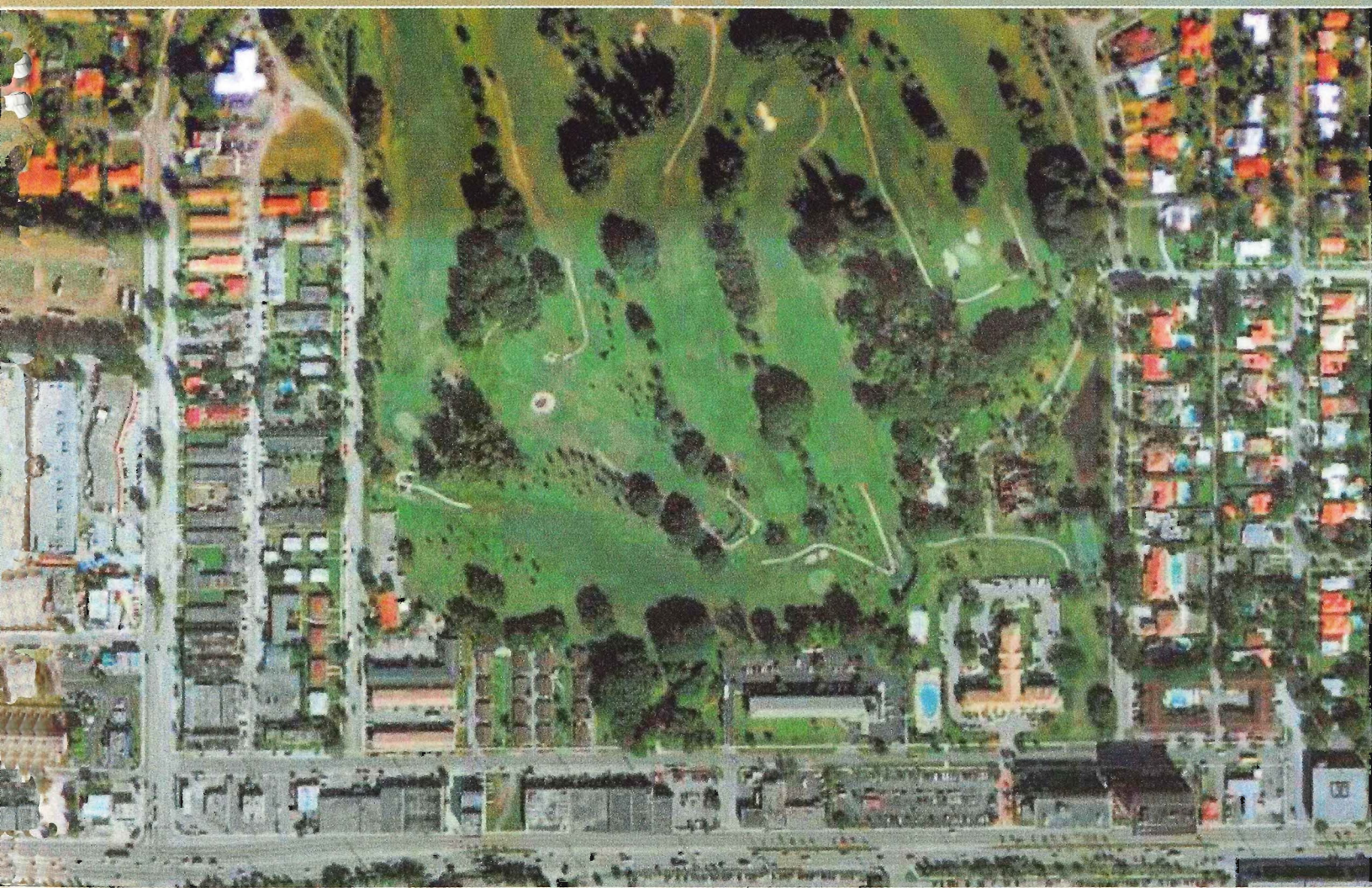


# Curtiss Parkway/ NW 36 Street

## Traffic Study





# **Curtiss Parkway / NW 36 Street Traffic Study**

**Prepared by:**

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**May 2006  
DPA Project #05223**

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## **EXECUTIVE SUMMARY**

David Plummer and Associates was retained by the City of Miami Springs to conduct a traffic impact study and assess the possible impacts on traffic flow (i.e., increased congestion) in the vicinity of the intersection of Curtiss Parkway and N. W. 36th Street. The City of Miami Springs has recently received a proposal from Strategic Properties, Inc., of Miami to construct a mixed-use project at a site in Miami Springs bounded by Curtiss Parkway, Fairway Drive and Eldron Drive. Project buildout is anticipated for 2008. The impact of four different land use scenarios was studied. At present, there are a series of one- to two-story residential structures zoned multi-family (R-3C per Miami Springs' zoning) occupying the project site. The original construction timeframe of these dwellings dates back to the 1940s and 1950s.

Based on established future traffic conditions with project for the year 2008, the analysis was completed for the four land use scenarios. Following is a summary of the findings.

