0	0.5		20	59.4	19.5	1		0	86.8	2.2	0.9		0	0	0	100		
Total %	3.2	49.6	0	0.3	53.1	5.2	15.6	5.1	0.3	26.2	0	19.9	0.5	0.2	20.5	0	0	0	0.1	0.1	
Cars	128	1986																			
% Cars	96.2	96.8	0	100	96.8	96.6	93.6	99.1	100	95.4	0	94	94.7	100	94.1	0	0	0	100	100	95.9
Trucks	5	66	0	0	71	7	41	2	0	50	0	49	1	0	50	0	0	0	0	0	171
% Trucks	3.8	3.2	0	0	3.2	3.2	6.4	0.9	0	4.6	0	6	5.3	0	5.9	0	0	0	0	0	4.1



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Start Time	NW 7 AVE Southbound					NW 81 ST Westbound					NW 7 AVE Northbound					NW 81 ST Eastbound					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 AM to 08:15 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30 AM																					
07:30 AM	20	309	0	1	330	26	75	18	0	119	0	104	1	0	105	0	0	0	1	1	555
07:45 AM	18	310	0	3	331	29	80	42	1	152	0	129	2	1	132	0	0	0	1	1	616
08:00 AM	19	380	0	1	400	29	102	31	0	162	0	160	1	3	164	0	0	0	1	1	717
08:15 AM	20	371	0	2	393	30	93	28	0	151	0	123	2	1	126	0	0	0	2	2	672
Total Volume	77	1370	0	7	1454	114	350	119	1	584	0	506	6	5	517	0	0	0	5	5	2560
% App. Total	5.3	94.2	0	0.5		19.5	59.9	20.4	0.2		0	97.9	1.2	1		0	0	0	100		
PHF	.963	.901	.000	.683	.909	.950	.858	.708	.260	.901	.000	.843	.790	.417	.839	.000	.000	.000	.625	.625	.893

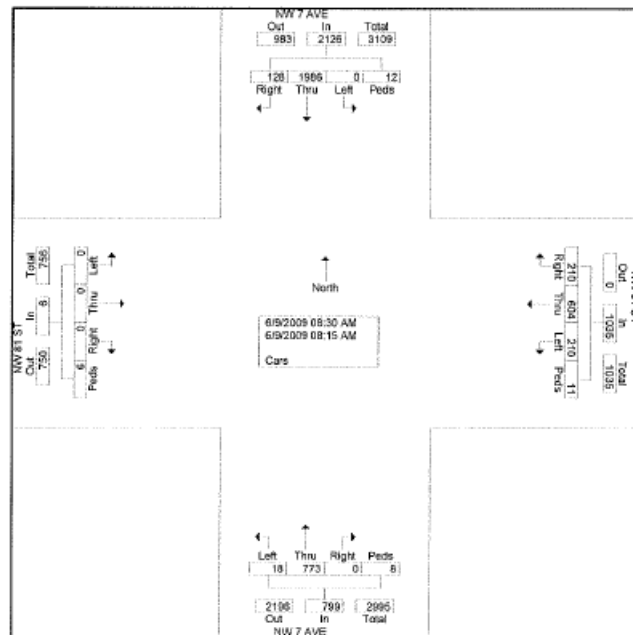


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Groups Printed-Cars

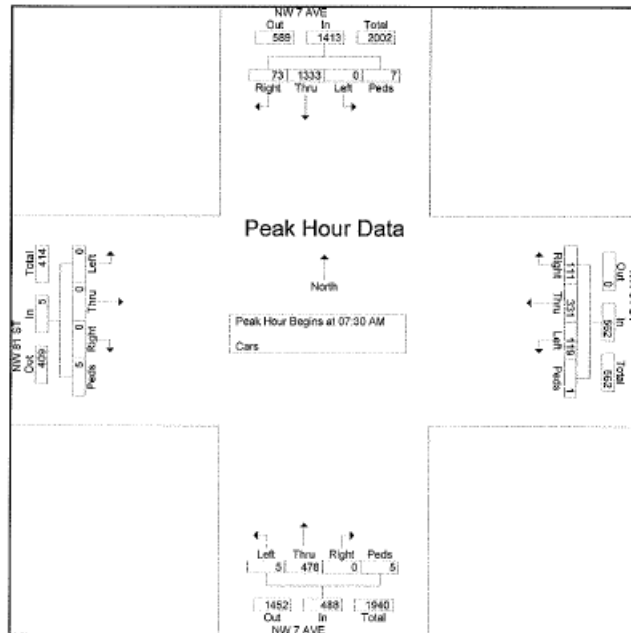
Start Time	NW 7 AVE Southbound					NW 81 ST Westbound					NW 7 AVE Northbound					NW 81 ST Eastbound					All Total
	Right	Thru	Left	Peds	Acc Tot	Right	Thru	Left	Peds	Acc Tot	Right	Thru	Left	Peds	Acc Tot	Right	Thru	Left	Peds	Acc Tot	
06:30 AM	9	164	0	2	175	20	73	21	2	116	0	45	0	1	46	0	0	0	1	1	338
06:45 AM	13	143	0	1	157	25	64	22	3	114	0	81	3	0	84	0	0	0	0	0	355
Total	22	307	0	3	332	45	137	43	5	230	0	126	3	1	130	0	0	0	1	1	693
07:00 AM	16	149	0	1	166	30	69	21	4	124	0	96	7	2	105	0	0	0	0	0	395
07:15 AM	17	197	0	1	215	24	67	27	1	119	0	73	3	0	76	0	0	0	0	0	410
07:30 AM	19	303	0	1	323	26	70	18	0	114	0	96	1	0	97	0	0	0	1	1	535
07:45 AM	17	305	0	3	325	28	78	42	1	149	0	122	1	1	124	0	0	0	1	1	599
Total	69	954	0	6	1029	108	284	108	6	506	0	387	12	3	402	0	0	0	2	2	1939
08:00 AM	18	368	0	1	387	28	97	31	0	156	0	142	1	3	146	0	0	0	1	1	690
08:15 AM	19	357	0	2	378	29	85	28	0	143	0	118	2	1	121	0	0	0	2	2	644
Grand Total	128	1966	0	12	2106	210	604	210	11	1035	0	773	18	8	799	0	0	0	6	6	3996
Approch %	6	93.4	0	0.6		20.3	56.4	20.3	1.1		0	86.7	2.3	1		0	0	0	100		
Total %	3.2	50.1	0	0.3	53.6	5.3	15.2	5.3	0.3	26.1	0	19.5	0.5	0.2	20.1	0	0	0	0.2	0.2	



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Start Time	NW 7 AVE Southbound					NW 81 ST Westbound					NW 7 AVE Northbound					NW 81 ST Eastbound					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 AM to 08:15 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30 AM																					
07:30 AM	19	303	0	1	323	26	70	18	0	114	0	96	1	0	97	0	0	0	1	1	535
07:45 AM	17	305	0	3	325	28	78	42	1	149	0	122	1	1	124	0	0	0	1	1	599
08:00 AM	18	368	0	1	387	28	97	31	0	156	0	142	1	3	146	0	0	0	1	1	690
08:15 AM	19	357	0	2	378	29	86	28	0	143	0	118	2	1	121	0	0	0	2	2	644
Total Volume	73	1333	0	7	1413	111	331	119	1	562	0	478	5	5	488	0	0	0	5	5	2466
% App. Total	5.2	94.3	0	0.5		19.8	58.9	21.2	0.2		0	98	1	1		0	0	0	100		
PHF	.991	.906	.000	.583	.913	.967	.853	.708	.250	.901	.000	.842	.625	.417	.636	.000	.000	.000	.625	.625	.894

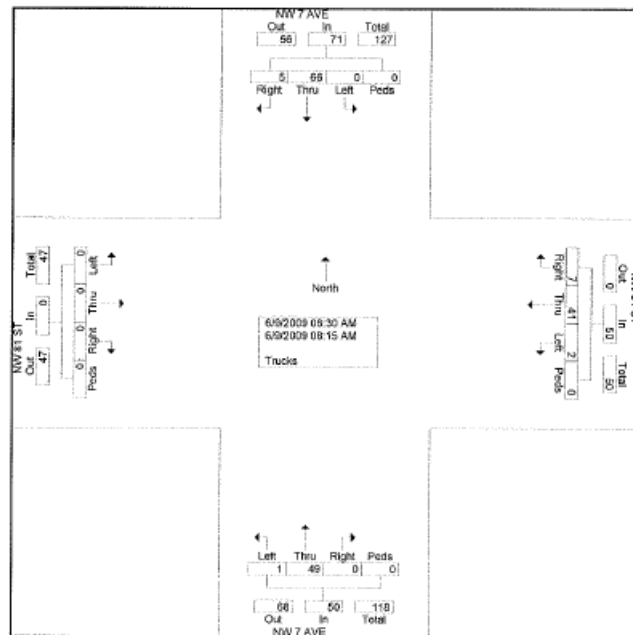


Richard Garcia & Associates Inc.
 13117 NW 107th Ave SUITE #4
 Hialeah Gardens, FL 33018
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File Name : NW 7 Ave & NW 81 St AM
 Site Code :
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Groups Printed- Trucks

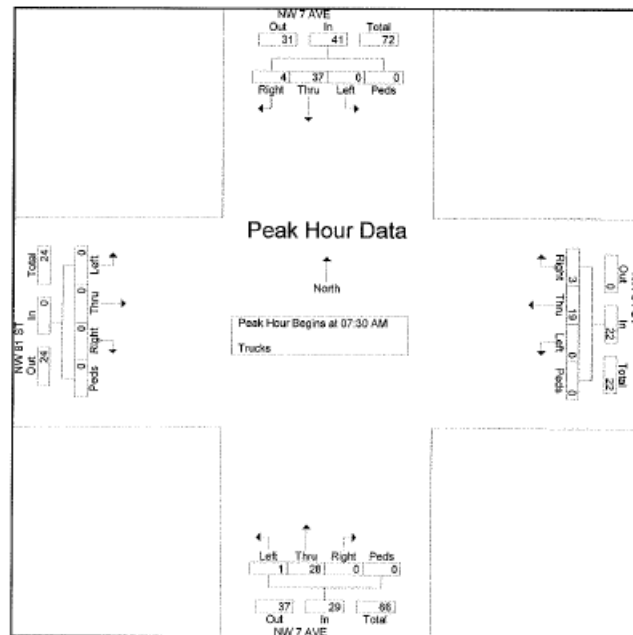
Start Time	NW 7 AVE Southbound					NW 81 ST Westbound					NW 7 AVE Northbound					NW 81 ST Eastbound					Int. Total
	Right	Thru	Left	Peds	App. Time	Right	Thru	Left	Peds	App. Time	Right	Thru	Left	Peds	App. Time	Right	Thru	Left	Peds	App. Time	
06:30 AM	0	3	0	0	3	1	7	0	0	8	0	6	0	0	6	0	0	0	0	0	17
06:45 AM	0	14	0	0	14	3	3	0	0	6	0	3	0	0	3	0	0	0	0	0	23
Total	0	17	0	0	17	4	10	0	0	14	0	9	0	0	9	0	0	0	0	0	40
07:00 AM	1	7	0	0	8	0	5	1	0	6	0	6	0	0	6	0	0	0	0	0	20
07:15 AM	0	5	0	0	5	0	7	1	0	8	0	6	0	0	6	0	0	0	0	0	19
07:30 AM	1	6	0	0	7	0	5	0	0	5	0	8	0	0	8	0	0	0	0	0	20
07:45 AM	1	5	0	0	6	1	2	0	0	3	0	7	1	0	8	0	0	0	0	0	17
Total	3	23	0	0	26	1	19	2	0	22	0	27	1	0	28	0	0	0	0	0	76
08:00 AM	1	12	0	0	13	1	5	0	0	6	0	8	0	0	8	0	0	0	0	0	27
08:15 AM	1	14	0	0	15	1	7	0	0	8	0	5	0	0	5	0	0	0	0	0	28
Grand Total	5	66	0	0	71	7	41	2	0	50	0	49	1	0	50	0	0	0	0	0	171
Approch %	7	93	0	0		14	82	4	0		0	98	2	0		0	0	0	0		
Total %	2.9	38.6	0	0	41.5	4.1	24	1.2	0	29.2	0	28.7	0.6	0	29.2	0	0	0	0	0	0



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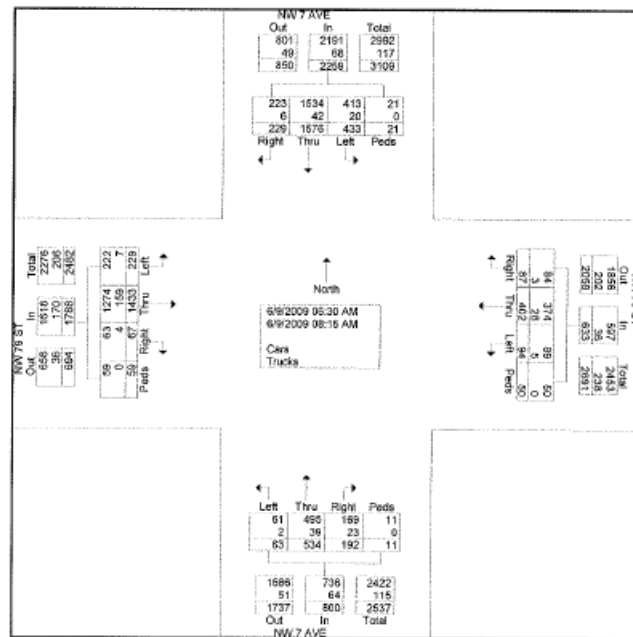
Start Time	NW 7 AVE Southbound					NW 81 ST Westbound					NW 7 AVE Northbound					NW 81 ST Eastbound					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 08:30 AM to 08:15 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30 AM																					
07:30 AM	1	6	0	0	7	0	5	0	0	5	0	8	0	0	8	0	0	0	0	0	20
07:45 AM	1	5	0	0	6	1	2	0	0	3	0	7	1	0	8	0	0	0	0	0	17
08:00 AM	1	12	0	0	13	1	5	0	0	6	0	8	0	0	8	0	0	0	0	0	27
08:15 AM	1	14	0	0	15	1	7	0	0	8	0	5	0	0	5	0	0	0	0	0	28
Total Volume	4	37	0	0	41	3	19	0	0	22	0	28	1	0	29	0	0	0	0	0	92
% App. Total	9.8	90.2	0	0		13.6	86.4	0	0		0	98.6	3.4	0		0	0	0	0	0	
PHF	1.000	.661	.000	.000	.683	.750	.679	.000	.000	.688	.000	.875	.250	.000	.906	.000	.000	.000	.000	.000	.821



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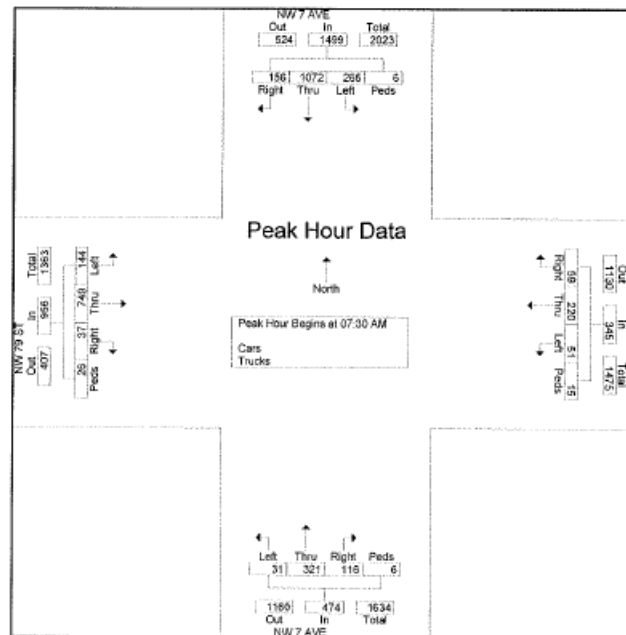
Groups Printed- Cars - Trucks																							
NW 7 AVE												NW 79 ST											
Southbound						Westbound						Northbound						Eastbound					
Start Time	Right	Thru	Left	Peds	App. Tot	Right	Thru	Left	Peds	App. Tot	Right	Thru	Left	Peds	App. Tot	Right	Thru	Left	Peds	App. Tot	Mt. Total		
06:30 AM	14	139	34	2	189	6	40	9	7	62	19	36	11	2	68	6	146	12	6	170	489		
06:45 AM	18	98	46	4	166	9	31	8	6	54	16	51	5	1	73	10	180	23	13	226	519		
Total	32	237	80	6	355	15	71	17	13	116	35	87	16	3	141	16	326	35	19	396	1008		
07:00 AM	22	114	37	7	180	7	39	14	4	64	20	75	5	2	102	5	143	25	5	178	524		
07:15 AM	19	153	51	2	225	6	72	12	18	108	21	51	11	0	83	9	215	25	9	258	674		
07:30 AM	30	230	66	0	326	12	59	10	2	83	26	55	5	0	86	12	200	40	4	256	761		
07:45 AM	44	246	63	2	355	13	53	18	7	91	33	79	9	2	123	8	185	42	10	245	814		
Total	115	743	217	11	1086	38	223	54	31	346	100	260	30	4	394	34	743	132	28	937	2763		
08:00 AM	42	295	70	3	410	18	58	13	4	93	32	98	7	3	140	9	183	33	7	232	875		
08:15 AM	40	301	66	1	408	16	50	10	2	78	25	89	10	1	125	8	181	29	5	223	834		
Grand Total	229	1576	433	21	2259	87	402	94	50	533	192	534	63	11	800	67	1433	229	59	1788	5480		
Approch %	10.1	69.8	19.2	0.9		13.7	63.5	14.8	7.9		24	66.8	7.9	1.4		3.7	80.1	12.8	3.3				
Total %	4.2	28.8	7.9	0.4	41.2	1.6	7.3	1.7	0.9	11.6	3.5	9.7	1.1	0.2	14.6	1.2	26.1	4.2	1.1	32.6			
Cars	223	1534															1274						
% Cars	97.4	97.3	95.4	100	97	96.8	93	94.7	100	94.3	88	92.7	96.8	100	92	94	88.9	96.9	100	90.5	93.8		
Trucks	6	42	20	0	68	3	28	5	0	36	23	39	2	0	64	4	159	7	0	170	338		
% Trucks	2.6	2.7	4.6	0	3	3.4	7	5.3	0	5.7	12	7.3	3.2	0	8	6	11.1	3.1	0	9.5	6.2		



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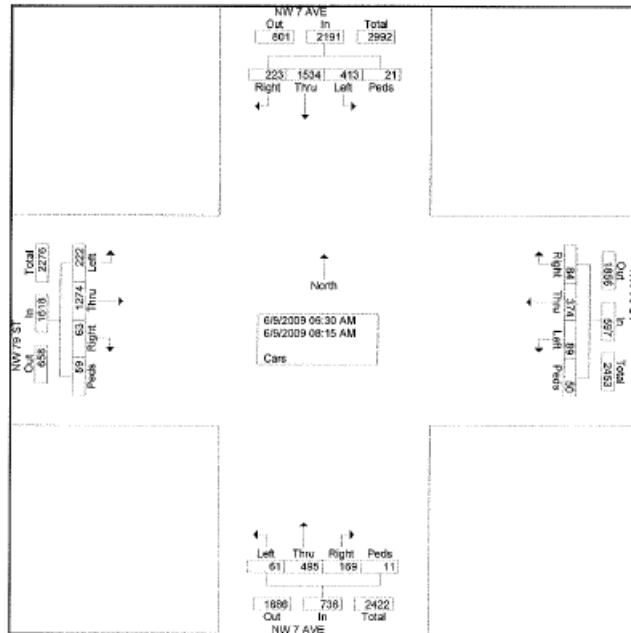
Start Time	NW 7 AVE Southbound					NW 79 ST Westbound					NW 7 AVE Northbound					NW 79 ST Eastbound					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 06:30 AM to 08:15 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30 AM																					
07:30 AM	30	230	66	0	326	12	59	10	2	83	26	55	5	0	86	12	200	40	4	256	751
07:45 AM	44	246	63	2	355	13	53	18	7	91	33	79	9	2	123	8	185	42	10	245	814
08:00 AM	42	295	70	3	410	18	58	13	4	93	32	98	7	3	140	9	183	33	7	232	876
08:15 AM	40	301	66	1	408	16	50	10	2	78	25	89	10	1	125	8	181	29	5	223	834
Total Volume	156	1072	265	6	1499	59	220	51	15	345	116	321	31	6	474	37	749	144	26	956	3274
% App. Total	10.4	71.5	17.7	0.4		17.1	63.8	14.8	4.3		24.6	67.7	6.5	1.3		3.9	78.3	15.1	2.7		
PHF	.886	.890	.946	.500	.914	.819	.932	.708	.536	.927	.879	.819	.775	.500	.846	.771	.936	.857	.690	.934	.935



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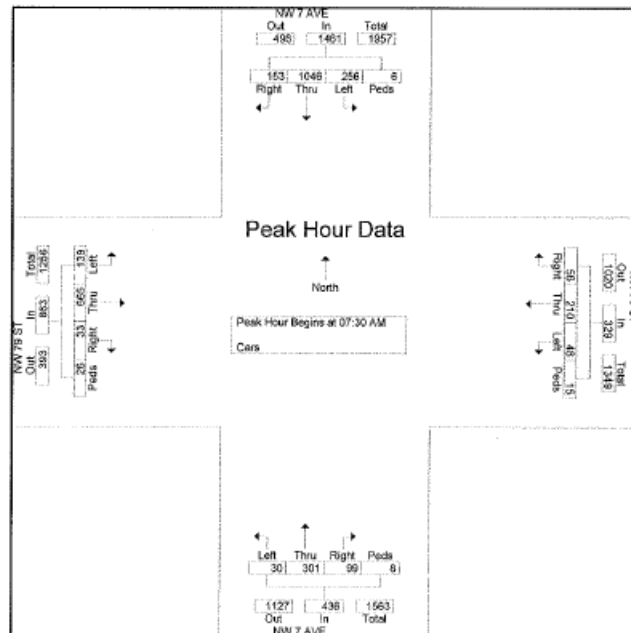
Groups Printed- Cars																							
	NW 7 AVE Southbound					NW 79 ST Westbound					NW 7 AVE Northbound					NW 79 ST Eastbound							
Start Time	Right	Thru	Left	Peds	App. Tot	Right	Thru	Left	Peds	App. Tot	Right	Thru	Left	Peds	App. Tot	Right	Thru	Left	Peds	App. Tot	Int. Total		
06:30 AM	14	136	34	2	186	6	39	8	7	60	19	31	10	2	62	6	128	11	6	151	459		
06:45 AM	17	94	38	4	153	9	30	8	6	53	14	48	5	1	68	10	166	23	13	212	486		
Total	31	230	72	6	339	15	69	16	13	113	33	79	15	3	130	16	294	34	19	363	945		
07:00 AM	21	110	34	7	172	7	32	14	4	57	17	69	5	2	93	5	127	25	5	162	484		
07:15 AM	18	148	51	2	219	6	63	11	18	98	20	46	11	0	77	9	188	24	9	230	624		
07:30 AM	30	226	63	0	319	10	54	8	2	74	22	51	5	0	78	12	176	38	4	230	701		
07:45 AM	44	242	62	2	350	13	62	17	7	89	30	74	9	2	115	6	168	39	10	223	777		
Total	113	726	210	11	1060	36	201	50	31	318	89	240	30	4	363	32	659	126	28	845	2586		
08:00 AM	41	287	67	3	398	18	55	13	4	90	26	91	6	3	126	8	163	33	7	211	825		
08:15 AM	38	291	64	1	394	15	49	10	2	76	21	85	10	1	117	7	158	29	5	199	786		
Grand Total	223	1534	413	21	2191	84	374	89	50	597	169	495	61	11	736	63	1274	222	59	1618	5142		
Approch %	10.2	70	18.8	1		14.1	62.8	14.9	8.4		23	67.3	8.3	1.5		3.9	78.7	13.7	3.8				
Total %	4.3	29.8	8	0.4	42.8	1.6	7.3	1.7	1	11.6	3.3	9.6	1.2	0.2	14.3	1.2	24.8	4.3	1.1	31.5			



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	NW 7 AVE					NW 79 ST					NW 7 AVE					NW 79 ST					
	Southbound					Westbound					Northbound					Eastbound					
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	16. Total
Peak Hour Analysis From 06:30 AM to 08:15 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30 AM																					
07:30 AM	30	226	63	0	319	10	54	8	2	74	22	51	5	0	78	12	176	38	4	230	701
07:45 AM	44	242	62	2	350	13	52	17	7	89	30	74	9	2	115	6	168	39	10	223	777
08:00 AM	41	267	87	3	398	18	58	13	4	90	26	91	6	3	126	8	163	33	7	211	826
08:15 AM	38	291	64	1	394	15	49	10	2	76	21	85	10	1	117	7	158	29	5	199	786
Total Volume	153	1046	256	6	1461	56	210	48	15	329	99	301	30	6	436	33	665	139	26	863	3089
% App. Total	10.5	71.6	17.5	0.4		17	63.8	14.6	4.6		22.7	69	6.9	1.4		3.8	77.1	16.1	3		
PHF	.869	.890	.955	.600	.918	.778	.955	.706	.536	.914	.825	.827	.750	.500	.865	.688	.945	.891	.650	.936	.936

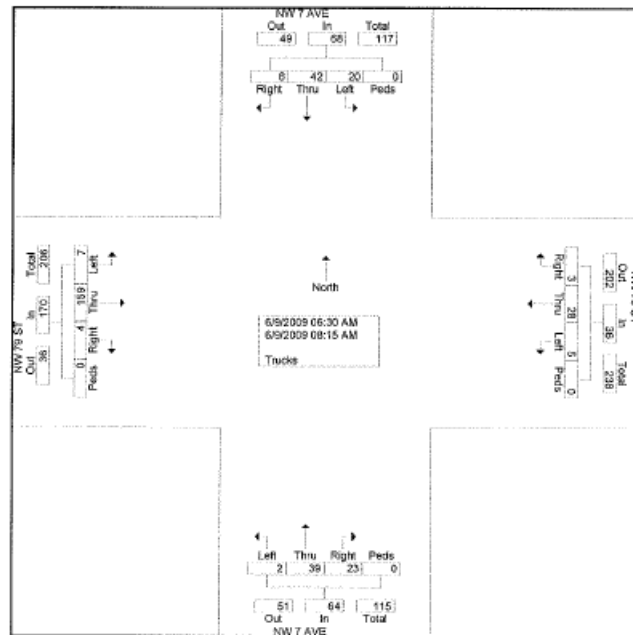


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Groups Printed- Trucks

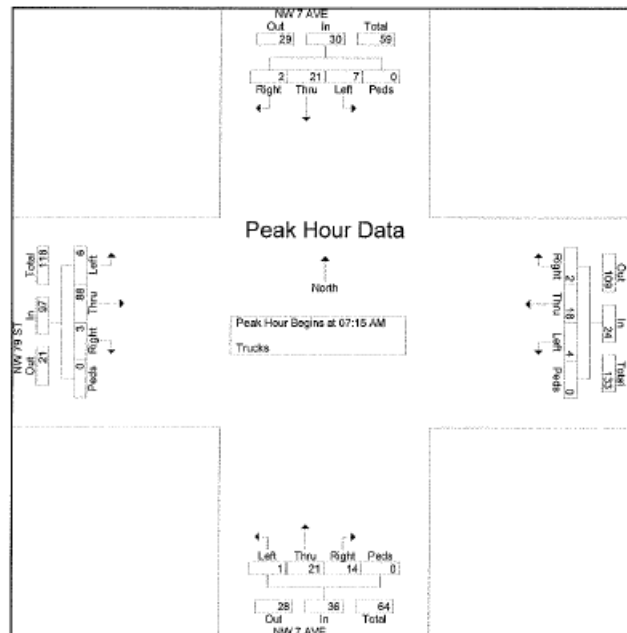
Start Time	NW 7 AVE Southbound					NW 79 ST Westbound					NW 7 AVE Northbound					NW 79 ST Eastbound					In Total
	Right	Thru	Left	Peds	App. Tot	Right	Thru	Left	Peds	App. Tot	Right	Thru	Left	Peds	App. Tot	Right	Thru	Left	Peds	App. Tot	
06:30 AM	0	3	0	0	3	0	1	1	0	2	0	5	1	0	6	0	18	1	0	19	30
06:45 AM	1	4	8	0	13	0	1	0	0	1	2	3	0	0	5	0	14	0	0	14	33
Total	1	7	8	0	16	0	2	1	0	3	2	8	1	0	11	0	32	1	0	33	63
07:00 AM	1	4	3	0	8	0	7	0	0	7	3	6	0	0	9	0	16	0	0	16	40
07:15 AM	1	5	0	0	6	0	9	1	0	10	1	5	0	0	6	0	27	1	0	28	50
07:30 AM	0	4	3	0	7	2	5	2	0	9	4	4	0	0	8	0	24	2	0	26	50
07:45 AM	0	4	1	0	5	0	1	1	0	2	3	5	0	0	8	2	17	3	0	22	37
Total	2	17	7	0	26	2	22	4	0	28	11	20	0	0	31	2	84	6	0	92	177
08:00 AM	1	8	3	0	12	0	3	0	0	3	6	7	1	0	14	1	20	0	0	21	50
08:15 AM	2	10	2	0	14	1	1	0	0	2	4	4	0	0	8	1	23	0	0	24	48
Grand Total	6	42	20	0	68	3	28	5	0	36	23	39	2	0	64	4	159	7	0	170	338
Approch %	8.8	61.8	29.4	0		8.3	77.8	13.9	0		35.9	60.9	3.1	0		2.4	93.5	4.1	0		
Total %	1.8	12.4	5.9	0	20.1	0.9	8.3	1.5	0	10.7	6.8	11.5	0.6	0	18.9	1.2	47	2.1	0	50.3	



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Start Time	NW 7 AVE Southbound					NW 79 ST Westbound					NW 7 AVE Northbound					NW 79 ST Eastbound					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 08:30 AM to 08:15 AM - Peak 1 of 1																						
Peak Hour for Entire Intersection Begins at 07:15 AM																						
07:15 AM	1	5	0	0	6	0	9	1	0	10	1	5	0	0	6	0	27	1	0	28	50	
07:30 AM	0	4	3	0	7	2	5	2	0	9	4	4	0	0	8	0	24	2	0	26	50	
07:45 AM	0	4	1	0	5	0	1	1	0	2	3	5	0	0	8	2	17	3	0	22	37	
08:00 AM	1	8	3	0	12	0	3	0	0	3	6	7	1	0	14	1	20	0	0	21	50	
Total Volume	2	21	7	0	30	2	18	4	0	24	14	21	1	0	36	3	88	6	0	97	187	
% App. Total	6.7	70	23.3	0		8.3	75	16.7	0		38.9	58.3	2.8	0		3.1	90.7	6.2	0			
PHF	.500	.656	.583	.000	.625	.250	.500	.500	.000	.600	.583	.750	.250	.000	.643	.375	.815	.500	.000	.866	.935	



PM Movement Counts

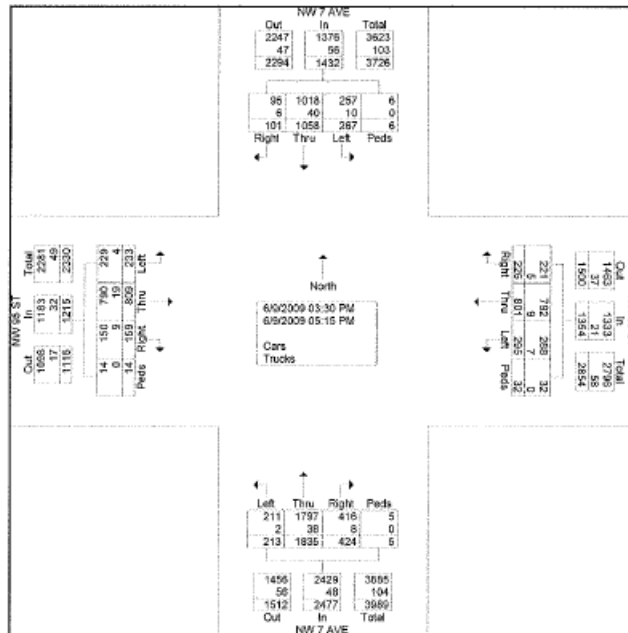
**PM PEAK HOUR VOLUMES
SUMMARY OF VEHICLE MOVEMENTS**

Location	Move	2009 Existing							
		PHF	Peds	Total Vehs	Trucks	Cars	Truck %	2007 SF	2009 Prj Vol
				Volume					2009 Adj Vol ¹
1	NBL			98	3	95	4%	1.02	100
	NBT	0.92	12	1068	26	1,042	3%	1.02	1,090
	NBR			120	10	110	9%	1.02	123
NW 7 AVE & NW 79 ST	SBL			215	2	213	1%	1.02	220
	SBT	0.93	6	469	21	448	5%	1.02	479
	SBR			117	3	114	3%	1.02	120
4:30 - 5:30 PM	EBL			248	6	242	3%	1.02	253
	EBT	0.97	23	710	33	677	5%	1.02	725
	EBR			54	1	53	2%	1.02	56
06/09/09	WBL			75	4	71	6%	1.02	77
	WBT	0.91	17	297	13	284	5%	1.02	303
	WBR			72	4	68	6%	1.02	74
2	NBL			54	2	52	4%	1.02	56
	NBT	0.92	3	1334	32	1,302	3%	1.02	1,361
	NBR			0	0	0	0%	1.02	0
NW 7 AVE & NW 81 ST	SBL			0	0	0	0%	1.02	0
	SBT	0.94	4	695	21	674	4%	1.02	709
	SBR			107	3	104	3%	1.02	110
4:30 - 5:30 PM	EBL			0	0	0	0%	1.02	0
	EBT	0.45	9	0	0	0	0%	1.02	0
	EBR			0	0	0	0%	1.02	0
06/09/09	WBL			109	5	104	5%	1.02	112
	WBT	0.90	8	538	45	493	9%	1.02	549
	WBR			217	6	211	3%	1.02	222
3	NBL			56	0	56	0%	1.02	58
	NBT	0.97	9	1546	36	1,510	3%	1.02	1,577
	NBR			2	0	2	0%	1.02	3
NW 7 AVE & LITTLE RIVER DR	SBL			1	0	1	0%	1.02	2
	SBT	0.94	9	807	23	784	3%	1.02	824
	SBR			28	0	28	0%	1.02	29
4:30 - 5:30 PM	EBL			15	0	15	0%	1.02	16
	EBT	0.79	0	0	0	0	0%	1.02	0
	EBR			48	0	48	0%	1.02	49
06/09/09	WBL			8	0	8	0%	1.02	9
	WBT	0.50	0	0	0	0	0%	1.02	0
	WBR			4	1	3	25%	1.02	5
4	NBL			0	0	0	0%	1.02	0
	NBT	0.96	0	1536	36	1,500	3%	1.02	1,567
	NBR			1	0	1	0%	1.02	2
NW 7 AVE & IMMIGRAT	SBL			0	0	0	0%	1.02	0
	SBT	0.94	1	796	22	774	3%	1.02	812
	SBR			0	0	0	0%	1.02	0
4:30 - 5:30 PM	EBL			0	0	0	0%	1.02	0
	EBT	0.00	0	0	0	0	0%	1.02	0
	EBR			0	0	0	0%	1.02	0
06/09/09	WBL			0	0	0	0%	1.02	0
	WBT	0.75	1	0	0	0	0%	1.02	0
	WBR			2	0	2	0%	1.02	3
5	NBL			115	1	114	1%	1.02	118
	NBT	0.88	4	993	22	971	3%	1.02	1,013
	NBR			237	4	233	2%	1.02	242
NW 7 AVE & NW 95 ST	SBL			150	6	144	4%	1.02	153
	SBT	0.94	4	495	24	471	5%	1.02	505
	SBR			55	3	52	6%	1.02	57
3:30 - 4:30 PM	EBL			125	2	123	2%	1.02	128
	EBT	0.93	9	440	13	427	3%	1.02	449
	EBR			82	4	78	5%	1.02	84
06/09/09	WBL			152	5	147	4%	1.02	156
	WBT	0.87	20	411	5	406	2%	1.02	420
	WBR			114	2	112	2%	1.02	117

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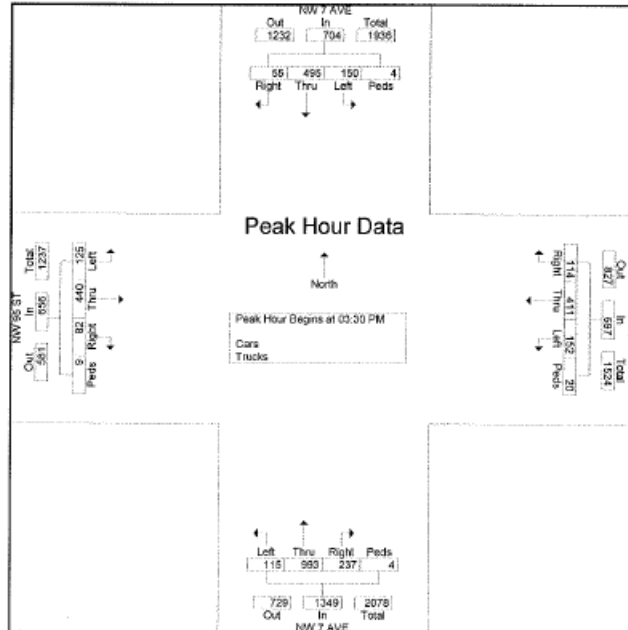
Groups Printed- Cars - Trucks																				
	NW 7 AVE Southbound					NW 95 ST Westbound					NW 7 AVE Northbound					NW 95 ST Eastbound				
Start Time	Right	Thru	Left	Peds	App Total	Right	Thru	Left	Peds	App Total	Right	Thru	Left	Peds	App Total	Right	Thru	Left	Peds	App Total
03:30 PM	13	127	45	2	187	22	84	35	6	147	62	191	31	0	284	22	119	33	2	176
03:45 PM	14	124	37	0	175	25	99	43	5	2	174	50	270	27	2	349	17	113	36	3
Total	27	251	82	2	362	47	183	78	11	2	321	112	461	58	2	633	39	232	69	5
04:00 PM	14	132	32	2	180	31	110	33	2	0	176	69	289	27	0	385	21	108	25	3
04:15 PM	14	112	36	0	162	38	118	41	4	1	200	56	243	30	2	331	22	100	30	1
04:30 PM	14	123	33	1	171	30	107	43	3	0	183	51	216	27	0	294	21	85	32	1
04:45 PM	11	132	34	0	177	32	101	39	2	0	174	54	225	23	0	302	23	88	24	2
Total	53	499	135	3	690	129	436	156	11	1	733	230	973	107	2	1312	87	381	112	7
05:00 PM	11	139	26	1	177	26	90	33	3	2	154	39	204	29	1	273	17	99	24	0
05:15 PM	10	169	24	0	203	24	92	28	2	0	146	43	197	19	0	259	16	97	28	2
Grand Total	101	1058	267	6	1432	226	801	295	27	5	1354	424	1835	213	5	2477	159	809	233	14
Approach %	7.1	73.9	18.6	0.4		16.7	59.2	21.8	2	0.4		17.1	74.1	8.6	0.2		13.1	86.6	19.2	1.2
Total %	1.6	16.3	4.1	0.1	22.1	3.5	12.4	4.8	0.4	0.1	20.9	6.5	28.3	3.3	0.1	38.2	2.5	12.5	3.6	0.2
Cars	95	1018	257	6	1376	221	792	288	27	5	1333	416	1707	211	5	2429	150	790	229	14
% Cars	94.1	96.2	96.3	100	96.1	97.8	98.9	97.6	100	100	98.4	98.1	97.9	99.1	100	98.1	94.3	97.7	98.3	100
Trucks	6	40	10	0	56	5	9	7	0	0	21	8	38	2	0	48	9	19	4	0
% Trucks	5.9	3.8	3.7	0	3.9	2.2	1.1	2.4	0	0	1.6	1.9	2.1	0.9	0	1.9	5.7	2.3	1.7	0



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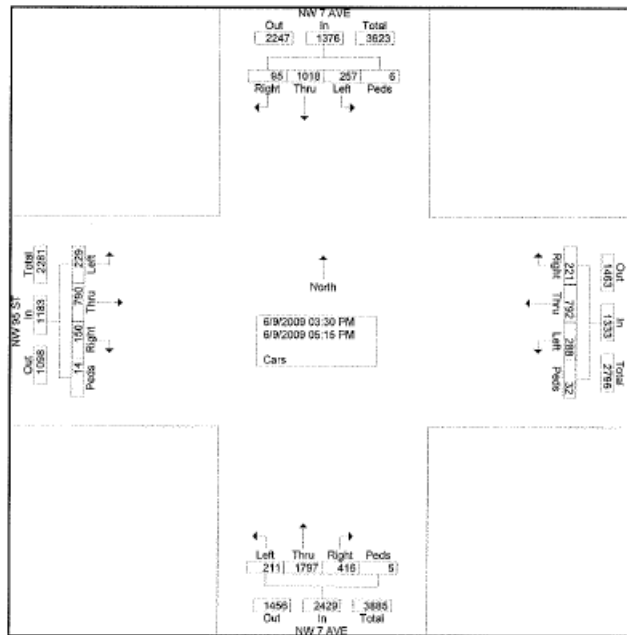
	NW 7 AVE Southbound					NW 95 ST Westbound					NW 7 AVE Northbound					NW 95 ST Eastbound						
Start Time	Right	Thru	Left	Peds	App. Tot	Right	Thru	Left	sum	Peds	App. Tot	Right	Thru	Left	Peds	App. Tot	Right	Thru	Left	Peds	App. Tot	Int. Total
Peak Hour Analysis From 03:30 PM to 04:15 PM Peak 1 of 1																						
Peak Hour for Entire Intersection Begins at 03:30 PM																						
03:30 PM	13	127	45	2	187	22	84	35	6	0	147	62	191	31	0	284	22	119	33	2	176	794
03:45 PM	14	124	37	0	175	25	99	43	5	2	174	50	270	27	2	349	17	113	36	3	169	867
04:00 PM	14	132	32	2	180	31	110	33	2	0	176	69	289	27	0	385	21	108	26	3	158	899
04:15 PM	14	112	36	0	162	36	118	41	4	1	200	55	243	30	2	331	22	100	30	1	153	846
Total Volume	55	495	150	4	704	114	411	152	17	3	697	237	993	115	4	1349	82	440	125	9	656	3406
% App. Total	7.8	70.3	21.3	0.6		16.4	59	21.8	2.4	0.4		17.6	73.6	8.5	0.3		12.5	67.1	19.1	1.4		
PHF	.082	.936	.833	.500	.941	.792	.871	.884	.706	.375	.871	.859	.859	.927	.500	.876	.932	.924	.868	.750	.932	.947