- Link analysis shows that NW 36 Street currently operates at LOS (E+35%) and will operate at LOS (E+43%) in future conditions. The segments will still operate within the adopted LOS Standard (50% above LOS E for NW 36 Street) adopted by the City in their Comprehensive Plan.
- Curtiss Road currently operates at LOS C or better, and is projected to operate at LOS D, which is within the acceptable LOS standard (LOS E for Curtiss Road) established in the City of Miami Springs Comprehensive Plan.
- Operational roadway improvements are not warranted by the growth associated with any of the proposed scenarios of this project since adopted levels of service standards are met.
- Because of the location of the project in relation to the City of Miami Springs Golf Course, opportunities to travel through residential neighborhoods to access the project are limited from the north and the east. Furthermore, trips generated by the proposed retail uses (supermarket and specialty retail) are generally local in nature (i.e. relatively short trips impacting a limited

area), and are expected to satisfy nearby shopping needs from area residents. The proposed residential uses are cohesive with existing residential uses in the area. Neighborhood protection (traffic calming) improvements are not anticipated as a result of this development.

- The existing transportation network will appropriately accommodate within the adopted standards the impacts of any of the proposed scenarios for the Poinciana Golf Village project.

## **1.0 INTRODUCTION**

### **1.1 Project Background**

The City of Miami Springs is interested in conducting a study that would assess the possible impacts on traffic flow (i.e., increased congestion) in the vicinity of the intersection of Curtiss Parkway and N. W. 36th Street as a result of the City's proposed redevelopment efforts of the area north of Fairway Drive and east of Curtiss Parkway. The City of Miami Springs has recently received a proposal from Strategic Properties, Inc., of Miami to construct mixed-use project at a site in Miami Springs bounded by Curtiss Parkway, Fairway Drive and Eldron Drive (see Exhibit 1). Project buildout is anticipated for 2008. At present, there are a series of one- to two-story residential structures zoned multi-family (R-3C per Miami Springs' zoning) occupying the project site. The original construction timeframe of these dwellings dates back to the 1940s and 1950s.