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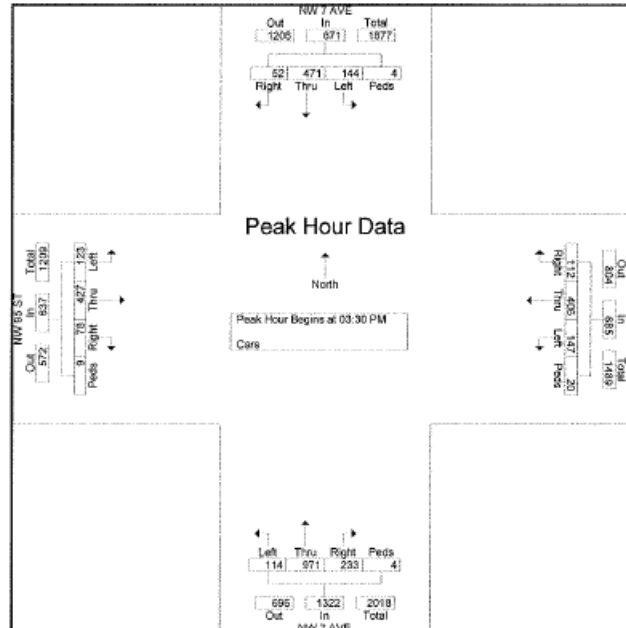
Groups Printed- Cars																				
	NW 7 AVE Southbound					NW 95 ST Westbound					NW 7 AVE Northbound					NW 95 ST Eastbound				
Start Time	Right	Thru	Left	Peds	App Total	Right	Thru	Left	Peds	App Total	Right	Thru	Left	Peds	App Total	Right	Thru	Left	Peds	
03:30 PM	13	120	44	2	179	21	83	34	6	144	51	186	31	0	278	21	117	33	2	
03:45 PM	13	116	36	0	165	25	98	42	5	172	50	266	27	2	345	15	109	36	3	
Total	26	236	80	2	344	46	181	76	11	316	111	452	58	2	623	36	226	69	5	
04:00 PM	12	127	29	2	170	30	109	32	2	173	67	283	26	0	376	21	105	24	3	
04:15 PM	14	108	35	0	157	36	116	39	4	196	55	236	30	2	323	21	96	30	1	
04:30 PM	13	119	31	1	164	29	106	42	3	180	49	212	26	0	287	19	83	31	1	
04:45 PM	9	129	33	0	171	31	99	38	2	170	53	220	23	0	296	22	85	24	2	
Total	48	483	128	3	662	126	430	151	11	719	224	951	105	2	1282	83	369	109	7	
05:00 PM	11	135	26	1	173	26	89	33	3	2153	39	201	29	1	270	16	99	23	0	
05:15 PM	10	164	23	0	197	23	92	28	2	0145	42	193	19	0	254	15	96	26	2	
Grand Total	95	1018	257	6	1376	221	792	288	27	51333	416	1797	211	5	2429	150	790	229	14	
Approch %	6.9	74	18.7	0.4		16.6	59.4	21.6	2	0.4	17.1	74	8.7	0.2		12.7	66.8	19.4	1.2	
Total %	1.5	16.1	4.1	0.1	21.8	3.5	12.5	4.6	0.4	0.1	21.1	6.6	28.4	3.3	0.1	36.4	2.4	12.6	3.6	



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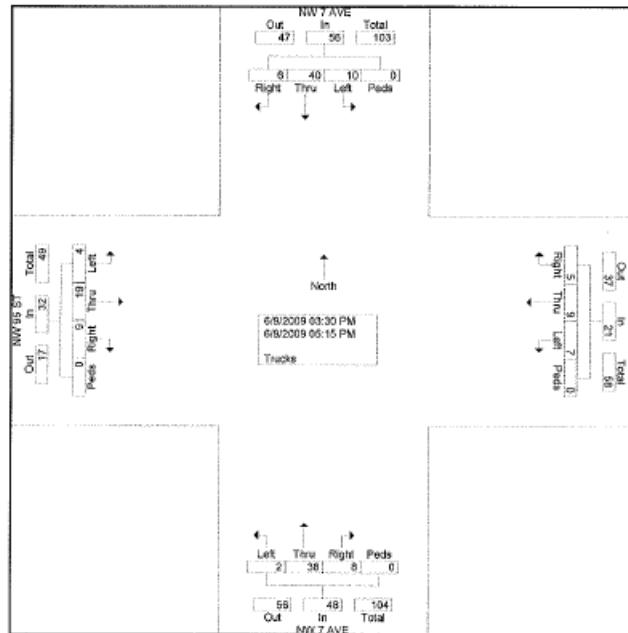
	NW 7 AVE Southbound					NW 95 ST Westbound					NW 7 AVE Northbound					NW 95 ST Eastbound				
Start Time	Right	Thru	Left	Peds	App Tot	Right	Thru	Left	Peds	App Tot	Right	Thru	Left	Peds	App Tot	Right	Thru	Left	Peds	App Tot
Peak Hour for Entire Intersection Begins at 03:30 PM																				
03:30 PM	13	120	44	2	179	21	83	34	6	144	61	186	31	0	278	21	117	33	2	173
03:45 PM	13	116	36	0	165	25	96	42	5	172	50	286	27	2	345	15	109	36	3	163
04:00 PM	12	127	29	2	170	30	109	32	2	173	67	283	26	0	376	21	105	24	3	153
04:15 PM	14	108	35	0	157	38	116	39	4	196	55	236	30	2	323	21	95	30	1	148
Total Volume	52	471	144	4	671	112	406	147	17	685	233	971	114	4	1322	78	427	123	9	637
% App. Total	7.7	70.2	21.5	0.6		16.4	59.3	21.5	2.5	0.4	17.6	73.4	8.6	0.3		12.2	67	19.3	1.4	
PHF	.829	.927	.818	.500	.937	.778	.875	.875	.375	.874	.869	.858	.919	.500	.879	.929	.912	.854	.750	.921



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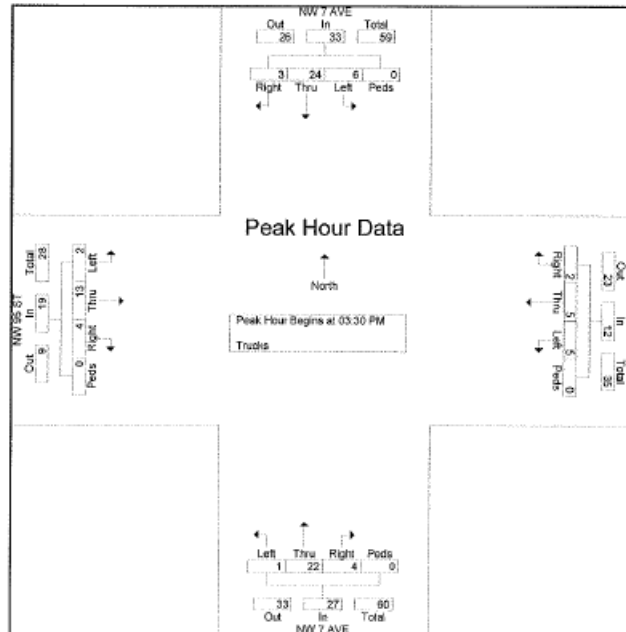
Groups Printed- Trucks																			
NW 7 AVE Southbound					NW 95 ST Westbound					NW 7 AVE Northbound					NW 95 ST Eastbound				
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds
03:30 PM	0	7	1	0	8	1	1	1	0	3	1	5	0	0	6	1	2	0	0
03:45 PM	1	8	1	0	10	0	1	1	0	2	0	4	0	0	4	2	4	0	0
Total	1	15	2	0	18	1	2	2	0	5	1	9	0	0	10	3	6	0	0
04:00 PM	2	5	3	0	10	1	1	1	0	3	2	6	1	0	9	0	3	2	0
04:15 PM	0	4	1	0	5	0	2	2	0	4	1	7	0	0	8	1	4	0	0
04:30 PM	1	4	2	0	7	1	1	1	0	3	2	4	1	0	7	2	2	1	0
04:45 PM	2	3	1	0	6	1	2	1	0	4	1	5	0	0	6	1	3	0	0
Total	5	16	7	0	28	3	6	5	0	14	6	22	2	0	30	4	12	3	0
05:00 PM	0	4	0	0	4	0	1	0	0	1	0	3	0	0	3	1	0	1	0
05:15 PM	0	5	1	0	6	1	0	0	0	1	1	4	0	0	5	1	1	0	0
Grand Total	6	40	10	0	56	5	9	7	0	21	8	38	2	0	48	9	19	4	0
Approch %	10.7	71.4	17.9	0		23.8	42.9	33.3	0	0	16.7	79.2	4.2	0		28.1	60.4	12.5	0
Total %	3.8	25.5	6.4	0	35.7	3.2	5.7	4.5	0	0	5.1	24.2	1.3	0	30.6	5.7	12.1	2.5	0



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	NW 7 AVE Southbound					NW 95 ST Westbound					NW 7 AVE Northbound					NW 95 ST Eastbound				
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
Peak Hour for Entire Intersection Begins at 03:30 PM																				
03:30 PM	0	7	1	0	8	1	1	1	0	3	1	5	0	0	6	1	2	0	0	3
03:45 PM	1	8	1	0	10	0	1	1	0	2	0	4	0	0	4	2	4	0	0	6
04:00 PM	2	5	3	0	10	1	1	1	0	3	2	6	1	0	9	0	3	2	0	5
04:15 PM	0	4	1	0	5	0	2	2	0	4	1	7	0	0	8	1	4	0	0	5
Total Volume	3	24	6	0	33	2	5	5	0	12	4	22	1	0	27	4	13	2	0	19
% App. Total	9.1	72.7	18.2	0		16.7	41.7	41.7	0		14.8	81.5	3.7	0		21.1	68.4	10.5	0	
PHF	.375	.750	.500	.000	.625	.500	.625	.625	.000	.750	.500	.786	.250	.000	.750	.500	.813	.250	.000	.792

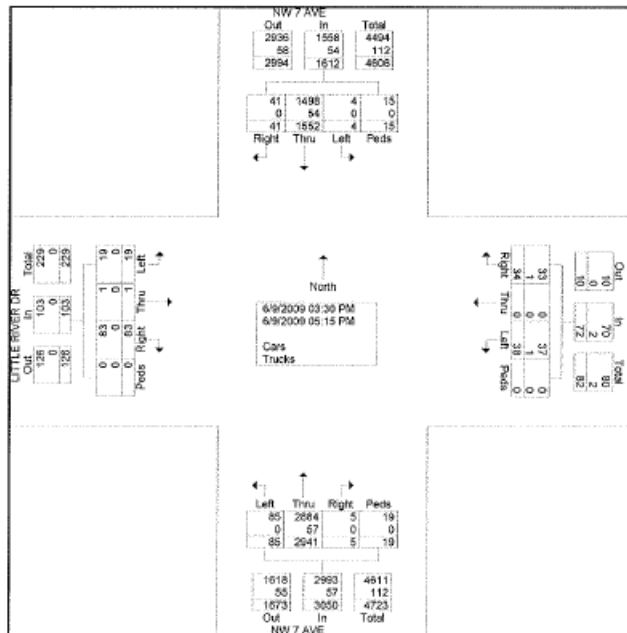


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Groups Printed- Cars - Trucks

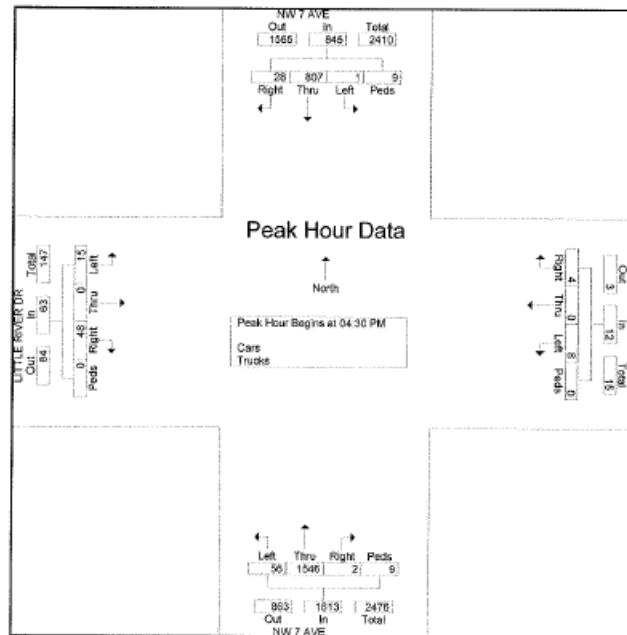
Start Time	NW 7 AVE Southbound					LITTLE RIVER DR Westbound					NW 7 AVE Northbound					LITTLE RIVER DR Eastbound				
	Right	Thru	Left	Peds	App Total	Right	Thru	Left	Peds	App Total	Right	Thru	Left	Peds	App Total	Right	Thru	Left	Peds	App Total
03:30 PM	3	181	2	0	186	18	0	15	0	33	2	313	6	4	325	10	0	3	0	13
03:45 PM	3	195	0	0	200	4	0	7	0	11	0	358	13	4	375	6	0	1	0	7
Total	6	376	2	0	386	22	0	22	0	44	2	671	19	8	700	16	0	4	0	20
04:00 PM	4	187	1	0	193	5	0	6	0	11	0	381	6	1	388	9	0	0	0	9
04:15 PM	3	182	0	0	185	3	0	2	0	5	1	343	4	1	349	10	1	0	0	11
04:30 PM	6	189	0	0	195	3	0	3	0	6	1	365	16	1	383	9	0	5	0	14
04:45 PM	6	199	0	0	205	0	0	0	0	0	1	390	15	2	408	13	0	7	0	20
Total	19	757	1	0	768	11	0	11	0	22	3	1478	41	5	1528	41	1	12	0	54
05:00 PM	6	207	1	1	215	0	0	3	0	3	0	388	14	5	407	15	0	3	0	18
05:15 PM	10	212	0	1	223	1	0	2	0	3	0	403	11	1	415	11	0	0	0	11
Grand Total	41	1552	4	2	1612	34	0	38	0	72	5	2941	85	19	3050	83	1	19	0	103
Approch %	2.5	98.3	0.2	0.1	0.8	47.2	0	52.8	0	0	0.2	98.4	2.8	0.6	0	80.6	1	18.4	0	0
Total %	0.8	32.1	0.1	0	0.3	33.3	0.7	0	0.8	1.5	0.1	60.8	1.8	0.4	63.1	1.7	0	0.4	0	2.1
Cars	41	1498	4	2	1558	33	0	37	0	70	5	2884	85	19	2993	83	1	19	0	103
% Cars	100	98.5	100	100	96.7	97.1	0	97.4	0	97.2	100	98.1	100	100	98.1	100	100	100	0	97.7
Trucks	0	54	0	0	54	1	0	1	0	2	0	57	0	0	57	0	0	0	0	113
% Trucks	0	3.5	0	0	3.3	2.9	0	2.6	0	2.8	0	1.9	0	0	1.9	0	0	0	0	2.3



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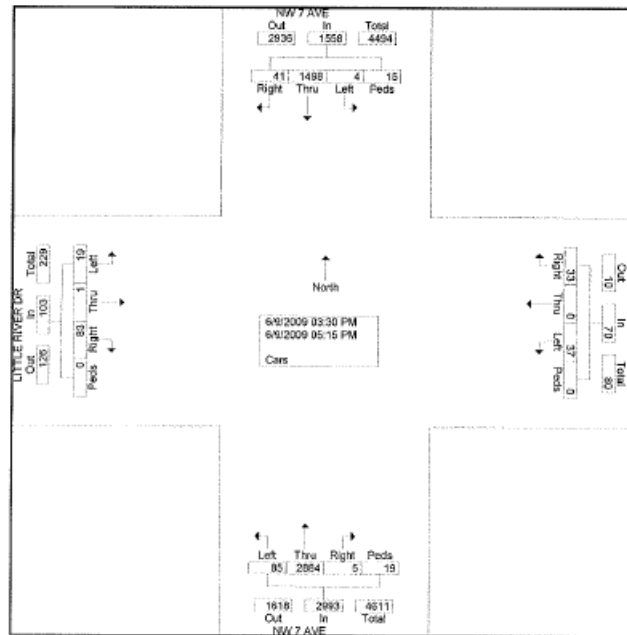
Start Time	NW 7 AVE Southbound					LITTLE RIVER DR Westbound					NW 7 AVE Northbound					LITTLE RIVER DR Eastbound				
	Right	Thru	Left	App. Tot	Peds	Right	Thru	Left	Peds	App. Tot	Right	Thru	Left	Peds	App. Tot	Right	Thru	Left	Peds	App. Tot
Peak Hour Analysis From 03:30 PM to 05:15 PM - Peak 1 of 1																				
Peak Hour for Entire Intersection Begins at 04:30 PM																				
04:30 PM	6	189	0	2	197	3	0	3	0	6	1	365	16	1	383	9	0	5	0	14
04:45 PM	6	199	0	2	207	0	0	0	0	0	1	390	15	2	408	13	0	7	0	20
05:00 PM	6	207	1	1	216	0	0	3	0	3	0	388	14	5	407	15	0	3	0	18
05:15 PM	10	212	0	1	223	1	0	2	0	3	0	403	11	1	415	11	0	0	0	11
Total Volume	28	807	1	2	845	4	0	8	0	12	2	1546	56	9	1613	48	0	15	0	63
% App. Total	3.3	95.5	0.1	0.2	0.8	33.3	0	86.7	0	500	0.1	95.8	3.5	0.6	972	76.2	0	23.8	0	768
PHF	.700	.952	.250	.500	.875	.939	.333	.000	.667	.000	.500	.959	.875	.450	.972	.800	.000	.536	.000	.968



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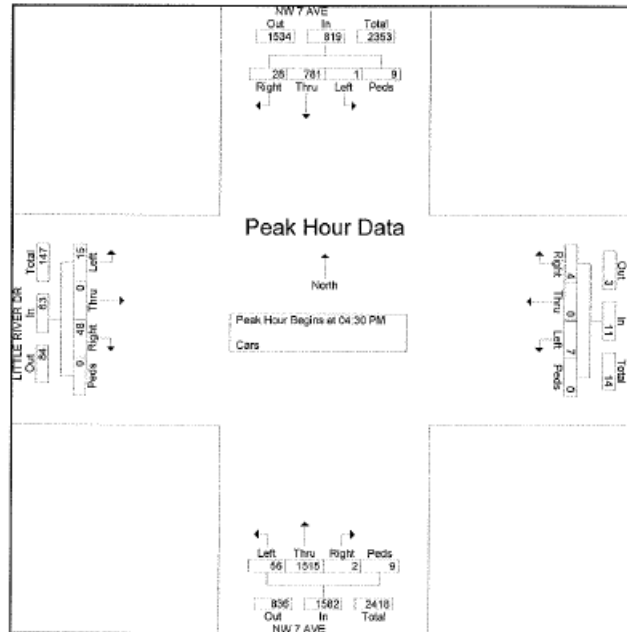
Groups Printed- Cars																						
	NW 7 AVE Southbound					LITTLE RIVER DR Westbound					NW 7 AVE Northbound					LITTLE RIVER DR Eastbound						
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	In Total	Out Total
03:30 PM	3	172	2	0	177	18	0	15	0	33	2	308	6	4	320	10	0	3	0	13	543	
03:45 PM	3	184	0	0	189	4	0	7	0	11	0	353	13	4	370	6	0	1	0	7	577	
Total	6	356	2	0	366	22	0	22	0	44	2	661	19	8	690	16	0	4	0	20	1120	
04:00 PM	4	184	1	0	190	5	0	6	0	11	0	376	6	1	383	9	0	0	0	9	593	
04:15 PM	3	177	0	0	183	2	0	2	0	4	1	332	4	1	338	10	1	0	0	11	536	
04:30 PM	6	186	0	0	194	3	0	3	0	6	1	356	16	1	374	9	0	5	0	14	588	
04:45 PM	6	188	0	0	196	0	0	0	0	0	1	382	15	2	400	13	0	7	0	20	616	
Total	19	735	1	0	763	10	0	11	0	21	3	1446	41	5	1496	41	1	12	0	54	2333	
05:00 PM	6	203	1	1	212	0	0	3	0	3	0	380	14	5	399	15	0	3	0	18	632	
05:15 PM	10	204	0	1	217	1	0	1	0	2	0	397	11	1	408	11	0	0	0	11	639	
Grand Total	41	1408	4	2	1558	33	0	37	0	70	5	2884	85	19	2993	83	1	19	0	103	4724	
Approch %	2.6	96.1	0.3	0.1	0.8	47.1	0	52.9	0	0	0.2	96.4	2.8	0.6		80.6	1	18.4	0			
Total %	0.9	31.7	0.1	0	0.3	33	0.7	0	0.8	0	1.5	0.1	61	1.8	0.4	63.4	1.8	0	0.4	0	2.2	



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 13117 NW 107th Ave SUITE #4
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File Name : NW 7 Ave & Little River Dr PM
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	NW 7 AVE Southbound					LITTLE RIVER DR Westbound					NW 7 AVE Northbound					LITTLE RIVER DR Eastbound						
Start Time	Right	Thru	Left	Peds	App. Tot	Right	Thru	Left	Peds	App. Tot	Right	Thru	Left	Peds	App. Tot	Right	Thru	Left	Peds	App. Tot	Int. Tot	
Peak Hour Analysis From 03:30 PM to 05:15 PM - Peak 1 of 1																						
Peak Hour for Entire Intersection Begins at 04:30 PM																						
04:30 PM	6	186	0	0	2	194	3	0	3	0	6	1	356	16	1	374	9	0	5	0	14	588
04:45 PM	6	188	0	0	2	196	0	0	0	0	0	1	382	15	2	400	13	0	7	0	20	615
05:00 PM	6	203	1	1	1	212	0	0	3	0	3	0	380	14	6	399	15	0	3	0	18	632
05:15 PM	10	204	0	1	2	217	1	0	1	0	2	0	397	11	1	409	11	0	0	0	11	639
Total Volume	28	781	1	2	7	819	4	0	7	0	11	2	1515	56	9	1582	48	0	15	0	63	2475
% App. Total	3.4	95.4	0.1	0.2	0.9		36.4	0	63.6	0		0.1	95.8	3.5	0.6		76.2	0	23.8	0		
PHIF	.700	.957	.250	.500	.875	.944	.333	.000	.583	.000	.458	.500	.954	.875	.450	.967	.800	.000	.536	.000	.768	.968

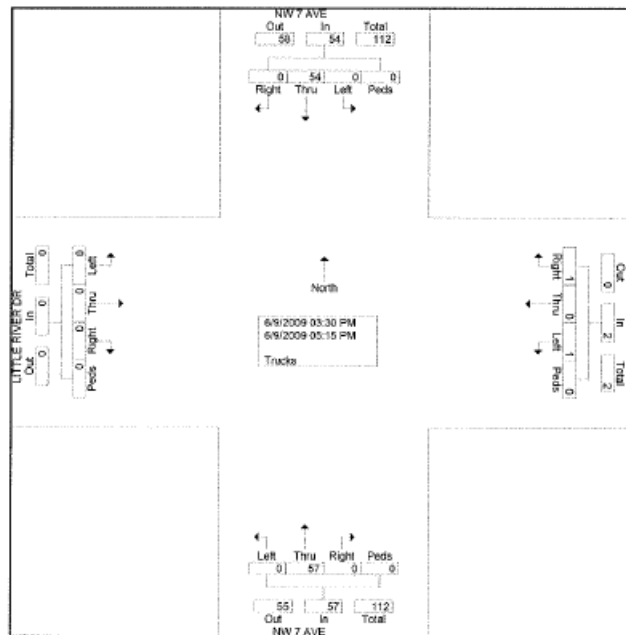


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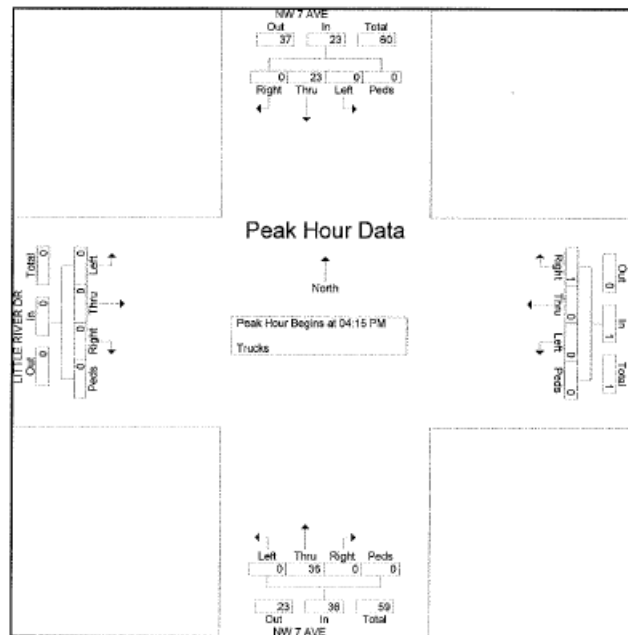
Groups Printed- Trucks

	NW 7 AVE Southbound					LITTLE RIVER DR Westbound					NW 7 AVE Northbound					LITTLE RIVER DR Eastbound				
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
03:30 PM	0	9	0	0	9	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0
03:45 PM	0	11	0	0	11	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0
Total	0	20	0	0	20	0	0	0	0	0	0	10	0	0	10	0	0	0	0	0
04:00 PM	0	3	0	0	3	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0
04:15 PM	0	5	0	0	5	1	0	0	0	1	0	11	0	0	11	0	0	0	0	0
04:30 PM	0	3	0	0	3	0	0	0	0	0	0	9	0	0	9	0	0	0	0	0
04:45 PM	0	11	0	0	11	0	0	0	0	0	0	8	0	0	8	0	0	0	0	0
Total	0	22	0	0	22	1	0	0	0	1	0	33	0	0	33	0	0	0	0	0
05:00 PM	0	4	0	0	4	0	0	0	0	0	0	8	0	0	8	0	0	0	0	0
05:15 PM	0	8	0	0	8	0	0	1	0	1	0	6	0	0	6	0	0	0	0	0
Grand Total	0	54	0	0	54	1	0	1	0	2	0	57	0	0	57	0	0	0	0	0
Approch %	0	100	0	0	0	50	0	50	0	0	100	0	0	0	0	0	0	0	0	0
Total %	0	47.8	0	0	47.8	0.9	0	0.9	0	1.8	0	50.4	0	0	50.4	0	0	0	0	0



File Name : NW 7 Ave & Little River Dr PM
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	NW 7 AVE Southbound						LITTLE RIVER DR Westbound						NW 7 AVE Northbound						LITTLE RIVER DR Eastbound						
Start Time	Right	Thru	Left	Opp.	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Tot. Volume			
Peak Hour Analysis From 03:30 PM to 05:15 PM																							Peak 1 of 1		
Peak Hour for Entire Intersection Begins at 04:15 PM																									
04:15 PM	0	5	0	0	0	5	1	0	0	0	1	0	11	0	0	11	0	0	0	0	0	17			
04:30 PM	0	3	0	0	0	3	0	0	0	0	0	0	9	0	0	9	0	0	0	0	0	12			
04:45 PM	0	11	0	0	0	11	0	0	0	0	0	0	8	0	0	8	0	0	0	0	0	19			
05:00 PM	0	4	0	0	0	4	0	0	0	0	0	0	8	0	0	8	0	0	0	0	0	12			
Total Volume	0	23	0	0	0	23	1	0	0	0	1	0	36	0	0	36	0	0	0	0	0	60			
% App. Total	0	100	0	0	0	100	0	0	0	0	0	0	100	0	0	100	0	0	0	0	0	100			
PHF	.000	.523	.000	.000	.000	.523	.250	.000	.000	.000	.250	.000	.818	.000	.000	.818	.000	.000	.000	.000	.000	.789			



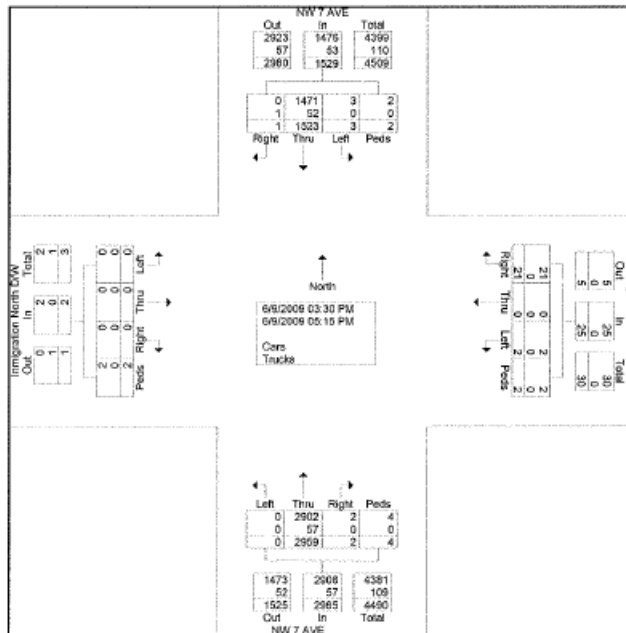
Richard Garcia & Associates Inc.
13117 NW 107th Ave SUITE #4
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File Name : NW 7 Ave & Immigration North D_W PM
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Groups Printed- Cars - Trucks

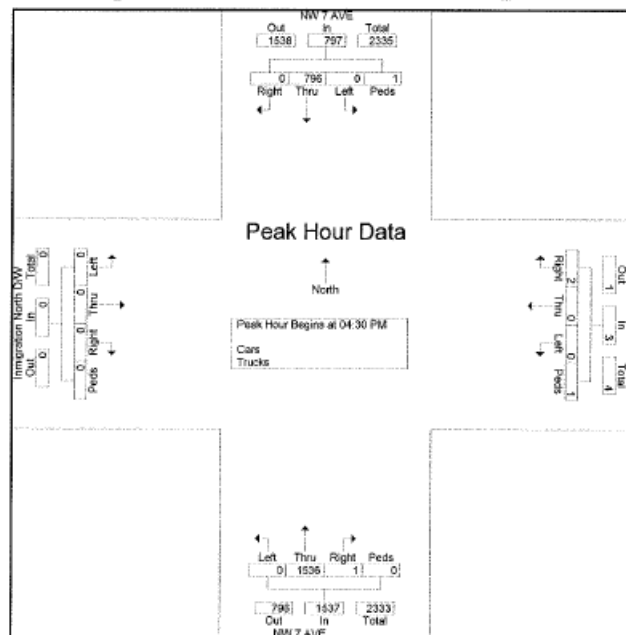
Start Time	NW 7 AVE Southbound				Immigration North D/W Westbound				NW 7 AVE Northbound				Immigration North D/W Eastbound				Int. Total
	Right	Thru	Left	Peds	App. Tot	Right	Thru	Left	Peds	App. Tot	Right	Thru	Left	Peds	App. Tot	Int. Total	
03:30 PM	0	174	1	0	175	9	0	2	0	11	1	333	0	2	336	0	522
03:45 PM	0	189	1	0	190	1	0	0	0	1	0	364	0	2	366	0	547
Total	0	363	2	0	365	10	0	2	0	12	1	687	0	4	692	0	1069
04:00 PM	0	185	0	0	185	3	0	0	1	4	0	385	0	0	385	0	575
04:15 PM	1	179	1	1	182	6	0	0	0	6	0	351	0	0	351	0	540
04:30 PM	0	183	0	0	183	1	0	0	0	1	1	362	0	0	363	0	547
04:45 PM	0	196	0	1	197	0	0	0	1	1	0	389	0	0	389	0	587
Total	1	743	1	2	747	10	0	0	2	12	1	1487	0	0	1488	0	2249
05:00 PM	0	211	0	0	211	1	0	0	0	1	0	386	0	0	386	0	596
05:15 PM	0	206	0	0	206	0	0	0	0	0	0	399	0	0	399	0	605
Grand Total	1	1523	3	2	1529	21	0	2	2	25	2	2959	0	4	2965	0	4521
Approch %	0.1	96.6	0.2	0.1		84	0	8	8		0.1	99.8	0	0.1		0	100
Total %	0	33.7	0.1	0	33.8	0.5	0	0	0	0.6	0	65.5	0	0.1	65.6	0	0
Cars	0	1471									2902						
% Cars	0	96.6	100	100	96.6	100	0	100	100	100	98.1	0	100	98.1		100	97.6
Trucks	1	52	0	0	53	0	0	0	0	0	57	0	0	57	0	0	110
% Trucks	100	3.4	0	0	3.5	0	0	0	0	0	1.9	0	0	1.9		0	2.4



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Start Time	NW 7 AVE Southbound					Immigration North D/W Westbound					NW 7 AVE Northbound					Immigration North D/W Eastbound					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 03:30 PM to 05:15 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	0	183	0	0	183	1	0	0	0	1	1	362	0	0	363	0	0	0	0	0	547
04:45 PM	0	196	0	1	197	0	0	0	0	1	0	389	0	0	389	0	0	0	0	0	587
05:00 PM	0	211	0	0	211	1	0	0	0	1	0	388	0	0	388	0	0	0	0	0	598
05:15 PM	0	206	0	0	206	0	0	0	0	0	0	399	0	0	399	0	0	0	0	0	605
Total Volume	0	796	0	1	797	2	0	0	1	3	1	1536	0	0	1537	0	0	0	0	0	2337
% App. Total	0	99.9	0	0.1	99.9	66.7	0	0	33.3	0.1	99.9	0	0	0	0	0	0	0	0	0	96.6
PHF	.000	.943	.000	.250	.944	.500	.000	.000	.250	.750	.250	.962	.000	.000	.963	.000	.000	.000	.000	.000	.966

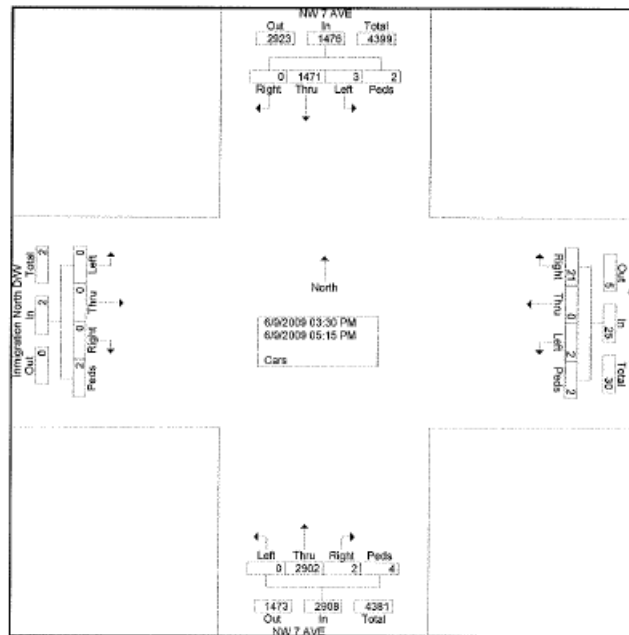


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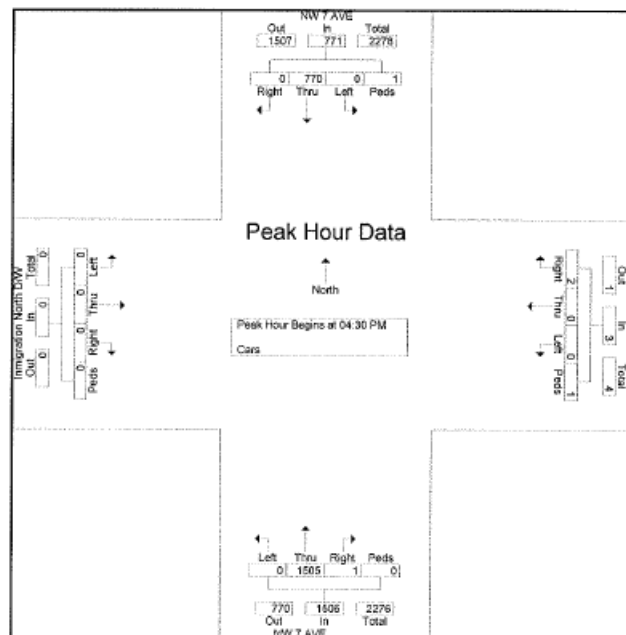
Groups Printed- Cars																					
Start Time	NW 7 AVE Southbound				Opp. Total	Immigration North D/W Westbound				Opp. Total	NW 7 AVE Northbound				Opp. Total	Immigration North D/W Eastbound				Opp. Total	Int. Total
	Right	Thru	Left	Peds		Right	Thru	Left	Peds		Right	Thru	Left	Peds		Right	Thru	Left	Peds		
03:30 PM	0	165	1	0	166	9	0	2	0	11	1	328	0	2	331	0	0	0	0	0	508
03:45 PM	0	179	1	0	180	1	0	0	0	1	0	349	0	2	351	0	0	0	0	0	532
Total	0	344	2	0	346	10	0	2	0	12	1	677	0	4	682	0	0	0	0	0	1040
04:00 PM	0	182	0	0	182	3	0	0	1	4	0	380	0	0	380	0	0	0	1	1	587
04:15 PM	0	175	1	1	177	6	0	0	0	6	0	340	0	0	340	0	0	0	1	1	524
04:30 PM	0	180	0	0	180	1	0	0	0	1	1	353	0	0	354	0	0	0	0	0	535
04:45 PM	0	185	0	1	186	0	0	0	1	1	0	381	0	0	381	0	0	0	0	0	668
Total	0	722	1	2	725	10	0	0	2	12	1	1454	0	0	1455	0	0	0	2	2	2194
05:00 PM	0	207	0	0	207	1	0	0	0	1	0	378	0	0	378	0	0	0	0	0	586
05:15 PM	0	198	0	0	198	0	0	0	0	0	0	393	0	0	393	0	0	0	0	0	591
Grand Total	0	1471	3	2	1476	21	0	2	2	25	2	2902	0	4	2908	0	0	0	2	2	4411
Approch %	0	99.7	0.2	0.1		84	0	8	8		0.1	99.8	0	0.1		0	0	0	100		
Total %	0	33.3	0.1	0	33.5	0.5	0	0	0	0.6	0	65.8	0	0.1	65.9	0	0	0	0	0	



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Start Time	NW 7 AVE Southbound					Immigration North D/W Westbound					NW 7 AVE Northbound					Immigration North D/W Eastbound				
	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 03:30 PM to 05:15 PM - Peak 1 of 1																				
Peak Hour for Entire Intersection Begins at 04:30 PM																				
04:30 PM	0	180	0	0	180	1	0	0	0	1	1	353	0	0	354	0	0	0	0	0
04:45 PM	0	185	0	1	186	0	0	0	1	1	0	381	0	0	381	0	0	0	0	0
05:00 PM	0	207	0	0	207	1	0	0	0	1	0	378	0	0	378	0	0	0	0	0
05:15 PM	0	198	0	0	198	0	0	0	0	0	0	393	0	0	393	0	0	0	0	0
Total Volume	0	770	0	1	771	2	0	0	1	3	1	1505	0	0	1505	0	0	0	0	0
% App. Total	0	99.9	0	0.1	99.9	66.7	0	0	33.3	0.1	99.9	0	0	0	0	0	0	0	0	0
PHF	.000	.930	.000	.250	.931	.500	.000	.000	.250	.750	.250	.957	.000	.000	.958	.000	.000	.000	.000	.964



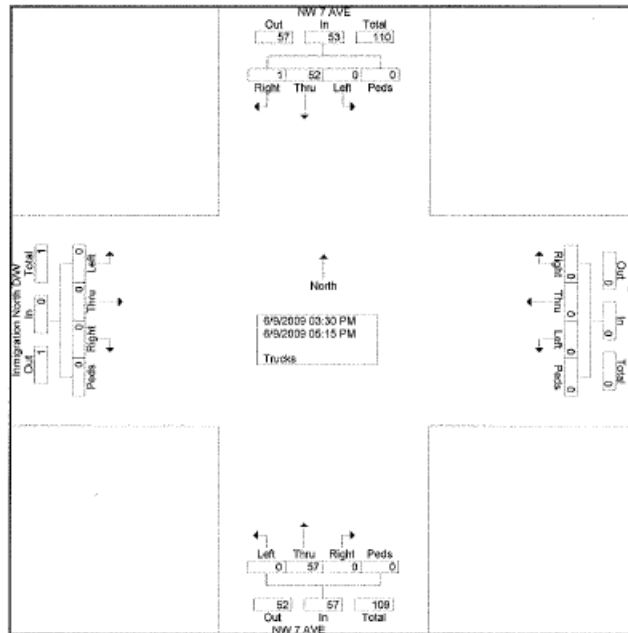
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File Name : NW 7 Ave & Immigration North D_W PM
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Groups Printed- Trucks

	NW 7 AVE Southbound					Immigration North D/W Westbound					NW 7 AVE Northbound					Immigration North D/W Eastbound					
Start Time	Right	Thru	Left	Peds	App. Time	Right	Thru	Left	Peds	App. Time	Right	Thru	Left	Peds	App. Time	Right	Thru	Left	Peds	App. Time	Gr. Total
03:30 PM	0	9	0	0	9	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	14
03:45 PM	0	10	0	0	10	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	16
Total	0	19	0	0	19	0	0	0	0	0	0	10	0	0	10	0	0	0	0	0	29
04:00 PM	0	3	0	0	3	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	8
04:15 PM	1	4	0	0	5	0	0	0	0	0	0	11	0	0	11	0	0	0	0	0	16
04:30 PM	0	3	0	0	3	0	0	0	0	0	0	9	0	0	9	0	0	0	0	0	12
04:45 PM	0	11	0	0	11	0	0	0	0	0	0	8	0	0	8	0	0	0	0	0	19
Total	1	21	0	0	22	0	0	0	0	0	0	33	0	0	33	0	0	0	0	0	55
05:00 PM	0	4	0	0	4	0	0	0	0	0	0	8	0	0	8	0	0	0	0	0	12
05:15 PM	0	8	0	0	8	0	0	0	0	0	0	6	0	0	6	0	0	0	0	0	14
Grand Total	1	52	0	0	53	0	0	0	0	0	0	57	0	0	57	0	0	0	0	0	110
Approch %	1.9	98.1	0	0		0	0	0	0	0	0	100	0	0		0	0	0	0		
Total %	0.9	47.3	0	0	48.2	0	0	0	0	0	0	51.8	0	0	51.8	0	0	0	0	0	



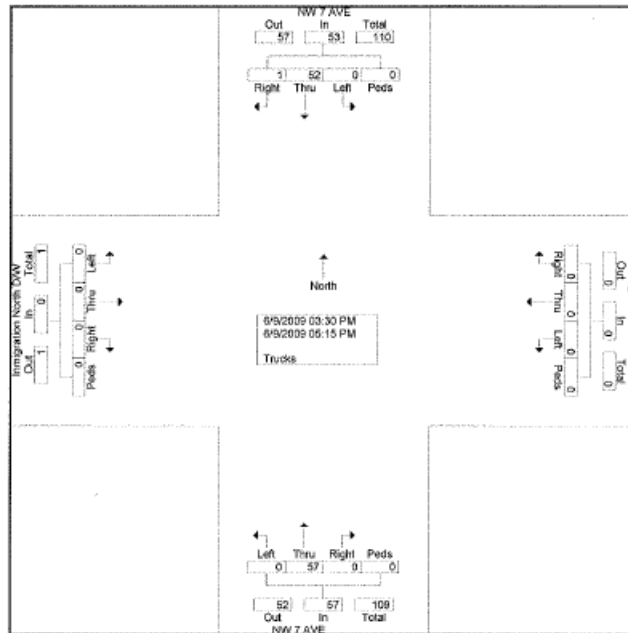
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Groups Printed- Trucks