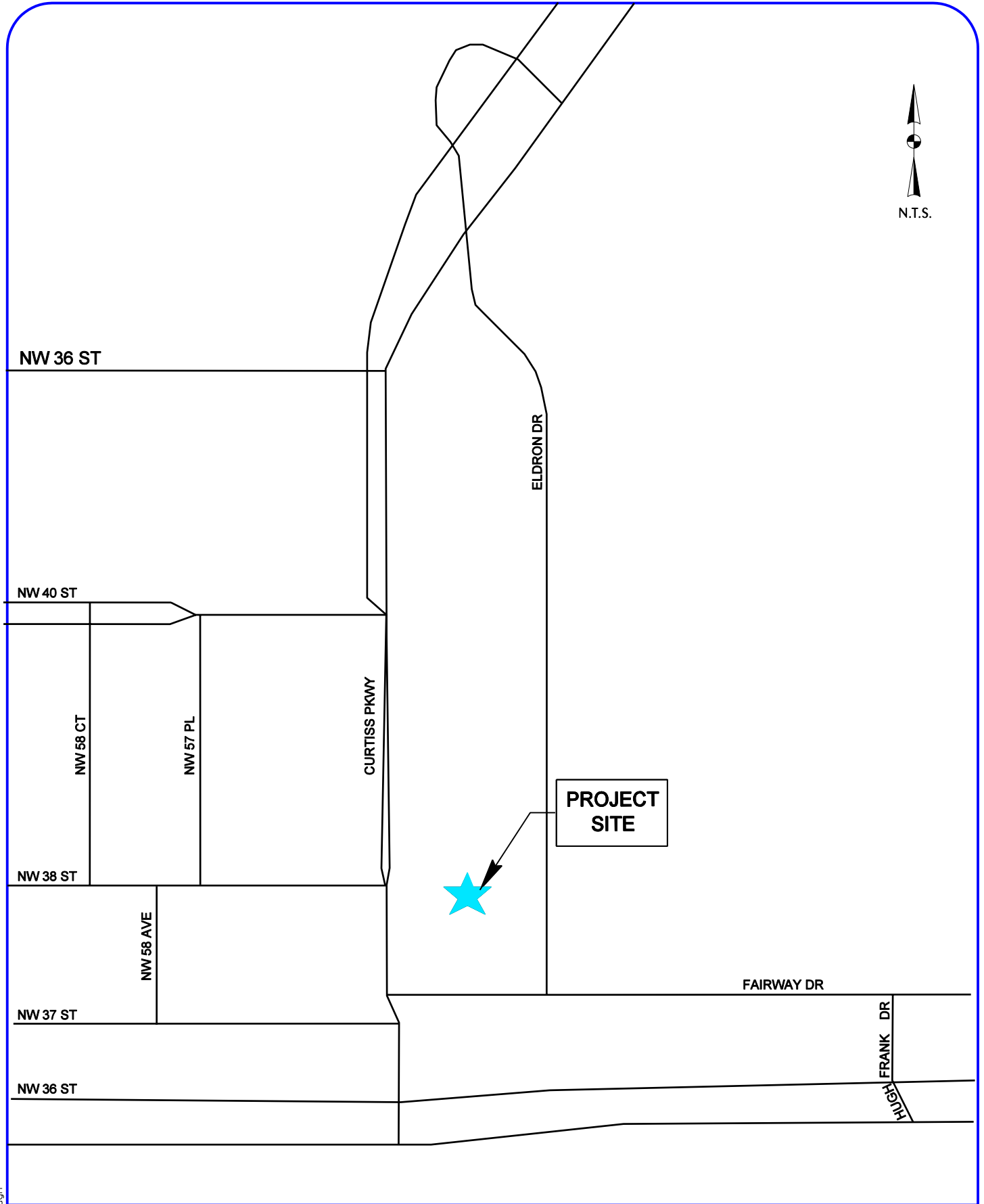
### **1.2 Study Objective**

The objective of this study is to provide the City of Miami Springs with a traffic study that outlines the impacts of this project on the surrounding street network, and will be used as a basis for decision-making during the review and approval process of this project.

### **1.3 Study Methodology**

The data collection and analysis presented in this report were in accordance with the scope of work established for this project outlined below.

- The study area is bounded by the roadway segments immediately adjacent to the intersection of Curtiss Parkway/NW 36 Street.



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PROJECT:  
**CURTISS PARKWAY/ NW 36 SREET  
TRAFFIC STUDY**

TITLE:  
**PROJECT LOCATION**

EXHIBIT No.  
**1**



- All traffic analysis, as requested by the City, was performed based on daily traffic volumes.
- Directional 24-hour traffic counts were taken at each of the intersection's approaches. Traffic counts were converted to Average Annual Daily Traffic (AADT) conditions using factors published by the Florida Department of Transportation.
- Other roadway physical and operational characteristics necessary to undertake capacity analysis were obtained from field observations.
- Existing roadway Level of Service (LOS) was evaluated by comparing existing AADT daily traffic volumes against service volumes published by the Florida Department of Transportation in their 2002 Quality/Level of Service Handbook. As applicable, peak hour observations were reported as an additional qualitative traffic flow indication.
- Future traffic conditions without project for the buildout year were projected by using the historic traffic growth.
- Trip Generation was estimated for five different land use scenarios for the Poinciana Golf Village Project. All traffic generation estimates are based on weekday, daily trip generation rates and/or equations published by the Institute of Transportation Engineers in Trip Generation, Seventh Edition. Because of the mixed nature of this project, an estimate was made of the internal trips occurring within this site. This estimate was based on the methodology outlined in ITE's March, 2001 Trip Generation Handbook. In addition, the amount of pass-by trips was estimated for the retail component of the project using this same publication.
- The ITE rates and/or equations, as well as the existing development information, were used to estimate the existing traffic volumes generated by the existing uses on the site. These traffic volumes are using the area roadways today. As the existing buildings are replaced, the corresponding trips are also replaced by the trips generated by the new project. In essence, the net increase in trips from the site was estimated.
- The new daily trips generated by the project were assigned to the road network based on the directional cardinal distribution of trips information published by the Miami-Dade

Metropolitan Planning Organization. Field observations during the PM Peak Hour were made to validate the use of this distribution.

- For each scenario, roadway LOS was evaluated using the same methodology described for existing traffic conditions.
- Future traffic conditions determined the need to explore conceptual transportation improvements compatible with the area.

## 2.0 EXISTING TRAFFIC CONDITIONS

Data collection for this report included roadway characteristics, intersection data, and traffic counts.

### 2.1 Existing Characteristics

Roadway characteristics were collected and operational conditions observed for the intersection of NW 36 Street/Curtiss Parkway and the links adjacent to the intersections. Exhibit 2 shows the existing lane configurations. The following data was collected.

#### NW 36 Street

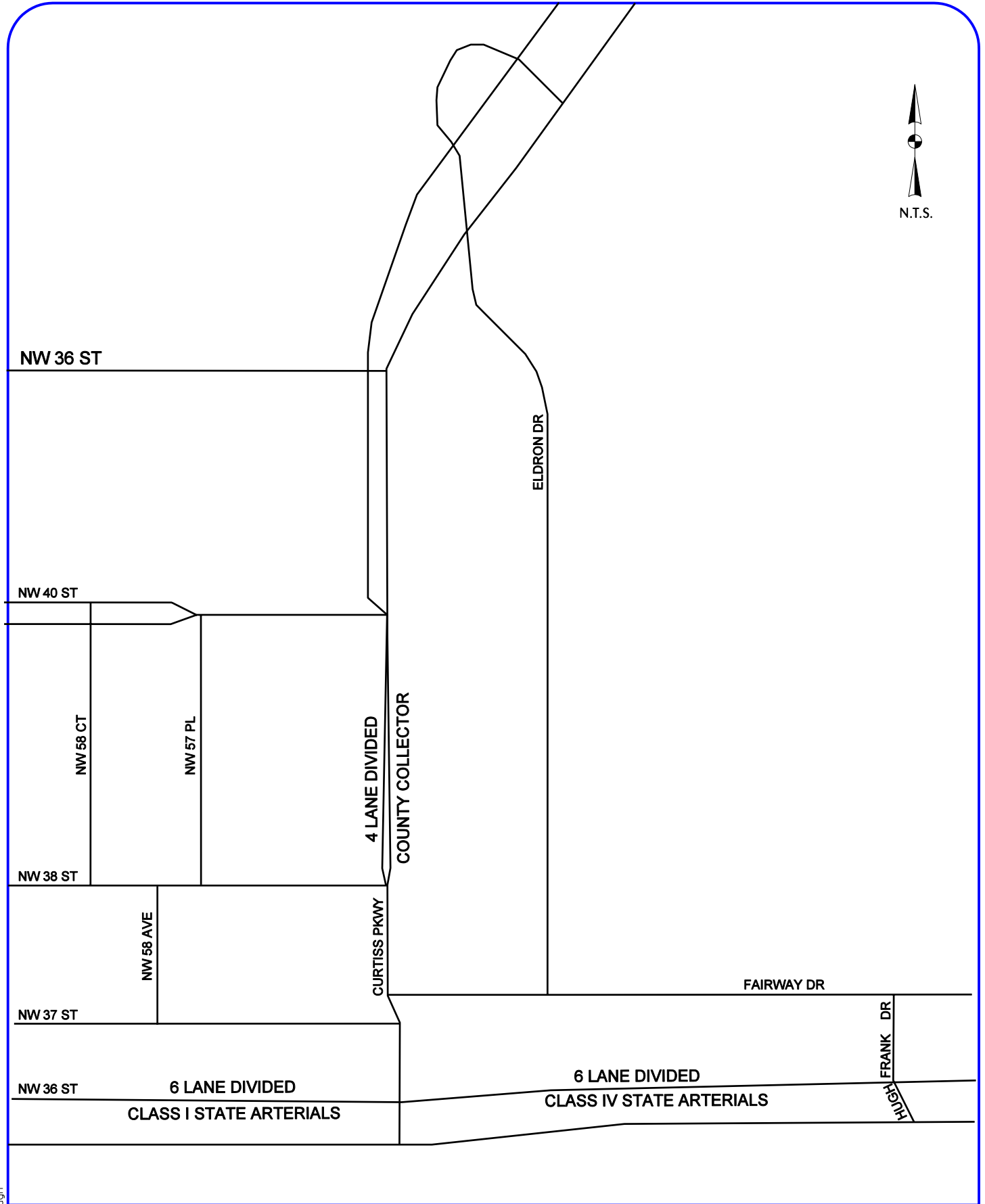
NW 36 Street is a six-lane state arterial that runs east-west and has a posted speed limit of 40 mph. The east and westbound approaches have exclusive left turn lanes at major intersections. Roadway classification for NW 36 Street was found to differ for the sections east and west of Curtiss Parkway. East of Curtiss Parkway, signal spacing is greater than 4.5 signalized intersections per mile. For purposes of this study, this section is considered a Class IV State Two-Way Arterial. West of Curtiss Parkway, signal spacing is less than 1.99 signals per mile. This section fills the description of a Class I state arterial.

#### Curtiss Parkway

Curtiss Parkway is a four-lane divided roadway that transverses the city from NW 36 Street on the south to the Miami Springs Circle, abutting the City of Hialeah. The posted speed limit is 35 mph. The roadway is classified as a county collector.

#### NW 36 Street / Curtiss Parkway Intersection

The intersection of NW 36 Street / NW 57 Avenue / Curtiss Parkway is a 4-legged, signalized intersection. NW 36 Street is a six-lane divided highway that runs east/west. The eastbound