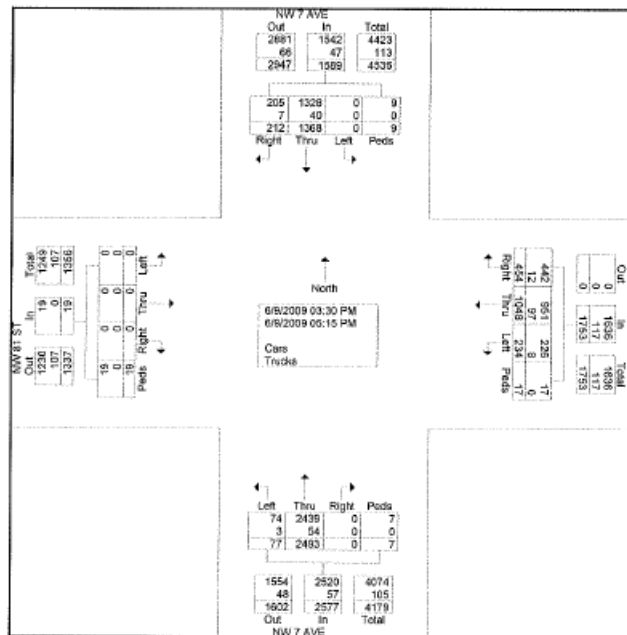
	NW 7 AVE Southbound					Immigration North D/W Westbound					NW 7 AVE Northbound					Immigration North D/W Eastbound					
Start Time	Right	Thru	Left	Peds	App. Time	Right	Thru	Left	Peds	App. Time	Right	Thru	Left	Peds	App. Time	Right	Thru	Left	Peds	App. Time	Gr. Total
03:30 PM	0	9	0	0	9	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	14
03:45 PM	0	10	0	0	10	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	16
Total	0	19	0	0	19	0	0	0	0	0	0	10	0	0	10	0	0	0	0	0	29
04:00 PM	0	3	0	0	3	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	8
04:15 PM	1	4	0	0	5	0	0	0	0	0	0	11	0	0	11	0	0	0	0	0	16
04:30 PM	0	3	0	0	3	0	0	0	0	0	0	9	0	0	9	0	0	0	0	0	12
04:45 PM	0	11	0	0	11	0	0	0	0	0	0	8	0	0	8	0	0	0	0	0	19
Total	1	21	0	0	22	0	0	0	0	0	0	33	0	0	33	0	0	0	0	0	55
05:00 PM	0	4	0	0	4	0	0	0	0	0	0	8	0	0	8	0	0	0	0	0	12
05:15 PM	0	8	0	0	8	0	0	0	0	0	0	6	0	0	6	0	0	0	0	0	14
Grand Total	1	52	0	0	53	0	0	0	0	0	0	57	0	0	57	0	0	0	0	0	110
Approch %	1.9	98.1	0	0		0	0	0	0	0	0	100	0	0		0	0	0	0		
Total %	0.9	47.3	0	0	48.2	0	0	0	0	0	0	51.8	0	0	51.8	0	0	0	0	0	



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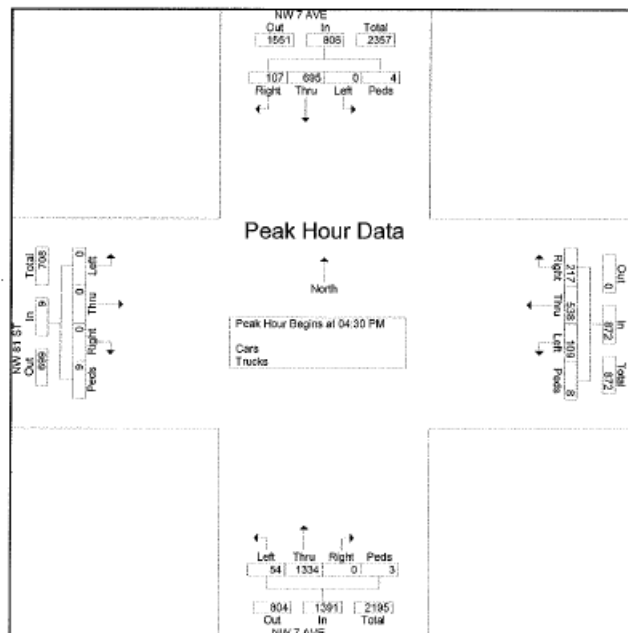
Groups Printed- Cars - Trucks																					
Start Time	NW 7 AVE Southbound					NW 81 ST Westbound					NW 7 AVE Northbound					NW 81 ST Eastbound					Tot. Total
	Right	Thru	Left	Peds	App. Tot	Right	Thru	Left	Peds	App. Tot	Right	Thru	Left	Peds	App. Tot	Right	Thru	Left	Peds	App. Tot	
03:30 PM	27	155	0	1	183	67	132	31	3	233	0	238	6	0	244	0	0	0	2	2	662
03:45 PM	32	173	0	3	208	71	132	36	2	241	0	284	8	2	294	0	0	0	3	3	746
Total	59	328	0	4	391	138	264	67	5	474	0	522	14	2	538	0	0	0	5	5	1408
04:00 PM	23	168	0	1	212	56	118	32	1	207	0	332	6	0	338	0	0	0	3	3	760
04:15 PM	23	167	0	0	180	43	128	26	3	200	0	305	3	2	310	0	0	0	2	2	692
04:30 PM	25	172	0	2	199	59	155	27	2	243	0	295	9	1	305	0	0	0	2	2	749
04:45 PM	17	171	0	0	188	52	125	21	1	199	0	329	13	1	343	0	0	0	5	5	736
Total	88	688	0	3	779	210	526	106	7	849	0	1261	31	4	1296	0	0	0	12	12	2936
05:00 PM	35	179	0	1	215	54	131	32	3	220	0	362	17	0	379	0	0	0	2	2	816
05:15 PM	30	173	0	1	204	52	127	29	2	210	0	348	15	1	364	0	0	0	0	0	778
Grand Total	212	1388	0	9	1589	454	1046	234	17	1753	0	2493	77	7	2577	0	0	0	19	19	5936
Approch %	13.3	86.1	0	0.6		25.9	59.8	13.3	1		0	96.7	3	0.3		0	0	0	100		
Total %	3.6	23	0	0.2	26.8	7.6	17.6	3.9	0.3	29.6	0	42	1.3	0.1	43.4	0	0	0	0.3	0.3	
Cars	205	1328									2439										
% Cars	96.7	97.1	0	100	97	97.4	90.7	96.6	100	93.3	0	97.8	96.1	100	97.8	0	0	0	100	100	96.3
Trucks	7	40	0	0	47	12	97	8	0	117	0	54	3	0	57	0	0	0	0	0	221
% Trucks	3.3	2.9	0	0	3	2.6	9.3	3.4	0	6.7	0	2.2	3.9	0	2.2	0	0	0	0	0	3.7



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13117 NW 107th Ave SUITE #4
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Start Time	NW 7 AVE Southbound					NW 81 ST Westbound					NW 7 AVE Northbound					NW 81 ST Eastbound					
	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 03:30 PM to 05:15 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	25	172	0	2	199	89	156	27	2	243	0	295	9	1	305	0	0	0	2	2	749
04:45 PM	17	171	0	0	188	52	125	21	1	199	0	329	13	1	343	0	0	0	5	5	735
05:00 PM	35	179	0	1	215	54	131	32	3	220	0	362	17	0	379	0	0	0	2	2	816
05:15 PM	30	173	0	1	204	52	127	29	2	210	0	348	15	1	364	0	0	0	0	0	778
Total Volume	107	695	0	4	806	217	538	109	8	872	0	1334	54	3	1391	0	0	0	9	9	3076
% App. Total	13.3	86.2	0	0.5		24.9	61.7	12.5	0.9		0	95.9	3.9	0.2		0	0	0	100		
PHF	.794	.971	.000	.500	.637	.919	.868	.852	.867	.897	.000	.921	.794	.750	.918	.000	.000	.000	.450	.450	.943

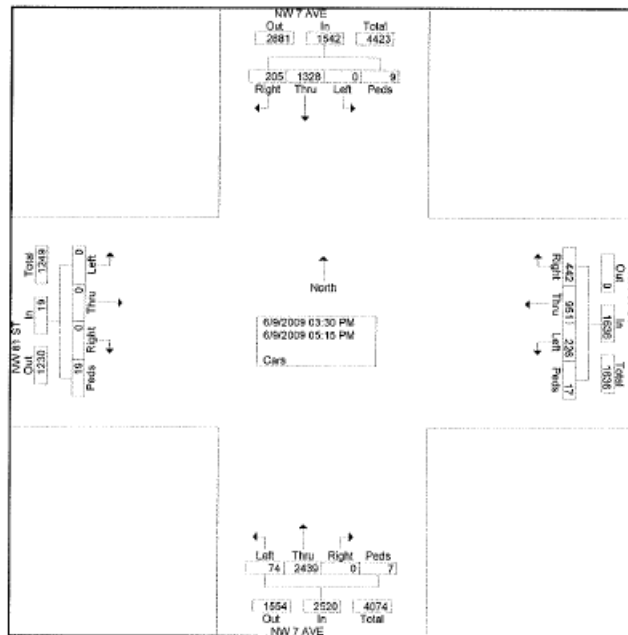


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Groups Printed- Cars

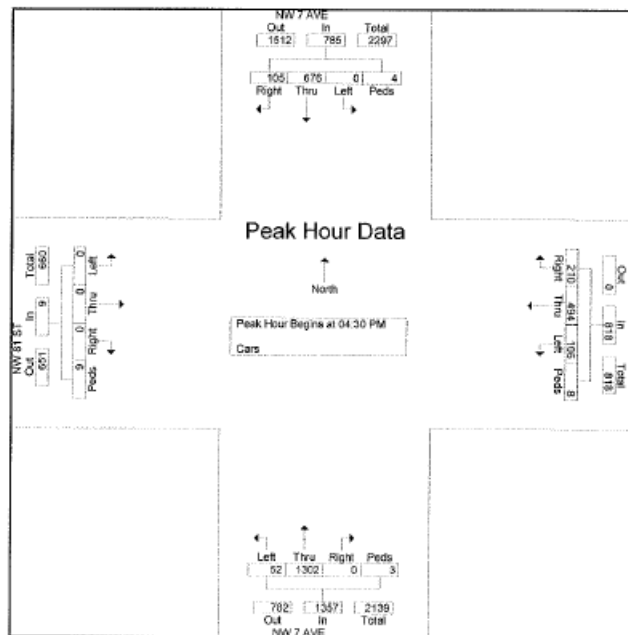
Start Time	NW 7 AVE Southbound				NW 81 ST Westbound				NW 7 AVE Northbound				NW 81 ST Eastbound				Int. Total
	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	
03:30 PM	26	150	0	1	177	67	116	31	3	217	0	231	5	0	236	0	632
03:45 PM	29	164	0	3	196	71	118	34	2	225	0	260	8	2	290	0	714
Total	55	314	0	4	373	138	234	65	5	442	0	511	13	2	526	0	1346
04:00 PM	23	185	0	1	209	52	108	32	1	193	0	329	6	0	335	0	740
04:15 PM	22	163	0	0	175	42	115	23	3	183	0	297	3	2	302	0	662
04:30 PM	24	168	0	2	194	56	144	25	2	227	0	285	9	1	295	0	718
04:45 PM	16	161	0	0	177	51	118	21	1	191	0	325	11	1	337	0	710
Total	85	667	0	3	755	201	486	101	7	794	0	1236	29	4	1269	0	2630
05:00 PM	35	176	0	1	212	53	117	32	3	205	0	352	17	0	369	0	788
05:15 PM	30	171	0	1	202	50	115	28	2	186	0	340	15	1	356	0	753
Grand Total	205	1328	0	9	1542	442	951	226	17	1636	0	2439	74	7	2520	0	5717
Approch %	13.3	86.1	0	0.6	27	58.1	13.8	1	0	98.8	2.9	0.3	0	0	0	100	
Total %	3.6	23.2	0	0.2	27	7.7	16.6	4	0.3	28.6	0	42.7	1.3	0.1	44.1	0	0.3



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Start Time	NW 7 AVE Southbound					NW 81 ST Westbound					NW 7 AVE Northbound					NW 81 ST Eastbound					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 03:30 PM to 05:15 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	24	168	0	2	194	86	144	25	2	227	0	285	9	1	295	0	0	0	2	2	718
04:45 PM	16	161	0	0	177	51	113	21	1	191	0	325	11	1	337	0	0	0	5	5	710
05:00 PM	35	176	0	1	212	53	117	32	3	205	0	352	17	0	369	0	0	0	2	2	788
05:15 PM	30	171	0	1	202	50	115	28	2	195	0	340	15	1	355	0	0	0	0	0	753
Total Volume	105	676	0	4	785	210	494	106	8	818	0	1302	52	3	1357	0	0	0	9	9	2969
% App. Total	13.4	86.1	0	0.5	25.7	60.4	13	1	0	95.9	3.8	0.2	0	0	0	0	0	0	100	0	100
PHF	.750	.980	.000	.500	.928	.936	.858	.828	.667	.901	.000	.925	.765	.750	.919	.000	.000	.000	.450	.450	.842

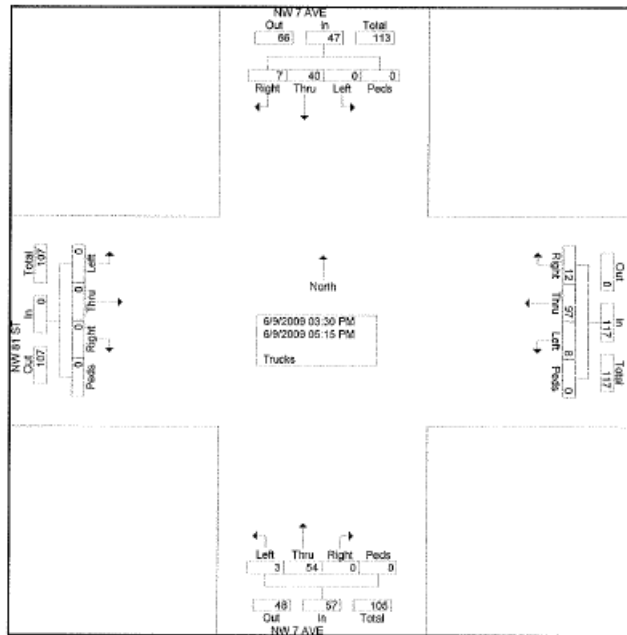


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Groups Printed- Trucks

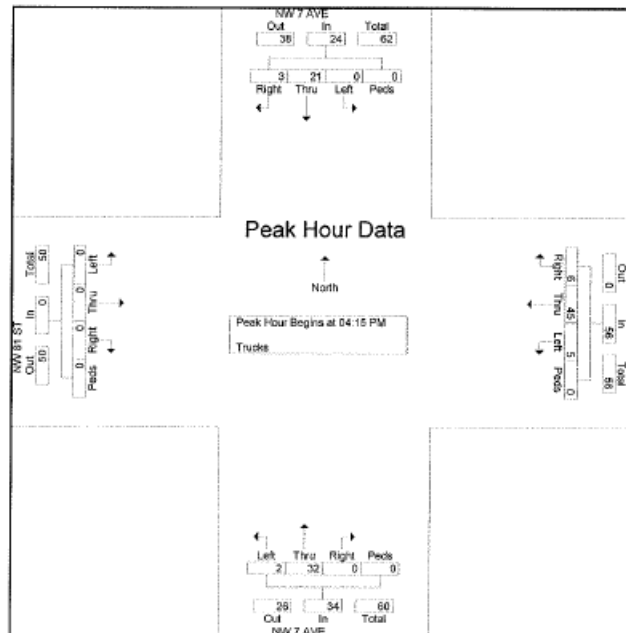
Start Time	NW 7 AVE Southbound				App. Total	NW 81 ST Westbound				App. Total	NW 7 AVE Northbound				App. Total	NW 81 ST Eastbound				App. Total	Int. Total
	Right	Thru	Left	Peds		Right	Thru	Left	Peds		Right	Thru	Left	Peds		Right	Thru	Left	Peds		
03:30 PM	1	5	0	0	6	0	16	0	0	16	0	7	1	0	8	0	0	0	0	0	30
03:45 PM	3	9	0	0	12	0	14	2	0	16	0	4	0	0	4	0	0	0	0	0	32
Total	4	14	0	0	18	0	30	2	0	32	0	11	1	0	12	0	0	0	0	0	62
04:00 PM	0	3	0	0	3	4	10	0	0	14	0	3	0	0	3	0	0	0	0	0	20
04:15 PM	1	4	0	0	5	1	13	3	0	17	0	8	0	0	8	0	0	0	0	0	30
04:30 PM	1	4	0	0	5	3	11	2	0	16	0	10	0	0	10	0	0	0	0	0	31
04:45 PM	1	10	0	0	11	1	7	0	0	8	0	4	2	0	6	0	0	0	0	0	25
Total	3	21	0	0	24	9	41	5	0	55	0	25	2	0	27	0	0	0	0	0	106
05:00 PM	0	3	0	0	3	1	14	0	0	15	0	10	0	0	10	0	0	0	0	0	28
05:15 PM	0	2	0	0	2	2	12	1	0	15	0	8	0	0	8	0	0	0	0	0	25
Grand Total	7	40	0	0	47	12	97	8	0	117	0	54	3	0	57	0	0	0	0	0	221
Approch %	14.9	85.1	0	0		10.3	82.9	6.8	0		0	94.7	5.3	0		0	0	0	0	0	
Total %	3.2	18.1	0	0	21.3	5.4	43.9	3.6	0	52.9	0	24.4	1.4	0	25.8	0	0	0	0	0	



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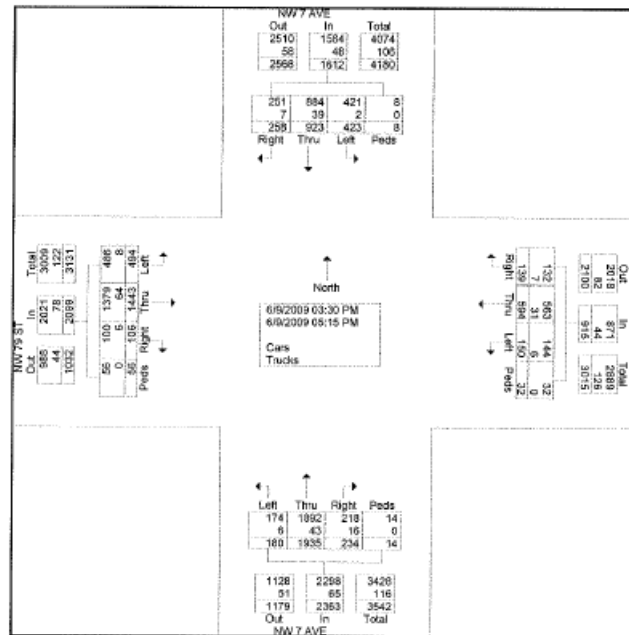
Start Time	NW 7 AVE Southbound					NW 81 ST Westbound					NW 7 AVE Northbound					NW 81 ST Eastbound					In Total
	Right	Thru	Left	Peds	App Total	Right	Thru	Left	Peds	App Total	Right	Thru	Left	Peds	App Total	Right	Thru	Left	Peds	App Total	
Peak Hour Analysis From 03:30 PM to 05:15 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:15 PM																					
04:15 PM	1	4	0	0	5	1	13	3	0	17	0	8	0	0	8	0	0	0	0	0	30
04:30 PM	1	4	0	0	5	3	11	2	0	16	0	10	0	0	10	0	0	0	0	0	31
04:45 PM	1	10	0	0	11	1	7	0	0	8	0	4	2	0	6	0	0	0	0	0	25
05:00 PM	0	3	0	0	3	1	14	0	0	15	0	10	0	0	10	0	0	0	0	0	28
Total Volume	3	21	0	0	24	6	45	5	0	56	0	32	2	0	34	0	0	0	0	0	114
% App Total	12.5	87.5	0	0		10.7	80.4	8.9	0		0	94.1	5.9	0		0	0	0	0	0	
PHF	.750	.525	.000	.000	.545	.500	.804	.417	.000	.824	.000	.800	.250	.000	.850	.000	.000	.000	.000	.000	.919



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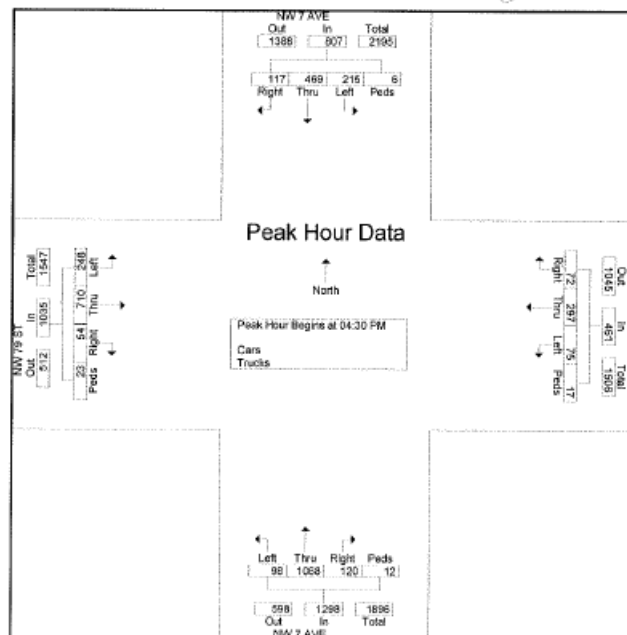
Groups Printed- Cars - Trucks																					
Start Time	NW 7 AVE Southbound				App. Total	NW 79 ST Westbound				App. Total	NW 7 AVE Northbound				App. Total	NW 79 ST Eastbound				App. Total	Int. Total
	Right	Thru	Left	Peds		Right	Thru	Left	Peds		Right	Thru	Left	Peds		Right	Thru	Left	Peds		
03:30 PM	35	93	60	2	190	14	70	16	0	102	28	171	19	0	218	14	174	60	6	254	764
03:45 PM	30	131	46	0	207	14	83	22	7	126	25	210	21	2	258	12	191	65	7	275	866
Total	65	224	106	2	397	28	153	40	7	228	53	381	40	2	476	26	365	125	13	529	1630
04:00 PM	37	122	62	0	221	21	79	16	2	118	34	261	24	0	319	13	180	56	8	257	915
04:15 PM	39	108	40	0	187	18	65	19	6	108	27	225	16	0	270	13	188	65	12	278	843
04:30 PM	35	101	58	1	195	14	69	22	6	111	33	231	21	5	291	16	183	62	5	266	863
04:45 PM	27	108	58	1	194	23	81	18	5	127	31	251	30	2	314	12	181	65	10	268	903
Total	138	439	218	2	797	76	294	75	19	464	125	968	93	8	1194	54	732	248	35	1069	3524
05:00 PM	29	133	51	3	216	18	75	19	4	116	30	297	25	1	353	14	175	63	5	257	942
05:15 PM	26	127	48	1	202	17	72	16	2	107	26	289	22	3	340	12	171	56	3	244	890
Grand Total	258	923	423	8	1612	139	594	150	32	915	234	1936	180	14	2363	106	1443	495	56	2099	6989
Approch %	16	57.3	26.2	0.5		15.2	64.9	16.4	3.5		9.9	81.9	7.6	0.6		5.1	68.7	23.5	2.7		
Total %	3.7	13.2	8.1	0.1	23.1	2	8.5	2.1	0.5	13.1	3.3	27.7	2.6	0.2	33.8	1.5	20.6	7.1	0.8	30	
Cars	251	884	421	8	1564	132	583	144	32	871	218	1892				100	1379				
% Cars	97.3	95.8	99.5	100	97	95	94.8	96	100	95.2	93.2	97.8	96.7	100	97.2	94.3	95.8	98.4	100	96.3	96.6
Trucks	7	39	2	0	48	7	31	6	0	44	16	43	6	0	65	6	64	8	0	78	235
% Trucks	2.7	4.2	0.5	0	3	5	5.2	4	0	4.8	6.8	2.2	3.3	0	2.8	5.7	4.4	1.6	0	3.7	3.4



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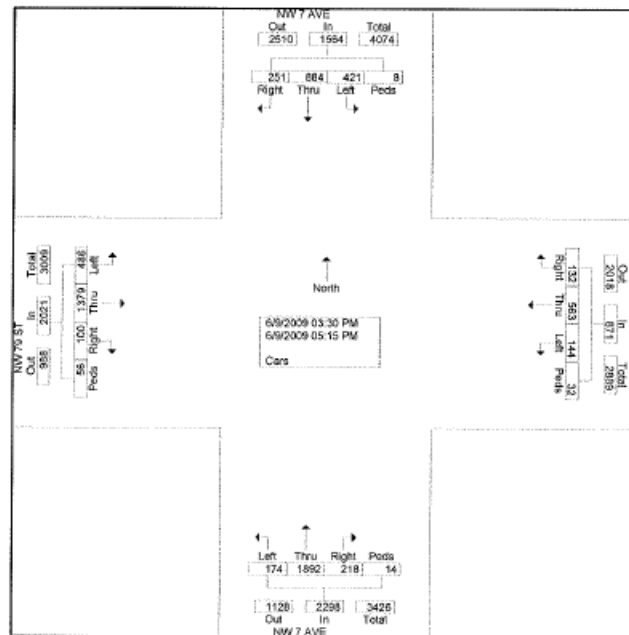
Start Time	NW 7 AVE Southbound					NW 79 ST Westbound					NW 7 AVE Northbound					NW 79 ST Eastbound				
	Right	Thru	Left	Peds	App. Tot	Right	Thru	Left	Peds	App. Tot	Right	Thru	Left	Peds	App. Tot	Right	Thru	Left	Peds	App. Tot
Peak Hour Analysis From 03:30 PM to 05:15 PM - Peak 1 of 1																				
Peak Hour for Entire Intersection Begins at 04:30 PM																				
04:30 PM	35	101	58	1	195	14	69	22	6	111	33	231	21	6	291	16	183	62	5	266
04:45 PM	27	108	58	1	184	23	81	18	5	127	31	251	30	2	314	12	181	65	10	268
05:00 PM	29	133	51	3	216	18	75	19	4	116	30	297	25	1	353	14	175	63	5	257
05:15 PM	26	127	48	1	202	17	72	16	2	107	26	289	22	3	340	12	171	58	3	244
Total Volume	117	469	215	6	807	72	297	75	17	461	120	1058	98	12	1268	54	710	248	23	1035
% App. Total	14.5	58.1	26.6	0.7		15.6	64.4	16.3	3.7		9.2	82.3	7.6	0.9		5.2	68.6	24	2.2	
PHF	.836	.882	.927	.500	.934	.783	.917	.852	.708	.907	.909	.899	.817	.500	.919	.844	.970	.954	.575	.956



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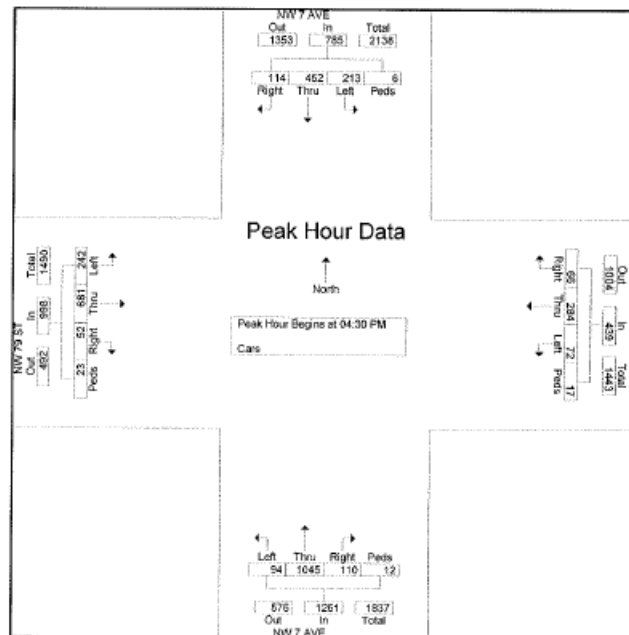
Groups Printed- Cars																							
Start Time	NW 7 AVE Southbound					NW 79 ST Westbound					NW 7 AVE Northbound					NW 79 ST Eastbound					Int. Total		
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total			
03:30 PM	33	90	60	2	185	13	64	18	0	95	26	164	19	0	209	14	165	60	6	245	734		
03:45 PM	29	121	46	0	196	14	76	22	7	121	24	207	21	2	254	10	182	65	7	264	835		
Total	62	211	106	2	381	27	142	40	7	216	50	371	40	2	463	24	347	125	13	509	1569		
04:00 PM	37	119	62	0	218	21	75	15	2	113	33	259	22	0	314	11	172	55	8	246	891		
04:15 PM	38	102	40	0	180	18	62	17	6	103	25	217	18	0	260	13	179	64	12	268	811		
04:30 PM	34	96	58	1	189	13	64	22	6	105	29	223	19	6	277	15	174	60	5	254	825		
04:45 PM	26	101	56	1	184	21	78	16	5	120	30	248	29	2	309	12	173	64	10	259	872		
Total	135	418	216	2	771	73	279	70	19	441	117	947	88	8	1160	51	698	243	35	1027	3399		
05:00 PM	29	130	51	3	213	17	73	19	4	113	27	290	25	1	343	14	166	61	5	246	917		
05:15 PM	25	125	46	1	199	15	69	15	2	101	24	284	21	3	332	11	166	57	3	237	889		
Grand Total	251	884	421	8	1564	132	563	144	32	871	218	1892	174	14	2298	100	1379	486	56	2021	6754		
Approch %	16	56.5	26.9	0.5		15.2	64.6	16.5	3.7		9.5	82.3	7.5	0.6		4.9	68.2	24	2.8				
Total %	3.7	13.1	6.2	0.1	23.2	2	8.3	2.1	0.5	12.9	3.2	28	2.6	0.2	34	1.5	20.4	7.2	0.8	29.9			



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Start Time	NW 7 AVE Southbound					NW 79 ST Westbound					NW 7 AVE Northbound					NW 79 ST Eastbound					Veh. 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 03:30 PM to 05:15 PM - Peak 1 of 1																						
Peak Hour for Entire Intersection Begins at 04:30 PM																						
04:30 PM	34	96	58	1	189	13	64	22	6	105	29	223	19	6	277	15	174	60	5	254	825	
04:45 PM	26	101	56	1	184	21	78	16	5	120	30	248	29	2	309	12	173	64	10	259	872	
05:00 PM	29	130	51	3	213	17	73	19	4	113	27	290	25	1	343	14	168	61	5	248	917	
05:15 PM	25	125	48	1	199	15	69	15	2	101	24	284	21	3	332	11	166	57	3	237	869	
Total Volume	114	452	213	6	785	66	284	72	17	439	110	1045	94	12	1261	52	681	242	23	998	3483	
% App. Total	14.5	57.6	27.1	0.8		15	64.7	16.4	3.9		8.7	82.9	7.5	1		5.2	68.2	24.2	2.3			
PHF	.838	.809	.918	.500	.921	.786	.910	.818	.708	.915	.917	.901	.810	.500	.919	.867	.978	.945	.576	.963	.950	

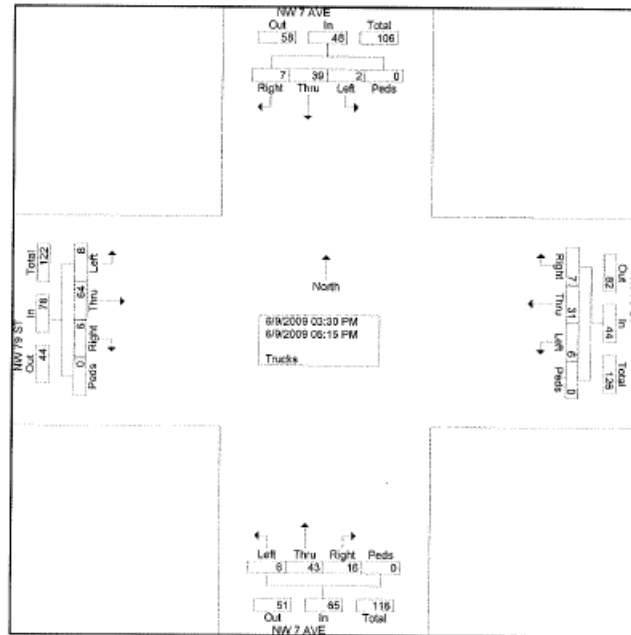


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 Site Code :
 Start Date : 6/9/2009
 Page No : 1

Groups Printed- Trucks

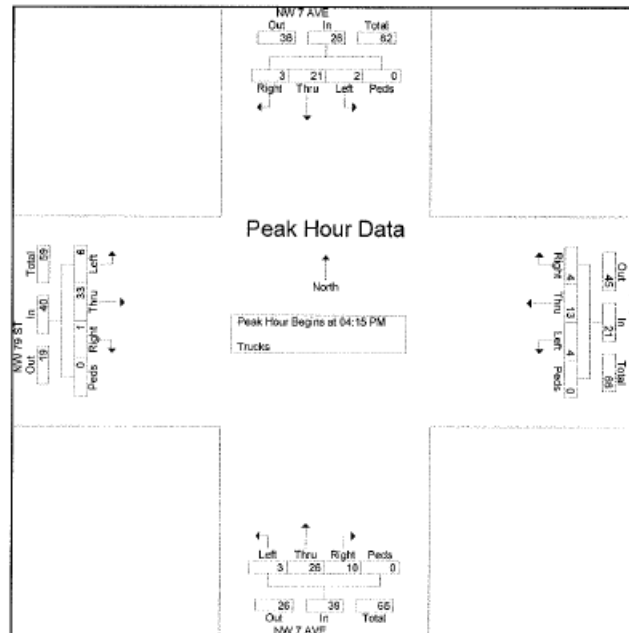
Start Time	NW 7 AVE Southbound					NW 79 ST Westbound					NW 7 AVE Northbound					NW 79 ST Eastbound					In Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
03:30 PM	2	3	0	0	5	1	6	0	0	7	2	7	0	0	9	0	9	0	0	9	30
03:45 PM	1	10	0	0	11	0	5	0	0	5	1	3	0	0	4	2	9	0	0	11	31
Total	3	13	0	0	16	1	11	0	0	12	3	10	0	0	13	2	18	0	0	20	61
04:00 PM	0	3	0	0	3	0	4	1	0	5	1	2	2	0	5	2	8	1	0	11	24
04:15 PM	1	6	0	0	7	0	3	2	0	5	2	8	0	0	10	0	9	1	0	10	32
04:30 PM	1	5	0	0	6	1	5	0	0	6	4	8	2	0	14	1	9	2	0	12	38
04:45 PM	1	7	2	0	10	2	3	2	0	7	1	3	1	0	5	0	8	1	0	9	31
Total	3	21	2	0	26	3	15	3	0	23	8	21	5	0	34	3	34	5	0	42	125
05:00 PM	0	3	0	0	3	1	2	0	0	3	3	7	0	0	10	0	7	2	0	9	25
05:15 PM	1	2	0	0	3	2	3	1	0	6	2	5	1	0	8	1	5	1	0	7	24
Grand Total	7	39	2	0	48	7	31	3	0	44	16	43	3	0	65	6	64	8	0	78	235
Approch %	14.6	81.2	4.2	0		15.9	70.5	13.6	0		24.6	66.2	9.2	0		7.7	82.1	10.3	0		
Total %	3	16.6	0.9	0	20.4	3	13.2	2.6	0	18.7	6.8	18.3	2.6	0	27.7	2.6	27.2	3.4	0	33.2	



Richard Garcia & Associates Inc.
 13117 NW 107th Ave SUITE #4
 Hialeah Gardens, FL 33018
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File Name : NW 7 Ave & NW 79 St PM
 Site Code :
 Start Date : 6/9/2009
 Page No : 2

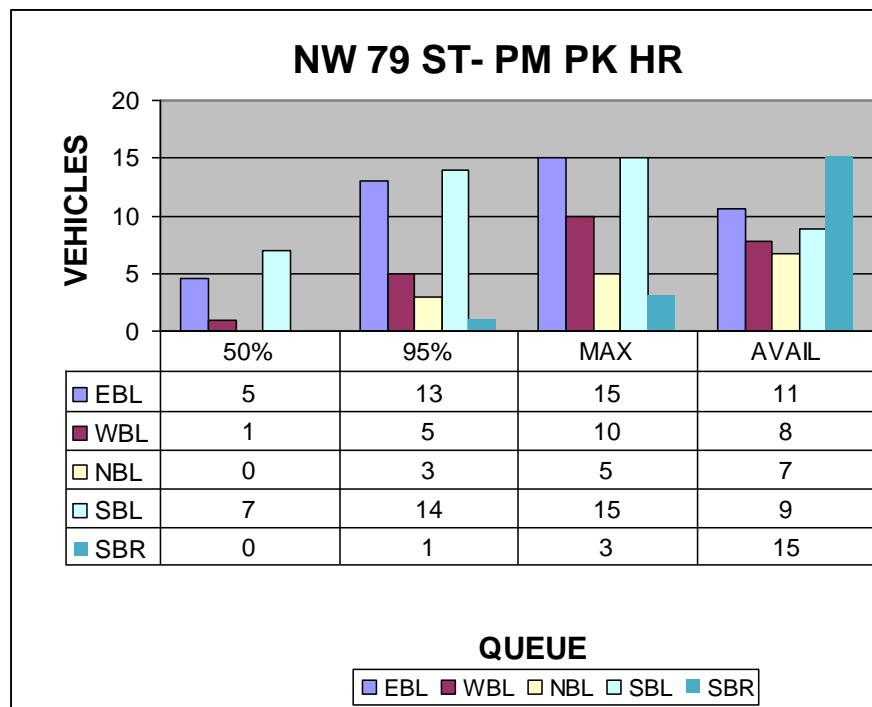
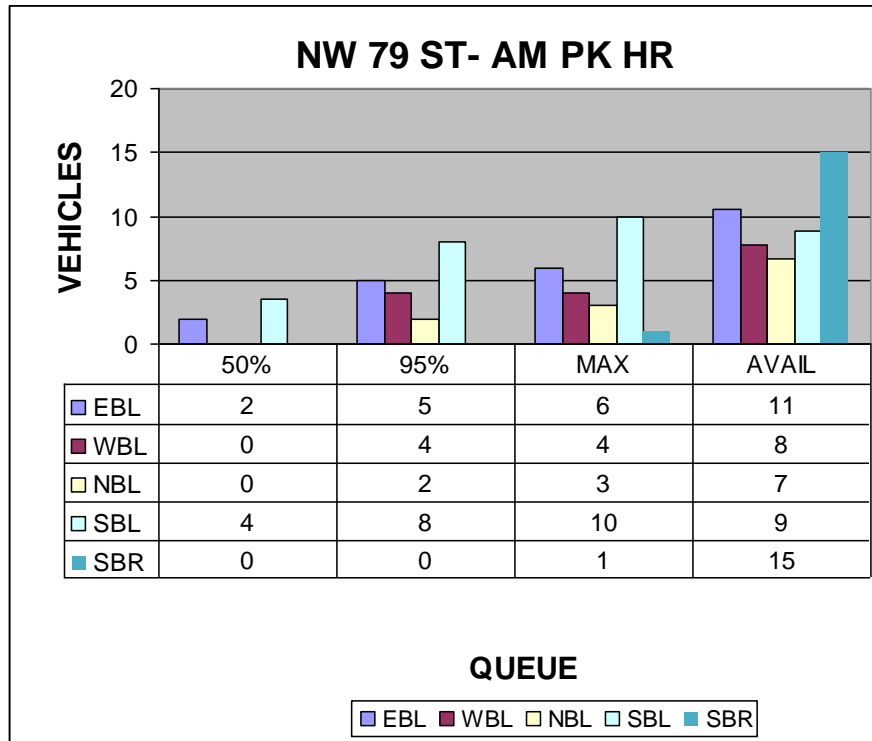
Start Time	NW 7 AVE Southbound					NW 79 ST Westbound					NW 7 AVE Northbound					NW 79 ST Eastbound				
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total
Peak Hour Analysis From 03:30 PM to 05:15 PM - Peak 1 of 1																				
Peak Hour for Entire Intersection Begins at 04:15 PM																				
04:15 PM	1	6	0	0	7	0	3	2	0	5	2	8	0	0	10	0	9	1	0	10
04:30 PM	1	5	0	0	6	1	5	0	0	6	4	8	2	0	14	1	9	2	0	12
04:45 PM	1	7	2	0	10	2	3	2	0	7	1	3	1	0	5	0	8	1	0	9
05:00 PM	0	3	0	0	3	1	2	0	0	3	3	7	0	0	10	0	7	2	0	9
Total Volume	3	21	2	0	26	4	13	4	0	21	10	26	3	0	39	1	33	6	0	40
% App. Total	11.5	80.8	7.7	0		19	61.9	19	0		25.6	66.7	7.7	0		2.5	82.5	15	0	
PHF	.750	.750	.250	.000	.650	.500	.650	.500	.000	.750	.625	.813	.375	.000	.666	.250	.917	.750	.000	.833



Appendix F – Existing Queue Analysis

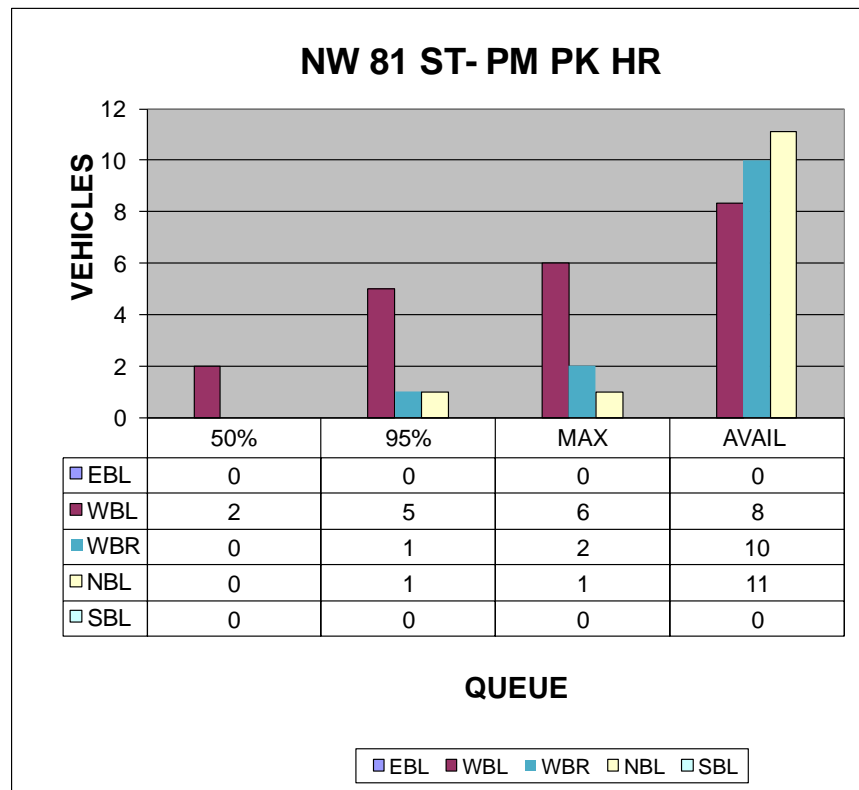
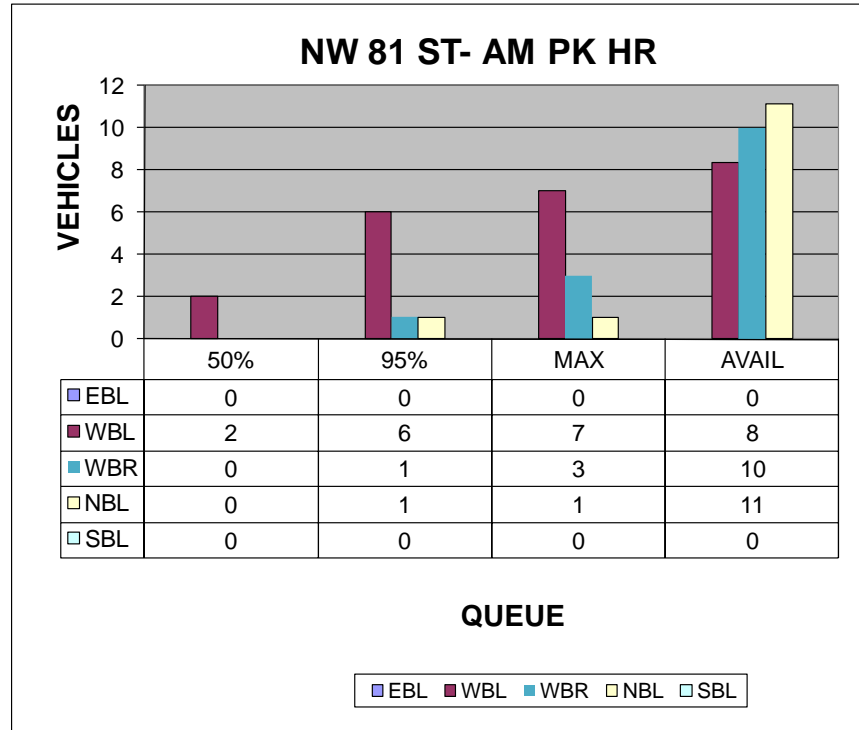
Existing