05107\existing.dgn



PROJECT:  
**CURTISS PARKWAY/ NW 36 SREET  
TRAFFIC STUDY**

TITLE:  
**EXISTING LANE  
CONFIGURATION**

EXHIBIT No.  
**2**



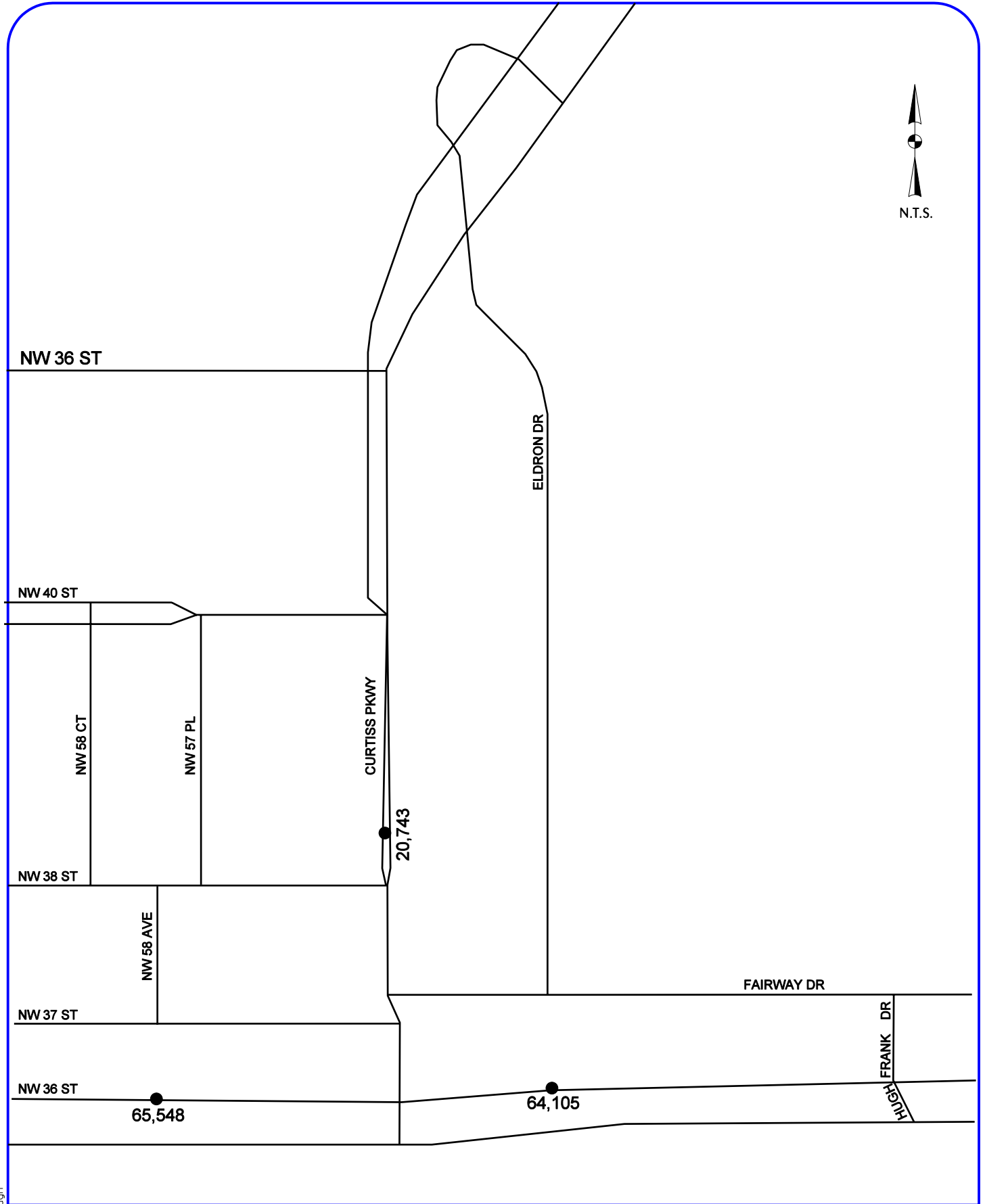
approach has an exclusive left turn lane, three through lanes and one exclusive right turn lane. The westbound approach has an exclusive left turn lane and three through lanes, and an exclusive right turn lane. The southbound approach has an exclusive left turn lane, a through lane, and a shared through and right turn lane.

## **2.2 Traffic Counts**

Twenty-four counts were collected on Thursday, May 2, 2006 at each approach of the intersection of NW 36 Street / Curtiss Parkway. The counts were adjusted by the FDOT Weekly Volume Factor for this area of Miami-Dade County to obtain Average Annual Daily Traffic (AADT) conditions. Existing Volumes are graphically portrayed in Exhibit 3. Summarized traffic counts are also included in Appendix A.

## **2.3 Existing Conditions Link Analysis**

Roadway Level Of Service (LOS) was evaluated by comparing existing daily traffic volumes against service volumes published by the Florida Department of Transportation 2002 Quality/Level of Service Handbook. The analysis is based on the existing lane configuration. Other factors, such as the number of traffic signals per mile, were assessed to establish the roadway Class. Analysis results are summarized in Exhibit 4. Generalized Service Volumes published by FDOT are included in Appendix B.



05107\existing.dgn



PROJECT:  
**CURTISS PARKWAY/ NW 36 SREET  
TRAFFIC STUDY**

TITLE:  
**EXISTING (2006)  
AVERAGE ANNUAL  
DAILY TRAFFIC**

EXHIBIT No.

**3**

## Exhibit 4

## Existing Link Analysis

## Curtiss Parkway/NW 36 Street Traffic Study

Roadway	Location	Functional Classification	LOS Std	Number of Lanes	Volume (2006 AADT)	Generalized LOS E SV	V/C	LOS	Meets LOS Std?
Curtiss Parkway  NW 36 Street	North of NW 36 Street	County Collector	E	4 LD	20,743	32,900	0.63	C or better	YES
	East of Curtis Parkway	State Principal Arterial	E + 50%	6 LD	64,105	47,600	1.35	(E+35%)	YES
	West of Curtis Parkway	State Principal Arterial	E + 50%	6 LD	65,548	53,500	1.23	(E+23%)	YES

**Notes:**

(1) Generalized Service Volumes were obtained from the 2002 Quality/Level of Service Handbook, published by The State of Florida Department of Transportation. The following categories were used: Non-State Major City/County Roadway for Curtis Parkway. Class II State Two-way Arterial for NW 36 Street.

### **3.0 PLANNED AND PROGRAMMED ROADWAY IMPROVEMENTS**

The 2006 Miami-Dade County *Transportation Improvement Program* (TIP) was reviewed to identify any programmed or planned roadway projects within the limits of the study area established for this study. No projects were listed within the study area.