NW 79 ST Drive AM & PM Queue Charts



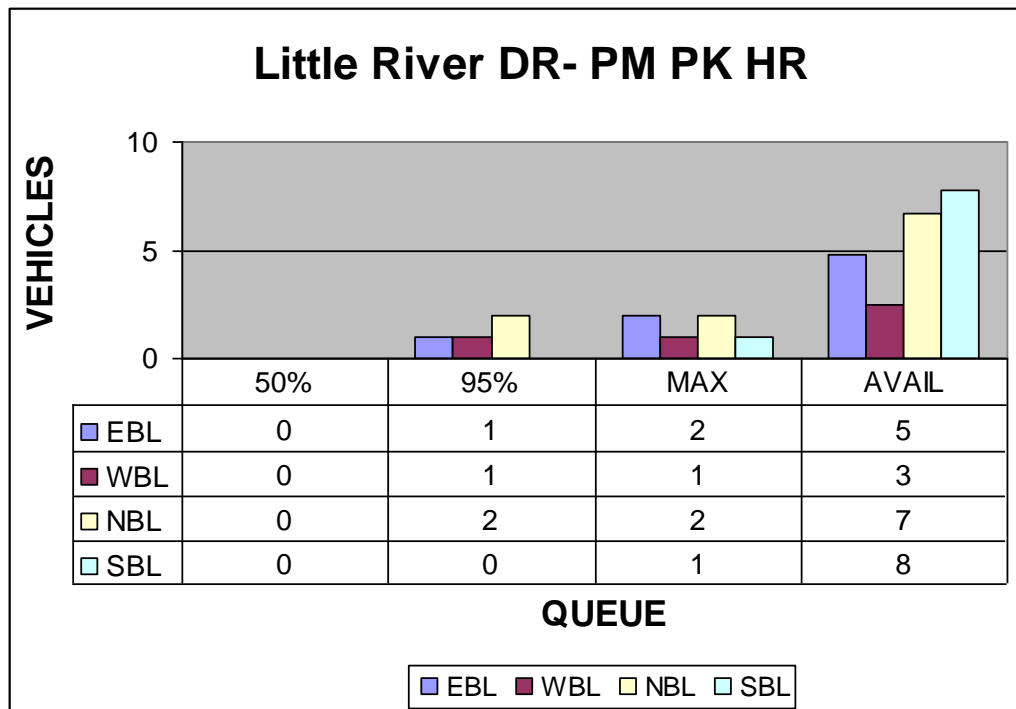
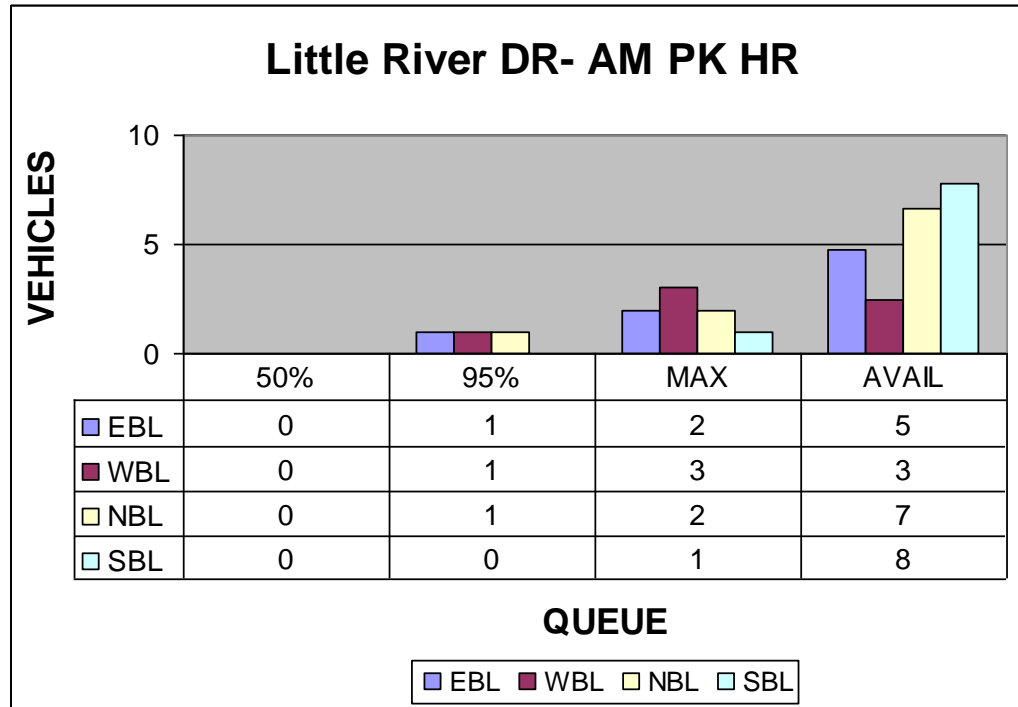
Existing

NW 81 ST AM & PM Queue Charts



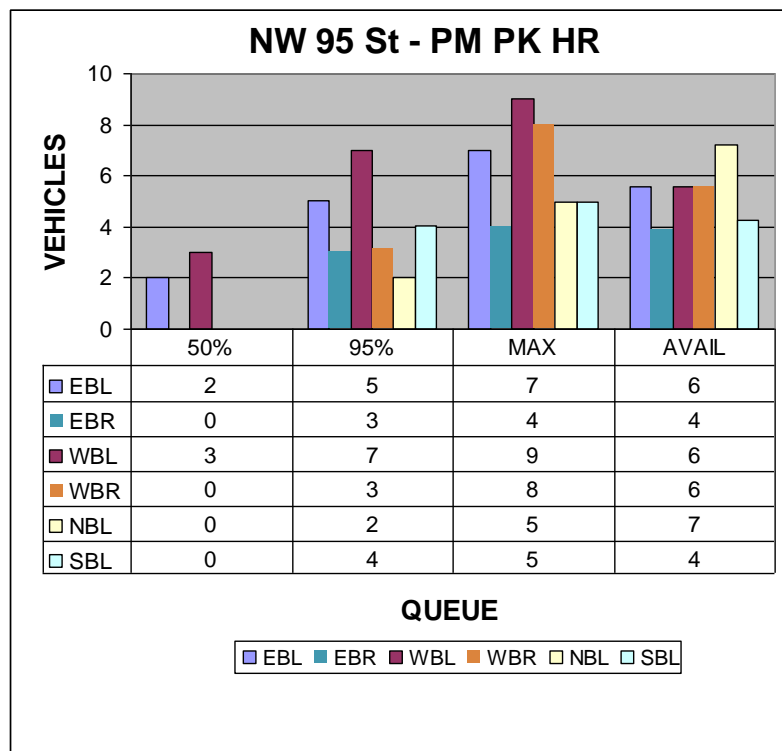
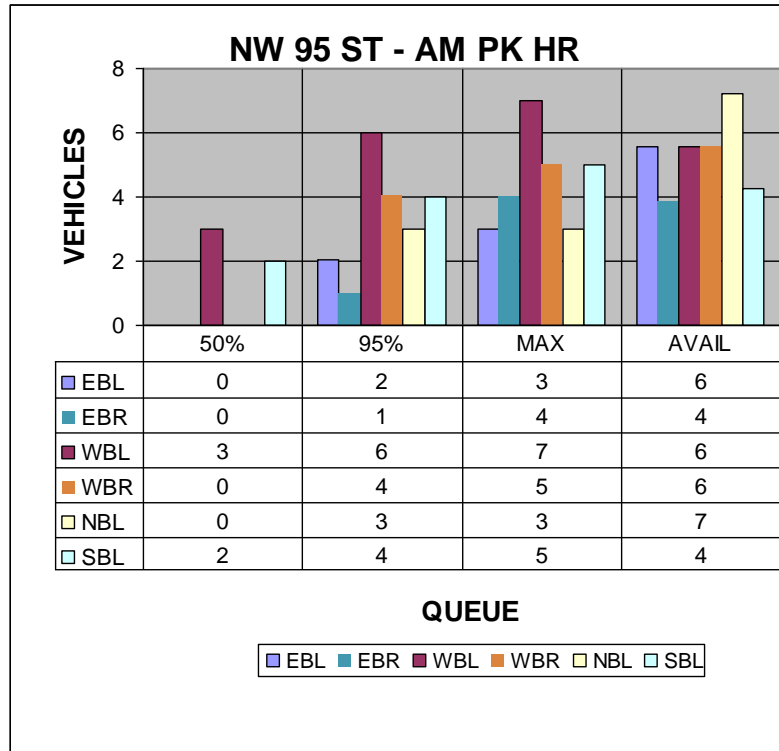
Existing

Little River Dr. AM & PM Queue Charts



Existing

NW 95 ST AM & PM Queue Charts



QUEUE DATA

Groups Printed- Cars - Trucks

Start Time	NW 7 AVE Southbound				NW 95 ST Westbound				NW 7 AVE Northbound				NW 95 ST Eastbound				Int. Total
	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	
07:30 AM	0	3	1	0	0	0	0	0	0	0	1	0	1	3	1	0	10
07:31 AM	0	0	0	0	0	3	3	0	0	0	0	0	0	7	1	0	14
07:32 AM	0	1	3	0	0	1	2	0	2	4	0	0	0	4	2	0	19
07:33 AM	0	3	2	0	0	1	3	0	0	0	0	0	4	5	3	0	21
07:34 AM	0	4	2	0	1	1	3	0	2	3	0	0	1	4	0	0	21
07:35 AM	0	2	2	0	0	3	3	0	1	1	0	0	0	6	1	0	19
07:36 AM	0	0	0	0	0	1	4	0	0	0	0	0	1	3	1	0	10
07:37 AM	0	7	3	0	0	1	3	0	5	2	2	0	0	2	0	0	25
07:38 AM	0	6	3	0	1	4	4	0	3	1	1	0	1	2	1	0	27
07:39 AM	0	6	4	0	0	0	0	0	6	5	1	0	0	0	0	0	22
07:40 AM	0	5	2	0	0	0	0	0	0	0	2	0	0	0	0	0	9
07:41 AM	0	0	0	0	0	3	0	0	0	0	0	0	0	6	1	0	10
07:42 AM	0	4	3	0	0	0	0	0	2	0	0	0	0	0	0	0	9
07:43 AM	0	0	0	0	0	5	7	0	3	3	0	0	0	3	0	0	21
07:44 AM	0	3	4	0	0	1	2	0	2	6	0	0	0	4	0	0	22
07:45 AM	0	3	4	0	0	3	3	0	2	3	0	0	0	5	1	0	24
07:46 AM	0	0	0	0	0	3	5	0	0	0	0	0	0	5	2	0	15
07:47 AM	0	6	3	0	0	0	0	0	1	0	0	0	2	1	0	0	13
07:48 AM	0	5	1	0	0	0	0	0	2	2	3	0	1	4	0	0	18
07:49 AM	0	9	1	0	0	0	0	0	1	3	3	0	0	0	0	0	17
07:50 AM	0	4	2	0	0	3	4	0	6	6	3	0	1	4	0	0	33
07:51 AM	0	0	0	0	0	6	2	0	0	0	0	0	1	0	2	0	11
07:52 AM	0	2	3	0	0	2	0	0	0	0	0	0	1	2	1	0	11
07:53 AM	0	5	3	0	0	2	2	0	2	1	3	0	1	3	1	0	23
07:54 AM	0	6	5	0	0	1	6	0	0	3	3	0	0	3	0	0	27
07:55 AM	0	4	1	0	0	6	6	0	5	5	2	0	0	4	0	0	33
07:56 AM	0	0	0	0	0	3	3	0	0	0	0	0	1	4	0	0	11
07:57 AM	0	2	2	0	0	0	0	0	2	6	1	0	0	0	0	0	13
07:58 AM	0	2	2	0	3	5	5	0	2	0	0	0	0	4	1	0	24
07:59 AM	0	2	4	0	3	6	7	0	2	0	0	0	0	2	1	0	27
Total	0	94	60	0	8	64	77	0	51	54	25	0	16	90	20	0	559
08:00 AM	0	1	3	0	2	6	5	0	1	2	0	0	0	4	0	0	24
08:01 AM	0	0	0	0	2	2	5	0	0	0	0	0	1	2	3	0	15
08:02 AM	0	6	3	0	0	3	3	0	3	7	0	0	0	3	1	0	29
08:03 AM	0	0	0	0	3	4	3	0	0	0	0	0	1	3	2	0	16
08:04 AM	0	3	2	0	0	2	4	0	0	0	1	0	0	0	0	0	12
08:05 AM	0	9	4	0	0	0	0	0	0	1	2	0	0	0	0	0	16
08:06 AM	0	0	0	0	2	1	5	0	0	0	0	0	1	3	2	0	14
08:07 AM	0	4	3	0	0	0	0	0	4	8	2	0	0	0	0	0	21
08:08 AM	0	0	0	0	4	7	5	0	0	0	0	0	0	4	3	0	23
08:09 AM	0	4	3	0	0	0	0	0	8	5	2	0	0	0	0	0	22
08:10 AM	0	5	2	0	1	5	5	0	2	3	3	0	0	5	0	0	31
08:11 AM	0	0	0	0	5	7	3	0	0	0	0	0	0	2	2	0	19
08:12 AM	0	7	4	0	0	1	2	0	3	5	3	0	0	0	0	0	25
08:13 AM	0	3	2	0	0	5	4	0	0	3	2	0	0	3	0	0	22
08:14 AM	0	3	3	0	0	3	3	0	4	4	2	0	0	4	2	0	28
08:15 AM	0	0	0	0	3	4	3	0	0	0	0	0	1	3	2	0	16
08:16 AM	0	4	2	0	0	2	4	0	0	0	1	0	0	0	0	0	13
08:17 AM	0	8	4	0	0	0	0	0	0	1	2	0	0	0	0	0	15
08:18 AM	0	0	0	0	2	1	5	0	0	0	0	0	1	3	2	0	14
08:19 AM	0	4	3	0	0	0	0	0	6	7	2	0	0	0	0	0	22
08:20 AM	0	0	0	0	4	7	5	0	0	0	0	0	0	4	1	0	21
08:21 AM	0	4	3	0	0	0	0	0	8	7	2	0	0	0	0	0	24
08:22 AM	0	5	2	0	1	5	5	0	2	4	3	0	0	5	0	0	32
08:23 AM	0	0	0	0	5	7	3	0	0	0	0	0	0	2	0	0	17
08:24 AM	0	7	4	0	0	0	2	0	3	5	3	0	0	0	0	0	24
08:25 AM	0	0	0	0	5	7	3	0	0	0	0	0	0	2	0	0	17
08:26 AM	0	5	4	0	0	0	0	0	4	6	3	0	0	0	0	0	22
08:27 AM	0	4	2	0	0	6	2	0	0	3	2	0	0	3	0	0	22
08:28 AM	0	3	3	0	0	3	3	0	0	0	0	0	0	4	2	0	18
08:29 AM	0	0	0	0	3	4	3	0	4	5	2	0	1	3	2	0	27

QUEUE DATA

Groups Printed- Cars - Trucks

Start Time	NW 7 AVE Southbound				NW 95 ST Westbound				NW 7 AVE Northbound				NW 95 ST Eastbound				Int Total
	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	
04:30 PM	0	0	2	0	2	6	6	0	5	15	0	0	0	7	1	0	44
04:31 PM	0	0	0	0	3	3	6	0	0	0	0	0	3	6	2	0	23
04:32 PM	0	0	0	0	2	4	3	0	0	0	0	0	0	3	2	0	14
04:33 PM	0	0	0	0	1	3	5	0	0	0	0	0	0	5	0	0	14
04:34 PM	0	0	0	0	5	5	2	0	0	0	0	0	0	1	4	0	17
04:35 PM	0	0	0	0	8	11	5	0	0	0	0	0	0	4	5	0	33
04:36 PM	0	0	0	0	0	4	4	0	0	0	0	0	0	4	2	0	14
04:37 PM	0	0	0	0	6	7	0	0	0	0	0	0	0	4	1	0	18
04:38 PM	0	0	0	0	0	6	5	0	0	0	2	0	2	3	0	0	18
04:39 PM	0	2	3	0	0	2	6	0	8	6	2	0	0	7	2	0	38
04:40 PM	0	2	2	0	0	4	5	0	2	5	1	0	0	6	3	0	30
04:41 PM	0	0	0	0	0	4	3	0	0	0	0	0	1	7	3	0	18
04:42 PM	0	2	0	0	0	0	0	0	12	14	0	0	0	0	0	0	28
04:43 PM	0	1	3	0	2	1	6	0	0	8	0	0	3	8	5	0	37
04:44 PM	0	3	4	0	0	1	3	0	9	14	0	0	0	3	3	0	40
04:45 PM	0	3	3	0	1	4	4	0	0	4	1	0	1	7	2	0	30
04:46 PM	0	3	2	0	0	5	1	0	2	4	1	0	1	7	1	0	27
04:47 PM	0	1	5	0	1	3	0	0	1	5	1	0	0	0	2	0	19
04:48 PM	0	2	1	0	1	3	4	0	2	3	0	0	2	4	6	0	28
04:49 PM	0	3	2	0	0	0	0	0	2	5	0	0	0	0	0	0	12
04:50 PM	0	3	1	0	0	4	6	0	2	3	1	0	1	7	2	0	30
04:51 PM	0	0	0	0	0	0	4	0	0	0	0	0	3	5	0	0	12
04:52 PM	0	2	3	0	0	0	0	0	0	4	0	0	0	0	0	0	9
04:53 PM	0	1	1	0	0	2	3	0	1	1	1	0	0	8	2	0	20
04:54 PM	0	3	4	0	0	2	8	0	2	5	0	0	0	4	2	0	30
04:55 PM	0	3	0	0	0	6	7	0	9	9	0	0	0	5	3	0	42
04:56 PM	0	0	0	0	0	4	6	0	0	0	0	0	1	5	2	0	18
04:57 PM	0	3	3	0	0	0	0	0	3	5	1	0	0	0	0	0	15
04:58 PM	0	0	0	0	0	2	7	0	0	0	0	0	0	1	4	0	14
04:59 PM	0	2	4	0	1	2	1	0	12	15	0	0	1	6	1	0	45
Total	0	39	43	0	33	98	110	0	72	125	11	0	19	127	60	0	737
05:00 PM	0	4	1	0	2	2	1	0	0	9	1	0	0	9	1	0	30
05:01 PM	0	0	0	0	0	3	1	0	0	0	0	0	4	4	6	0	18
05:02 PM	0	5	2	0	0	0	0	0	3	4	2	0	0	0	0	0	16
05:03 PM	0	1	0	0	1	5	4	0	0	0	0	0	0	4	2	0	17
05:04 PM	0	1	1	0	0	3	6	0	4	6	1	0	0	2	2	0	26
05:05 PM	0	0	0	0	0	5	6	0	0	0	0	0	0	5	1	0	17
05:06 PM	0	4	0	0	0	3	9	0	3	4	1	0	1	2	0	0	27
05:07 PM	0	2	2	0	0	0	0	0	1	4	2	0	0	0	0	0	11
05:08 PM	0	0	0	0	0	2	5	0	0	0	0	0	2	7	5	0	21
05:09 PM	0	5	3	0	0	0	0	0	11	13	4	0	0	0	0	0	36
05:10 PM	0	2	4	0	2	3	7	0	6	10	1	0	0	4	1	0	40
05:11 PM	0	0	0	0	1	3	6	0	0	0	0	0	1	7	2	0	20
05:12 PM	0	2	0	0	0	0	0	0	8	14	1	0	0	0	0	0	25
05:13 PM	0	0	0	0	0	0	6	0	0	0	0	0	0	14	1	0	21
05:14 PM	0	0	0	0	0	3	3	0	9	13	0	0	0	6	3	0	37
05:15 PM	0	3	0	0	1	3	4	0	0	12	1	0	0	12	7	0	43
05:16 PM	0	4	0	0	0	0	0	0	10	10	2	0	0	0	0	0	26
05:17 PM	0	3	2	0	0	4	3	0	0	15	1	0	0	6	3	0	37
05:18 PM	0	0	0	0	0	3	4	0	0	0	0	0	4	9	2	0	22
05:19 PM	0	1	0	0	0	0	0	0	10	13	1	0	0	0	0	0	25
05:20 PM	0	6	5	0	0	1	0	0	1	3	5	0	0	0	0	0	21
05:21 PM	0	0	0	0	0	4	3	0	0	0	0	0	0	6	3	0	16
05:22 PM	0	2	5	0	0	0	0	0	9	10	0	0	0	0	0	0	26
05:23 PM	0	0	0	0	0	4	3	0	0	0	0	0	0	8	5	0	20
05:24 PM	0	2	1	0	0	0	0	0	7	9	1	0	0	0	0	0	20
05:25 PM	0	0	0	0	0	6	1	0	0	0	0	0	0	3	3	0	13
05:26 PM	0	0	0	0	1	2	2	0	0	0	0	0	0	1	2	0	8
05:27 PM	0	5	2	0	0	0	0	0	10	12	2	0	0	0	0	0	31
05:28 PM	0	0	0	0	0	5	6	0	0	0	0	0	1	5	4	0	21
05:29 PM	0	4	2	0	0	3	6	0	9	13	2	0	2	7	1	0	49

QUEUE DATA

Groups Printed- Cars - Trucks

Start Time	NW 7 AVE Southbound				IMMIGRATION D/W Westbound				NW 7 AVE Northbound				LITTLE RIVER DR Eastbound				Int. Total
	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
07:31 AM	0	4	0	0	0	0	0	0	0	4	0	0	0	0	0	0	8
07:32 AM	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	4
07:33 AM	0	0	0	0	0	0	1	0	0	2	0	0	0	0	0	0	3
07:34 AM	0	6	0	0	0	0	0	0	0	3	1	0	2	0	0	0	12
07:35 AM	0	4	0	0	0	0	0	0	0	0	0	0	1	0	0	0	5
07:36 AM	0	9	0	0	0	0	0	0	0	5	0	0	2	0	0	0	16
07:37 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:38 AM	0	3	0	0	0	0	0	0	0	5	0	0	0	0	0	0	8
07:39 AM	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	5
07:40 AM	0	4	0	0	0	0	0	0	0	3	0	0	0	0	1	0	8
07:41 AM	0	13	0	0	0	0	0	0	0	5	0	0	1	0	0	0	19
07:42 AM	0	3	0	0	0	0	0	0	0	0	0	0	1	0	0	0	4
07:43 AM	0	6	1	0	0	0	0	0	0	10	0	0	0	0	0	0	17
07:44 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	8	0	0	0	0	0	0	0	4	0	0	1	0	0	0	13
07:46 AM	0	0	0	0	0	0	0	0	0	5	0	0	2	0	0	0	7
07:47 AM	0	8	0	0	0	0	0	0	0	3	0	0	0	0	1	0	12
07:48 AM	0	11	0	0	0	0	0	0	0	6	0	0	2	0	0	0	19
07:49 AM	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2
07:50 AM	0	2	0	0	0	0	0	0	0	8	1	0	0	0	0	0	11
07:51 AM	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	2
07:52 AM	0	16	0	0	0	0	0	0	0	7	1	0	1	0	0	0	25
07:53 AM	0	0	0	0	0	0	0	0	0	8	1	0	2	0	0	0	11
07:54 AM	0	5	0	0	0	0	0	0	0	5	0	0	0	0	0	0	10
07:55 AM	0	9	0	0	0	0	0	0	0	12	0	0	0	0	0	0	21
07:56 AM	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2
07:57 AM	0	16	0	0	0	0	0	0	0	13	0	0	0	0	0	0	29
07:58 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
07:59 AM	0	12	0	0	0	0	0	0	0	8	0	0	2	0	0	0	22
Total	0	141	1	0	1	0	1	0	0	125	4	0	22	0	2	0	297
08:00 AM	0	0	0	0	0	0	0	0	0	9	0	0	2	0	0	0	11
08:01 AM	0	1	0	0	0	0	1	0	0	3	0	0	0	0	0	0	5
08:02 AM	0	2	0	0	0	0	0	0	0	9	0	0	0	0	0	0	11
08:03 AM	0	3	0	0	0	0	0	0	0	0	0	0	1	0	0	0	4
08:04 AM	0	13	0	0	0	0	0	0	0	7	0	0	0	0	0	0	20
08:05 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:06 AM	0	9	0	0	1	0	0	0	0	3	0	0	0	0	0	0	13
08:07 AM	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	4
08:08 AM	0	2	0	0	0	0	0	0	0	5	0	0	1	0	0	0	8
08:09 AM	0	9	0	0	0	0	0	0	0	9	1	0	1	0	0	0	20
08:10 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
08:11 AM	0	16	0	0	0	0	0	0	0	6	0	0	2	0	0	0	24
08:12 AM	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	2
08:13 AM	0	1	0	0	0	0	0	0	0	5	0	0	1	0	0	0	7
08:14 AM	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	5
08:15 AM	0	4	0	0	0	0	0	0	0	3	0	0	0	0	0	0	7
08:16 AM	0	10	0	0	0	0	0	0	0	5	0	0	0	0	0	0	15
08:17 AM	0	3	0	0	0	0	0	0	0	0	0	0	2	0	0	0	5
08:18 AM	0	9	0	0	0	0	0	0	0	8	0	0	2	0	0	0	19
08:19 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	2	0	3
08:20 AM	0	8	0	0	0	0	1	0	0	6	0	0	0	0	2	0	17
08:21 AM	0	0	0	0	0	0	1	0	0	7	0	0	0	0	0	0	8
08:22 AM	0	10	0	0	0	0	3	0	0	6	0	0	0	0	0	0	19
08:23 AM	0	11	0	0	0	0	0	0	0	8	0	0	0	0	0	0	19
08:24 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
08:25 AM	0	7	0	0	0	0	0	0	0	6	2	0	1	0	0	0	16
08:26 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
08:27 AM	0	13	0	0	0	0	0	0	0	7	0	0	0	0	0	0	20
08:28 AM	0	15	0	0	0	0	0	0	0	7	0	0	3	0	0	0	25
08:29 AM	0	7	0	0	0	0	0	0	0	4	0	0	0	0	0	0	11

Groups Printed- Cars - Trucks																	
	NW 7 AVE Southbound				IMMIGRATION D/W Westbound				NW 7 AVE Northbound				LITTLE RIVER DR Eastbound				
Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Int. Total
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:31 PM	0	5	0	0	0	0	0	0	0	4	0	0	0	0	0	0	9
04:32 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:33 PM	0	4	0	0	0	0	0	0	0	9	1	0	0	1	0	0	15
04:34 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:35 PM	0	2	0	0	0	0	0	0	0	11	0	0	0	0	0	0	13
04:36 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:37 PM	0	3	0	0	0	0	0	0	0	1	0	0	0	0	0	0	4
04:38 PM	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	4
04:39 PM	0	2	0	0	0	0	0	0	0	5	0	0	0	0	0	0	7
04:40 PM	0	1	0	0	0	0	1	0	0	2	0	0	0	0	0	0	4
04:41 PM	0	2	0	0	0	0	0	0	0	2	0	0	0	0	0	0	4
04:42 PM	0	3	0	0	0	0	0	0	0	16	0	0	0	0	0	0	19
04:43 PM	0	0	0	0	0	0	0	0	0	16	0	0	0	1	0	0	17
04:44 PM	0	3	0	0	0	0	0	0	0	7	0	0	0	1	0	0	11
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:46 PM	0	6	0	0	0	0	0	0	0	3	0	0	0	0	0	0	9
04:47 PM	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3
04:48 PM	0	5	0	0	0	0	0	0	0	7	0	0	0	0	2	0	14
04:49 PM	0	3	0	0	0	0	0	0	0	3	0	0	0	0	2	0	8
04:50 PM	0	3	0	0	0	0	0	0	0	5	1	0	0	0	0	0	9
04:51 PM	0	2	0	0	0	0	0	0	0	9	1	0	0	0	0	0	12
04:52 PM	0	4	0	0	0	0	0	0	0	11	1	0	0	1	0	0	17
04:53 PM	0	2	0	0	0	0	0	0	0	3	0	0	0	1	0	0	6
04:54 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:55 PM	0	2	0	0	0	0	0	0	0	3	0	0	0	1	0	0	6
04:56 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	2
04:57 PM	0	2	0	0	0	0	0	0	0	2	0	0	0	0	0	0	4
04:58 PM	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3
04:59 PM	0	3	0	0	0	0	0	0	0	4	0	0	0	0	0	0	7
Total	0	57	0	0	0	0	2	0	0	133	4	0	0	6	5	0	207
05:00 PM	0	3	0	0	0	0	0	0	0	5	0	0	0	0	0	0	8
05:01 PM	0	5	0	0	0	0	0	0	0	10	2	0	0	0	0	0	17
05:02 PM	0	2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	3
05:03 PM	0	4	0	0	0	0	0	0	0	3	0	0	0	0	0	0	7
05:04 PM	0	4	0	0	0	0	0	0	0	5	0	0	0	0	0	0	9
05:05 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
05:06 PM	0	3	0	0	0	0	0	0	0	5	0	0	0	0	1	0	9
05:07 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:08 PM	0	3	0	0	0	0	0	0	0	12	0	0	0	0	0	0	15
05:09 PM	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	2
05:10 PM	0	2	0	0	2	0	0	0	0	7	0	0	0	0	0	0	11
05:11 PM	0	1	0	0	2	0	0	0	0	3	0	0	0	0	0	0	6
05:12 PM	0	2	0	0	0	0	0	0	0	3	2	0	0	0	0	0	7
05:13 PM	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	4
05:14 PM	0	1	0	0	0	0	0	0	0	7	0	0	0	0	0	0	8
05:15 PM	0	6	0	0	0	0	0	0	0	4	0	0	0	1	0	0	11
05:16 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
05:17 PM	0	5	0	0	0	0	0	0	0	10	1	0	0	0	0	0	16
05:18 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:19 PM	0	4	0	0	0	0	0	0	0	4	1	0	0	0	0	0	9
05:20 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:21 PM	0	4	0	0	0	0	0	0	0	2	0	0	0	1	0	0	7
05:22 PM	0	2	1	0	0	0	1	0	0	2	1	0	0	0	0	0	7
05:23 PM	0	9	1	0	0	0	1	0	0	4	1	0	0	0	0	0	16
05:24 PM	0	3	0	0	0	0	0	0	0	7	2	0	0	1	0	0	13
05:25 PM	0	5	0	0	0	0	1	0	0	8	2	0	0	0	0	0	16
05:26 PM	0	5	0	0	0	0	0	0	0	10	0	0	0	0	0	0	15
05:27 PM	0	5	0	0	0	0	0	0	0	12	0	0	0	0	0	0	17
05:28 PM	0	4	0	0	0	0	0	0	0	2	0	0	0	0	0	0	6
05:29 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Groups Printed- Cars - Trucks																		
	NW 79 AVE				NW 81 ST				NW 79 AVE				NW 81 ST					
	Southbound				Westbound				Northbound				Eastbound					
Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Int. Total	
07:30 AM	0	2	0	0	0	2	1	0	0	6	0	0	0	0	0	0	0	11
07:31 AM	0	9	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	12
07:32 AM	0	13	0	0	0	0	1	0	0	6	0	0	0	0	0	0	0	20
07:33 AM	0	1	0	0	0	6	3	0	0	0	0	0	0	0	0	0	0	10
07:34 AM	0	4	0	0	1	0	0	0	0	5	0	0	0	0	0	0	0	10
07:35 AM	0	0	0	0	0	2	4	0	0	0	0	0	0	0	0	0	0	6
07:36 AM	0	5	0	0	0	3	4	0	0	3	0	0	0	0	0	0	0	15
07:37 AM	0	8	0	0	0	0	1	0	0	4	0	0	0	0	0	0	0	13
07:38 AM	0	4	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	6
07:39 AM	0	8	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	9
07:40 AM	0	1	0	0	1	3	5	0	0	0	0	0	0	0	0	0	0	10
07:41 AM	0	2	0	0	1	0	1	0	0	5	1	0	0	0	0	0	0	10
07:42 AM	0	0	0	0	0	1	6	0	0	0	0	0	0	0	0	0	0	7
07:43 AM	0	7	0	0	0	2	6	0	0	2	0	0	0	0	0	0	0	17
07:44 AM	0	7	0	0	0	1	4	0	0	0	0	0	0	0	0	0	0	12
07:45 AM	0	4	0	0	0	3	5	0	0	0	0	0	0	0	0	0	0	12
07:46 AM	0	9	0	0	0	2	3	0	0	2	0	0	0	0	0	0	0	16
07:47 AM	0	0	0	0	0	7	7	0	0	0	0	0	0	0	0	0	0	14
07:48 AM	0	9	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	10
07:49 AM	0	0	0	0	1	3	4	0	0	0	0	0	0	0	0	0	0	8
07:50 AM	0	3	0	0	0	3	4	0	0	5	0	0	0	0	0	0	0	15
07:51 AM	0	9	0	0	0	1	2	0	0	5	1	0	0	0	0	0	0	18
07:52 AM	0	3	0	0	0	3	5	0	0	0	0	0	0	0	0	0	0	11
07:53 AM	0	5	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	11
07:54 AM	0	0	0	0	0	6	3	0	0	0	0	0	0	0	0	0	0	9
07:55 AM	0	3	0	0	1	0	0	0	0	6	0	0	0	0	0	0	0	10
07:56 AM	0	1	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	5
07:57 AM	0	3	0	0	0	2	2	0	0	6	0	0	0	0	0	0	0	13
07:58 AM	0	3	0	0	0	4	1	0	0	6	0	0	0	0	0	0	0	14
07:59 AM	0	4	0	0	0	5	2	0	0	1	0	0	0	0	0	0	0	12
Total	0	127	0	0	5	64	78	0	0	70	2	0	0	0	0	0	0	346
08:00 AM	0	7	0	0	1	0	3	0	0	2	0	0	0	0	0	0	0	13
08:01 AM	0	0	0	0	0	2	5	0	0	0	0	0	0	0	0	0	0	7
08:02 AM	0	9	0	0	0	1	0	0	0	4	0	0	0	0	0	0	0	14
08:03 AM	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	3
08:04 AM	0	6	0	0	0	2	1	0	0	3	1	0	0	0	0	0	0	13
08:05 AM	0	6	0	0	0	2	3	0	0	5	1	0	0	0	0	0	0	17
08:06 AM	0	9	0	0	0	5	6	0	0	0	0	0	0	0	0	0	0	20
08:07 AM	0	13	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	15
08:08 AM	0	4	0	0	0	3	2	0	0	0	0	0	0	0	0	0	0	9
08:09 AM	0	7	0	0	0	1	1	0	0	2	0	0	0	0	0	0	0	11
08:10 AM	0	0	0	0	0	3	1	0	0	0	0	0	0	0	0	0	0	4
08:11 AM	0	4	0	0	0	4	1	0	0	2	0	0	0	0	0	0	0	11
08:12 AM	0	5	0	0	0	1	2	0	0	2	0	0	0	0	0	0	0	10
08:13 AM	0	7	0	0	0	7	5	0	0	0	0	0	0	0	0	0	0	19
08:14 AM	0	10	0	0	0	1	1	0	0	5	0	0	0	0	0	0	0	17
08:15 AM	0	0	0	0	0	1	3	0	0	0	0	0	0	0	0	0	0	4
08:16 AM	0	3	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	7
08:17 AM	0	0	0	0	0	2	3	0	0	0	0	0	0	0	0	0	0	5
08:18 AM	0	6	0	0	0	6	4	0	0	3	1	0	0	0	0	0	0	20
08:19 AM	0	7	0	0	0	1	1	0	0	3	0	0	0	0	0	0	0	12
08:20 AM	0	13	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	17
08:21 AM	0	18	0	0	0	2	1	0	0	5	0	0	0	0	0	0	0	26
08:22 AM	0	3	0	0	2	8	3	0	0	0	0	0	0	0	0	0	0	16
08:23 AM	0	13	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	21
08:24 AM	0	0	0	0	0	4	2	0	0	0	0	0	0	0	0	0	0	6
08:25 AM	0	9	0	0	0	4	5	0	0	3	0	0	0	0	0	0	0	21
08:26 AM	0	11	0	0	1	4	2	0	0	3	0	0	0	0	0	0	0	21
08:27 AM	0	7	0	0	3	8	3	0	0	0	0	0	0	0	0	0	0	21
08:28 AM	0	11	0	0	0	3	0	0	0	5	0	0	0	0	0	0	0	19
08:29 AM	0	7	0	0	3	5	1	0	0	0	0	0	0	0	0	0	0	16

QUEUE DATA

Groups Printed- Cars - Trucks

Start Time	NW 7 AVE Southbound				NW 81 ST Westbound				NW 7 AVE Northbound				NW 81 ST Eastbound				Int. Total
	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	
04:30 PM	0	4	0	0	0	7	5	0	0	1	0	0	0	0	0	0	17
04:31 PM	0	7	0	0	0	3	0	0	0	3	0	0	0	0	0	0	13
04:32 PM	0	1	0	0	0	6	3	0	0	1	0	0	0	0	0	0	11
04:33 PM	0	10	0	0	0	2	1	0	0	1	0	0	0	0	0	0	14
04:34 PM	0	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0	8
04:35 PM	0	5	0	0	0	5	4	0	0	4	0	0	0	0	0	0	18
04:36 PM	0	5	0	0	0	4	2	0	0	9	0	0	0	0	0	0	20
04:37 PM	0	1	0	0	0	7	3	0	0	2	0	0	0	0	0	0	13
04:38 PM	0	11	0	0	0	4	2	0	0	8	0	0	0	0	0	0	25
04:39 PM	0	0	0	0	0	10	4	0	0	1	1	0	0	0	0	0	16
04:40 PM	0	6	0	0	0	4	0	0	0	4	1	0	0	0	0	0	15
04:41 PM	0	0	0	0	0	4	2	0	0	0	0	0	0	0	0	0	6
04:42 PM	0	1	0	0	0	4	2	0	0	8	0	0	0	0	0	0	15
04:43 PM	0	2	0	0	0	7	1	0	0	8	0	0	0	0	0	0	18
04:44 PM	0	2	0	0	0	9	2	0	0	2	0	0	0	0	0	0	15
04:45 PM	0	3	0	0	0	1	2	0	0	12	1	0	0	0	0	0	19
04:46 PM	0	0	0	0	0	8	2	0	0	1	0	0	0	0	0	0	11
04:47 PM	0	2	0	0	0	1	0	0	0	8	1	0	0	0	0	0	12
04:48 PM	0	0	0	0	0	7	3	0	0	0	0	0	0	0	0	0	10
04:49 PM	0	5	0	0	0	9	4	0	0	6	0	0	0	0	0	0	24
04:50 PM	0	0	0	0	0	9	2	0	0	0	0	0	0	0	0	0	11
04:51 PM	0	5	0	0	0	10	2	0	0	2	0	0	0	0	0	0	19
04:52 PM	0	8	0	0	0	2	1	0	0	14	0	0	0	0	0	0	25
04:53 PM	0	0	0	0	0	9	3	0	0	2	0	0	0	0	0	0	14
04:54 PM	0	6	0	0	0	0	1	0	0	2	0	0	0	0	0	0	9
04:55 PM	0	0	0	0	0	5	2	0	0	0	0	0	0	0	0	0	7
04:56 PM	0	3	0	0	0	9	2	0	0	5	0	0	0	0	0	0	19
04:57 PM	0	7	0	0	0	1	0	0	0	16	0	0	0	0	0	0	24
04:58 PM	0	4	0	0	0	2	1	0	0	6	0	0	0	0	0	0	13
04:59 PM	0	5	0	0	0	1	0	0	0	14	0	0	0	0	0	0	20
Total	0	103	0	0	0	154	60	0	0	140	4	0	0	0	0	0	461
05:00 PM	0	1	0	0	0	10	1	0	0	0	0	0	0	0	0	0	12
05:01 PM	0	4	0	0	0	2	0	0	0	11	0	0	0	0	0	0	17
05:02 PM	0	0	0	0	0	4	2	0	0	0	0	0	0	0	0	0	6
05:03 PM	0	1	0	0	0	1	0	0	0	8	0	0	0	0	0	0	10
05:04 PM	0	9	0	0	0	5	2	0	0	9	0	0	0	0	0	0	25
05:05 PM	0	4	0	0	0	10	5	0	0	1	0	0	0	0	0	0	20
05:06 PM	0	13	0	0	0	3	3	0	0	10	0	0	0	0	0	0	29
05:07 PM	0	1	0	0	0	9	6	0	0	0	0	0	0	0	0	0	16
05:08 PM	0	7	0	0	0	2	0	0	0	13	0	0	0	0	0	0	22
05:09 PM	0	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0	8
05:10 PM	0	1	0	0	0	5	5	0	0	3	1	0	0	0	0	0	15
05:11 PM	0	2	0	0	0	5	2	0	0	5	0	0	0	0	0	0	14
05:12 PM	0	3	0	0	0	8	3	0	0	1	0	0	0	0	0	0	15
05:13 PM	0	7	0	0	1	0	1	0	0	3	0	0	0	0	0	0	12
05:14 PM	0	0	0	0	0	4	2	0	0	2	0	0	0	0	0	0	8
05:15 PM	0	10	0	0	0	0	1	0	0	13	0	0	0	0	0	0	24
05:16 PM	0	0	0	0	2	5	3	0	0	0	0	0	0	0	0	0	10
05:17 PM	0	3	0	0	0	8	3	0	0	9	0	0	0	0	0	0	23
05:18 PM	0	3	0	0	1	6	1	0	0	0	0	0	0	0	0	0	11
05:19 PM	0	1	0	0	0	10	2	0	0	2	0	0	0	0	0	0	15
05:20 PM	0	7	0	0	0	0	0	0	0	7	1	0	0	0	0	0	15
05:21 PM	0	0	0	0	0	3	4	0	0	1	0	0	0	0	0	0	8
05:22 PM	0	7	0	0	0	0	0	0	0	11	1	0	0	0	0	0	19
05:23 PM	0	0	0	0	0	7	3	0	0	0	0	0	0	0	0	0	10
05:24 PM	0	4	0	0	0	6	3	0	0	7	0	0	0	0	0	0	20
05:25 PM	0	5	0	0	0	5	1	0	0	0	0	0	0	0	0	0	11
05:26 PM	0	8	0	0	0	10	1	0	0	2	0	0	0	0	0	0	21
05:27 PM	0	9	0	0	0	0	0	0	0	8	0	0	0	0	0	0	17
05:28 PM	0	1	0	0	0	3	1	0	0	1	0	0	0	0	0	0	6
05:29 PM	0	2	0	0	1	0	0	0	0	4	0	0	0	0	0	0	7

QUEUE DATA

Groups Printed- Cars - Trucks

Start Time	NW 7 AVE Southbound				NW 79 ST Westbound				NW 7 AVE Northbound				NW 79 ST Eastbound				Int. Total
	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	
07:30 AM	0	1	2	0	0	2	0	0	0	4	0	0	0	14	2	0	25
07:31 AM	0	9	3	0	0	0	0	0	0	5	0	0	0	0	0	0	17
07:32 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	12	1	0	13
07:33 AM	0	0	0	0	0	3	0	0	0	1	0	0	0	16	4	0	24
07:34 AM	0	8	5	0	0	6	2	0	0	1	0	0	0	12	2	0	36
07:35 AM	0	1	1	0	0	6	2	0	0	1	1	0	0	17	2	0	31
07:36 AM	0	11	5	0	0	1	3	0	0	1	1	0	0	7	3	0	32
07:37 AM	0	0	2	0	0	3	3	0	0	1	2	0	0	16	3	0	30
07:38 AM	0	4	3	0	0	0	0	0	0	2	2	0	0	5	0	0	16
07:39 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	15	1	0	17
07:40 AM	0	0	1	0	0	4	0	0	0	2	0	0	0	8	2	0	17
07:41 AM	0	11	1	0	0	4	1	0	0	2	0	0	0	18	3	0	40
07:42 AM	0	0	0	0	0	5	2	0	3	1	0	0	0	28	5	0	44
07:43 AM	0	8	8	0	0	3	3	0	5	1	0	0	0	21	0	0	49
07:44 AM	0	0	4	0	0	3	3	0	3	0	1	0	0	27	0	0	41
07:45 AM	0	7	7	0	0	0	0	0	0	1	1	0	0	9	0	0	25
07:46 AM	0	0	4	0	0	2	0	0	0	0	0	0	0	30	5	0	41
07:47 AM	0	3	7	0	0	3	0	0	1	3	1	0	0	25	5	0	48
07:48 AM	0	11	8	0	0	1	0	0	1	3	1	0	0	27	5	0	57
07:49 AM	0	4	6	0	0	4	0	0	0	2	0	0	0	24	5	0	45
07:50 AM	0	9	9	0	0	4	2	0	1	1	0	0	0	19	1	0	46
07:51 AM	0	3	3	0	0	8	4	0	0	2	2	0	0	28	1	0	51
07:52 AM	0	9	7	0	0	0	0	0	3	5	3	0	0	13	0	0	40
07:53 AM	0	0	0	0	0	2	0	0	0	0	0	0	0	22	4	0	28
07:54 AM	0	2	10	0	0	4	1	0	1	5	0	0	0	22	4	0	49
07:55 AM	0	9	10	0	0	1	1	0	1	3	0	0	0	22	2	0	49
07:56 AM	0	6	7	0	0	5	3	0	0	2	0	0	0	26	6	0	55
07:57 AM	1	10	8	0	0	4	0	0	2	3	0	0	0	17	2	0	47
07:58 AM	0	4	3	0	0	4	0	0	0	1	0	0	0	20	2	0	34
07:59 AM	0	17	5	0	0	0	0	0	0	1	0	0	0	9	1	0	33
Total	1	147	129	0	0	83	30	0	21	54	15	0	0	529	71	0	1080
08:00 AM	0	0	5	0	0	3	1	0	0	0	0	0	0	11	3	0	23
08:01 AM	1	2	6	0	0	4	3	0	0	1	3	0	0	12	3	0	35
08:02 AM	0	6	2	0	0	0	1	0	0	0	0	0	0	11	3	0	23
08:03 AM	0	11	4	0	0	2	0	0	1	1	0	0	0	17	3	0	39
08:04 AM	0	21	7	0	0	3	2	0	2	2	0	0	0	11	3	0	51
08:05 AM	0	4	3	0	0	5	4	0	0	0	0	0	0	17	5	0	38
08:06 AM	0	18	4	0	0	0	0	0	4	5	0	0	0	6	0	0	37
08:07 AM	0	4	2	0	0	3	0	0	0	0	0	0	0	16	1	0	26
08:08 AM	0	8	3	0	0	3	0	0	1	2	2	0	0	18	1	0	38
08:09 AM	0	21	7	0	0	0	0	0	0	2	2	0	0	11	1	0	44
08:10 AM	0	5	1	0	0	4	1	0	1	3	0	0	0	18	1	0	34
08:11 AM	0	14	1	0	0	3	0	0	1	2	0	0	0	5	0	0	26
08:12 AM	0	7	0	0	0	5	0	0	0	0	0	0	0	11	2	0	25
08:13 AM	0	19	2	0	0	0	0	0	0	2	0	0	0	4	0	0	27
08:14 AM	0	4	4	0	0	5	4	0	0	0	0	0	0	6	3	0	26
08:15 AM	0	7	2	0	0	4	0	0	1	2	0	0	0	9	4	0	29
08:16 AM	0	0	3	0	0	2	0	0	0	0	0	0	0	8	2	0	15
08:17 AM	0	9	5	0	0	5	1	0	0	0	0	0	0	11	5	0	36
08:18 AM	0	14	8	0	0	2	0	0	2	1	0	0	0	7	2	0	36
08:19 AM	0	4	2	0	0	7	1	0	0	0	0	0	0	9	3	0	26
08:20 AM	0	11	7	0	0	0	0	0	2	0	0	0	0	0	0	0	20
08:21 AM	0	0	4	0	0	5	2	0	0	0	0	0	0	9	3	0	23
08:22 AM	0	7	1	0	0	6	0	0	0	1	1	0	0	14	3	0	33
08:23 AM	0	12	1	0	0	2	4	0	0	1	1	0	0	3	4	0	28
08:24 AM	0	3	3	0	0	3	4	0	1	0	0	0	0	8	5	0	27
08:25 AM	0	15	5	0	0	0	0	0	2	1	0	0	0	11	2	0	36
08:26 AM	0	8	3	0	0	3	1	0	0	0	0	0	0	7	0	0	22
08:27 AM	0	14	4	0	0	0	0	0	0	2	1	0	0	0	0	0	21
08:28 AM	0	5	0	0	0	6	2	0	0	0	0	0	0	19	2	0	34
08:29 AM	0	3	5	0	0	6	0	0	1	1	1	0	0	18	4	0	39

QUEUE DATA

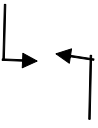
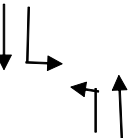
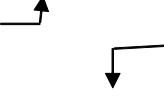
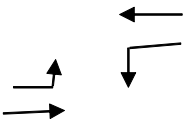
Groups Printed- Cars - Trucks

Start Time	NW 7 AVE Southbound				NW 79 ST Westbound				NW 7 AVE Northbound				NW 79 ST Eastbound				Int. Total
	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	
04:30 PM	3	8	6	0	0	1	1	0	8	11	5	0	0	10	0	0	53
04:31 PM	0	0	0	0	0	6	2	0	0	0	0	0	0	24	11	0	43
04:32 PM	1	3	6	0	0	0	0	0	4	6	0	0	0	7	10	0	37
04:33 PM	0	8	0	0	0	1	0	0	0	0	0	0	0	15	10	0	34
04:34 PM	0	0	0	0	0	3	1	0	2	1	0	0	0	20	13	0	40
04:35 PM	0	9	2	0	0	4	1	0	6	4	0	0	0	12	0	0	38
04:36 PM	0	1	2	0	0	6	5	0	0	0	0	0	0	21	6	0	41
04:37 PM	1	4	8	0	0	0	0	0	4	12	1	0	0	22	3	0	55
04:38 PM	0	0	15	0	0	2	1	0	7	0	0	0	0	24	8	0	57
04:39 PM	0	1	9	0	0	3	1	0	6	6	0	0	0	14	8	0	48
04:40 PM	0	5	11	0	0	5	1	0	5	13	0	0	0	24	9	0	73
04:41 PM	1	2	11	0	0	7	1	0	3	10	1	0	0	22	11	0	69
04:42 PM	1	8	9	0	0	0	2	0	1	5	1	0	0	18	2	0	47
04:43 PM	0	0	3	0	0	4	1	0	0	8	0	0	0	6	4	0	26
04:44 PM	1	3	7	0	0	0	0	0	6	4	0	0	0	17	0	0	38
04:45 PM	0	0	6	0	0	7	1	0	0	7	0	0	0	23	1	0	45
04:46 PM	0	1	4	0	0	5	3	0	5	11	2	0	0	24	0	0	55
04:47 PM	0	8	7	0	0	7	0	0	0	6	0	0	0	25	6	0	59
04:48 PM	0	1	6	0	0	8	3	0	5	15	0	0	0	20	9	0	67
04:49 PM	1	3	13	0	0	0	2	0	0	16	1	0	0	17	7	0	60
04:50 PM	0	2	14	0	0	6	3	0	4	12	0	0	0	21	11	0	73
04:51 PM	1	13	9	0	0	1	0	0	6	27	0	0	0	9	9	0	75
04:52 PM	0	0	10	0	0	2	2	0	0	11	0	0	0	18	13	0	56
04:53 PM	0	0	10	0	0	0	0	0	4	28	3	0	0	7	0	0	52
04:54 PM	0	7	4	0	0	6	1	0	0	3	0	0	0	11	5	0	37
04:55 PM	0	0	8	0	0	8	1	0	5	27	0	0	0	9	5	0	63
04:56 PM	0	12	7	0	0	1	0	0	7	25	0	0	0	4	1	0	57
04:57 PM	0	1	10	0	0	5	2	0	0	17	0	0	0	14	3	0	52
04:58 PM	0	1	10	0	0	1	0	0	9	25	3	0	0	9	1	0	59
04:59 PM	0	0	7	0	0	8	2	0	0	9	0	0	0	20	6	0	52
Total	10	101	214	0	0	107	37	0	97	319	17	0	0	487	172	0	1551
05:00 PM	0	1	8	0	0	0	0	0	5	27	0	0	0	14	0	0	55
05:01 PM	0	10	2	0	0	6	1	0	6	26	0	0	0	24	6	0	81
05:02 PM	1	0	8	0	0	6	1	0	2	18	0	0	0	24	9	0	69
05:03 PM	0	6	9	0	0	1	1	0	4	22	0	0	0	14	4	0	61
05:04 PM	0	0	14	0	0	7	5	0	5	15	0	0	0	26	7	0	79
05:05 PM	1	11	12	0	0	0	0	0	2	28	4	0	0	11	0	0	69
05:06 PM	0	0	14	0	0	7	1	0	0	7	0	0	0	32	2	0	63
05:07 PM	1	1	13	0	0	0	0	0	9	23	0	0	0	15	0	0	62
05:08 PM	0	0	15	0	0	2	7	0	2	8	1	0	0	38	4	0	77
05:09 PM	0	4	9	0	0	8	4	0	9	29	0	0	0	25	13	0	101
05:10 PM	0	10	9	0	0	0	0	0	5	25	0	0	0	27	13	0	89
05:11 PM	0	0	5	0	0	6	0	0	5	14	0	0	0	24	15	0	69
05:12 PM	0	10	5	0	0	0	0	0	3	28	0	0	0	15	9	0	70
05:13 PM	0	0	3	0	0	6	0	0	0	4	0	0	0	23	10	0	46
05:14 PM	0	6	1	0	0	0	0	0	3	18	0	0	0	11	0	0	39
05:15 PM	0	0	1	0	0	0	0	0	0	7	0	0	0	26	4	0	38
05:16 PM	0	0	2	0	0	6	0	0	6	23	2	0	0	24	4	0	67
05:17 PM	2	4	10	0	0	0	0	0	0	29	2	0	0	22	4	0	73
05:18 PM	0	3	13	0	0	6	2	0	5	14	0	0	0	25	5	0	73
05:19 PM	0	3	12	0	0	0	0	0	9	25	0	0	0	9	0	0	58
05:20 PM	0	0	5	0	0	6	3	0	0	10	0	0	0	32	3	0	59
05:21 PM	0	10	5	0	0	0	0	0	4	22	0	0	0	17	0	0	58
05:22 PM	0	0	2	0	0	4	2	0	0	8	0	0	0	34	9	0	59
05:23 PM	0	1	4	0	0	7	0	0	5	22	0	0	0	28	10	0	77
05:24 PM	0	7	5	0	0	1	1	0	5	26	0	0	0	24	4	0	73
05:25 PM	0	0	7	0	0	2	2	0	0	19	1	0	0	41	6	0	78
05:26 PM	0	10	7	0	0	0	0	0	4	37	0	0	0	9	0	0	67
05:27 PM	0	0	10	0	0	4	2	0	0	13	0	0	0	31	4	0	64
05:28 PM	0	8	10	0	0	0	0	0	5	22	1	0	0	15	0	0	61
05:29 PM	0	0	4	0	0	4	0	0	0	8	0	0	0	35	2	0	53

Appendix G – Existing Signal Phasing and Timing


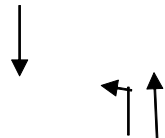

Existing Signal Timing

NW 7 Ave & NW 79 St

Phase		1	2	3	4
Movement					
AM Pk Hr	G	25	46	7	46
	Y	3	4	3	4
	R	-	1	-	1
	CL	28	51	10	51
140					
PM Pk Hr	G	15	31	10	28
	Y	3	4	3	4
	R	-	1	-	1
	CL	18	36	13	33
100					

Existing Signal Timing

NW 7 Ave & NW 81 St

Phase	1	2	3
Movement			

AM Pk Hr	G	14	67	45
	Y	4	4	4
	R	-	1	1
	CL	18	72	50
PM Pk Hr	G	10	48	28
	Y	4	4	4
	R	-	1	1
	CL	14	53	33

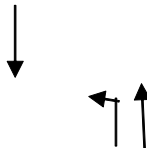

140

100

Existing Signal Timing

NW 7 Ave & NW 88 St (Little River Dr)

Phase	1	2
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Movement		
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AM Pk Hr	G	89	41
	Y	4	4
	R	1	1
	CL	94	46

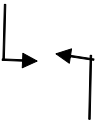
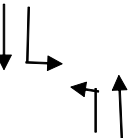
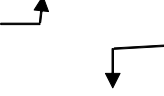
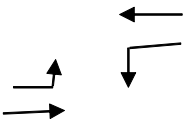
140

PM Pk Hr	G	64	26
	Y	4	4
	R	1	1
	CL	69	31

100

Existing Signal Timing

NW 7 Ave & NW 95 St

Phase		1	2	3	4
Movement					
AM Pk Hr	G	13	34	13	22
	Y	4	4	4	4
	R	-	1	-	1
	CL	17	39	17	27
100					
PM Pk Hr	G	13	34	13	22
	Y	4	4	4	4
	R	-	1	-	1
	CL	17	39	17	27
100					

Intersection Timing Plans for 2095 NW 7 AVE & 79 ST

06-15-09 based on the most recent prior database update on 06-11-09

PN	SC	EY	MC	OFF	NSW	F	Y	R	EWL	Y	EW	F	G	Y	R	NSL	Y
1				62	36	10	4	1	7	3	7	11	28	4	1	25	3
2				63	24	10	4	1	7	3	7	11	1	4	1	9	3
3				62	36	10	4	1	7	3	7	11	28	4	1	25	3
4				47	16	10	4	1	7	3	7	11	2	4	1	11	3
5				68	10	10	4	1	7	3	7	11	5	4	1	19	3
6				64	21	10	4	1	10	3	7	11	10	4	1	15	3
7				59	19	10	4	1	7	3	7	11	5	4	1	15	3
8				87	32	10	4	1	13	3	7	11	6	4	1	15	3
9				85	29	10	4	1	10	3	7	11	12	4	1	15	3
10				62	20	10	4	1	7	3	7	11	14	4	1	15	3
11				65	33	10	4	1	7	3	7	11	34	4	1	22	3
12				63	14	10	4	1	7	3	7	11	1	4	1	19	3
13				64	24	10	4	1	10	3	7	11	7	4	1	15	3
14				123	56	10	4	1	8	3	7	11	12	4	1	20	3
15				84	26	10	4	1	7	3	7	11	13	4	1	20	3
16				64	24	10	4	1	7	3	7	11	10	4	1	15	3
17				64	24	10	4	1	7	3	7	11	10	4	1	15	3
18				64	24	10	4	1	7	3	7	11	10	4	1	15	3
19			7	65	24	1	4	1	7	3	43	4	1	6	3	7	3
20				64	19	10	4	1	7	3	7	11	5	4	1	15	3
21				64	19	10	4	1	7	3	7	11	5	4	1	15	3
22			7	0	10	10	4	1	8	3	7	11	1	4	1	10	3
23			7	0	10	10	4	1	8	3	7	11	1	4	1	10	3
24			7	0	11	10	4	1	8	3	7	11	1	4	1	10	3

Timing Plan Schedule:

[illegible]

Intersection Timing Plans for 3172 NW 7 AVE & 81 ST
06-15-09 based on the first following database update on 06-11-09

PN	SC	EY	MC	OFF	NSG	F	Y	R	WW	F	G	Y	R	NL	Y
1				21	53	14	4	1	7	20	18	4	1	14	4
2				51	16	14	4	1	10	20	1	4	1	10	4
3				21	53	14	4	1	7	20	18	4	1	14	4
4			7	40	8	14	4	1	9	20	1	4	1	5	4
5				51	16	14	4	1	10	20	1	4	1	10	4
6				91	34	14	4	1	7	20	1	4	1	10	4
7				60	24	14	4	1	7	20	1	4	1	10	4
8				75	26	14	4	1	20	20	1	4	1	15	4
9				92	26	14	4	1	20	20	1	4	1	15	4
10				51	27	14	4	1	7	20	6	4	1	12	4
11				27	53	14	4	1	7	20	18	4	1	14	4
12				51	16	14	4	1	10	20	1	4	1	10	4
13				33	34	14	4	1	7	20	1	4	1	10	4
14				111	41	14	4	1	20	20	16	4	1	15	4
15				6	31	14	4	1	15	20	1	4	1	15	4
16				51	34	14	4	1	7	20	1	4	1	10	4
17				51	34	14	4	1	7	20	1	4	1	10	4
18				51	34	14	4	1	7	20	1	4	1	10	4
19				74	16	14	4	1	10	20	1	4	1	10	4
20				51	24	14	4	1	7	20	1	4	1	10	4
21				51	24	14	4	1	7	20	1	4	1	10	4
22			7	0	8	14	4	1	9	20	1	4	1	5	4
23			7	0	8	14	4	1	9	20	1	4	1	5	4
24			7	0	11	6	4	1	9	6	1	4	1	5	4

Timing Plan Schedule:

[illegible]

MONDAY TIMING FOR 2504 NW 7 AVE & 95 ST

TIME	PATTERN NUMBER AND NAME	MINIMUMS:	OFF	NSW	F	Y	R	EWL	Y	EWL	F	G	Y	R	NSL	Y	CYCLE SKIP EYT MC
0	NITE 9/19		28	7	13	4	1	7	4	11	11	1	4	1	5	4	71
500	NITE 0/5		28	15	13	4	1	9	4	11	13	1	4	1	7	4	85
600	PRE-AM PEAK 0/3		43	15	13	4	1	9	4	11	13	1	4	1	9	4	85
630	AM PEAK M2 0/3		70	21	13	4	1	13	4	11	13	2	4	1	13	4	100
700	AM PEAK M1 0/1		23	21	13	4	1	13	4	11	13	2	4	1	13	4	100
800	AM PEAK M1 0/3		23	21	13	4	1	13	4	11	13	2	4	1	13	4	100
930	AVG M2 0/4		75	21	13	4	1	13	4	11	13	2	4	1	13	4	100
1330	AVG M1 0/4		32	21	13	4	1	13	4	11	13	2	4	1	13	4	100
1545	PM PEAK M1 0/3		28	15	13	4	1	13	4	11	13	1	4	1	13	4	100
1615	PM PEAK M2 0/3		28	15	13	4	1	13	4	11	13	1	4	1	13	4	100
1930	NITE 0/5		69	27	13	4	1	5	4	11	13	1	4	1	13	4	85
	PRE-AM TEST		61	37	13	4	1	5	4	11	13	7	4	1	5	4	95
	AM PEAK TEST		75	15	13	4	1	5	4	11	13	7	4	1	5	4	105
	POST-PM PEAK 0/4		84	29	13	4	1	10	4	11	13	1	4	1	9	4	85
	I-95 BLOCKAGE AM 0/3		70	28	13	4	1	13	4	11	13	8	4	1	12	4	110
	I-95 BLOCKAGE PM 0/3		49	17	13	4	1	13	4	11	13	4	4	1	14	4	80
	POST - P.M. TEST		75	21	13	4	1	13	4	11	13	2	4	1	5	4	100
	AVG M2 #2 0/4		75	21	13	4	1	13	4	11	13	2	4	1	13	4	100
	AVG M1 #2 0/4		86	38	13	4	1	5	4	11	13	2	4	1	5	4	105
	PM PEAK TEST		65	18	13	4	1	5	4	11	13	2	4	1	5	4	90
	MID DAY TEST		42	11	13	4	1	5	4	11	13	1	4	1	5	4	70
	LATE NITE TEST		28	11	13	4	1	7	4	11	13	1	4	1	5	4	75
	RECALL TEST 0/28																

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY	NO SCHOOL MONDAY	NO SCHOOL FRIDAY
TIME PT CYC	TIME PT CYC	TIME PT CYC	TIME PT CYC	TIME PT CYC	TIME PT CYC	TIME PT CYC	TIME PT CYC	TIME PT CYC
0 23 85	0 23 85	0 23 85	0 23 85	0 23 85	0 23 85	0 23 85	0 23 85	0 23 85
500 4 85	500 4 85	500 4 85	500 4 85	500 4 85	600 5 85	600 5 85	500 4 85	500 4 85
600 5 85	600 5 85	600 5 85	600 5 85	600 5 85	1000 3 100	1000 3 100	600 5 85	600 5 85
630 10 100	630 10 100	630 10 100	630 10 100	630 10 100	2030 4 85	2030 4 85	630 10 100	630 10 100
700 17 100	700 17 100	700 17 100	700 17 100	700 17 100			930 3 100	930 3 100
800 12 100	800 12 100	800 12 100	800 12 100	800 12 100			1500 13 100	1500 13 100
930 3 100	930 3 100	930 3 100	930 3 100	930 3 100			1930 4 85	1930 4 85
1330 6 100	1330 6 100	1330 6 100	1330 6 100	1330 6 100				
1545 11 100	1545 11 100	1545 11 100	1545 11 100	1545 11 100				
1615 13 100	1615 13 100	1615 13 100	1615 13 100	1615 13 100				
1930 4 85	1930 4 85	1930 4 85	1930 4 85	1930 4 85				

MONDAY TIMING FOR 3973 NW 7 AV & LITTLE RIV D 06-16-09 TYPE-SA SECTION 31

TIME	PATTERN NUMBER AND NAME	MINIMUMS:	OFF	NSG	G	Y	R	EW	F	G	Y	R	SECTION 31	CYCLE SKIP	EYT	MC
0	LATE NITE 13/6		0	40	1	4	1	7	18	1	4	1	1	77		
500	LATE NITE 13/6		0	40	1	4	1	7	18	1	4	1	1	77		
600	PRE AM M2		6	48	1	4	1	7	18	1	4	1	1	85		
645	AM PEAK SCHOOL		6	48	1	4	1	7	18	1	4	1	1	85		
715	AM PEAK M2 62 ST SKIP		119	88	1	4	1	7	18	16	4	1	1	140		
845	AM PEAK M1 62 ST SKIP		119	88	1	4	1	7	18	16	4	1	1	140		
900	LATE AM PEAK M2		125	88	1	4	1	7	18	16	4	1	1	140		
930	MID-DAY M2		8	63	1	4	1	7	18	1	4	1	1	100		
1345	AFT M1		90	63	1	4	1	7	18	1	4	1	1	100		
1445	PM/FLASHERS		8	63	1	4	1	7	18	1	4	1	1	100		
1530	MID-DAY M1		20	63	1	4	1	7	18	1	4	1	1	100		
1630	PM PEAK M2		30	73	1	4	1	7	18	1	4	1	1	110		
2000	POST PM PEAK M2		16	53	1	4	1	7	18	1	4	1	1	90		
2200	NITE M2 3/0		56	36	1	4	1	7	18	1	4	1	1	73		
	I-95 SB BLOCK M2 SCH FLASH		20	73	1	4	1	7	18	1	4	1	1	110		
	I-95 NB BLOCK M2		20	73	1	4	1	7	18	1	4	1	1	110		
	AM/FLASHERS/ARCOLA/SUMMER SCHOOL		6	58	1	4	1	7	18	16	4	1	1	140		
	WEEKENDS M2		66	48	1	4	1	7	18	1	4	1	1	85		
	I-95 SB BLOCK M1		8	99	1	4	1	7	18	1	4	1	1	100		
	PM/FLASHERS/ARCOLA/SUMMER SCHOOL		8	63	1	4	1	7	18	1	4	1	1	85		
	HIA.R.T. OUT M2 SKP @ 62 ST 0/1		30	48	1	4	1	7	18	1	4	1	1	90		
	AFT M1		8	53	1	4	1	7	18	1	4	1	1	90		
	PM/FLASHERS		8	53	1	4	1	7	18	1	4	1	1	90		
	RECALL TEST		0	40	1	4	1	7	18	1	4	1	1	77		

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY	NO SCHOOL MONDAY	NO SCHOOL FRIDAY
TIME PT CYC	TIME PT CYC	TIME PT CYC	TIME PT CYC	TIME PT CYC	TIME PT CYC	TIME PT CYC	TIME PT CYC	TIME PT CYC
0 22 65	0 22 65	0 22 65	0 22 65	0 22 65	0 22 65	0 22 65	0 22 65	0 22 65
500 23 85	315 24 65	500 23 65	500 23 65	500 23 65	500 23 65	500 23 65	500 23 65	500 23 65
645 2 85	345 22 65	600 5 85	600 5 85	600 5 85	600 5 85	600 5 85	600 5 85	600 5 85
715 3 140	500 23 65	645 2 85	645 2 85	645 2 85	645 2 85	645 2 85	645 2 85	645 2 85
845 3 140	600 5 85	715 1 140	715 1 140	715 1 140	715 1 140	715 1 140	715 1 140	715 1 140
900 11 140	645 2 85	845 3 140	845 3 140	845 3 140	845 3 140	845 3 140	845 3 140	845 3 140
930 18 100	715 1 140	900 11 140	900 11 140	900 11 140	900 11 140	900 11 140	900 11 140	900 11 140
1345 13 100	845 3 140	930 18 100	930 18 100	930 18 100	930 18 100	930 18 100	930 18 100	930 18 100
1445 17 100	900 11 140	1345 13 100	1345 13 100	1345 13 100	1345 13 100	1345 13 100	1345 13 100	1345 13 100
1530 15 110	930 18 100	1430 20 90	1445 17 100	1445 17 100	1445 17 100	1445 17 100	1445 17 100	1445 17 100
1630 15 110	1345 13 100	1445 11 140	1530 6 100	1530 6 100	1530 6 100	1530 6 100	1530 6 100	1530 6 100
2000 7 90	1445 17 100	1530 6 100	1630 15 110	1630 15 110	1630 15 110	1630 15 110	1630 15 110	1630 15 110
2200 4 80	1630 15 110	2000 7 90	2000 7 90	2000 7 90	2000 7 90	2000 7 90	2000 7 90	2000 7 90
	2000 7 90	2200 4 80	2200 4 80	2200 4 80	2200 4 80	2200 4 80	2200 4 80	2200 4 80
	2200 4 80							

Print Date:
7/28/2009

Print Time:
11:20 AM

TOD Schedule Report for 2503: I-95 NB&NW 95 St

Asset	Intersection	TOD Schedule	On Mode	Plan #	Cycle	Offset	PH 1	PH 2	PH 3	PH 4	PH 5	PH 6	PH 7	PH 8	Active	Active
2503	2503: I-95 NB&NW 95 St	DOW-3 Tuesday	TOD	[03]AM	PE	100	62	20	39	0	28	0	62	0	0	1
								EBL	WBT	NBT	EBT					Max 2

Active Phase Bank: Phase Bank 1

Phase	Walk	Don't Walk	Min Initial	Veh Ext	Max Limit	Max 2	Yellow	Red
1	EBL	0 - 0 - 0	0 - 0 - 0	5 - 5 - 5	2 - 2 - 2	20 - 20 - 20	20 - 20 - 20	3
2	WBT	0 - 0 - 0	0 - 0 - 0	16 - 16 - 16	1 - 1 - 1	50 - 50 - 50	0 - 50 - 50	4
3	NBT	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0
4	EBT	7 - 7 - 7	24 - 24 - 24	7 - 7 - 7	2.5 - 2.5 - 2.5	28 - 28 - 28	35 - 35 - 35	4
5		0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0
6		0 - 0 - 0	0 - 0 - 0	16 - 16 - 16	1 - 1 - 1	50 - 50 - 50	0 - 50 - 50	4
7		0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0
8		0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0

Last In Service Date: unknown

Permitted Phases

12345678
Default
External Permit 0
External Permit 1
External Permit 2

TOD Schedule Report for 2503: I- 95 NB&NW 95 St

Current TOD Schedule		Green Time							
		1	2	3	4	5	6	7	8
Time	Plan	Cycle	EBL	WBT	NBT	EBT	Ring Offset	Offset	
0500	Free	85	12	32	0	28	0	47	0
0600	4	85	12	32	0	28	0	47	0
0630	5	100	20	39	0	28	0	62	0
0700	10	100	20	39	0	28	0	62	0
0730	17	100	20	39	0	28	0	62	0
0800	12	100	20	39	0	28	0	62	0
0930	3	100	20	39	0	28	0	62	0
1330	6	100	20	39	0	28	0	62	0
1545	11	100	20	39	0	28	0	62	0
1615	13	100	20	39	0	28	0	62	0
1930	4	85	12	32	0	28	0	47	0
	1	95	6	48	0	28	0	57	0
	2	105	6	58	0	28	0	67	0
	7	85	12	32	0	28	0	47	0
	8	110	20	49	0	28	0	72	0
	9	110	20	49	0	28	0	72	0
	14	80	6	33	0	28	0	42	0
	15	100	20	39	0	28	0	62	0
	16	100	20	39	0	28	0	62	0
	20	105	6	41	0	45	0	50	0
	21	90	14	21	0	42	0	38	0
	22	70	12	17	0	28	0	32	0

Local TOD Schedule		Plan		DOW	
Time	Free	4	5	Su	M
0500	4	4	5	Su	M
0600	5	10	17	Su	M
0630	10	17	12	Su	M
0700	17	12	3	Su	M
0800	12	3	6	Su	M
0930	3	6	11	Su	M
1000	6	11	13	Su	M
1330	11	13	4	Su	M
1545	13	4	4	Su	M
1615	4	4	4	Su	M
1930	4	4	4	Su	M
2030	4	4	4	Su	M

Current Time of Day Function		Local Time of Day Function	
Time	Function	Time	Function
0000	TOD OUTPUTS	0000	TOD OUTPUTS

Settings	
Blank - FREE - Phase Bank 1, Max 1	
Blank - Plan - Phase Bank 1, Max 2	
1 - Phase Bank 2, Max 1	
2 - Phase Bank 2, Max 2	
3 - Phase Bank 3, Max 1	
4 - Phase Bank 3, Max 2	
5 - EXTERNAL PERMIT 1	
6 - EXTERNAL PERMIT 2	
7 - X-PED OMIT	
8 - TBA	

Print Date:
7/28/2009

Print Time:
11:20 AM

TOD Schedule Report for 4743: I- 95 SB O&NW 95 St

Asset	Intersection	TOD Schedule	Op Mode	Plan #	Cycle	Offset	Splits								Active	Active		
															Phase	Bank	Maximum	
							PH 1	PH 2	PH 3	PH 4	PH 5	PH 6	PH 7	PH 8				
4743	4743: I- 95 SB O&NW 95 St	DOW-3 Tuesday	TOD	[03]	AM	PE	100	64	0	60	0	0	17	40	0	30	1	Max 2

Active Phase Bank: Phase Bank 1

Phase	Walk	Don't Walk	Min Initial	Veh Ext	Max Limit	Max 2	Yellow	Red
1	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
2	0 - 0 - 0	0 - 0 - 0	16 - 16 - 16	1 - 1 - 1	30 - 30 - 30	0 - 40 - 40	4	1.2
3	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
4	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
5	0 - 0 - 0	0 - 0 - 0	5 - 5 - 5	2 - 2 - 2	7 - 7 - 7	25 - 25 - 25	3	0
6	0 - 0 - 0	0 - 0 - 0	16 - 16 - 16	1 - 1 - 1	30 - 30 - 30	0 - 40 - 40	4	1.2
7	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
8	0 - 0 - 0	0 - 0 - 0	7 - 7 - 7	2.5 - 2.5 - 2.5	20 - 20 - 20	40 - 40 - 40	4	1.4

Last In Service Date: unknown

Permitted Phases

12345678
Default
External Permit 0
External Permit 1
External Permit 2
-2--56-8
-2---6-8
-2---6-8
-2---6-8

TOD Schedule Report for 4743: I- 95 SB O&NW 95 St

Current TOD Schedule		Green Time										
Plan	Cycle	1	2	3	4	5	6	7	8			
			WBT			WBL	EBT		SBT			
Free												
0500	4	85	0	50	0	0	12	35	0	25	0	16
0600	5	85	0	50	0	0	12	35	0	25	0	26
0630	10	100	0	65	0	0	20	42	0	25	0	58
0700	17	100	0	65	0	0	20	42	0	25	0	10
0800	12	100	0	65	0	0	20	42	0	25	0	10
0930	3	100	0	60	0	0	17	40	0	30	0	64
1330	6	100	0	60	0	0	17	40	0	30	0	64
1545	11	100	0	60	0	0	15	42	0	30	0	20
1615	13	100	0	60	0	0	15	42	0	30	0	20
1930	4	85	0	50	0	0	12	35	0	25	0	16
	1	95	0	58	0	0	25	30	0	27	0	42
	2	105	0	72	0	0	7	62	0	23	0	92
	7	85	0	50	0	0	12	35	0	25	0	66
	8	110	0	60	0	0	10	47	0	40	0	70
	9	110	0	60	0	0	10	47	0	40	0	60
	14	80	0	61	0	0	5	53	0	9	0	2
	15	100	0	60	0	0	17	40	0	30	0	64
	16	100	0	60	0	0	17	40	0	30	0	64
	20	105	0	55	0	0	5	47	0	40	0	76
	21	90	0	65	0	0	5	57	0	15	0	84
	22	70	0	53	0	0	5	45	0	7	0	68
	23	60	0	30	0	0	7	20	0	20	0	22

Local TOD Schedule			
Time	Plan	DOW	
0000	Free	SuM	TWThFS
0500	4	M	TWThF
0600	5	SuM	TWThFS
0630	10	M	TWThF
0700	17	M	TWThF
0800	12	M	TWThF
0930	3	M	TWThF
1000	3	Su	
1330	6	M	TWThF
1545	11	M	TWThF
1615	13	M	TWThF
1930	4	M	TWThF
2030	4	Su	

Local TOD Schedule

Time	Plan	DOW
0000	Free	Su M T W Th F S
0500	4	M T W Th F
0600	5	Su M T W Th F S
0630	10	M T W Th F
0700	17	M T W Th F
0800	12	M T W Th F
0900	3	M T W Th F
1000	3	Su
1330	6	M T W Th F
1545	11	M T W Th F
1615	13	M T W Th F
1930	4	M T W Th F
2030	4	Su

Current Time of Day Function

Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS		Su M T W Th F S

Local Time of Day Function

Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS		Su M T W Th F S

* Settings

- Blank - FREE - Phase Bank 1, Max 1
- Blank - Plan - Phase Bank 1, Max 2
- 1 - Phase Bank 2, Max 1
- 2 - Phase Bank 2, Max 2
- 3 - Phase Bank 3, Max 1
- 4 - Phase Bank 3, Max 2
- 5 - EXTERNAL PERMIT 1
- 6 - EXTERNAL PERMIT 2
- 7 - X-PED OMIT
- 8 - TBA

Print Date:
7/28/2009

Print Time:
11:21 AM

TOD Schedule Report for 3574: I-95 NB O&NW 81 St

Asset	Intersection	TOD Schedule	On Mode	Plan #	Cycle Offset	Splitts	PH 1	PH 2	PH 3	PH 4	PH 5	PH 6	PH 7	PH 8	Active PhaseBank	Active Maximum
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3574 3574: I-95 NB O&NW 81 St DOW-3 TOD N/A 0 0 0 0 0 0 0 0 0 0 0 0 0 0 Max 0

Active Phase Bank: Phase Bank 1

Phase	Walk Phase Bank	Don't Walk	Min Initial	Veh Ext	Max Limit	Max 2	Yellow	Red
1	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0
2	7 - 7 - 7	9 - 9 - 9	7 - 7 - 7	1 - 1 - 1	50 - 50 - 50	0 - 50 - 50	4	1
3	0 - 0 - 0	0 - 0 - 0	7 - 7 - 7	2.5 - 2.5 - 2.5	24 - 24 - 24	34 - 34 - 34	4	1
4	7 - 7 - 7	12 - 12 - 12	7 - 7 - 7	2.5 - 2.5 - 2.5	24 - 24 - 24	60 - 34 - 34	4	1
5	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
6	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
7	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
8	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0

Last In Service Date: unknown

Permitted Phases	12345678
Default	-234-----
External Permit 0	-----
External Permit 1	-----
External Permit 2	-----

TOD Schedule Report for 3574: I- 95 NB O&NW 81 St

Current TOD Schedule	Plan	Cycle	Green Time							Local TOD Schedule	
			1	2	3	4	5	6	7	8	Time 0000
			WBT	NBT	SBT						Plan 1
											DOW Su M T W Th F S
1		140	0	40	25	60	0	0	0	0	
2		85	0	34	10	26	0	0	0	0	
3		140	0	55	25	45	0	0	0	0	
4		80	0	35	7	23	0	0	0	0	
5		85	0	30	10	30	0	0	0	0	
6		100	0	34	12	39	0	0	0	0	
7		90	0	35	10	30	0	0	0	0	
8		110	0	49	10	36	0	0	0	0	
9		110	0	39	10	46	0	0	0	0	
10		100	0	35	15	35	0	0	0	0	
11		140	0	55	25	45	0	0	0	0	
13		100	0	33	10	42	0	0	0	0	
14		140	0	49	10	66	0	0	0	0	
15		110	0	39	10	46	0	0	0	0	
16		100	0	42	10	33	0	0	0	0	
17		100	0	34	10	41	0	0	0	0	
18		100	0	34	10	41	0	0	0	0	
19		85	0	34	10	26	0	0	0	0	
20		90	0	35	10	30	0	0	0	0	
21		90	0	35	10	30	0	0	0	0	

Current Time of Day Function			Local Time of Day Function		
Time	Function	Settings* Day of Week	Time	Function	Settings* Day of Week
0000	TOD OUTPUTS	----- Su M T W Th F S	0000	TOD OUTPUTS	----- Su M T W Th F S
* Settings			* Settings		
Blank - FREE - Phase Bank 1, Max 1			Blank - Plan - Phase Bank 1, Max 2		
1 - Phase Bank 2, Max 1			2 - Phase Bank 2, Max 2		
3 - Phase Bank 3, Max 1			4 - Phase Bank 3, Max 2		
5 - EXTERNAL PERMIT 1			6 - EXTERNAL PERMIT 2		
7 - X-PED OMIT			8 - TBA		

Print Date:
7/28/2009

Print Time:
11:22 AM

TOD Schedule Report for 3615: I-95 SB O-NW 81 St

Asset	Intersection	TOD Schedule	On Mode	Plan #	Cycle Offset	Splits	Active	Active
						PH 1 PH 2 PH 3 PH 4 PH 5 PH 6 PH 7 PH 8	PhaseBank	Maximum

3615 3615: I-95 SB O-NW 81 St DOW-3 TOD N/A 0 0 0 0 0 0 0 0 Max 0
Tuesday

Active Phase Bank: Phase Bank 1

Phase	Walk	Don't Walk	Min Initial	Veh Ext	Max Limit	Max 2	Yellow	Red
1	2	3	1	2	3	1	2	3
2	3	1	2	3	1	2	3	1
3	1	2	3	1	2	3	1	2

Last In Service Date: 07/28/2009 11:22

Permitted Phases

Default
External Permit 0
External Permit 1
External Permit 2

12345678

Current TOD Schedule	Plan	Cycle	1	2	3	4	5	6	7	8	Ring Offset	Offset

Local TOD Schedule	Time	Plan	DOW

Current Time of Day Function	Time	Function	Settings *	Day of Week

Local Time of Day Function	Time	Function	Settings *	Day of Week

*** Settings**

Blank - FREE - Phase Bank 1, Max 1
Blank - Plan - Phase Bank 1, Max 2
1 - Phase Bank 2, Max 1
2 - Phase Bank 2, Max 2
3 - Phase Bank 3, Max 1
4 - Phase Bank 3, Max 2
5 - EXTERNAL PERMIT 1
6 - EXTERNAL PERMIT 2
7 - X-PED OMIT
8 - TBA

Print Date:
7/28/2009

Print Time:
11:23 AM

TOD Schedule Report for 2503: I- 95 NB&NW 95 St

Asset	Intersection	TOD Schedule	On Mode	Plan #	Cycle	Offset	PH 1	PH 2	PH 3	PH 4	PH 5	PH 6	PH 7	PH 8	Active PhaseBank	Active Maximum
2503	2503: I- 95 NB&NW 95 St	DOW-3 Tuesday	TOD	[03] AM	PE	100	62	20	39	0	28	0	62	0	0	1
								EBL	WBT	NBT	EBT					Max 2

Active Phase Bank: Phase Bank 1

Phase	Walk	Don't Walk	Min Initial	Veh Ext	Max Limit	Max 2	Yellow	Red
1	EBL	0 - 0 - 0	0 - 0 - 0	5 - 5 - 5	2 - 2 - 2	20 - 20 - 20	20 - 20 - 20	3
2	WBT	0 - 0 - 0	0 - 0 - 0	16 - 16 - 16	1 - 1 - 1	50 - 50 - 50	0 - 50 - 50	4
3	NBT	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0
4	EBT	0 - 0 - 0	0 - 0 - 0	7 - 7 - 7	2.5 - 2.5 - 2.5	28 - 28 - 28	35 - 35 - 35	4
5	WBT	0 - 0 - 0	0 - 0 - 0	16 - 16 - 16	1 - 1 - 1	50 - 50 - 50	0 - 50 - 50	4
6	NBT	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0
7	EBT	0 - 0 - 0	0 - 0 - 0	16 - 16 - 16	1 - 1 - 1	50 - 50 - 50	0 - 50 - 50	4
8	WBT	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0

Last In Service Date: unknown

Permitted Phases

12345678
Default
External Permit 0
External Permit 1
External Permit 2

TOD Schedule Report for 2503: I- 95 NB&NW 95 St

Current		Green Time								
TOD Schedule	Plan	Cycle	1	2	3	4	5	6	7	8
			EBL	WBT	NBT	EBT				
	Free									
0500	4	85	12	32	0	28	0	47	0	0
0600	5	85	12	32	0	28	0	47	0	0
0630	10	100	20	39	0	28	0	62	0	0
0700	17	100	20	39	0	28	0	62	0	0
0800	12	100	20	39	0	28	0	62	0	0
0930	3	100	20	39	0	28	0	62	0	0
1330	6	100	20	39	0	28	0	62	0	0
1545	11	100	20	39	0	28	0	62	0	0
1615	13	100	20	39	0	28	0	62	0	0
1930	4	85	12	32	0	28	0	47	0	0
	1	95	6	48	0	28	0	57	0	0
	2	105	6	58	0	28	0	67	0	0

Local TOD Schedule

Time	Plan	DOW
0000	Free	Su M T W Th F S
0500	4	M T W Th F
0600	5	Su M T W Th F S
0630	10	M T W Th F
0700	17	M T W Th F
0800	12	M T W Th F
0930	3	M T W Th F
1000	3	Su
1330	6	M T W Th F
1545	11	M T W Th F
1615	13	M T W Th F
1930	4	M T W Th F
2015	4	Su
2030	4	S

Current Time of Day Function

Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	-----	Su M T W Th F S

Local Time of Day Function

Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	-----	Su M T W Th F S

* Settings

- Blank - FREE - Phase Bank 1, Max 1
- Blank - Plan - Phase Bank 1, Max 2
- 1 - Phase Bank 2, Max 1
- 2 - Phase Bank 2, Max 2
- 3 - Phase Bank 3, Max 1
- 4 - Phase Bank 3, Max 2
- 5 - EXTERNAL PERMIT 1
- 6 - EXTERNAL PERMIT 2
- 7 - X-PED OMIT
- 8 - TBA

Print Date:
7/28/2009

Print Time:
11:23 AM

TOD Schedule Report for 3634: I- 95 SB&NW 79 St

Asset	Intersection	TOD Schedule	Op Mode	Plan #	Cycle	Offset	Splits	PH 1	PH 2	PH 3	PH 4	PH 5	PH 6	PH 7	PH 8	Active PhaseBank	Active Maximum
-------	--------------	-----------------	---------	--------	-------	--------	--------	------	------	------	------	------	------	------	------	---------------------	-------------------

3634 3634: I- 95 SB&NW 79 St DOW-3 TOD N/A 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 Max 0
Tuesday

Active Phase Bank: Phase Bank 1

Phase	Walk Phase Bank	Don't Walk	Min Initial	Veh Ext	Max Limit	Max 2	Yellow	Red
	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3		
	- - -	- - -	- - -	- - -	- - -	- - -		

Last In Service Date: 07/28/2009 11:23

Permitted Phases

Default
External Permit 0
External Permit 1
External Permit 2

12345678

Current TOD Schedule	Plan	Cycle	1	2	3	4	5	6	7	8	Ring Offset	Offset
-------------------------	------	-------	---	---	---	---	---	---	---	---	-------------	--------

Local TOD Schedule	Time	Plan	DOW
--------------------	------	------	-----

Current Time of Day Function	Time	Function	Settings *	Day of Week
------------------------------	------	----------	------------	-------------

Local Time of Day Function	Time	Function	Settings *	Day of Week
----------------------------	------	----------	------------	-------------

* Settings
Blank - FREE - Phase Bank 1, Max 1
Blank - Plan - Phase Bank 1, Max 2
1 - Phase Bank 2, Max 1
2 - Phase Bank 2, Max 2
3 - Phase Bank 3, Max 1
4 - Phase Bank 3, Max 2
5 - EXTERNAL PERMIT 1
6 - EXTERNAL PERMIT 2
7 - X-PED OMIT
8 - TBA

Appendix H – Synchro Analysis Results

2009 Existing AM Conditions

AM INTERSECTION RESULTS

#	North-South Road		East-West Road	CONTROL TYPE		EB			WB			NB			SB				
						EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR		
1	NW 7 Ave	&	NW 79 St	Semi-Act.	Delay	30.4	54.7		35.0	35.2			25.6	30.3	21.1	31.4	20.8		
					LOS	C	D		D	D		C	C	C	C	C			
					Approach Delay	51.1		35.1		20.3		28.1							
					Approach LOS	D		D		C		C							
					Intesection Delay	35.5													
					Intesection LOS	D													
					50th Queue L (ft)	89	389		34	108		19	123		165	479	38		






















~ Volume exceeds capacity, queue is theoretically infinite. Queue shown is maximum after two cycles. # 95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles. m Volume for 95th percentile queue is metered by upstream signal.