## 4.0 FUTURE TRAFFIC CONDITIONS

### 4.1 Background Traffic and Committed Developments

Average Daily Traffic Counts published by the Miami-Dade County Public Works Department and the FDOT were reviewed to determine historic growth in the area. This analysis indicated that, even though traffic has fluctuated in recent years, a decrease in through volumes has been experienced on NW 36 Street. Traffic Count data obtained for the purpose of calculating a growth rate is provided in Appendix C.

Population estimates obtained from the US Bureau of Census for the City of Miami Springs show that in the last 20 years the city has grown at an approximate rate of 0.5% yearly. These same estimates show that growth has continued at a smaller rate for the last 10 years. However, for purposes of this study a 0.5% compounded yearly growth rate was used. The population data obtained for this analysis is also provided in Appendix C.

### 4.2 Trip Generation for Proposed Project Scenarios

Trip generation for the different proposed project scenarios and for the existing land uses was estimated using the Institute of Transportation Engineers (ITE) publication *Trip Generation*, Seventh Edition. This manual provides trip generation rates and/or equations for 24-hour and peak hour volumes by land use type. These rates and equations represent vehicles at a free-standing site's driveways. The site plan and trip generation worksheets are provided in Appendix D.

ITE recognizes that data obtained to establish trip generation rates and/or equations is collected at

single-use, free-standing sites, and that mixed-use developments provide a potential for interaction of trips within the site, which must be accounted for separately. ITE's *Trip Generation Handbook*, published in March 2001, provides guidelines for establishing internal capture for mixed-use developments. These guidelines were followed in determining the potential for trip interactions within the site for each of the proposed scenarios. The internal orientation of project trips was established based on the mix of land uses, the projected number of daily trips based on the ITE rates and/or equations, and the potential for interaction of trips. The internalization matrices developed for each scenario are included in Appendix D.

Research shows that a percentage of retail trips to and from a site are “pass-by” trips. ITE describes pass-by as trips “*attracted from traffic passing the site on an adjacent street*”. Pass-by trips are already using the existing roadway network and therefore do not result in additional impact to these facilities. Trip generation for the retail component of the project is reduced based on data provided in the *Trip Generation Handbook*.

The *Miami-Springs Transit System Services and Opportunities Study*, prepared by a local consultant for the City of Miami Springs, shows that 1.9% of the City of Miami Springs work commute trips are made via public transit. Even though the implementation of the recommendations in the study will likely result in an increase of transit demand, the recommended improvements may not be implemented by project buildout. Therefore, the existing rate was used in this study to account for other modes of transportation for the future proposed scenarios, as well as the existing uses on site.

Trips generated by the existing facilities to be demolished were credited against the proposed trips. Adjustments for the internal, pass-by trips and other modes of transportation were taken before applying the credit. A summary of the trip generation including all adjustments taken is provided in Exhibits 5A through 5D for each of the proposed development scenarios for this project.

<div>Exhibit 5A</div> <div>Daily Trip Generation</div> <div>Curtiss Parkway/NW 36 Street Traffic Study</div> <div>Alternative 1 - 238 DUs of Condominium; 28,456 SF of Retail &amp; 52,000 SF Supermarket</div>						
Land Use	ITE Land Use Code	Intensity	ITE Daily Trip Generation (Two-Way)	Internalization	Pass-by	Mode Split 1.90%
Residential Condominium	230	238 Dus	1,341	-268	NA	-20
Specialty Retail	814	28,456 SF	1,261	-51	NA	-23
Supermarket	850	52,000 SF	5,316	-216	-1,832	-62
<b>Existing Uses</b>						
Residential Condominium	230	172 Dus	1,129	NA	NA	-21
<b>NET NEW EXTERNAL VEHICLES TRIPS</b>						<b>4,338</b>

Source: David Plummer and Associates, Inc.

## Exhibit 5B

## Daily Trip Generation

***Curtiss Parkway/NW 36 Street Traffic Study***  
***Alternative 2 - 278 DUs of Condominium; 28,456 SF of Retail & 52,000 SF Supermarket***

Land Use	ITE Land Use Code	Intensity	ITE Daily Trip Generation (Two-Way)	Internalization	Pass-by	Mode Split 1.90%	Net New Daily Trips (Two-Way)
Residential Condominium	230	278 Dus	1,531	-306	NA	-23	1,202
Specialty Retail	814	28,456 SF	1,261	-59	NA	-22	1,180
Supermarket	850	52,000 SF	5,316	-247	-1,820	-62	3,187
<b><u>Existing Uses</u></b>							
Residential Condominium	230	172 Dus	1,129	NA	NA	-21	1,108
<b>NET NEW EXTERNAL VEHICLES TRIPS</b>							<b>4,461</b>

Source: David Plummer and Associates, Inc.