Arterial Results

Existing AM NW 7 Avenue								
NB	Travel Time (s)	64.2	NW 79 ST	22.1	NW 81 ST	54.1	LITTLE RIVER DR	73.5
	LOS	D		C		B		C
SB	Travel Time (s)	-	NW 79 ST	49.9	NW 81 ST	61.1	LITTLE RIVER DR	57.9
	LOS	-		F		B		B

HCM Signalized Intersection Capacity Analysis 1: NW 79 ST & NW 7 AVE


7/30/2009

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	150	800	40	60	250	70	40	350	150	300	1100	200
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	5.0		3.0	5.0		3.0	5.0		3.0	5.0	5.0
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.91		1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	0.99		1.00	0.99		1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.99		1.00	0.97		1.00	0.96		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1662	3087		1616	3096		1678	4367		1694	3421	1490
Flt Permitted	0.45	1.00		0.12	1.00		0.14	1.00		0.34	1.00	1.00
Satd. Flow (perm)	796	3087		200	3096		247	4367		612	3421	1490
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.85	0.85	0.85	0.91	0.91	0.91
Adj. Flow (vph)	161	860	43	65	269	75	47	412	176	330	1209	220
RTOR Reduction (vph)	0	3	0	0	19	0	0	52	0	0	0	77
Lane Group Flow (vph)	161	900	0	65	325	0	47	536	0	330	1209	143
Confl. Peds. (#/hr)			26			15			6			6
Heavy Vehicles (%)	5%	12%	9%	8%	9%	4%	4%	7%	13%	3%	2%	2%
Turn Type	pm+pt			pm+pt			pm+pt			pm+pt		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		6
Actuated Green, G (s)	48.6	41.5		45.0	39.7		53.4	47.5		70.0	61.1	61.1
Effective Green, g (s)	48.6	41.5		45.0	39.7		53.4	47.5		70.0	61.1	61.1
Actuated g/C Ratio	0.37	0.32		0.35	0.31		0.41	0.37		0.54	0.47	0.47
Clearance Time (s)	3.0	5.0		3.0	5.0		3.0	5.0		3.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	345	987		127	947		167	1598		493	1610	701
v/s Ratio Prot	c0.03	c0.29		c0.02	0.11		0.01	0.12		c0.10	c0.35	
v/s Ratio Perm	0.15			0.16			0.10			0.26		0.10
v/c Ratio	0.47	0.91		0.51	0.34		0.28	0.34		0.67	0.75	0.20
Uniform Delay, d1	29.4	42.4		31.6	34.9		24.7	29.7		17.7	28.1	20.1
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	1.0	12.3		3.5	0.2		0.9	0.6		3.4	3.3	0.7
Delay (s)	30.4	54.7		35.0	35.2		25.6	30.3		21.1	31.4	20.8
Level of Service	C	D		D	D		C	C		C	C	C
Approach Delay (s)		51.1			35.1			30.0			28.1	
Approach LOS		D			D			C			C	
Intersection Summary												
HCM Average Control Delay		35.5			HCM Level of Service			D				
HCM Volume to Capacity ratio		0.76										
Actuated Cycle Length (s)		129.8			Sum of lost time (s)			9.0				
Intersection Capacity Utilization		75.6%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												

Queues

1: NW 79 ST & NW 7 AVE

8/3/2009

									
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	161	903	65	344	47	588	330	1209	220
v/c Ratio	0.46	0.90	0.44	0.36	0.25	0.36	0.65	0.74	0.28
Control Delay	31.7	55.2	33.9	33.0	20.1	28.1	23.9	33.2	9.4
Queue Delay	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0
Total Delay	31.7	55.2	33.9	33.8	20.1	28.1	23.9	33.2	9.4
Queue Length 50th (ft)	89	389	34	108	19	123	165	479	38
Queue Length 95th (ft)	148	#526	68	158	37	154	235	587	96
Internal Link Dist (ft)		1758		264		1509		575	
Turn Bay Length (ft)	200		150		100		150		
Base Capacity (vph)	350	1076	151	1074	360	1639	528	1627	785
Starvation Cap Reductn	0	0	0	446	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.46	0.84	0.43	0.55	0.13	0.36	0.63	0.74	0.28

Intersection Summary

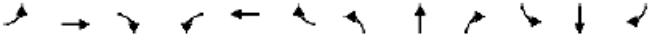
95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

HCM Signalized Intersection Capacity Analysis

2: NW 81 St & NW 7 AVE

7/30/2009

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↖	↗	↘	↖	↗	↘	↖	↗	↘
Volume (vph)	0	0	0	150	400	150	10	550	0	0	1400	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				5.0	5.0	5.0	5.0	5.0			5.0	
Lane Util. Factor				1.00	0.95	1.00	1.00	0.91			0.91	
Frpb, ped/bikes				1.00	1.00	0.99	1.00	1.00			1.00	
Flpb, ped/bikes				1.00	1.00	1.00	1.00	1.00			1.00	
Frt				1.00	1.00	0.85	1.00	1.00			0.99	
Flt Protected				0.95	1.00	1.00	0.95	1.00			1.00	
Satd. Flow (prot)				1745	3292	1494	1491	4730			4814	
Flt Permitted				0.95	1.00	1.00	0.11	1.00			1.00	
Satd. Flow (perm)				1745	3292	1494	176	4730			4814	
Peak-hour factor, PHF	0.92	0.92	0.92	0.90	0.90	0.90	0.84	0.84	0.84	0.91	0.91	0.91
Adj. Flow (vph)	0	0	0	167	444	167	12	655	0	0	1538	88
RTOR Reduction (vph)	0	0	0	0	0	137	0	0	0	0	3	0
Lane Group Flow (vph)	0	0	0	167	444	30	12	655	0	0	1623	0
Confl. Peds. (#/hr)						1			5			7
Heavy Vehicles (%)	2%	2%	2%	0%	6%	3%	17%	6%	0%	0%	3%	6%
Turn Type				Split		Perm	pm+pt					
Protected Phases				8	8		5	2			6	
Permitted Phases						8	2					
Actuated Green, G (s)				21.4	21.4	21.4	89.2	89.2			83.0	
Effective Green, g (s)				21.4	21.4	21.4	89.2	89.2			83.0	
Actuated g/C Ratio				0.18	0.18	0.18	0.74	0.74			0.69	
Clearance Time (s)				5.0	5.0	5.0	5.0	5.0			5.0	
Vehicle Extension (s)				3.0	3.0	3.0	3.0	3.0			3.0	
Lane Grp Cap (vph)				310	584	265	143	3498			3313	
v/s Ratio Prot				0.10	c0.13		0.00	c0.14			c0.34	
v/s Ratio Perm						0.02	0.06					
v/c Ratio				0.54	0.76	0.11	0.08	0.19			0.49	
Uniform Delay, d1				45.1	47.2	41.6	5.6	4.7			8.8	
Progression Factor				1.00	1.00	1.00	1.00	1.00			1.00	
Incremental Delay, d2				1.8	5.8	0.2	0.3	0.1			0.5	
Delay (s)				46.9	52.9	41.8	5.9	4.9			9.4	
Level of Service				D	D	D	A	A			A	
Approach Delay (s)		0.0			49.3			4.9			9.4	
Approach LOS		A			D			A			A	
Intersection Summary												
HCM Average Control Delay			18.5									B
HCM Volume to Capacity ratio			0.55									
Actuated Cycle Length (s)			120.6								15.0	
Intersection Capacity Utilization			48.3%								A	
Analysis Period (min)			15									
c Critical Lane Group												

2: NW 81 St & NW 7 AVE

↙ ← ↗ ↘ ↑ ↓

[illegible]

HCM Signalized Intersection Capacity Analysis 3: Little River Dr & NW 7 AVE

7/30/2009

	EBL	EBT	EBR	WBL	WBT	WER	NBL	NBT	NBR	SBL	SBT	SBR
Movement	EBL	EBT	EBR	WBL	WBT	WER	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	←	←	←	←	←	←	←	←	←	←	←	←
Volume (vph)	10	0	60	10	0	20	20	650	30	30	1600	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Lane Util. Factor	1.00	1.00		1.00	1.00	1.00	1.00	0.91		1.00	0.91	
Frpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Fpfb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	0.85		0.91	1.00	0.99	1.00	1.00		1.00	1.00	
Flt Protected	0.95	1.00		0.98	0.95	1.00		0.95	1.00		0.95	1.00
Satd. Flow (prot)	1745	1561		1645	1586	4737		1745	4863		1745	4863
Flt Permitted	0.84	1.00		0.86	0.11	1.00		0.35	1.00		0.35	1.00
Satd. Flow (perm)	1545	1561		1438	188	4737		637	4863		637	4863
Peak-hour factor, PHF	0.87	0.87	0.87	0.64	0.64	0.64	0.88	0.88	0.88	0.90	0.90	0.90
Adj. Flow (vph)	11	0	69	16	0	31	23	739	34	33	1778	11
RTOR Reduction (vph)	0	22	0	0	29	0	0	2	0	0	0	0
Lane Group Flow (vph)	11	47	0	0	18	0	23	771	0	33	1789	0
Confl. Peds. (#/hr)									6			8
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	10%	5%	4%	0%	3%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	7.8	7.8		7.8	7.8	99.3	99.3	99.3	99.3	99.3	99.3	
Effective Green, g (s)	7.8	7.8		7.8	7.8	99.3	99.3	99.3	99.3	99.3	99.3	
Actuated g/C Ratio	0.07	0.07		0.07	0.07	0.85	0.85	0.85	0.85	0.85	0.85	
Clearance Time (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	103	104		96	159	4017		540	4124			
v/s Ratio Prot		c0.03				0.16			c0.37			
v/s Ratio Perm	0.01			0.01	0.12		0.05					
v/c Ratio	0.11	0.45		0.19	0.14	0.19	0.06	0.43				
Uniform Delay, d1	51.4	52.6		51.7	1.5	1.6	1.4	2.1				
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00				
Incremental Delay, d2	0.5	3.1		1.0	1.9	0.1	0.2	0.3				
Delay (s)	51.8	55.6		52.6	3.4	1.7	1.6	2.5				
Level of Service	D	E		D	A	A	A	A				
Approach Delay (s)		55.1		52.6		1.8		2.5				
Approach LOS		E		D		A		A				
Intersection Summary												
HCM Average Control Delay		4.7										
HCM Volume to Capacity ratio		0.43										
Actuated Cycle Length (s)		117.1						10.0				
Intersection Capacity Utilization		47.9%						A				
Analysis Period (min)		15										
c Critical Lane Group												















Queues
3: Little River Dr & NW 7 AVE

↗ → ← ↖ ↑ ↘ ↓

[illegible]

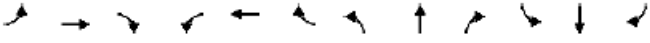
HCM Unsignalized Intersection Capacity Analysis
4: N DWY & NW 7 AVE

7/30/2009

								
Movement	WBL	WBR	NBT	NBR	SBL	SBT		
Lane Configurations			  			  		
Volume (veh/h)	10	30	650	30	30	1600		
Sign Control	Stop		Free		Free			
Grade	0%		0%		0%			
Peak Hour Factor	0.70	0.70	0.89	0.89	0.91	0.91		
Hourly flow rate (vph)	14	43	730	34	33	1758		
Pedestrians								
Lane Width (ft)								
Walking Speed (ft/s)								
Percent Blockage								
Right turn flare (veh)								
Median type			TWLT		TWLT			
Median storage veh			2		2			
Upstream signal (ft)			270					
pX, platoon unblocked	0.98	0.98			0.98			
vC, conflicting volume	1399	260			764			
vC1, stage 1 conf vol	747							
vC2, stage 2 conf vol	652							
vCu, unblocked vol	1347	189			701			
tC, single (s)	6.8	6.9			4.1			
tC, 2 stage (s)	5.8							
tF (s)	3.5	3.3			2.2			
p0 queue free %	96	95			96			
cM capacity (veh/h)	347	813			890			
Direction, Lane #	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3	SB 4
Volume Total	57	292	292	180	33	586	586	586
Volume Left	14	0	0	0	33	0	0	0
Volume Right	43	0	0	34	0	0	0	0
cSH	608	1700	1700	1700	890	1700	1700	1700
Volume to Capacity	0.09	0.17	0.17	0.11	0.04	0.34	0.34	0.34
Queue Length 95th (ft)	8	0	0	0	3	0	0	0
Control Delay (s)	11.5	0.0	0.0	0.0	9.2	0.0	0.0	0.0
Lane LOS	B				A			
Approach Delay (s)	11.5	0.0			0.2			
Approach LOS	B							
Intersection Summary								
Average Delay			0.4					
Intersection Capacity Utilization			40.9%		ICU Level of Service		A	
Analysis Period (min)			15					

HCM Signalized Intersection Capacity Analysis 5: NW 95 ST & NW 7 AVE

7/30/2009

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↱	↰	↰	↰↱	↰	↰	↰↱	↰	↰	↰↱	↰
Volume (vph)	80	450	90	200	400	50	70	350	150	250	1300	100
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	5.0	5.0	3.0	5.0	5.0	3.0	5.0		3.0	5.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.91		1.00	0.91	
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00	0.95	1.00	0.99		1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.96		1.00	0.99	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1711	3355	1451	1711	3388	1447	1662	4556		1728	4814	
Flt Permitted	0.48	1.00	1.00	0.21	1.00	1.00	0.11	1.00		0.37	1.00	
Satd. Flow (perm)	866	3355	1451	385	3388	1447	200	4556		675	4814	
Peak-hour factor, PHF	0.84	0.84	0.84	0.90	0.90	0.90	0.91	0.91	0.91	0.92	0.92	0.92
Adj. Flow (vph)	95	536	107	222	444	56	77	385	165	272	1413	109
RTOR Reduction (vph)	0	0	48	0	0	41	0	74	0	0	7	0
Lane Group Flow (vph)	95	536	59	222	444	15	77	476	0	272	1515	0
Confl. Peds. (#/hr)			7			19			4			1
Heavy Vehicles (%)	2%	4%	5%	2%	3%	3%	5%	6%	1%	1%	3%	2%
Turn Type	pm+pt		Perm		pm+pt		Perm		pm+pt		pm+pt	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		
Actuated Green, G (s)	27.4	19.9	19.9	35.4	24.9	24.9	41.2	34.9		50.2	40.9	
Effective Green, g (s)	27.4	19.9	19.9	35.4	24.9	24.9	41.2	34.9		50.2	40.9	
Actuated g/C Ratio	0.29	0.21	0.21	0.37	0.26	0.26	0.43	0.37		0.53	0.43	
Clearance Time (s)	3.0	5.0	5.0	3.0	5.0	5.0	3.0	5.0		3.0	5.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	314	698	302	316	882	377	183	1663		490	2060	
v/s Ratio Prot	0.02	0.16		0.09	0.13		0.03	0.10		0.07	0.31	
v/s Ratio Perm	0.06		0.04	0.17		0.01	0.15			0.22		
v/c Ratio	0.30	0.77	0.20	0.70	0.50	0.04	0.42	0.29		0.56	0.74	
Uniform Delay, d1	25.8	35.7	31.3	22.8	30.1	26.4	17.5	21.5		13.0	22.8	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.5	5.1	0.3	6.9	0.5	0.0	1.6	0.4		1.4	2.4	
Delay (s)	26.3	40.8	31.6	29.7	30.5	26.5	19.0	22.0		14.4	25.2	
Level of Service	C	D	C	C	C	C	B	C		B	C	
Approach Delay (s)		37.6			30.0		21.6			23.6		
Approach LOS		D			C		C			C		
Intersection Summary												
HCM Average Control Delay			27.1									
HCM Volume to Capacity ratio			0.66									
Actuated Cycle Length (s)			95.6							6.0		
Intersection Capacity Utilization			69.9%							C		
Analysis Period (min)			15									
c Critical Lane Group												

5: NW 95 ST & NW 7 AVE

[illegible]

Arterial Level of Service

7/30/2009

Arterial Level of Service: NB NW 7 AVE

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
NW 79 ST	III	35	36.1	28.1	64.2	0.30	16.9	D
NW 81 St	III	35	16.7	5.4	22.1	0.12	20.2	C
S DWY	III	35	52.2	1.9	54.1	0.44	29.0	B
NW 95 ST	III	35	55.2	18.3	73.5	0.46	22.6	C
Total	III		160.2	53.7	213.9	1.32	22.2	C

Arterial Level of Service: SB NW 7 AVE

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
NW 95 ST	III	35	30.9	26.1	57.0	0.26	16.2	D
Little River Dr	III	35	55.2	2.7	57.9	0.46	28.6	B
NW 81 St	III	35	52.2	8.9	61.1	0.44	25.6	B
NW 79 ST	III	35	16.7	33.2	49.9	0.12	8.9	F
Total	III		155.0	70.9	225.9	1.28	20.3	C

2009 Existing PM Conditions

PM INTERSECTION RESULTS

#	North-South Road		East-West Road	CONTROL TYPE		EB			WB			NB			SB		
						EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
1	NW 7 Ave	&	NW 79 St	Semi-Act.	Delay	26.5	32.5		24.4	32.2		18.1	37.5		71.5	23.9	20.1
					LOS	C	C		C	C		B	D		E	C	C
					Approach Delay	30.9			31.0			36.1			36.5		
					Approach LOS	C			C			D			D		
					Intesection Delay	34.1											
					Intesection LOS	C											
					50th Queue L (ft)	113	227		28	119		34	270		~107	131	0
					95th Queue L (ft)	176	312		55	169		71	#397		#294	198	46
2	NW 7 Ave	&	NW 81 St	Semi-Act.	Delay				31.5	39.3	38.9	7.0	9.0			13.1	
					LOS				A	D	D	A	A			B	
					Approach Delay				38.0			8.9			13.1		
					Approach LOS				D			A			B		
					Intesection Delay	18.5											
					Intesection LOS	B											
					50th Queue L (ft)				85	182	133	14	163			116	
					95th Queue L (ft)				145	244	224	32	215			164	
3	NW 7 Ave	&	Little River Dr.	Semi-Act.	Delay	44.7	42.6			44.6		2.3	2.5		2.0	1.9	
					LOS	D	D			D		A	A		A	A	
					Approach Delay	43.2			44.6			2.5			1.9		
					Approach LOS	D			D			A			A		
					Intesection Delay	4.2											
					Intesection LOS	A											
					50th Queue L (ft)	14	0			11		5	71		1	32	
					95th Queue L (ft)	31	0			17		17	107		5	51	
4	NW 7 Ave	&	North Immigaration Drive-way	T Intersection	Delay					9.9		0.0	0.0	0.0	0.0	0.0	0.0
					LOS					A		A	A	A	A	A	A
					Approach Delay				9.9			0.0			0.0		
					Approach LOS				A			A			A		
					Intesection Delay												
					Intesection LOS												
					50th Queue L (ft)												
					95th Queue L (ft)					1		0	0	0	0	0	0
5	NW 7 Ave	&	NW 95 St	Semi-Act. Uncoord.	Delay	25.8	39.2	31.3	30.1	37.3	30.2	14.4	30.9		28.3	20.7	
					LOS	C	D	C	C	D	C	B	C		C	C	
					Approach Delay	35.2			34.2			29.2			22.6		
					Approach LOS	D			C			C			C		
					Intesection Delay	30.0											
					Intesection LOS	C											
					50th Queue L (ft)	64	145	19	96	151	13	50	289		70	98	
					95th Queue L (ft)	111	204	63	152	209	63	88	365		#175	145	






















~ Volume exceeds capacity, queue is theoretically infinite. Queue shown is maximum after two cycles. # 95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles. m Volume for 95th percentile queue is metered by upstream signal.

Arterial Results

Existing PM NW 7 Avenue										
NB	Travel Time (s)	75.2	NW 79 ST	26.4	NW 81 ST	54.9	LITTLE RIVER DR	88.7	NW 95 ST	-
	LOS	D		D		B		C		-
SB	Travel Time (s)	-	NW 79 ST	42.6	NW 81 ST	65.5	LITTLE RIVER DR	57.3	NW 95 ST	52.4
	LOS	-		E		C		B		D

HCM Signalized Intersection Capacity Analysis 1: NW 79 ST & NW 7 AVE

7/30/2009

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	300	750	60	80	350	80	100	1100	150	250	500	150
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	5.0		3.0	5.0		3.0	5.0		3.0	5.0	5.0
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.91		1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	0.99		1.00	1.00		1.00	1.00	0.98
Fpfb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.99		1.00	0.97		1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1694	3281		1646	3201		1678	4729		1728	3323	1482
Flt Permitted	0.30	1.00		0.22	1.00		0.41	1.00		0.13	1.00	1.00
Satd. Flow (perm)	534	3281		379	3201		717	4729		229	3323	1482
Peak-hour factor, PHF	0.97	0.97	0.97	0.91	0.91	0.91	0.92	0.92	0.92	0.93	0.93	0.93
Adj. Flow (vph)	309	773	62	88	385	88	109	1196	163	269	538	161
RTOR Reduction (vph)	0	6	0	0	22	0	0	16	0	0	0	104
Lane Group Flow (vph)	309	829	0	88	451	0	109	1343	0	269	538	57
Confl. Peds. (#/hr)			23			17			12			6
Heavy Vehicles (%)	3%	5%	2%	6%	5%	6%	4%	3%	9%	1%	5%	3%
Turn Type	pm+pt			pm+pt			pm+pt			pm+pt		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		6
Actuated Green, G (s)	38.4	28.6		27.9	21.1		35.9	28.8		41.9	31.8	31.8
Effective Green, g (s)	38.4	28.6		27.9	21.1		35.9	28.8		41.9	31.8	31.8
Actuated g/C Ratio	0.43	0.32		0.31	0.23		0.40	0.32		0.46	0.35	0.35
Clearance Time (s)	3.0	5.0		3.0	5.0		3.0	5.0		3.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	411	1039		213	748		361	1508		274	1170	522
v/s Ratio Prot	c0.12	c0.25		0.03	0.14		0.02	0.28		c0.11	0.16	
v/s Ratio Perm	0.20			0.10			0.10			c0.35		0.04
v/c Ratio	0.75	0.80		0.41	0.60		0.30	0.89		0.98	0.46	0.11
Uniform Delay, d1	19.0	28.2		23.1	30.9		17.6	29.2		22.5	22.6	19.7
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	7.6	4.3		1.3	1.4		0.5	8.3		49.1	1.3	0.4
Delay (s)	26.5	32.5		24.4	32.2		18.1	37.5		71.5	23.9	20.1
Level of Service	C	C		C	C		B	D		E	C	C
Approach Delay (s)		30.9			31.0			36.1			36.5	
Approach LOS		C			C			D			D	
Intersection Summary												
HCM Average Control Delay			34.1			HCM Level of Service				C		
HCM Volume to Capacity ratio			0.84									
Actuated Cycle Length (s)			90.3			Sum of lost time (s)				6.0		
Intersection Capacity Utilization			83.1%			ICU Level of Service				E		
Analysis Period (min)			15									
c Critical Lane Group												

Queues

1: NW 79 ST & NW 7 AVE

8/3/2009



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	309	835	88	473	109	1359	269	538	161
v/c Ratio	0.73	0.79	0.36	0.63	0.28	0.90	0.97	0.45	0.25
Control Delay	27.4	34.1	18.8	32.5	16.4	39.1	72.6	25.9	5.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	27.4	34.1	18.8	32.5	16.4	39.1	72.6	25.9	5.5
Queue Length 50th (ft)	113	227	28	119	34	270	~107	131	0
Queue Length 95th (ft)	176	312	55	169	71	#397	#294	198	46
Internal Link Dist (ft)		1758		264		1509		575	
Turn Bay Length (ft)	200		150		100		150		
Base Capacity (vph)	431	1121	341	1019	415	1512	276	1189	633
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.72	0.74	0.26	0.46	0.26	0.90	0.97	0.45	0.25

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

HCM Signalized Intersection Capacity Analysis

2: NW 81 St & NW 7 AVE

7/30/2009

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement												
Lane Configurations				↰	↱	↱	↰	↱			↰	↱
Volume (vph)	0	0	0	150	550	250	60	1400	0	0	750	150
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				5.0	5.0	5.0	5.0	5.0			5.0	
Lane Util. Factor				1.00	0.95	1.00	1.00	0.91			0.91	
Frpb, ped/bikes				1.00	1.00	0.97	1.00	1.00			1.00	
Flpb, ped/bikes				1.00	1.00	1.00	1.00	1.00			1.00	
Frt				1.00	1.00	0.85	1.00	1.00			0.97	
Flt Protected				0.95	1.00	1.00	0.95	1.00			1.00	
Satd. Flow (prot)				1662	3202	1476	1678	4868			4693	
Flt Permitted				0.95	1.00	1.00	0.23	1.00			1.00	
Satd. Flow (perm)				1662	3202	1476	412	4868			4693	
Peak-hour factor, PHF	0.92	0.92	0.92	0.90	0.90	0.90	0.92	0.92	0.92	0.94	0.94	0.94
Adj. Flow (vph)	0	0	0	167	611	278	65	1522	0	0	798	160
RTOR Reduction (vph)	0	0	0	0	0	29	0	0	0	0	27	0
Lane Group Flow (vph)	0	0	0	167	611	249	65	1522	0	0	931	0
Confl. Peds. (#/hr)						8			3			4
Heavy Vehicles (%)	2%	2%	2%	5%	9%	3%	4%	3%	0%	0%	4%	3%
Turn Type				Split		Perm	pm+pt					
Protected Phases				8	8		5	2			6	
Permitted Phases						8	2					
Actuated Green, G (s)				23.6	23.6	23.6	63.2	63.2			52.5	
Effective Green, g (s)				23.6	23.6	23.6	63.2	63.2			52.5	
Actuated g/C Ratio				0.24	0.24	0.24	0.65	0.65			0.54	
Clearance Time (s)				5.0	5.0	5.0	5.0	5.0			5.0	
Vehicle Extension (s)				3.0	3.0	3.0	3.0	3.0			3.0	
Lane Grp Cap (vph)				405	781	360	344	3178			2545	
v/s Ratio Prot				0.10	0.19		0.01	0.31			0.20	
v/s Ratio Perm						0.17	0.11					
v/c Ratio				0.41	0.78	0.69	0.19	0.48			0.37	
Uniform Delay, d1				30.8	34.2	33.3	6.7	8.5			12.6	
Progression Factor				1.00	1.00	1.00	1.00	1.00			1.00	
Incremental Delay, d2				0.7	5.1	5.6	0.3	0.5			0.4	
Delay (s)				31.5	39.3	38.9	7.0	9.0			13.1	
Level of Service				C	D	D	A	A			B	
Approach Delay (s)		0.0			38.0			8.9			13.1	
Approach LOS		A			D			A			B	
Intersection Summary												
HCM Average Control Delay			18.5								B	
HCM Volume to Capacity ratio			0.56									
Actuated Cycle Length (s)			96.8							10.0		
Intersection Capacity Utilization			51.7%							A		
Analysis Period (min)			15									
c Critical Lane Group												

Queues

2: NW 81 St & NW 7 AVE





















8/3/2009



Lane Group	WBL	WBT	WBR	NBL	NBT	SBT
Lane Group Flow (vph)	167	611	278	65	1522	958
v/c Ratio	0.41	0.77	0.71	0.19	0.48	0.37
Control Delay	33.1	40.8	38.5	8.4	9.7	13.3
Queue Delay	0.0	0.7	0.3	0.0	0.0	0.0
Total Delay	33.1	41.5	38.8	8.4	9.7	13.3
Queue Length 50th (ft)	85	182	133	14	163	116
Queue Length 95th (ft)	145	244	224	32	215	164
Internal Link Dist (ft)		255			575	2218
Turn Bay Length (ft)				100		
Base Capacity (vph)	465	897	441	369	3157	2596
Starvation Cap Reductn	0	88	17	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.36	0.76	0.66	0.18	0.48	0.37
Intersection Summary						

HCM Signalized Intersection Capacity Analysis 3: Little River Dr & NW 7 AVE

7/30/2009

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	20	0	50	10	0	10	60	1600	10	10	850	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0			5.0		5.0	5.0		5.0	5.0	
Lane Util. Factor	1.00	1.00			1.00		1.00	0.91		1.00	0.91	
Frpb, ped/bikes	1.00	1.00			1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00			1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.85			0.93		1.00	1.00		1.00	0.99	
Flt Protected	0.95	1.00			0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1745	1561			1485		1745	4863		1745	4840	
Flt Permitted	0.73	1.00			0.81		0.29	1.00		0.13	1.00	
Satd. Flow (perm)	1343	1561			1232		538	4863		240	4840	
Peak-hour factor, PHF	0.79	0.79	0.79	0.50	0.50	0.50	0.97	0.97	0.97	0.94	0.94	0.94
Adj. Flow (vph)	25	0	63	20	0	20	62	1649	10	11	904	32
RTOR Reduction (vph)	0	59	0	0	19	0	0	0	0	0	2	0
Lane Group Flow (vph)	25	4	0	0	21	0	62	1659	0	11	934	0
Confl. Peds. (#/hr)									9			9
Heavy Vehicles (%)	0%	0%	0%	0%	0%	25%	0%	3%	0%	0%	3%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	6.7	6.7			6.7		80.8	80.8		80.8	80.8	
Effective Green, g (s)	6.7	6.7			6.7		80.8	80.8		80.8	80.8	
Actuated g/C Ratio	0.07	0.07			0.07		0.83	0.83		0.83	0.83	
Clearance Time (s)	5.0	5.0			5.0		5.0	5.0		5.0	5.0	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	92	107			85		446	4030		199	4011	
v/s Ratio Prot		0.00						0.34			0.19	
v/s Ratio Perm	0.02				0.02		0.12			0.05		
v/c Ratio	0.27	0.04			0.25		0.14	0.41		0.06	0.23	
Uniform Delay, d1	43.1	42.4			43.0		1.6	2.2		1.5	1.8	
Progression Factor	1.00	1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.6	0.2			1.6		0.7	0.3		0.5	0.1	
Delay (s)	44.7	42.6			44.6		2.3	2.5		2.0	1.9	
Level of Service	D	D			D		A	A		A	A	
Approach Delay (s)		43.2			44.6			2.5			1.9	
Approach LOS		D			D			A			A	
Intersection Summary												
HCM Average Control Delay			4.2									A
HCM Volume to Capacity ratio			0.40									
Actuated Cycle Length (s)			97.5							10.0		
Intersection Capacity Utilization			54.8%								A	
Analysis Period (min)			15									
c Critical Lane Group												

Queues

3: Little River Dr & NW 7 AVE















8/3/2009



Lane Group	EBL	EBT	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	25	63	40	62	1659	11	936
v/c Ratio	0.24	0.23	0.35	0.14	0.41	0.05	0.23
Control Delay	39.8	2.0	30.2	3.0	2.7	2.9	2.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	39.8	2.0	30.2	3.0	2.7	2.9	2.1
Queue Length 50th (ft)	14	0	11	5	71	1	32
Queue Length 95th (ft)	31	0	17	17	107	5	51
Internal Link Dist (ft)		1763	274		2218		190
Turn Bay Length (ft)	100			150		150	
Base Capacity (vph)	304	480	294	453	4096	203	4079
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.08	0.13	0.14	0.14	0.41	0.05	0.23
Intersection Summary							













HCM Unsignalized Intersection Capacity Analysis
4: N DWY & NW 7 AVE

7/30/2009

								
Movement	WBL	WBR	NBT	NBR	SBL	SBT		
Lane Configurations			  			  		
Volume (veh/h)	0	10	1600	10	0	850		
Sign Control	Stop		Free		Free			
Grade	0%		0%		0%			
Peak Hour Factor	0.75	0.75	0.96	0.96	0.94	0.94		
Hourly flow rate (vph)	0	13	1667	10	0	904		
Pedestrians								
Lane Width (ft)								
Walking Speed (ft/s)								
Percent Blockage								
Right turn flare (veh)								
Median type			TWLT		TWLT			
Median storage (veh)			2		2			
Upstream signal (ft)			270					
pX, platoon unblocked	0.91	0.91			0.91			
vC, conflicting volume	1973	561			1677			
vC1, stage 1 conf vol	1672							
vC2, stage 2 conf vol	301							
vCu, unblocked vol	1737	192			1413			
tC, single (s)	6.8	6.9			4.1			
tC, 2 stage (s)	5.8							
tF (s)	3.5	3.3			2.2			
p0 queue free %	100	98			100			
cM capacity (veh/h)	172	753			447			
Direction, Lane #	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3	SB 4
Volume Total	13	667	667	344	0	301	301	301
Volume Left	0	0	0	0	0	0	0	0
Volume Right	13	0	0	10	0	0	0	0
cSH	753	1700	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.02	0.39	0.39	0.20	0.00	0.18	0.18	0.18
Queue Length 95th (ft)	1	0	0	0	0	0	0	0
Control Delay (s)	9.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	A							
Approach Delay (s)	9.9	0.0			0.0			
Approach LOS	A							
Intersection Summary								
Average Delay			0.1					
Intersection Capacity Utilization			41.1%		ICU Level of Service		A	
Analysis Period (min)			15					

HCM Signalized Intersection Capacity Analysis 5: NW 95 ST & NW 7 AVE

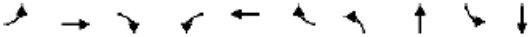
7/30/2009

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	150	450	90	200	450	150	150	1050	250	200	550	60
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	5.0	5.0	3.0	5.0	5.0	3.0	5.0		3.0	5.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.91		1.00	0.91	
Frpb, ped/bikes	1.00	1.00	0.97	1.00	1.00	0.95	1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.97		1.00	0.99	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1711	3388	1446	1678	3421	1460	1728	4719		1678	4692	
Flt Permitted	0.29	1.00	1.00	0.26	1.00	1.00	0.37	1.00		0.11	1.00	
Satd. Flow (perm)	531	3388	1446	463	3421	1460	670	4719		198	4692	
Peak-hour factor, PHF	0.93	0.93	0.93	0.87	0.87	0.87	0.88	0.88	0.88	0.94	0.94	0.94
Adj. Flow (vph)	161	484	97	230	517	172	170	1193	284	213	585	64
RTOR Reduction (vph)	0	0	48	0	0	115	0	38	0	0	12	0
Lane Group Flow (vph)	161	484	49	230	517	57	170	1439	0	213	637	0
Confl. Peds. (#/hr)			9			20			4			4
Heavy Vehicles (%)	2%	3%	5%	4%	2%	2%	1%	3%	2%	4%	5%	6%
Turn Type	pm+pt		Perm	pm+pt		Perm	pm+pt		pm+pt		pm+pt	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		
Actuated Green, G (s)	29.1	18.0	18.0	32.1	19.5	19.5	44.4	34.2		47.2	35.6	
Effective Green, g (s)	29.1	18.0	18.0	32.1	19.5	19.5	44.4	34.2		47.2	35.6	
Actuated g/C Ratio	0.31	0.19	0.19	0.35	0.21	0.21	0.48	0.37		0.51	0.39	
Clearance Time (s)	3.0	5.0	5.0	3.0	5.0	5.0	3.0	5.0		3.0	5.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	309	660	282	327	722	308	439	1747		287	1808	
v/s Ratio Prot	0.06	0.14		c0.10	c0.15		0.04	c0.30		c0.09	0.14	
v/s Ratio Perm	0.10		0.03	0.15		0.04	0.14			0.29		
v/c Ratio	0.52	0.73	0.17	0.70	0.72	0.18	0.39	0.82		0.74	0.35	
Uniform Delay, d1	24.2	34.9	31.0	23.4	33.9	29.9	13.9	26.4		18.3	20.2	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.6	4.2	0.3	6.7	3.4	0.3	0.6	4.6		9.9	0.5	
Delay (s)	25.8	39.2	31.3	30.1	37.3	30.2	14.4	30.9		28.3	20.7	
Level of Service	C	D	C	C	D	C	B	C		C	C	
Approach Delay (s)		35.2			34.2			29.2			22.6	
Approach LOS		D			C			C			C	
Intersection Summary												
HCM Average Control Delay			30.0									C
HCM Volume to Capacity ratio			0.79									
Actuated Cycle Length (s)			92.4							17.0		
Intersection Capacity Utilization			75.8%								D	
Analysis Period (min)			15									
c Critical Lane Group												

Queues

5: NW 95 ST & NW 7 AVE

8/3/2009

										
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	161	484	97	230	517	172	170	1477	213	649
v/c Ratio	0.50	0.73	0.29	0.68	0.72	0.41	0.38	0.83	0.73	0.36
Control Delay	25.3	42.7	17.5	31.7	40.7	11.4	14.0	31.5	33.8	21.5
Queue Delay	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Total Delay	25.3	42.7	17.5	31.7	40.8	11.4	14.0	31.5	33.8	21.5
Queue Length 50th (ft)	64	145	19	96	151	13	50	289	70	98
Queue Length 95th (ft)	111	204	63	152	209	63	88	365	#175	145
Internal Link Dist (ft)		1627			250			2081		1278
Turn Bay Length (ft)	100		60	100		100	100		75	
Base Capacity (vph)	361	774	376	352	795	450	497	1783	324	1816
Starvation Cap Reductn	0	0	0	0	15	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.45	0.63	0.26	0.65	0.66	0.38	0.34	0.83	0.66	0.36

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Arterial Level of Service

7/30/2009

Arterial Level of Service: NB NW 7 AVE

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
NW 79 ST	III	35	36.1	39.1	75.2	0.30	14.4	D
NW 81 St	III	35	16.7	9.7	26.4	0.12	16.9	D
S DWY	III	35	52.2	2.7	54.9	0.44	28.5	B
NW 95 ST	III	35	55.2	31.5	86.7	0.46	19.1	C
Total	III		160.2	83.0	243.2	1.32	19.5	C

Arterial Level of Service: SB NW 7 AVE

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
NW 95 ST	III	35	30.9	21.5	52.4	0.26	17.7	D
Little River Dr	III	35	55.2	2.1	57.3	0.46	28.9	B
NW 81 St	III	35	52.2	13.3	65.5	0.44	23.9	C
NW 79 ST	III	35	16.7	25.9	42.6	0.12	10.5	E
Total	III		155.0	62.8	217.8	1.28	21.1	C

2015 Future AM Conditions

AM INTERSECTION RESULTS

#	North-South Road	East-West Road	CONTROL TYPE		EB			WB			NB			SB					
					EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR			
1	NW 7 Ave	&	NW 79 St	Semi-Act.	Delay	38.6	68.5		39.2	35.9		32.4	35.8		34.6	43.0	22.9		
					LOS	D	E		D	D		C	D		C	D	C		
					Approach Delay	63.3			36.3			35.6			39.3				
					Approach LOS	E			D			D			D				
					Intesection Delay	44.9													
					Intesection LOS	D													
					50th Queue L (ft)	130	~494		36	141		20	169		201	630	51		
		</																	






















~ Volume exceeds capacity, queue is theoretically infinite. Queue shown is maximum after two cycles. # 95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles. m Volume for 95th percentile queue is metered by upstream signal.