Exhibit 5C						
Daily Trip Generation						
Curtiss Parkway/NW 36 Street Traffic Study						
Alternative 3 - 318 DUs of Condominium; 28,456 SF of Retail & 52,000 SF Supermarket						
Land Use	ITE Land Use Code	Intensity	ITE Daily Trip Generation (Two-Way)	Internalization	Pass-by	Mode Split 1.90%
Residential Condominium	230	318 Dus	1,716	-343	NA	-26
Specialty Retail	814	28,456 SF	1,261	-66	NA	-22
Supermarket	850	52,000 SF	5,316	-277	-1,810	-61
<b>Existing Uses</b>						
Residential Condominium	230	172 Dus	1,129	NA	NA	-21
<b>NET NEW EXTERNAL VEHICLES TRIPS</b>						<b>4,580</b>

Source: David Plummer and Associates, Inc.

Exhibit 5D						
Daily Trip Generation						
Curtiss Parkway/NW 36 Street Traffic Study						
Alternative 4 - 358 DUs of Condominium; 28,456 SF of Retail & 52,000 SF Supermarket						
Land Use	ITE Land Use Code	Intensity	ITE Daily Trip Generation (Two-Way)	Internalization	Pass-by	Mode Split 1.90%
Residential Condominium	230	358 Dus	1,898	-358	NA	-29
Specialty Retail	814	28,456 SF	1,261	-69	NA	-22
Supermarket	850	52,000 SF	5,316	-289	-1,805	-61
<b>Existing Uses</b>						
Residential Condominium	230	172 Dus	1,129	NA	NA	-21
<b>NET NEW EXTERNAL VEHICLES TRIPS</b>						<b>4,733</b>

Source: David Plummer and Associates, Inc.

### 4.3 Project Trip Assignment

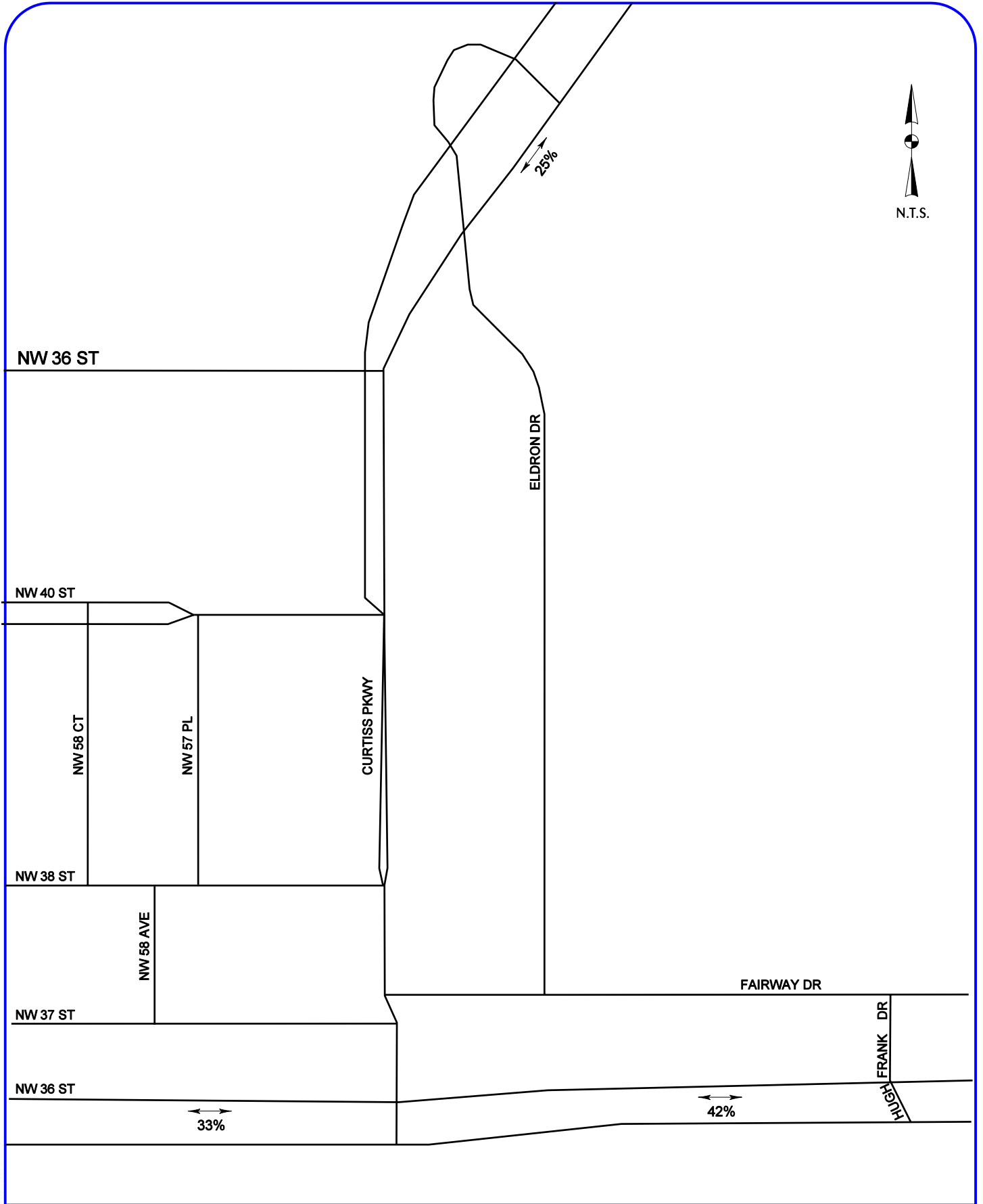
Project traffic was distributed and assigned to the study area using the Cardinal Distribution for TAZ 693 shown in Exhibit 6. The Cardinal Distribution gives a generalized distribution of trips from a TAZ to other parts of Miami-Dade County. For estimating trip distribution for the project traffic, consideration was given to conditions such as the roadway network accessed by the project traffic, roadways available to travel in the desired direction, and attractiveness of traveling on a specific roadway.