Arterial Results

2015 AM NW 7 Avenue									
NB	Travel Time (s)	69.5	NW 79 ST	23.3	NW 81 ST	54.4	LITTLE RIVER DR	75.1	NW 95 ST
	LOS	D		C		B		C	
SB	Travel Time (s)	-	NW 79 ST	59.6	NW 81 ST	63.3	LITTLE RIVER DR	58.4	NW 95 ST
	LOS	-		F		B		B	

HCM Signalized Intersection Capacity Analysis 1: NW 79 ST & NW 7 AVE

7/30/2009

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	200	900	50	60	300	80	40	450	150	350	1300	200
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	5.0		3.0	5.0		3.0	5.0		3.0	5.0	5.0
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.91		1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	0.99		1.00	0.99		1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.99		1.00	0.97		1.00	0.96		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1662	3083		1616	3098		1678	4418		1694	3421	1489
Flt Permitted	0.41	1.00		0.09	1.00		0.09	1.00		0.27	1.00	1.00
Satd. Flow (perm)	720	3083		153	3098		151	4418		489	3421	1489
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.85	0.85	0.85	0.91	0.91	0.91
Adj. Flow (vph)	215	968	54	65	323	86	47	529	176	385	1429	220
RTOR Reduction (vph)	0	3	0	0	18	0	0	42	0	0	0	66
Lane Group Flow (vph)	215	1019	0	65	391	0	47	663	0	385	1429	154
Confl. Peds. (#/hr)			26			15			6			6
Heavy Vehicles (%)	5%	12%	9%	8%	9%	4%	4%	7%	13%	3%	2%	2%
Turn Type	pm+pt			pm+pt			pm+pt			pm+pt		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		6
Actuated Green, G (s)	53.1	46.1		50.1	44.6		52.9	46.8		72.3	63.2	63.2
Effective Green, g (s)	53.1	46.1		50.1	44.6		52.9	46.8		72.3	63.2	63.2
Actuated g/C Ratio	0.39	0.34		0.37	0.33		0.39	0.34		0.53	0.46	0.46
Clearance Time (s)	3.0	5.0		3.0	5.0		3.0	5.0		3.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	327	1038		115	1009		126	1510		456	1579	687
v/s Ratio Prot	c0.03	c0.33		0.02	0.13		0.02	0.15		c0.14	c0.42	
v/s Ratio Perm	0.22			0.19			0.13			0.31		0.10
v/c Ratio	0.66	0.98		0.57	0.39		0.37	0.44		0.84	0.91	0.22
Uniform Delay, d1	33.9	45.0		33.0	35.6		30.5	34.9		21.2	34.1	22.1
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	4.7	23.5		6.2	0.2		1.9	0.9		13.4	9.0	0.8
Delay (s)	38.6	68.5		39.2	35.9		32.4	35.8		34.6	43.0	22.9
Level of Service	D	E		D	D		C	D		C	D	C
Approach Delay (s)		63.3			36.3			35.6			39.3	
Approach LOS		E			D			D			D	
Intersection Summary												
HCM Average Control Delay		44.9										D
HCM Volume to Capacity ratio		0.89										
Actuated Cycle Length (s)		136.9								9.0		
Intersection Capacity Utilization		84.2%								E		
Analysis Period (min)		15										
c Critical Lane Group												

Queues

1: NW 79 ST & NW 7 AVE

8/3/2009



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	215	1022	65	409	47	705	385	1429	220
v/c Ratio	0.64	0.97	0.50	0.40	0.33	0.46	0.83	0.90	0.29
Control Delay	40.4	66.3	38.2	34.8	24.1	33.4	35.0	42.9	11.5
Queue Delay	0.0	0.0	0.0	1.3	0.0	0.0	0.0	0.0	0.0
Total Delay	40.4	66.3	38.2	36.0	24.1	33.4	35.0	42.9	11.5
Queue Length 50th (ft)	130	~494	36	141	20	169	201	630	51
Queue Length 95th (ft)	196	#649	68	190	37	195	#307	#810	112
Internal Link Dist (ft)		1758		264		1509		575	
Turn Bay Length (ft)	200		150		100		150		
Base Capacity (vph)	334	1051	133	1053	316	1546	479	1595	760
Starvation Cap Reductn	0	0	0	428	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.64	0.97	0.49	0.65	0.15	0.46	0.80	0.90	0.29

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.




















95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

HCM Signalized Intersection Capacity Analysis

2: NW 81 St & NW 7 AVE

7/30/2009

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	150	450	200	10	700	0	0	1600	90
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				5.0	5.0	5.0	5.0	5.0			5.0	
Lane Util. Factor				1.00	0.95	1.00	1.00	0.91			0.91	
Frpb, ped/bikes				1.00	1.00	0.99	1.00	1.00			1.00	
Flpb, ped/bikes				1.00	1.00	1.00	1.00	1.00			1.00	
Frt				1.00	1.00	0.85	1.00	1.00			0.99	
Flt Protected				0.95	1.00	1.00	0.95	1.00			1.00	
Satd. Flow (prot)				1745	3292	1494	1491	4730			4814	
Flt Permitted				0.95	1.00	1.00	0.08	1.00			1.00	
Satd. Flow (perm)				1745	3292	1494	125	4730			4814	
Peak-hour factor, PHF	0.92	0.92	0.92	0.90	0.90	0.90	0.84	0.84	0.84	0.91	0.91	0.91
Adj. Flow (vph)	0	0	0	167	500	222	12	833	0	0	1758	99
RTOR Reduction (vph)	0	0	0	0	0	142	0	0	0	0	3	0
Lane Group Flow (vph)	0	0	0	167	500	80	12	833	0	0	1854	0
Confl. Peds. (#/hr)						1			5			7
Heavy Vehicles (%)	2%	2%	2%	0%	6%	3%	17%	6%	0%	0%	3%	6%
Turn Type				Split		Perm	pm+pt					
Protected Phases				8	8		5	2			6	
Permitted Phases						8	2					
Actuated Green, G (s)				24.3	24.3	24.3	89.2	89.2			83.0	
Effective Green, g (s)				24.3	24.3	24.3	89.2	89.2			83.0	
Actuated g/C Ratio				0.20	0.20	0.20	0.72	0.72			0.67	
Clearance Time (s)				5.0	5.0	5.0	5.0	5.0			5.0	
Vehicle Extension (s)				3.0	3.0	3.0	3.0	3.0			3.0	
Lane Grp Cap (vph)				343	648	294	104	3416			3235	
v/s Ratio Prot				0.10	0.15		0.00	0.18			0.39	
v/s Ratio Perm						0.05	0.08					
v/c Ratio				0.49	0.77	0.27	0.12	0.24			0.57	
Uniform Delay, d1				44.1	47.0	42.1	7.4	5.8			10.8	
Progression Factor				1.00	1.00	1.00	1.00	1.00			1.00	
Incremental Delay, d2				1.1	5.7	0.5	0.5	0.2			0.7	
Delay (s)				45.2	52.6	42.6	7.9	6.0			11.5	
Level of Service				D	D	D	A	A			B	
Approach Delay (s)		0.0			48.7			6.0			11.5	
Approach LOS		A			D			A			B	
Intersection Summary												
HCM Average Control Delay			19.4									B
HCM Volume to Capacity ratio			0.62									
Actuated Cycle Length (s)			123.5								15.0	
Intersection Capacity Utilization			53.8%								A	
Analysis Period (min)			15									
c Critical Lane Group												

Queues

2: NW 81 St & NW 7 AVE





















8/3/2009



Lane Group	WBL	WBT	WBR	NBL	NBT	SBT
Lane Group Flow (vph)	167	500	222	12	833	1657
v/c Ratio	0.47	0.75	0.50	0.08	0.25	0.55
Control Delay	46.2	52.0	14.1	8.9	6.6	11.1
Queue Delay	0.2	0.2	0.1	0.0	0.0	0.0
Total Delay	46.3	52.2	14.1	8.9	6.6	11.1
Queue Length 50th (ft)	114	191	29	2	71	213
Queue Length 95th (ft)	182	251	100	9	104	417
Internal Link Dist (ft)		255			575	2218
Turn Bay Length (ft)				100		
Base Capacity (vph)	561	1058	600	211	3372	3348
Starvation Cap Reductn	74	102	24	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.34	0.52	0.39	0.06	0.25	0.55
Intersection Summary						

HCM Signalized Intersection Capacity Analysis 3: Little River Dr & NW 7 AVE

7/30/2009

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	10	0	60	10	0	20	20	800	100	90	1800	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0			5.0		5.0	5.0		5.0	5.0	
Lane Util. Factor	1.00	1.00			1.00		1.00	1.00	0.91	1.00	0.91	
Frpb, ped/bikes	1.00	1.00			1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00			1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.85			0.91		1.00	0.98		1.00	1.00	
Fit Protected	0.95	1.00			0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1745	1561			1645		1586	4679		1745	4864	
Fit Permitted	0.83	1.00			0.86		0.09	1.00		0.27	1.00	
Satd. Flow (perm)	1532	1561			1438		144	4679		492	4864	
Peak-hour factor, PHF	0.87	0.87	0.87	0.64	0.64	0.64	0.88	0.88	0.88	0.90	0.90	0.90
Adj. Flow (vph)	11	0	69	16	0	31	23	909	114	100	2000	11
RTOR Reduction (vph)	0	13	0	0	29	0	0	5	0	0	0	0
Lane Group Flow (vph)	11	56	0	0	18	0	23	1018	0	100	2011	0
Confl. Peds. (#/hr)									6			8
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	10%	5%	4%	0%	3%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	8.4	8.4			8.4		99.1	99.1		99.1	99.1	
Effective Green, g (s)	8.4	8.4			8.4		99.1	99.1		99.1	99.1	
Actuated g/C Ratio	0.07	0.07			0.07		0.84	0.84		0.84	0.84	
Clearance Time (s)	5.0	5.0			5.0		5.0	5.0		5.0	5.0	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	110	112			103		121	3946		415	4102	
v/s Ratio Prot		c0.04						0.22			c0.41	
v/s Ratio Perm	0.01				0.01		0.16			0.20		
v/c Ratio	0.10	0.50			0.18		0.19	0.26		0.24	0.49	
Uniform Delay, d1	51.0	52.5			51.3		1.7	1.8		1.8	2.5	
Progression Factor	1.00	1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.4	3.5			0.8		3.5	0.2		1.4	0.4	
Delay (s)	51.4	56.0			52.1		5.2	2.0		3.2	2.9	
Level of Service	D	E			D		A	A		A	A	
Approach Delay (s)		55.4			52.1			2.1			2.9	
Approach LOS		E			D			A			A	
Intersection Summary												
HCM Average Control Delay			4.6									A
HCM Volume to Capacity ratio			0.49									
Actuated Cycle Length (s)			117.5							10.0		
Intersection Capacity Utilization			59.3%								B	
Analysis Period (min)			15									
c Critical Lane Group												

Queues

3: Little River Dr & NW 7 AVE







8/3/2009



Lane Group	EBL	EBT	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	11	69	47	23	1023	100	2011
v/c Ratio	0.09	0.50	0.33	0.19	0.25	0.24	0.48
Control Delay	46.4	49.9	28.5	6.4	2.2	3.9	3.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	46.4	49.9	28.5	6.4	2.2	3.9	3.2
Queue Length 50th (ft)	8	40	11	3	43	12	117
Queue Length 95th (ft)	25	79	27	12	64	32	173
Internal Link Dist (ft)		1763	274		2218		190
Turn Bay Length (ft)	100			150		150	
Base Capacity (vph)	420	438	416	123	4018	422	4175
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.03	0.16	0.11	0.19	0.25	0.24	0.48
Intersection Summary							

























HCM Unsignalized Intersection Capacity Analysis
4: N DWY & NW 7 AVE

7/30/2009

								
Movement	WBL	WBR	NBT	NBR	SBL	SBT		
Lane Configurations		↗	↖↗↘		↘	↖↗↘		
Volume (veh/h)	0	30	700	90	90	1800		
Sign Control	Stop		Free			Free		
Grade	0%		0%			0%		
Peak Hour Factor	0.70	0.70	0.89	0.89	0.91	0.91		
Hourly flow rate (vph)	0	43	787	101	99	1978		
Pedestrians								
Lane Width (ft)								
Walking Speed (ft/s)								
Percent Blockage								
Right turn flare (veh)								
Median type			TWLT		TWLT			
Median storage veh			2		2			
Upstream signal (ft)			270					
pX, platoon unblocked	0.98	0.98			0.98			
vC, conflicting volume	1694	313			888			
vC1, stage 1 conf vol	837							
vC2, stage 2 conf vol	857							
vCu, unblocked vol	1623	206			796			
tC, single (s)	6.8	6.9			4.1			
tC, 2 stage (s)	5.8							
tF (s)	3.5	3.3			2.2			
p0 queue free %	100	95			88			
cM capacity (veh/h)	268	787			814			
Direction, Lane #	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3	SB 4
Volume Total	43	315	315	258	99	659	659	659
Volume Left	0	0	0	0	99	0	0	0
Volume Right	43	0	0	101	0	0	0	0
cSH	787	1700	1700	1700	814	1700	1700	1700
Volume to Capacity	0.05	0.19	0.19	0.15	0.12	0.39	0.39	0.39
Queue Length 95th (ft)	4	0	0	0	10	0	0	0
Control Delay (s)	9.8	0.0	0.0	0.0	10.0	0.0	0.0	0.0
Lane LOS	A				B			
Approach Delay (s)	9.8	0.0			0.5			
Approach LOS	A							
Intersection Summary								
Average Delay			0.5					
Intersection Capacity Utilization			38.1%		ICU Level of Service		A	
Analysis Period (min)			15					

HCM Signalized Intersection Capacity Analysis 5: NW 95 ST & NW 7 AVE

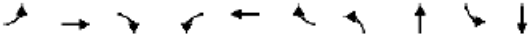
7/30/2009

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	90	500	150	250	450	60	80	400	200	300	1500	150
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	5.0	5.0	3.0	5.0	5.0	3.0	5.0		3.0	5.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.91		1.00	0.91	
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00	0.95	1.00	0.99		1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.95		1.00	0.99	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1711	3355	1450	1711	3388	1445	1662	4536		1728	4800	
Flt Permitted	0.43	1.00	1.00	0.17	1.00	1.00	0.12	1.00		0.31	1.00	
Satd. Flow (perm)	779	3355	1450	313	3388	1445	202	4536		559	4800	
Peak-hour factor, PHF	0.84	0.84	0.84	0.90	0.90	0.90	0.91	0.91	0.91	0.92	0.92	0.92
Adj. Flow (vph)	107	595	179	278	500	67	88	440	220	326	1630	163
RTOR Reduction (vph)	0	0	71	0	0	43	0	88	0	0	11	0
Lane Group Flow (vph)	107	595	108	278	500	24	88	572	0	326	1782	0
Confl. Peds. (#/hr)			7			19			4			1
Heavy Vehicles (%)	2%	4%	5%	2%	3%	3%	5%	6%	1%	1%	3%	2%
Turn Type	pm+pt		Perm	pm+pt		Perm	pm+pt		pm+pt		pm+pt	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		
Actuated Green, G (s)	29.2	21.2	21.2	37.9	26.9	26.9	41.5	34.7		51.0	41.2	
Effective Green, g (s)	29.2	21.2	21.2	37.9	26.9	26.9	41.5	34.7		51.0	41.2	
Actuated g/C Ratio	0.30	0.21	0.21	0.38	0.27	0.27	0.42	0.35		0.52	0.42	
Clearance Time (s)	3.0	5.0	5.0	3.0	5.0	5.0	3.0	5.0		3.0	5.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	305	719	311	314	922	393	185	1591		445	2000	
v/s Ratio Prot	0.03	0.18		0.12	0.15		0.03	0.13		0.10	0.37	
v/s Ratio Perm	0.08		0.07	0.22		0.02	0.17			0.28		
v/c Ratio	0.35	0.83	0.35	0.89	0.54	0.06	0.48	0.36		0.73	0.89	
Uniform Delay, d1	26.2	37.1	33.0	24.1	30.7	26.7	20.4	23.8		14.9	26.8	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.7	7.8	0.7	24.3	0.7	0.1	1.9	0.6		6.1	6.5	
Delay (s)	26.9	44.9	33.7	48.4	31.4	26.7	22.3	24.5		21.0	33.3	
Level of Service	C	D	C	D	C	C	C	C		C	C	
Approach Delay (s)		40.4			36.6			24.2			31.4	
Approach LOS		D			D			C			C	
Intersection Summary												
HCM Average Control Delay			32.9									
HCM Volume to Capacity ratio			0.82									
Actuated Cycle Length (s)			98.9							6.0		
Intersection Capacity Utilization			79.4%								D	
Analysis Period (min)			15									
c Critical Lane Group												

Queues

5: NW 95 ST & NW 7 AVE

8/3/2009

										
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	107	595	179	278	500	67	88	660	326	1793
v/c Ratio	0.32	0.84	0.48	0.87	0.54	0.15	0.42	0.39	0.71	0.88
Control Delay	21.8	49.3	21.8	49.6	33.9	11.0	18.8	19.9	23.2	33.5
Queue Delay	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0
Total Delay	21.8	49.3	21.8	49.6	34.3	11.0	18.8	19.9	23.2	33.5
Queue Length 50th (ft)	42	190	47	122	144	4	27	91	114	389
Queue Length 95th (ft)	72	233	100	#267	207	38	52	125	175	#528
Internal Link Dist (ft)		1627			250			2081		1278
Turn Bay Length (ft)	100		60	100		100	100		75	
Base Capacity (vph)	400	746	392	325	933	441	290	1672	464	2036
Starvation Cap Reductn	0	0	0	0	120	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.27	0.80	0.46	0.86	0.62	0.15	0.30	0.39	0.70	0.88

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Arterial Level of Service

7/30/2009

Arterial Level of Service: NB NW 7 AVE

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
NW 79 ST	III	35	36.1	33.4	69.5	0.30	15.6	D
NW 81 St	III	35	16.7	6.6	23.3	0.12	19.2	C
S DWY	III	35	52.2	2.2	54.4	0.44	28.8	B
NW 95 ST	III	35	55.2	19.9	75.1	0.46	22.1	C
Total	III		160.2	62.1	222.3	1.32	21.4	C

Arterial Level of Service: SB NW 7 AVE

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
NW 95 ST	III	35	30.9	33.5	64.4	0.26	14.4	D
Little River Dr	III	35	55.2	3.2	58.4	0.46	28.4	B
NW 81 St	III	35	52.2	11.1	63.3	0.44	24.8	B
NW 79 ST	III	35	16.7	42.9	59.6	0.12	7.5	F
Total	III		155.0	90.7	245.7	1.28	18.7	C

2015 Future PM Conditions

PM INTERSECTION RESULTS

#	North-South Road	East-West Road	CONTROL TYPE		EB			WB			NB			SB		
					EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
1	NW 7 Ave	& NW 79 St	Semi-Act.	Delay	25.0	36.9		24.4	30.7		19.2	76.5		76.7	28.1	22.6
				LOS	C	D		C	C		B	E		E	C	C
				Approach Delay	33.9			29.6			71.1			40.1		
				Approach LOS	C			C			E			D		
				Intesection Delay	48.8											
				Intesection LOS	D											
				50th Queue L (ft)	113	273		32	121		56	~390		~114	156	0
	95th Queue L (ft)	176	#405		60	172		102	#510		#290	222	46			
2	NW 7 Ave	& NW 81 St	Semi-Act.	Delay				30.5	43.2	37.0	8.4	11.0			15.0	
				LOS				C	D	D	A	B			B	
				Approach Delay				39.9			10.9			15.0		
				Approach LOS				D			B			B		
				Intesection Delay	20.3											
				Intesection LOS	C											
				50th Queue L (ft)				85	224	142	18	220			147	
	95th Queue L (ft)				145	296	234	36	261			190				
3	NW 7 Ave	& Little River Dr.	Semi-Act.	Delay	38.0	37.1			43.9		4.1	4.4		3.7	3.3	
				LOS	D	D			D		A	A		A	A	
				Approach Delay	37.3			43.9			4.4			3.3		
				Approach LOS	D			D			A			A		
				Intesection Delay	4.6											
				Intesection LOS	A											
				50th Queue L (ft)	12	0			42		9	114		1	50	
	95th Queue L (ft)	30	0			42		30	190		8	86				
4	NW 7 Ave	& North Immigration Drive-way	T Intersection	Delay					8.9		0.0	0.0	0.0	0.0	0.0	0.0
				LOS					A							
				Approach Delay				8.9			0.0			0.0		
				Approach LOS				A								
				Intesection Delay												
				Intesection LOS												
				50th Queue L (ft)												
	95th Queue L (ft)					1		0	0	0	0	0	0	0		
5	NW 7 Ave	& NW 95 St	Semi-Act. Uncoord.	Delay	25.9	43.5	31.3	34.3	37.5	29.9	15.5	47.2		31.2	22.4	
				LOS	C	D	C	C	D	C	B	D		C	C	
				Approach Delay	38.7			35.4			44.4			24.4		
				Approach LOS	D			D			D			C		
				Intesection Delay	37.4											
				Intesection LOS	D											
				50th Queue L (ft)	64	186	28	97	173	20	54	~413		75	116	
	95th Queue L (ft)	111	#253	76	#179	234	73	88	#497		#175	160				






















~ Volume exceeds capacity, queue is theoretically infinite. Queue shown is maximum after two cycles. # 95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles. m Volume for 95th percentile queue is metered by upstream signal.

Arterial Results

2015 PM NW 7 Avenue										
NB	Travel Time (s)	110.3	NW 79 ST	28.2	NW 81 ST	57.1	LITTLE RIVER DR	103.3	NW 95 ST	-
	LOS	F		D		B		D		-
SB	Travel Time (s)	-	NW 79 ST	46.2	NW 81 ST	67.2	LITTLE RIVER DR	58.8	NW 95 ST	53.8
	LOS	-		F		C		B		D

HCM Signalized Intersection Capacity Analysis 1: NW 79 ST & NW 7 AVE

7/30/2009

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	300	850	70	90	350	90	150	1300	150	250	550	150
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	5.0		3.0	5.0		3.0	5.0		3.0	5.0	5.0
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.91		1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	0.99		1.00	1.00		1.00	1.00	0.98
Ftpr, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Flt	1.00	0.99		1.00	0.97		1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1694	3280		1646	3189		1678	4748		1728	3323	1482
Flt Permitted	0.31	1.00		0.17	1.00		0.32	1.00		0.14	1.00	1.00
Satd. Flow (perm)	549	3280		297	3189		565	4748		250	3323	1482
Peak-hour factor, PHF	0.97	0.97	0.97	0.91	0.91	0.91	0.92	0.92	0.92	0.93	0.93	0.93
Adj. Flow (vph)	309	876	72	99	385	99	163	1413	163	269	591	161
RTOR Reduction (vph)	0	6	0	0	25	0	0	14	0	0	0	110
Lane Group Flow (vph)	309	942	0	99	459	0	163	1562	0	269	591	51
Confl. Peds. (#/hr)			23			17			12			6
Heavy Vehicles (%)	3%	5%	2%	6%	5%	6%	4%	3%	9%	1%	5%	3%
Turn Type	pm+pt			pm+pt			pm+pt			pm+pt		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		6
Actuated Green, G (s)	40.4	30.2		30.5	23.3		37.4	28.2		39.2	29.1	29.1
Effective Green, g (s)	40.4	30.2		30.5	23.3		37.4	28.2		39.2	29.1	29.1
Actuated g/C Ratio	0.44	0.33		0.33	0.25		0.41	0.31		0.43	0.32	0.32
Clearance Time (s)	3.0	5.0		3.0	5.0		3.0	5.0		3.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	418	1080		205	810		342	1460		270	1055	470
v/s Ratio Prot	0.11	0.29		0.04	0.14		0.05	0.33		0.11	0.18	
v/s Ratio Perm	0.21			0.12			0.15			0.32		0.03
v/c Ratio	0.74	0.87		0.48	0.57		0.48	1.07		1.00	0.56	0.11
Uniform Delay, d1	18.3	28.9		22.6	29.8		18.2	31.8		23.3	26.0	22.1
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	6.7	7.9		1.8	0.9		1.0	44.7		53.4	2.1	0.5
Delay (s)	25.0	36.9		24.4	30.7		19.2	76.5		76.7	28.1	22.6
Level of Service	C	D		C	C		B	E		E	C	C
Approach Delay (s)		33.9			29.6			71.1			40.1	
Approach LOS		C			C			E			D	
Intersection Summary												
HCM Average Control Delay		48.8								D		
HCM Volume to Capacity ratio		0.94										
Actuated Cycle Length (s)		91.7								14.0		
Intersection Capacity Utilization		88.3%								E		
Analysis Period (min)		15										
c Critical Lane Group												

Queues

1: NW 79 ST & NW 7 AVE

8/3/2009

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	309	948	99	484	153	1576	269	591	161
v/c Ratio	0.72	0.87	0.42	0.59	0.46	1.06	0.97	0.56	0.28
Control Delay	26.5	38.9	20.2	31.0	19.8	74.2	73.2	29.5	5.7
Queue Delay	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Total Delay	26.5	38.9	20.2	31.2	19.8	74.2	73.2	29.5	5.7
Queue Length 50th (ft)	113	273	32	121	56	~390	~114	156	0
Queue Length 95th (ft)	176	#405	60	172	102	#510	#290	222	46
Internal Link Dist (ft)		1758		264		1509		575	
Turn Bay Length (ft)	200		150		100		150		
Base Capacity (vph)	437	1117	323	1019	369	1483	276	1059	582
Starvation Cap Reductn	0	0	0	80	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.71	0.85	0.31	0.52	0.44	1.06	0.97	0.56	0.28

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

HCM Signalized Intersection Capacity Analysis

2: NW 81 St & NW 7 AVE

7/30/2009

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement												
Lane Configurations				↰	↱	↱	↰	↰	↰	↰	↱	↱
Volume (vph)	0	0	0	150	650	250	70	1600	0	0	850	150
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				5.0	5.0	5.0	5.0	5.0			5.0	
Lane Util. Factor				1.00	0.95	1.00	1.00	0.91			0.91	
Frpb, ped/bikes				1.00	1.00	0.97	1.00	1.00			1.00	
Flpb, ped/bikes				1.00	1.00	1.00	1.00	1.00			1.00	
Frt				1.00	1.00	0.85	1.00	1.00			0.98	
Flt Protected				0.95	1.00	1.00	0.95	1.00			1.00	
Satd. Flow (prot)				1662	3202	1475	1678	4868			4706	
Flt Permitted				0.95	1.00	1.00	0.20	1.00			1.00	
Satd. Flow (perm)				1662	3202	1475	349	4868			4706	
Peak-hour factor, PHF	0.92	0.92	0.92	0.90	0.90	0.90	0.92	0.92	0.92	0.94	0.94	0.94
Adj. Flow (vph)	0	0	0	167	722	278	76	1739	0	0	904	160
RTOR Reduction (vph)	0	0	0	0	0	18	0	0	0	0	23	0
Lane Group Flow (vph)	0	0	0	167	722	260	76	1739	0	0	1041	0
Confl. Peds. (#/hr)						8			3			4
Heavy Vehicles (%)	2%	2%	2%	5%	9%	3%	4%	3%	0%	0%	4%	3%
Turn Type				Split		Perm	pm+pt					
Protected Phases				8	8		5	2			6	
Permitted Phases						8	2					
Actuated Green, G (s)				26.2	26.2	26.2	63.1	63.1			52.0	
Effective Green, g (s)				26.2	26.2	26.2	63.1	63.1			52.0	
Actuated g/C Ratio				0.26	0.26	0.26	0.64	0.64			0.52	
Clearance Time (s)				5.0	5.0	5.0	5.0	5.0			5.0	
Vehicle Extension (s)				3.0	3.0	3.0	3.0	3.0			3.0	
Lane Grp Cap (vph)				439	845	389	303	3093			2464	
v/s Ratio Prot				0.10	0.23		0.02	0.36			0.22	
v/s Ratio Perm						0.18	0.14					
v/c Ratio				0.38	0.85	0.67	0.25	0.56			0.42	
Uniform Delay, d1				29.9	34.7	32.7	7.9	10.3			14.5	
Progression Factor				1.00	1.00	1.00	1.00	1.00			1.00	
Incremental Delay, d2				0.6	8.4	4.3	0.4	0.7			0.5	
Delay (s)				30.5	43.2	37.0	8.4	11.0			15.0	
Level of Service				C	D	D	A	B			B	
Approach Delay (s)		0.0			39.9			10.9			15.0	
Approach LOS		A			D			B			B	
Intersection Summary												
HCM Average Control Delay			20.3								C	
HCM Volume to Capacity ratio			0.65									
Actuated Cycle Length (s)			99.3							10.0		
Intersection Capacity Utilization			57.2%								B	
Analysis Period (min)			15									
c Critical Lane Group												

Queues

2: NW 81 St & NW 7 AVE





















8/3/2009



Lane Group	WBL	WBT	WBR	NBL	NBT	SBT
Lane Group Flow (vph)	167	722	278	76	1739	1064
v/c Ratio	0.38	0.85	0.68	0.24	0.57	0.42
Control Delay	32.1	44.5	38.5	9.5	11.5	15.0
Queue Delay	0.0	6.4	1.1	0.0	0.0	0.0
Total Delay	32.1	50.9	39.6	9.5	11.5	15.0
Queue Length 50th (ft)	85	224	142	18	220	147
Queue Length 95th (ft)	145	296	234	36	261	190
Internal Link Dist (ft)		255			575	2218
Turn Bay Length (ft)				100		
Base Capacity (vph)	465	897	430	330	3074	2514
Starvation Cap Reductn	0	132	41	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.36	0.94	0.71	0.23	0.57	0.42
Intersection Summary						

HCM Signalized Intersection Capacity Analysis 3: Little River Dr & NW 7 AVE

7/30/2009

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	20	0	60	30	0	20	70	1800	10	10	950	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0			5.0		5.0	5.0		5.0	5.0	
Lane Util. Factor	1.00	1.00			1.00		1.00	0.91		1.00	0.91	
Frpb, ped/bikes	1.00	1.00			1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00			1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.85			0.95		1.00	1.00		1.00	0.99	
Flt Protected	0.95	1.00			0.97		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1745	1561			1534		1745	4864		1745	4835	
Flt Permitted	0.70	1.00			0.77		0.26	1.00		0.10	1.00	
Satd. Flow (perm)	1284	1561			1220		471	4864		179	4835	
Peak-hour factor, PHF	0.79	0.79	0.79	0.50	0.50	0.50	0.97	0.97	0.97	0.94	0.94	0.94
Adj. Flow (vph)	25	0	76	60	0	40	72	1856	10	11	1011	43
RTOR Reduction (vph)	0	67	0	0	18	0	0	0	0	0	3	0
Lane Group Flow (vph)	25	9	0	0	82	0	72	1866	0	11	1051	0
Confl. Peds. (#/hr)									9			9
Heavy Vehicles (%)	0%	0%	0%	0%	0%	25%	0%	3%	0%	0%	3%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4					8			2			6
Actuated Green, G (s)	11.5	11.5			11.5		73.6	73.6		73.6	73.6	
Effective Green, g (s)	11.5	11.5			11.5		73.6	73.6		73.6	73.6	
Actuated g/C Ratio	0.12	0.12			0.12		0.77	0.77		0.77	0.77	
Clearance Time (s)	5.0	5.0			5.0		5.0	5.0		5.0	5.0	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	155	189			148		365	3764		139	3742	
v/s Ratio Prot		0.01						0.38			0.22	
v/s Ratio Perm	0.02				0.07		0.15			0.06		
v/c Ratio	0.16	0.05			0.56		0.20	0.50		0.08	0.28	
Uniform Delay, d1	37.5	37.0			39.4		2.9	3.9		2.6	3.1	
Progression Factor	1.00	1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.5	0.1			4.5		1.2	0.5		1.1	0.2	
Delay (s)	38.0	37.1			43.9		4.1	4.4		3.7	3.3	
Level of Service	D	D			D		A	A		A	A	
Approach Delay (s)		37.3			43.9			4.4			3.3	
Approach LOS		D			D			A			A	
Intersection Summary												
HCM Average Control Delay			6.3									A
HCM Volume to Capacity ratio			0.50									
Actuated Cycle Length (s)			95.1							10.0		
Intersection Capacity Utilization			60.4%									B
Analysis Period (min)			15									
c Critical Lane Group												

Queues

3: Little River Dr & NW 7 AVE















8/3/2009



Lane Group	EBL	EBT	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	25	76	100	72	1866	11	1054
v/c Ratio	0.16	0.25	0.61	0.20	0.50	0.08	0.28
Control Delay	34.6	3.2	43.6	5.2	4.9	5.2	3.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	34.6	3.2	43.6	5.2	4.9	5.2	3.6
Queue Length 50th (ft)	12	0	42	9	114	1	50
Queue Length 95th (ft)	30	0	42	30	190	8	86
Internal Link Dist (ft)		1763	274		2218		190
Turn Bay Length (ft)	100			150		150	
Base Capacity (vph)	308	474	308	363	3759	138	3740
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.08	0.16	0.32	0.20	0.50	0.08	0.28
Intersection Summary							

























HCM Unsignalized Intersection Capacity Analysis
4: N DWY & NW 7 AVE

7/30/2009

								
Movement	WBL	WBR	NBT	NBR	SBL	SBT		
Lane Configurations			  			  		
Volume (veh/h)	0	10	1800	10	0	950		
Sign Control	Stop		Free		Free			
Grade	0%		0%		0%			
Peak Hour Factor	0.75	0.75	0.96	0.96	0.94	0.94		
Hourly flow rate (vph)	0	13	1875	10	0	1011		
Pedestrians								
Lane Width (ft)								
Walking Speed (ft/s)								
Percent Blockage								
Right turn flare (veh)								
Median type			TWLT		TWLT			
Median storage veh			2		2			
Upstream signal (ft)			270					
pX, platoon unblocked	0.86	0.86			0.86			
vC, conflicting volume	2217	630			1885			
vC1, stage 1 conf vol	1880							
vC2, stage 2 conf vol	337							
vCu, unblocked vol	1849	6			1463			
tC, single (s)	6.8	6.9			4.1			
tC, 2 stage (s)	5.8							
tF (s)	3.5	3.3			2.2			
p0 queue free %	100	99			100			
cM capacity (veh/h)	153	932			403			
Direction, Lane #	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3	SB 4
Volume Total	13	750	750	385	0	337	337	337
Volume Left	0	0	0	0	0	0	0	0
Volume Right	13	0	0	10	0	0	0	0
cSH	932	1700	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.01	0.44	0.44	0.23	0.00	0.20	0.20	0.20
Queue Length 95th (ft)	1	0	0	0	0	0	0	0
Control Delay (s)	8.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	A							
Approach Delay (s)	8.9	0.0			0.0			
Approach LOS	A							
Intersection Summary								
Average Delay			0.0					
Intersection Capacity Utilization			45.0%		ICU Level of Service		A	
Analysis Period (min)			15					

HCM Signalized Intersection Capacity Analysis 5: NW 95 ST & NW 7 AVE

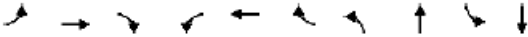
7/30/2009

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	150	550	100	200	500	150	150	1200	300	200	600	70
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	5.0	5.0	3.0	5.0	5.0	3.0	5.0		3.0	5.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.91		1.00	0.91	
Frpb, ped/bikes	1.00	1.00	0.97	1.00	1.00	0.95	1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.97		1.00	0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1711	3388	1446	1678	3421	1459	1728	4713		1678	4687	
Flt Permitted	0.26	1.00	1.00	0.19	1.00	1.00	0.33	1.00		0.11	1.00	
Satd. Flow (perm)	468	3388	1446	327	3421	1459	600	4713		198	4687	
Peak-hour factor, PHF	0.93	0.93	0.93	0.87	0.87	0.87	0.88	0.88	0.88	0.94	0.94	0.94
Adj. Flow (vph)	161	591	108	230	575	172	170	1364	341	213	638	74
RTOR Reduction (vph)	0	0	43	0	0	101	0	42	0	0	14	0
Lane Group Flow (vph)	161	591	65	230	575	71	170	1663	0	213	698	0
Confl. Peds. (#/hr)			9			20			4			4
Heavy Vehicles (%)	2%	3%	5%	4%	2%	2%	1%	3%	2%	4%	5%	6%
Turn Type	pm+pt		Perm	pm+pt		Perm	pm+pt		pm+pt		pm+pt	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8	2		6			
Actuated Green, G (s)	31.1	20.0	20.0	34.5	21.7	21.7	44.6	34.2		47.4	35.6	
Effective Green, g (s)	31.1	20.0	20.0	34.5	21.7	21.7	44.6	34.2		47.4	35.6	
Actuated g/C Ratio	0.33	0.21	0.21	0.36	0.23	0.23	0.47	0.36		0.50	0.38	
Clearance Time (s)	3.0	5.0	5.0	3.0	5.0	5.0	3.0	5.0		3.0	5.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	299	715	305	301	783	334	406	1700		283	1760	
v/s Ratio Prot	0.06	0.17		0.10	0.17		0.05	0.35		0.09	0.15	
v/s Ratio Perm	0.11		0.05	0.17		0.05	0.15		0.28			
v/c Ratio	0.54	0.83	0.21	0.76	0.73	0.21	0.42	0.98		0.75	0.40	
Uniform Delay, d1	24.1	35.7	30.9	23.4	33.9	29.6	14.8	29.9		20.4	21.7	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.9	7.8	0.4	11.0	3.6	0.3	0.7	17.3		10.8	0.7	
Delay (s)	25.9	43.5	31.3	34.3	37.5	29.9	15.5	47.2		31.2	22.4	
Level of Service	C	D	C	C	D	C	B	D		C	C	
Approach Delay (s)		38.7			35.4			44.4			24.4	
Approach LOS		D			D			D			C	
Intersection Summary												
HCM Average Control Delay			37.4			HCM Level of Service			D			
HCM Volume to Capacity ratio			0.88									
Actuated Cycle Length (s)			94.8			Sum of lost time (s)			17.0			
Intersection Capacity Utilization			82.3%			ICU Level of Service			E			
Analysis Period (min)			15									
c Critical Lane Group												

Queues

5: NW 95 ST & NW 7 AVE

8/3/2009

										
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	161	591	108	230	575	172	170	1705	213	712
v/c Ratio	0.52	0.83	0.31	0.75	0.74	0.40	0.41	0.98	0.74	0.40
Control Delay	25.7	47.1	20.4	37.2	40.9	12.9	15.1	48.1	35.1	22.9
Queue Delay	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0
Total Delay	25.7	47.1	20.4	37.2	41.9	12.9	15.1	48.1	35.1	22.9
Queue Length 50th (ft)	64	186	28	97	173	20	54	~413	75	116
Queue Length 95th (ft)	111	#253	76	#179	234	73	88	#497	#175	160
Internal Link Dist (ft)		1627			250			2081		1278
Turn Bay Length (ft)	100		60	100		100	100		75	
Base Capacity (vph)	350	771	371	322	810	445	462	1738	316	1769
Starvation Cap Reductn	0	0	0	0	76	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.46	0.77	0.29	0.71	0.78	0.39	0.37	0.98	0.67	0.40

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Arterial Level of Service

7/30/2009

Arterial Level of Service: NB NW 7 AVE

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
NW 79 ST	III	35	36.1	74.2	110.3	0.30	9.8	F
NW 81 St	III	35	16.7	11.5	28.2	0.12	15.8	D
S DWY	III	35	52.2	4.9	57.1	0.44	27.4	B
NW 95 ST	III	35	55.2	48.1	103.3	0.46	16.0	D
Total	III		160.2	138.7	298.9	1.32	15.9	D

Arterial Level of Service: SB NW 7 AVE

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
NW 95 ST	III	35	30.9	22.9	53.8	0.26	17.2	D
Little River Dr	III	35	55.2	3.6	58.8	0.46	28.2	B
NW 81 St	III	35	52.2	15.0	67.2	0.44	23.3	C
NW 79 ST	III	35	16.7	29.5	46.2	0.12	9.7	F
Total	III		155.0	71.0	226.0	1.28	20.3	C

2030 Future AM Conditions

AM INTERSECTION RESULTS

#	North-South Road	East-West Road	CONTROL TYPE		EB			WB			NB			SB						
					EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR				
1	NW 7 Ave	&	NW 79 St	Semi-Act.	Delay	160.5	206.6		79.3	38.5		38.3	41.4		147.3	127.0	24.9			
					LOS	F	F		E	D		D	D		F	F	C			
					Approach Delay	197.7			44.1			41.2			120.2					
					Approach LOS	F			D			D			F					
					Intesection Delay	120.8														
					Intesection LOS	F														
					50th Queue L (ft)	~260	~845		48	188		25	247		~437	~1090	89			
	95th Queue L (ft)	#480	#987		#104	246		45	275		#663	#1253	165							
2	NW 7 Ave	&	NW 81 St	Semi-Act.	Delay				44.6	51.8	46.5	18.8	8.5			22.2				
					LOS				D	D	D	B	A			C				
					Approach Delay				49.0			8.6			22.2					
					Approach LOS				D			A			C					
					Intesection Delay	25.2														
					Intesection LOS	C														
					50th Queue L (ft)				157	244	138	3	127				477			
	95th Queue L (ft)				237	310	233	11	175				#927							
3	NW 7 Ave	&	Little River Dr.	Semi-Act.	Delay	48.1	56.6			50.0		22.8	3.0		16.6	5.2				
					LOS	D	E			D		C	A		B	A				
					Approach Delay	55.7			50.0			3.4			5.9					
					Approach LOS	E			D			A			A					
					Intesection Delay	6.8														
					Intesection LOS	A														
					50th Queue L (ft)	8	64			22		4	79		40	241				
	95th Queue L (ft)	24	110			37		#49	116		#212	352								
4	NW 7 Ave	&	North Immigration Drive-way	T Intersection	Delay					9.7		0.0	0.0	0.0	12.4	0.0	0.0			
					LOS					A					B					
					Approach Delay				9.7			0.0			0.7					
					Approach LOS				A											
					Intesection Delay															
					Intesection LOS															
					50th Queue L (ft)															
	95th Queue L (ft)					6		0	0	0	25	0	0							
5	NW 7 Ave	&	NW 95 St	Semi-Act. Uncoord.	Delay	30.0	113.5	34.2	161.9	42.0	29.8	50.2	27.6		108.6	199.2				
					LOS	C	F	C	F	D	C	D	C		F	F				
					Approach Delay	89.1			81.8			31.2			185.5					
					Approach LOS	F			F			C			F					
					Intesection Delay	122.5														
					Intesection LOS	F														
					50th Queue L (ft)	74	~325	63	~257	213	15	52	140		~221	~757				
	95th Queue L (ft)	113	#400	117	#451	#321	57	112	182		#430	#896								

~ Volume exceeds capacity, queue is theoretically infinite. Queue shown is maximum after two cycles. # 95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles. m Volume for 95th percentile queue is metered by upstream signal.

Arterial Results

2030 AM NW 7 Avenue										
NB	Travel Time (s)	75.2	NW 79 ST	26.0	NW 81 ST	55.6	LITTLE RIVER DR	79.2	NW 95 ST	-
	LOS	D		D		B		C		-
SB	Travel Time (s)	-	NW 79 ST	138.1	NW 81 ST	74.4	LITTLE RIVER DR	61.2	NW 95 ST	225.7
	LOS	-		F		C		B		F

2030 Future PM Conditions

PM INTERSECTION RESULTS

#	North-South Road		East-West Road	CONTROL TYPE		EB			WB			NB			SB		
						EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
1	NW 7 Ave	&	NW 79 St	Semi-Act.	Delay	112.0	111.9		27.9	35.5		47.4	256.3		278.9	40.3	25.9
					LOS	F	F		C	D		D	F		F	D	C
					Approach Delay	112.0			34.1			236.4			102.3		
					Approach LOS	F			C			F			F		
					Intesection Delay	144.6											
					Intesection LOS	F											
					50th Queue L (ft)	~222	~466		55	198		81	~642		~262	241	0
2	NW 7 Ave	&	NW 81 St	Semi-Act.	Delay				31.2	84.9	64.8	11.6	15.2			18.0	
					LOS				C	F	E	B	B			B	
					Approach Delay				72.2			15.1			18.0		
					Approach LOS				E			B			B		
					Intesection Delay	32.6											
					Intesection LOS	C											
					50th Queue L (ft)				118	~347	238	23	349				213
3	NW 7 Ave	&	Little River Dr.	Semi-Act.	Delay	35.8	35.9			45.7		10.4	7.4		7.3	4.7	
					LOS	D	D			D		B	A		A	A	
					Approach Delay	35.8			45.7			7.5			4.7		
					Approach LOS	D			D			A			A		
					Intesection Delay	8.6											
					Intesection LOS	A											
					50th Queue L (ft)	19	21			60		17	226		2	90	
4	NW 7 Ave	&	North Immigration Drive-way	T Intersection	Delay					9.6		0.0	0.0	0.0	0.0	0.0	0.0
					LOS					A							
					Approach Delay				9.6			0.0			0.0		
					Approach LOS				A								
					Intesection Delay												
					Intesection LOS												
					50th Queue L (ft)												
5	NW 7 Ave	&	NW 95 St	Semi-Act. Uncoord.	Delay	35.5	72.9	33.4	59.9	53.8	32.6	22.0	209.9		70.0	27.0	
					LOS	D	E	C	E	D	C	C	F		E	C	
					Approach Delay	60.2			51.3			192.8			36.5		
					Approach LOS	E			D			F			D		
					Intesection Delay	107.9											
					Intesection LOS	F											
					50th Queue L (ft)	91	~258	52	131	251	51	75	~703		114	172	
		</															

~ Volume exceeds capacity, queue is theoretically infinite. Queue shown is maximum after two cycles. # 95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles. m Volume for 95th percentile queue is metered by upstream signal.

Arterial Results

2030 PM NW 7 Avenue									
NB	Travel Time (s)	284.3	NW 79 ST	32.4	NW 81 ST	60.5	LITTLE RIVER DR	256.3	NW 95 ST
	LOS	F		E		B		F	
SB	Travel Time (s)	-	NW 79 ST	58.0	NW 81 ST	69.9	LITTLE RIVER DR	60.4	NW 95 ST
	LOS	-		F		C		B	

2030 Future Built AM Conditions

AM INTERSECTION RESULTS

#	North-South Road	East-West Road	CONTROL TYPE		EB			WB			NB			SB			
					EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
1	NW 7 Ave	&	NW 79 St	Signalized	Delay	51.8	166.7		59.4	50.8		73.2	54.1		98.9	111.0	6.9
					LOS	D	F		E	D		E	D		F	F	A
					Approach Delay	144.6			52.0			55.2			97.8		
					Approach LOS	F			D			E			F		
					Intesection Delay	99.1											
					Intesection LOS	F											
					50th Queue L (ft)	206	~811		34	226		26	278		~430	~1094	17
	95th Queue L (ft)	#344	#954		#105	298		47	309		#654	#1221	m31				
2	NW 7 Ave	&	NW 81 St	Signalized	Delay				41.1	48.6	35.7	28.0	9.0			9.4	
					LOS				D	D	D	C	A			C	
					Approach Delay				43.9			9.2			9.4		
					Approach LOS				D			A			A		
					Intesection Delay	17.3											
					Intesection LOS	B											
					50th Queue L (ft)				123	182	72	3	124				145
	95th Queue L (ft)				173	218	120	m5	189				321				
3	NW 7 Ave	&	Little River Dr.	Signalized	Delay	59.1	68.1			62.2		28.5	0.5		6.3	1.4	
					LOS	E	E			E		C	A		A	A	
					Approach Delay	67.2			62.2			0.9			1.7		
					Approach LOS	E			E			A			A		
					Intesection Delay	3.8											
					Intesection LOS	A											
					50th Queue L (ft)	9	71			29		1	5		4	22	
	95th Queue L (ft)	29	125			46		m#33	5		m5	m26					
4	NW 7 Ave	&	North Immigration Drive-way	Unsignalized	Delay					10.1		0.0	0.0	0.0	12.6	0.0	0.0
					LOS					B				B			
					Approach Delay				10.1			0.0			0.7		
					Approach LOS				B						A		
					Intesection Delay												
					Intesection LOS												
					50th Queue L (ft)												
	95th Queue L (ft)					6		0	0	0	26	0	0				
5	NW 7 Ave	&	NW 95 St	Signalized	Delay	45.8	141.4	49.1	168.9	39.7	24.0	265.2	34.2		54.0	79.5	
					LOS	D	F	D	F	D	C	F	C		D	E	
					Approach Delay	113.2			82.4			70.7			75.7		
					Approach LOS	F			F			E			E		
					Intesection Delay	83.2											
					Intesection LOS	F											
					50th Queue L (ft)	107	~471	108	~354	300	15	~154	264		276	~904	
	95th Queue L (ft)	152	#539	171	#568	373	61	#308	281		#450	#993					










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Arterial Results

2030 AM NW 7 Avenue (Build)										
NB	Travel Time (s)	87.5	NW 79 ST	16.7	NW 81 ST	52.2	LITTLE RIVER	55.2	NW 95 ST	-
	LOS	E		D		B		C		-
SB	Travel Time (s)	-	NW 79 ST	125.1	NW 81 ST	61.1	LITTLE RIVER	56.7	NW 95 ST	109.0
	LOS	-		F		B		B		F

HCM Signalized Intersection Capacity Analysis 1: NW 79 ST & NW 7 AVE

8/4/2009

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	300	1200	60	80	350	150	50	600	200	450	1700	250
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	5.0		3.0	5.0		3.0	5.0		3.0	5.0	5.0
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.91		1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	0.98		1.00	0.99		1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.99		1.00	0.96		1.00	0.96		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1662	3086		1616	3053		1678	4418		1694	3421	1489
Flt Permitted	0.22	1.00		0.13	1.00		0.11	1.00		0.12	1.00	1.00
Satd. Flow (perm)	378	3086		214	3053		196	4418		218	3421	1489
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.85	0.85	0.85	0.91	0.91	0.91
Adj. Flow (vph)	323	1290	65	86	376	161	59	706	235	495	1868	275
RTOR Reduction (vph)	0	3	0	0	33	0	0	43	0	0	0	78
Lane Group Flow (vph)	323	1352	0	86	504	0	59	898	0	495	1868	197
Confl. Peds. (#/hr)			26			15			6			6
Heavy Vehicles (%)	5%	12%	9%	8%	9%	4%	4%	7%	13%	3%	2%	2%
Turn Type	pm+pt			pm+pt			pm+pt			pm+pt		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		6
Actuated Green, G (s)	58.0	49.0		37.8	31.8		40.8	36.0		72.0	64.2	64.2
Effective Green, g (s)	58.0	49.0		37.8	31.8		40.8	36.0		72.0	64.2	64.2
Actuated g/C Ratio	0.41	0.35		0.27	0.23		0.29	0.26		0.51	0.46	0.46
Clearance Time (s)	3.0	5.0		3.0	5.0		3.0	5.0		3.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	369	1080		118	693		108	1136		460	1569	683
v/s Ratio Prot	c0.14	c0.44		0.03	0.16		0.02	0.20		c0.25	c0.55	
v/s Ratio Perm	0.22			0.17			0.14			0.30		0.13
v/c Ratio	0.88	1.25		0.73	0.73		0.55	0.79		1.08	1.19	0.29
Uniform Delay, d1	31.8	45.5		43.0	50.1		67.7	48.5		41.2	37.9	23.6
Progression Factor	1.00	1.00		0.92	0.94		1.00	1.00		1.06	0.55	0.26
Incremental Delay, d2	20.0	121.2		19.7	3.7		5.5	5.6		55.3	90.0	0.7
Delay (s)	51.8	166.7		59.4	50.8		73.2	54.1		98.9	111.0	6.9
Level of Service	D	F		E	D		E	D		F	F	A
Approach Delay (s)		144.6			52.0			55.2			97.8	
Approach LOS		F			D			E			F	
Intersection Summary												
HCM Average Control Delay			99.1			HCM Level of Service			F			
HCM Volume to Capacity ratio			1.20									
Actuated Cycle Length (s)			140.0			Sum of lost time (s)			16.0			
Intersection Capacity Utilization			105.0%			ICU Level of Service			G			
Analysis Period (min)			15									
c Critical Lane Group												

Queues

1: NW 79 ST & NW 7 AVE

8/4/2009



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	323	1355	86	537	59	941	495	1868	275
v/c Ratio	0.86	1.25	0.71	0.74	0.47	0.80	1.07	1.18	0.36
Control Delay	51.9	159.4	57.2	50.6	34.3	51.4	92.3	108.4	3.8
Queue Delay	0.0	0.0	0.0	2.1	0.0	0.0	0.0	7.7	0.0
Total Delay	51.9	159.4	57.2	52.7	34.3	51.4	92.3	116.1	3.8
Queue Length 50th (ft)	206	~811	34	226	26	278	~430	~1094	17
Queue Length 95th (ft)	#344	#954	#105	298	47	309	#654	#1221	m31
Internal Link Dist (ft)		1758		264		1509		575	
Turn Bay Length (ft)	200		150		100		150		
Base Capacity (vph)	391	1083	121	727	125	1180	463	1583	766
Starvation Cap Reductn	0	0	0	87	0	0	0	23	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.83	1.25	0.71	0.84	0.47	0.80	1.07	1.20	0.36

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

HCM Signalized Intersection Capacity Analysis

2: NW 81 St & NW 7 AVE

8/4/2009

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↰	↷	↷	↰	↷			↷	↷
Volume (vph)	0	0	0	200	550	250	10	950	0	0	2200	150
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				5.0	5.0	5.0	5.0	5.0			5.0	
Lane Util. Factor				1.00	0.95	1.00	1.00	0.91			0.91	
Frpb, ped/bikes				1.00	1.00	0.99	1.00	1.00			1.00	
Flpb, ped/bikes				1.00	1.00	1.00	1.00	1.00			1.00	
Frt				1.00	1.00	0.85	1.00	1.00			0.99	
Flt Protected				0.95	1.00	1.00	0.95	1.00			1.00	
Satd. Flow (prot)				1745	3292	1494	1491	4730			4803	
Flt Permitted				0.95	1.00	1.00	0.04	1.00			1.00	
Satd. Flow (perm)				1745	3292	1494	65	4730			4803	
Peak-hour factor, PHF	0.92	0.92	0.92	0.90	0.90	0.90	0.84	0.84	0.84	0.91	0.91	0.91
Adj. Flow (vph)	0	0	0	222	611	278	12	1131	0	0	2418	165
RTOR Reduction (vph)	0	0	0	0	0	91	0	0	0	0	5	0
Lane Group Flow (vph)	0	0	0	222	611	187	12	1131	0	0	2578	0
Confl. Peds. (#/hr)						1			5			7
Heavy Vehicles (%)	2%	2%	2%	0%	6%	3%	17%	6%	0%	0%	3%	6%
Turn Type				Split		Perm	pm+pt					
Protected Phases				8	8		5	2			6	
Permitted Phases						8	2					
Actuated Green, G (s)				31.6	31.6	31.6	98.4	98.4			91.8	
Effective Green, g (s)				31.6	31.6	31.6	98.4	98.4			91.8	
Actuated g/C Ratio				0.23	0.23	0.23	0.70	0.70			0.66	
Clearance Time (s)				5.0	5.0	5.0	5.0	5.0			5.0	
Vehicle Extension (s)				3.0	3.0	3.0	3.0	3.0			3.0	
Lane Grp Cap (vph)				394	743	337	62	3325			3149	
v/s Ratio Prot				0.13	c0.19		0.00	c0.24			c0.54	
v/s Ratio Perm						0.12	0.13					
v/c Ratio				0.56	0.82	0.55	0.19	0.34			0.82	
Uniform Delay, d1				48.1	51.5	48.0	17.3	8.1			17.9	
Progression Factor				0.82	0.80	0.71	1.56	1.09			0.42	
Incremental Delay, d2				1.8	7.2	1.9	0.9	0.2			1.9	
Delay (s)				41.1	48.6	35.7	28.0	9.0			9.4	
Level of Service				D	D	D	C	A			A	
Approach Delay (s)		0.0			43.9			9.2			9.4	
Approach LOS		A			D			A			A	
Intersection Summary												
HCM Average Control Delay			17.3									B
HCM Volume to Capacity ratio			0.82									
Actuated Cycle Length (s)			140.0								15.0	
Intersection Capacity Utilization			69.4%									C
Analysis Period (min)			15									
c Critical Lane Group												

Queues
2: NW 81 St & NW 7 AVE

8/4/2009



Lane Group	WBL	WBT	WBR	NBL	NBT	SBT
Lane Group Flow (vph)	222	611	278	12	1131	2583
v/c Ratio	0.56	0.82	0.65	0.12	0.34	0.79
Control Delay	44.7	51.1	26.5	12.8	9.4	8.9
Queue Delay	1.9	3.9	0.9	0.0	0.0	2.7
Total Delay	46.6	54.9	27.4	12.8	9.4	11.6
Queue Length 50th (ft)	123	182	72	3	124	145
Queue Length 95th (ft)	173	218	120	m5	189	321
Internal Link Dist (ft)		255			575	2218
Turn Bay Length (ft)				100		
Base Capacity (vph)	436	823	462	96	3325	3256
Starvation Cap Reductn	102	137	51	0	0	0
Spillback Cap Reductn	0	0	0	0	0	539
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.66	0.89	0.68	0.13	0.34	0.95

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.








HCM Signalized Intersection Capacity Analysis 3: Little River Dr & NW 7 AVE

8/4/2009

	EBL	EBT	EBR	WBL	WBT	WER	NBL	NBT	NBR	SBL	SBT	SBR
Movement	EBL	EBT	EBR	WBL	WBT	WER	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	EBL	EBT	EBR	WBL	WBT	WER	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	10	0	80	20	0	20	20	1100	150	150	2400	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0			5.0		5.0	5.0		5.0	5.0	
Lane Util. Factor	1.00	1.00			1.00		1.00	0.91		1.00	0.91	
Frpb, ped/bikes	1.00	1.00			1.00		1.00	0.99		1.00	1.00	
Fpfb, ped/bikes	1.00	1.00			1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.85			0.93		1.00	0.98		1.00	1.00	
Flt Protected	0.95	1.00			0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1745	1561			1671		1586	4669		1745	4865	
Flt Permitted	0.71	1.00			0.67		0.04	1.00		0.17	1.00	
Satd. Flow (perm)	1299	1561			1153		61	4669		313	4865	
Peak-hour factor, PHF	0.87	0.87	0.87	0.64	0.64	0.64	0.88	0.88	0.88	0.90	0.90	0.90
Adj. Flow (vph)	11	0	92	31	0	31	23	1250	170	167	2667	11
RTOR Reduction (vph)	0	11	0	0	26	0	0	11	0	0	0	0
Lane Group Flow (vph)	11	81	0	0	36	0	23	1409	0	167	2678	0
Confl. Peds. (#/hr)									6			8
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	10%	5%	4%	0%	3%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	12.3	12.3			12.3		117.7	117.7		117.7	117.7	
Effective Green, g (s)	12.3	12.3			12.3		117.7	117.7		117.7	117.7	
Actuated g/C Ratio	0.09	0.09			0.09		0.84	0.84		0.84	0.84	
Clearance Time (s)	5.0	5.0			5.0		5.0	5.0		5.0	5.0	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	114	137			101		51	3925		263	4090	
v/s Ratio Prot		c0.05						0.30			c0.55	
v/s Ratio Perm	0.01				0.03		0.38			0.53		
v/c Ratio	0.10	0.59			0.35		0.45	0.36		0.63	0.65	
Uniform Delay, d1	58.7	61.4			60.1		2.9	2.5		3.8	4.0	
Progression Factor	1.00	1.00			1.00		1.29	0.09		0.84	0.29	
Incremental Delay, d2	0.4	6.7			2.1		24.8	0.2		3.1	0.2	
Delay (s)	59.1	68.1			62.2		28.5	0.5		6.3	1.4	
Level of Service	E	E			E		C	A		A	A	
Approach Delay (s)		67.2			62.2			0.9			1.7	
Approach LOS		E			E			A			A	
Intersection Summary												
HCM Average Control Delay			3.8									A
HCM Volume to Capacity ratio			0.65									
Actuated Cycle Length (s)			140.0							10.0		
Intersection Capacity Utilization			71.4%								C	
Analysis Period (min)			15									
c Critical Lane Group												















Queues
3: Little River Dr & NW 7 AVE

8/4/2009

							
Lane Group	EBL	EBT	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	11	92	62	23	1420	167	2678
v/c Ratio	0.10	0.62	0.49	0.44	0.36	0.64	0.65
Control Delay	58.6	71.0	47.7	35.0	0.5	8.6	1.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	58.6	71.0	47.7	35.0	0.5	8.6	1.5
Queue Length 50th (ft)	9	71	29	1	5	4	22
Queue Length 95th (ft)	29	125	46	m#33	5	m5	m26
Internal Link Dist (ft)		1763	274		2218		190
Turn Bay Length (ft)	100			150		150	
Base Capacity (vph)	148	189	157	52	3937	262	4090
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.07	0.49	0.39	0.44	0.36	0.64	0.65
Intersection Summary							
# 95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.							
m Volume for 95th percentile queue is metered by upstream signal.							













HCM Unsignalized Intersection Capacity Analysis 4: N DWY & NW 7 AVE

8/4/2009

								
Movement	WBL	WBR	NBT	NBR	SBL	SBT		
Lane Configurations			  			  		
Volume (veh/h)	0	40	950	150	150	2400		
Sign Control	Stop		Free			Free		
Grade	0%		0%			0%		
Peak Hour Factor	0.70	0.70	0.89	0.89	0.91	0.91		
Hourly flow rate (vph)	0	57	1067	169	165	2637		
Pedestrians								
Lane Width (ft)								
Walking Speed (ft/s)								
Percent Blockage								
Right turn flare (veh)								
Median type		TWLTL		TWLTL				
Median storage veh		2		2				
Upstream signal (ft)		270						
pX, platoon unblocked	0.94	0.94			0.94			
vC, conflicting volume	2360	440			1236			
vC1, stage 1 conf vol	1152							
vC2, stage 2 conf vol	1209							
vCu, unblocked vol	2233	199			1042			
tC, single (s)	6.8	6.9			4.1			
tC, 2 stage (s)	5.8							
tF (s)	3.5	3.3			2.2			
p0 queue free %	100	93			74			
cM capacity (veh/h)	156	770			637			
Direction, Lane #	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3	SB 4
Volume Total	57	427	427	382	165	879	879	879
Volume Left	0	0	0	0	165	0	0	0
Volume Right	57	0	0	169	0	0	0	0
cSH	770	1700	1700	1700	637	1700	1700	1700
Volume to Capacity	0.07	0.25	0.25	0.22	0.26	0.52	0.52	0.52
Queue Length 95th (ft)	6	0	0	0	26	0	0	0
Control Delay (s)	10.1	0.0	0.0	0.0	12.6	0.0	0.0	0.0
Lane LOS	B				B			
Approach Delay (s)	10.1	0.0			0.7			
Approach LOS	B							
Intersection Summary								
Average Delay			0.6					
Intersection Capacity Utilization			49.7%		ICU Level of Service		A	
Analysis Period (min)			15					

HCM Signalized Intersection Capacity Analysis 5: NW 95 ST & NW 7 AVE

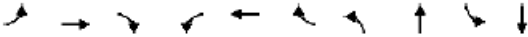
8/4/2009

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	150	700	150	350	600	80	150	550	250	400	2100	150
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	5.0	5.0	3.0	5.0	5.0	3.0	5.0		3.0	5.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.91		1.00	0.91	
Frpb, ped/bikes	1.00	1.00	0.97	1.00	1.00	0.94	1.00	0.99		1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.95		1.00	0.99	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1711	3355	1442	1711	3388	1423	1662	4544		1728	4818	
Flt Permitted	0.26	1.00	1.00	0.12	1.00	1.00	0.10	1.00		0.18	1.00	
Satd. Flow (perm)	467	3355	1442	218	3388	1423	167	4544		322	4818	
Peak-hour factor, PHF	0.84	0.84	0.84	0.90	0.90	0.90	0.91	0.91	0.91	0.92	0.92	0.92
Adj. Flow (vph)	179	833	179	389	667	89	165	604	275	435	2283	163
RTOR Reduction (vph)	0	0	35	0	0	32	0	57	0	0	6	0
Lane Group Flow (vph)	179	833	144	389	667	57	165	822	0	435	2440	0
Confl. Peds. (#/hr)			7			19			4			1
Heavy Vehicles (%)	2%	4%	5%	2%	3%	3%	5%	6%	1%	1%	3%	2%
Turn Type	pm+pt		Perm	pm+pt		Perm	pm+pt		pm+pt		pm+pt	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8	2		6			
Actuated Green, G (s)	43.0	30.0	30.0	55.0	39.0	39.0	47.9	41.9	75.0	66.0		
Effective Green, g (s)	43.0	30.0	30.0	55.0	39.0	39.0	47.9	41.9	75.0	66.0		
Actuated g/C Ratio	0.31	0.21	0.21	0.39	0.28	0.28	0.34	0.30	0.54	0.47		
Clearance Time (s)	3.0	5.0	5.0	3.0	5.0	5.0	3.0	5.0	3.0	5.0		
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		
Lane Grp Cap (vph)	259	719	309	320	944	396	121	1360	475	2271		
v/s Ratio Prot	0.06	0.25		c0.19	0.20		c0.06	0.18	0.20	c0.51		
v/s Ratio Perm	0.15		0.10	c0.29		0.04	c0.41		0.29			
v/c Ratio	0.69	1.16	0.46	1.22	0.71	0.14	1.36	0.60	0.92	1.07		
Uniform Delay, d1	38.1	55.0	48.0	61.2	45.4	37.9	69.2	42.0	31.8	37.0		
Progression Factor	1.00	1.00	1.00	0.79	0.83	0.63	0.86	0.77	1.00	1.00		
Incremental Delay, d2	7.7	86.4	1.1	120.6	2.2	0.2	206.0	1.9	22.2	42.5		
Delay (s)	45.8	141.4	49.1	168.9	39.7	24.0	265.2	34.2	54.0	79.5		
Level of Service	D	F	D	F	D	C	F	C	D	E		
Approach Delay (s)		113.2			82.4		70.7			75.7		
Approach LOS		F			F		E			E		
Intersection Summary												
HCM Average Control Delay			83.2		HCM Level of Service		F					
HCM Volume to Capacity ratio			1.23									
Actuated Cycle Length (s)			140.0		Sum of lost time (s)		14.0					
Intersection Capacity Utilization			106.0%		ICU Level of Service		G					
Analysis Period (min)			15									
c Critical Lane Group												

Queues

5: NW 95 ST & NW 7 AVE

8/4/2009

										
Lane Group	EBL	EBT	EBR	WBL	WBT	WER	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	179	833	179	389	667	89	165	879	435	2446
v/c Ratio	0.67	1.16	0.52	1.20	0.71	0.21	1.34	0.62	0.91	1.07
Control Delay	42.0	134.4	42.1	146.5	42.2	14.2	222.8	32.1	52.0	78.1
Queue Delay	0.0	0.0	0.0	8.1	4.8	0.0	0.0	0.0	0.0	0.0
Total Delay	42.0	134.4	42.1	154.6	47.0	14.2	222.8	32.1	52.0	78.1
Queue Length 50th (ft)	107	~471	108	~354	300	15	~154	264	276	~904
Queue Length 95th (ft)	152	#539	171	#568	373	61	#308	281	#450	#993
Internal Link Dist (ft)		1627			250		2081			1278
Turn Bay Length (ft)	100		60	100		100	100		75	
Base Capacity (vph)	278	719	344	323	943	428	123	1416	519	2277
Starvation Cap Reductn	0	0	0	5	207	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.64	1.16	0.52	1.22	0.91	0.21	1.34	0.62	0.84	1.07

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

2030 Future Built PM Conditions

PM INTERSECTION RESULTS

#	North-South Road	East-West Road	CONTROL TYPE		EB			WB			NB			SB			
					EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
1	NW 7 Ave	&	NW 79 St	Semi-Act.	Delay	179.2	154.7		230.0	129.7		26.1	115.7		209.7	33.3	61.8
					LOS	F	F		F	F		C	F		F	C	E
					Approach Delay	160.9			148.5			107.2			85.1		
					Approach LOS	F			F			F			F		
					Intesection Delay	122.3											
					Intesection LOS	F											
					50th Queue L (ft)	~414	~718		~118	~388		95	~803		~374	213	31






















~ Volume exceeds capacity, queue is theoretically infinite. Queue shown is maximum after two cycles. # 95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles. m Volume for 95th percentile queue is metered by upstream signal.

Arterial Results

2030 PM NW 7 Avenue (Build)										
NB	Travel Time (s)	147.6	NW 79 ST	27.6	NW 81 ST	56.4	LITTLE RIVER	125.2	NW 95 ST	-
	LOS	F		D		B		E		-
SB	Travel Time (s)	-	NW 79 ST	50.7	NW 81 ST	73.2	LITTLE RIVER	56.8	NW 95 ST	58.2
	LOS	-		F		C		B		D

HCM Signalized Intersection Capacity Analysis 1: NW 79 ST & NW 7 AVE

8/4/2009

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	400	1100	90	150	500	150	200	1700	200	350	750	200
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	5.0		3.0	5.0		3.0	5.0		3.0	5.0	5.0
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.91		1.00	0.95	1.00
Frpb, ped/bikes	1.00	0.99		1.00	0.99		1.00	1.00		1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.99		1.00	0.97		1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1694	3275		1646	3160		1678	4741		1728	3323	1474
Flt Permitted	0.13	1.00		0.15	1.00		0.26	1.00		0.07	1.00	1.00
Satd. Flow (perm)	238	3275		257	3160		461	4741		130	3323	1474
Peak-hour factor, PHF	0.97	0.97	0.97	0.91	0.91	0.91	0.92	0.92	0.92	0.93	0.93	0.93
Adj. Flow (vph)	412	1134	93	165	549	165	217	1848	217	376	806	215
RTOR Reduction (vph)	0	4	0	0	20	0	0	11	0	0	0	123
Lane Group Flow (vph)	412	1223	0	165	694	0	217	2054	0	376	806	92
Confl. Peds. (#/hr)			23			17			12			6
Heavy Vehicles (%)	3%	5%	2%	6%	5%	6%	4%	3%	9%	1%	5%	3%
Turn Type	pm+pt			pm+pt			pm+pt			pm+pt		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		6
Activated Green, G (s)	53.0	43.0		34.0	27.0		67.4	53.0		77.0	59.6	59.6
Effective Green, g (s)	53.0	43.0		34.0	27.0		67.4	53.0		77.0	59.6	59.6
Activated g/C Ratio	0.38	0.31		0.24	0.19		0.48	0.38		0.55	0.43	0.43
Clearance Time (s)	3.0	5.0		3.0	5.0		3.0	5.0		3.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	329	1006		132	609		347	1795		311	1415	628
v/s Ratio Prot	c0.21	0.37		0.06	0.22		0.06	0.43		c0.18	0.24	
v/s Ratio Perm	c0.27			0.24			0.24			c0.48		0.06
v/c Ratio	1.25	1.22		1.25	1.14		0.63	1.14		1.21	0.57	0.15
Uniform Delay, d1	43.1	48.5		68.7	56.5		22.6	43.5		61.7	30.5	24.6
Progression Factor	1.00	1.00		1.04	0.87		1.00	1.00		1.51	1.05	2.49
Incremental Delay, d2	136.2	106.2		158.9	80.7		3.5	72.2		116.7	1.4	0.4
Delay (s)	179.2	154.7		230.0	129.7		26.1	115.7		209.7	33.3	61.8
Level of Service	F	F		F	F		C	F		F	C	E
Approach Delay (s)		160.9			148.5			107.2			85.1	
Approach LOS		F			F			F			F	
Intersection Summary												
HCM Average Control Delay		122.3								F		
HCM Volume to Capacity ratio		1.18										
Actuated Cycle Length (s)		140.0								6.0		
Intersection Capacity Utilization		113.6%								H		
Analysis Period (min)		15										
c Critical Lane Group												

Queues

1: NW 79 ST & NW 7 AVE

8/4/2009



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	412	1227	165	714	217	2065	376	806	215
v/c Ratio	1.24	1.21	1.22	1.14	0.61	1.14	1.20	0.57	0.29
Control Delay	166.8	147.3	180.5	121.5	23.8	111.5	165.0	34.0	9.1
Queue Delay	0.0	0.0	0.0	37.7	0.0	0.0	0.0	0.0	0.0
Total Delay	166.8	147.3	180.5	159.2	23.8	111.5	165.0	34.0	9.1
Queue Length 50th (ft)	~414	~718	~118	~388	95	~803	~374	213	31
Queue Length 95th (ft)	#627	#860	#272	#521	143	#898	#583	234	63
Internal Link Dist (ft)		1758		264		1509		575	
Turn Bay Length (ft)	200		150		100		150		
Base Capacity (vph)	332	1010	135	629	397	1805	313	1415	751
Starvation Cap Reductn	0	0	0	45	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.24	1.21	1.22	1.22	0.55	1.14	1.20	0.57	0.29

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

HCM Signalized Intersection Capacity Analysis

2: NW 81 St & NW 7 AVE

8/4/2009

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement												
Lane Configurations				↰	↱	↱	↰	↱			↰	↱
Volume (vph)	0	0	0	200	850	350	90	2100	0	0	1100	200
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				5.0	5.0	5.0	5.0	5.0			5.0	
Lane Util. Factor				1.00	0.95	1.00	1.00	0.91			0.91	
Frpb, ped/bikes				1.00	1.00	0.97	1.00	1.00			1.00	
Flpb, ped/bikes				1.00	1.00	1.00	1.00	1.00			1.00	
Frt				1.00	1.00	0.85	1.00	1.00			0.98	
Flt Protected				0.95	1.00	1.00	0.95	1.00			1.00	
Satd. Flow (prot)				1662	3202	1466	1678	4868			4701	
Flt Permitted				0.95	1.00	1.00	0.11	1.00			1.00	
Satd. Flow (perm)				1662	3202	1466	200	4868			4701	
Peak-hour factor, PHF	0.92	0.92	0.92	0.90	0.90	0.90	0.92	0.92	0.92	0.94	0.94	0.94
Adj. Flow (vph)	0	0	0	222	944	389	98	2283	0	0	1170	213
RTOR Reduction (vph)	0	0	0	0	0	2	0	0	0	0	17	0
Lane Group Flow (vph)	0	0	0	222	944	387	98	2283	0	0	1366	0
Confl. Peds. (#/hr)						8			3			4
Heavy Vehicles (%)	2%	2%	2%	5%	9%	3%	4%	3%	0%	0%	4%	3%
Turn Type				Split		Perm	pm+pt					
Protected Phases				8	8		5	2			6	
Permitted Phases						8	2					
Actuated Green, G (s)				48.5	48.5	48.5	81.5	81.5			68.2	
Effective Green, g (s)				48.5	48.5	48.5	81.5	81.5			68.2	
Actuated g/C Ratio				0.35	0.35	0.35	0.58	0.58			0.49	
Clearance Time (s)				5.0	5.0	5.0	5.0	5.0			5.0	
Vehicle Extension (s)				3.0	3.0	3.0	3.0	3.0			3.0	
Lane Grp Cap (vph)				576	1109	508	204	2834			2290	
v/s Ratio Prot				0.13	0.29		0.03	0.47			0.29	
v/s Ratio Perm						0.26	0.25					
v/c Ratio				0.39	0.85	0.76	0.48	0.81			0.60	
Uniform Delay, d1				34.5	42.4	40.6	17.0	23.0			25.9	
Progression Factor				0.77	0.72	0.73	1.46	0.44			0.76	
Incremental Delay, d2				0.4	5.9	6.1	0.2	0.2			1.1	
Delay (s)				27.0	36.5	35.6	25.0	10.4			20.7	
Level of Service				C	D	D	C	B			C	
Approach Delay (s)		0.0			34.9			11.0			20.7	
Approach LOS		A			C			B			C	
Intersection Summary												
HCM Average Control Delay			20.5								C	
HCM Volume to Capacity ratio			0.82									
Actuated Cycle Length (s)			140.0							10.0		
Intersection Capacity Utilization			72.4%								C	
Analysis Period (min)			15									
c Critical Lane Group												

Queues

2: NW 81 St & NW 7 AVE

8/4/2009



Lane Group	WBL	WBT	WBR	NBL	NBT	SBT
Lane Group Flow (vph)	222	944	389	98	2283	1383
v/c Ratio	0.39	0.85	0.76	0.48	0.81	0.60
Control Delay	27.9	38.0	38.7	21.4	10.9	21.0
Queue Delay	1.0	1.3	1.7	0.0	0.6	0.0
Total Delay	28.9	39.3	40.4	21.4	11.5	21.0
Queue Length 50th (ft)	111	268	205	23	195	230
Queue Length 95th (ft)	156	303	265	m20	m168	309
Internal Link Dist (ft)		255			575	2218
Turn Bay Length (ft)				100		
Base Capacity (vph)	629	1212	557	212	2834	2307
Starvation Cap Reductn	212	111	63	0	209	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.53	0.86	0.79	0.46	0.87	0.60

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

HCM Signalized Intersection Capacity Analysis 3: Little River Dr & NW 7 AVE

8/4/2009

	EBL	EBT	EBR	WBL	WBT	WER	NBL	NBT	NBR	SBL	SBT	SBR
Movement	EBL	EBT	EBR	WBL	WBT	WER	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱		↰	↱		↰	↱		↰	↱	
Volume (vph)	30	0	80	40	0	20	90	2400	10	10	1300	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0			5.0		5.0	5.0		5.0	5.0	
Lane Util. Factor	1.00	1.00			1.00		1.00	0.91		1.00	0.91	
Frpb, ped/bikes	1.00	1.00			1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00			1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.85			0.96		1.00	1.00		1.00	0.99	
Flt Protected	0.95	1.00			0.97		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1745	1561			1567		1745	4865		1745	4836	
Flt Permitted	0.68	1.00			0.65		0.16	1.00		0.04	1.00	
Satd. Flow (perm)	1242	1561			1058		299	4865		80	4836	
Peak-hour factor, PHF	0.79	0.79	0.79	0.50	0.50	0.50	0.97	0.97	0.97	0.94	0.94	0.94
Adj. Flow (vph)	38	0	101	80	0	40	93	2474	10	11	1383	53
RTOR Reduction (vph)	0	73	0	0	9	0	0	0	0	0	2	0
Lane Group Flow (vph)	38	28	0	0	111	0	93	2484	0	11	1434	0
Confl. Peds. (#/hr)									9			9
Heavy Vehicles (%)	0%	0%	0%	0%	0%	25%	0%	3%	0%	0%	3%	0%
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	19.0	19.0			19.0		111.0	111.0		111.0	111.0	
Effective Green, g (s)	19.0	19.0			19.0		111.0	111.0		111.0	111.0	
Actuated g/C Ratio	0.14	0.14			0.14		0.79	0.79		0.79	0.79	
Clearance Time (s)	5.0	5.0			5.0		5.0	5.0		5.0	5.0	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	169	212			144		237	3857		63	3834	
v/s Ratio Prot		0.02						0.51			0.30	
v/s Ratio Perm	0.03				0.11		0.31			0.14		
v/c Ratio	0.22	0.13			0.77		0.39	0.64		0.17	0.37	
Uniform Delay, d1	53.9	53.2			58.4		4.4	6.1		3.5	4.3	
Progression Factor	1.00	1.00			1.00		0.58	0.53		0.39	0.28	
Incremental Delay, d2	0.7	0.3			22.3		2.9	0.5		5.1	0.2	
Delay (s)	54.6	53.5			80.7		5.4	3.8		6.5	1.5	
Level of Service	D	D			F		A	A		A	A	
Approach Delay (s)		53.8			80.7			3.8			1.5	
Approach LOS		D			F			A			A	
Intersection Summary												
HCM Average Control Delay			6.8									A
HCM Volume to Capacity ratio			0.66									
Actuated Cycle Length (s)			140.0							10.0		
Intersection Capacity Utilization			72.5%									C
Analysis Period (min)			15									
c Critical Lane Group												

Queues

3: Little River Dr & NW 7 AVE

8/4/2009

















Lane Group	EBL	EBT	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	38	101	120	93	2484	11	1436
v/c Ratio	0.22	0.35	0.79	0.39	0.64	0.17	0.37
Control Delay	54.2	17.0	85.0	6.6	4.2	7.7	1.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	54.2	17.0	85.0	6.6	4.2	7.7	1.6
Queue Length 50th (ft)	31	13	98	13	142	0	21
Queue Length 95th (ft)	55	47	78	m20	173	m1	m27
Internal Link Dist (ft)		1763	274		2218		190
Turn Bay Length (ft)	100			150		150	
Base Capacity (vph)	248	380	219	237	3854	63	3834
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.15	0.27	0.55	0.39	0.64	0.17	0.37

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.













HCM Unsignalized Intersection Capacity Analysis
4: N DWY & NW 7 AVE

8/4/2009

								
Movement	WBL	WBR	NBT	NBR	SBL	SBT		
Lane Configurations			  			  		
Volume (veh/h)	0	10	2400	10	0	1300		
Sign Control	Stop		Free		Free			
Grade	0%		0%		0%			
Peak Hour Factor	0.75	0.75	0.96	0.96	0.94	0.94		
Hourly flow rate (vph)	0	13	2500	10	0	1383		
Pedestrians								
Lane Width (ft)								
Walking Speed (ft/s)								
Percent Blockage								
Right turn flare (veh)								
Median type			TWLT		TWLT			
Median storage veh			2		2			
Upstream signal (ft)			270					
pX, platoon unblocked	0.78	0.78			0.78			
vC, conflicting volume	2966	839			2510			
vC1, stage 1 conf vol			2505					
vC2, stage 2 conf vol			461					
vCu, unblocked vol	2529	0			1943			
tC, single (s)	6.8	6.9			4.1			
tC, 2 stage (s)	5.8							
tF (s)	3.5	3.3			2.2			
p0 queue free %	100	98			100			
cM capacity (veh/h)	76	849			238			
Direction, Lane #	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3	SB 4
Volume Total	13	1000	1000	510	0	461	461	461
Volume Left	0	0	0	0	0	0	0	0
Volume Right	13	0	0	10	0	0	0	0
cSH	849	1700	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.02	0.59	0.59	0.30	0.00	0.27	0.27	0.27
Queue Length 95th (ft)	1	0	0	0	0	0	0	0
Control Delay (s)	9.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	A							
Approach Delay (s)	9.3	0.0			0.0			
Approach LOS	A							
Intersection Summary								
Average Delay			0.0					
Intersection Capacity Utilization			56.6%		ICU Level of Service		B	
Analysis Period (min)			15					

HCM Signalized Intersection Capacity Analysis 5: NW 95 ST & NW 7 AVE











8/4/2009

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	200	700	150	250	650	200	200	1600	400	250	800	90
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	5.0	5.0	3.0	5.0	5.0	3.0	5.0		3.0	5.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.91		1.00	0.91	
Frpb, ped/bikes	1.00	1.00	0.96	1.00	1.00	0.94	1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.97		1.00	0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1711	3388	1435	1678	3421	1433	1728	4710		1678	4688	
Flt Permitted	0.14	1.00	1.00	0.12	1.00	1.00	0.23	1.00		0.06	1.00	
Satd. Flow (perm)	248	3388	1435	221	3421	1433	427	4710		112	4688	
Peak-hour factor, PHF	0.93	0.93	0.93	0.87	0.87	0.87	0.88	0.88	0.88	0.94	0.94	0.94
Adj. Flow (vph)	215	753	161	287	747	230	227	1818	455	266	851	96
RTOR Reduction (vph)	0	0	36	0	0	75	0	31	0	0	9	0
Lane Group Flow (vph)	215	753	125	287	747	155	227	2242	0	266	938	0
Confl. Peds. (#/hr)			9			20			4			4
Heavy Vehicles (%)	2%	3%	5%	4%	2%	2%	1%	3%	2%	4%	5%	6%
Turn Type	pm+pt		Perm	pm+pt		Perm	pm+pt		pm+pt		pm+pt	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		
Actuated Green, G (s)	41.0	29.0	29.0	50.0	35.0	35.0	75.2	61.0		78.8	62.8	
Effective Green, g (s)	41.0	29.0	29.0	50.0	35.0	35.0	75.2	61.0		78.8	62.8	
Actuated g/C Ratio	0.29	0.21	0.21	0.36	0.25	0.25	0.54	0.44		0.56	0.45	
Clearance Time (s)	3.0	5.0	5.0	3.0	5.0	5.0	3.0	5.0		3.0	5.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	198	702	297	266	855	358	361	2052		242	2103	
v/s Ratio Prot	0.09	0.22		c0.14	0.22		0.06	0.48		c0.13	0.20	
v/s Ratio Perm	0.22		0.09	c0.25		0.11	0.27			c0.49		
v/c Ratio	1.09	1.07	0.42	1.08	0.87	0.43	0.63	1.09		1.10	0.45	
Uniform Delay, d1	42.7	55.5	48.2	42.0	50.4	44.2	18.1	39.5		64.2	26.6	
Progression Factor	1.00	1.00	1.00	0.86	0.84	0.68	0.63	0.53		1.00	1.00	
Incremental Delay, d2	88.7	55.1	1.0	75.0	9.0	0.8	2.6	48.5		86.9	0.7	
Delay (s)	131.4	110.6	49.2	111.1	51.4	30.9	14.1	69.6		151.1	27.3	
Level of Service	F	F	D	F	D	C	B	E		F	C	
Approach Delay (s)		105.8			61.2			64.6			54.4	
Approach LOS		F			E			E			D	
Intersection Summary												
HCM Average Control Delay			69.5			HCM Level of Service		E				
HCM Volume to Capacity ratio			1.07									
Actuated Cycle Length (s)			140.0			Sum of lost time (s)		9.0				
Intersection Capacity Utilization			102.0%			ICU Level of Service		G				
Analysis Period (min)			15									
c Critical Lane Group												

Queues

5: NW 95 ST & NW 7 AVE

8/4/2009

										
Lane Group	EBL	EBT	EBR	WBL	WBT	WER	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	215	753	161	287	747	230	227	2273	266	947
v/c Ratio	1.06	1.07	0.48	1.07	0.87	0.53	0.62	1.09	1.09	0.45
Control Delay	116.7	106.9	40.3	104.2	53.8	21.6	14.9	70.0	123.0	27.3
Queue Delay	0.0	0.0	0.0	0.0	37.8	0.9	0.0	0.0	0.0	0.0
Total Delay	116.7	106.9	40.3	104.2	91.7	22.5	14.9	70.0	123.0	27.3
Queue Length 50th (ft)	~162	~400	93	~220	355	104	54	~426	~222	210
Queue Length 95th (ft)	#332	#530	169	#385	416	194	93	#885	#412	264
Internal Link Dist (ft)		1627			250			2081		1278
Turn Bay Length (ft)	100		60	100		100	100		75	
Base Capacity (vph)	202	702	333	269	855	433	414	2083	244	2114
Starvation Cap Reductn	0	0	0	0	159	62	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.06	1.07	0.48	1.07	1.07	0.62	0.55	1.09	1.09	0.45

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Arterial Level of Service

6/4/2009

Arterial Level of Service: NB NW 7 AVE

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
NW 79 ST	III	35	36.1	111.5	147.6	0.30	7.3	F
NW 81 St	III	35	16.7	10.9	27.6	0.12	16.2	D
S DWY	III	35	52.2	4.2	56.4	0.44	27.8	B
NW 95 ST	III	35	55.2	70.0	125.2	0.46	13.2	E
Total	III		160.2	196.6	356.8	1.32	13.3	E

Arterial Level of Service: SB NW 7 AVE

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
NW 95 ST	III	35	30.9	27.3	58.2	0.26	15.9	D
Little River Dr	III	35	55.2	1.6	56.8	0.46	29.2	B
NW 81 St	III	35	52.2	21.0	73.2	0.44	21.4	C
NW 79 ST	III	35	16.7	34.0	50.7	0.12	8.8	F
Total	III		155.0	83.9	238.9	1.28	19.2	C



THE CORRADINO GROUP, INC.