**Exhibit 6**  
**2015 Cardinal Distribution (TAZ 693)**

Direction	NNE	ENE	ESE	SSE	SSW	WSW	WNW	NNW	Total
Distribution	9.32%	9.37%	19.64%	13.61%	11.66%	13.92%	6.88%	15.60%	100%

Source: Miami-Dade County Long Range Transportation Plan Update.

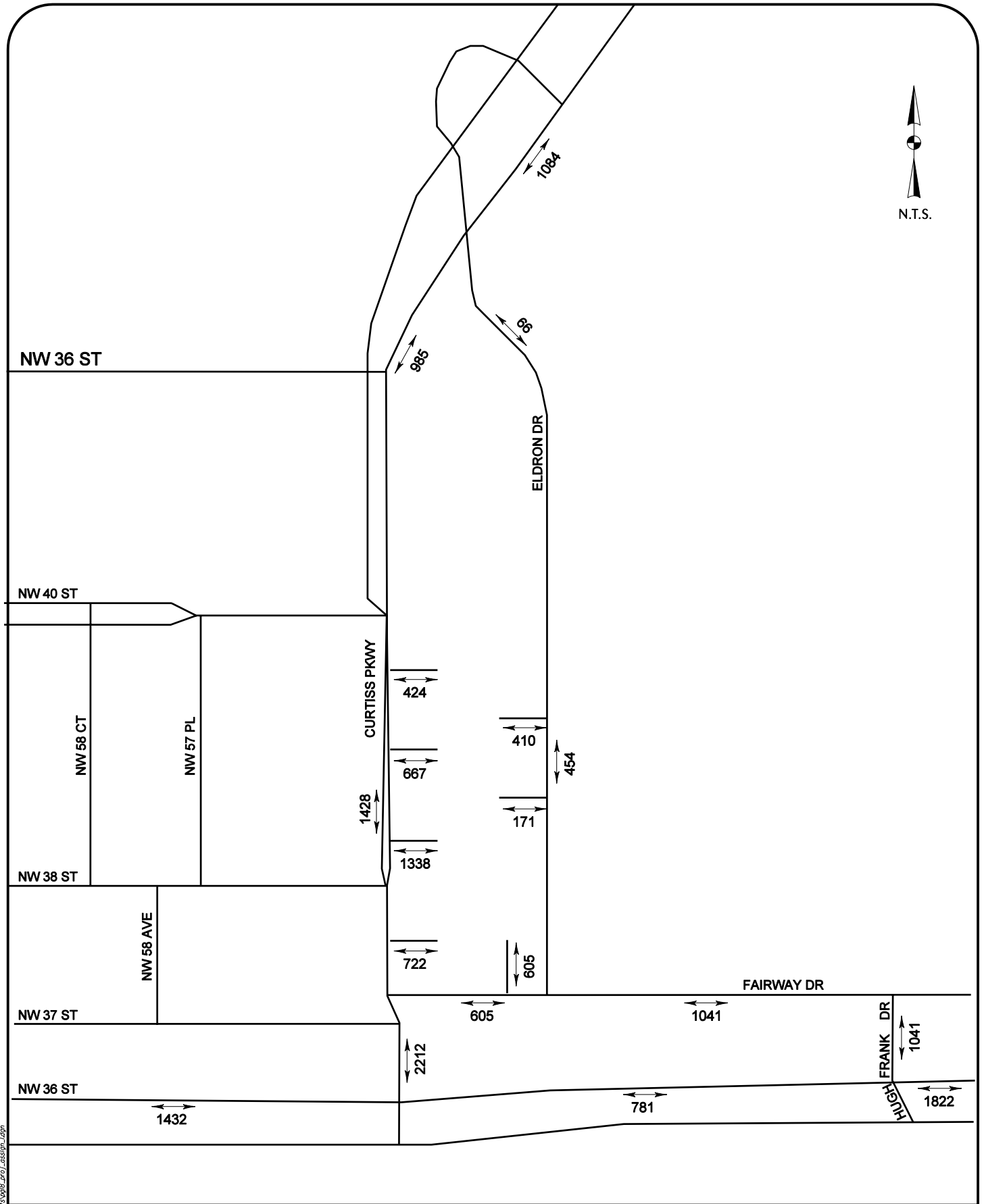
The resulting project trip distribution to the external roadway network is graphically portrayed in Exhibit 7. Project assignments for each scenario are provided in Exhibits 8A through 8D.



PROJECT:  
**CURTISS PARKWAY/ NW 36 SREET  
TRAFFIC STUDY**

TITLE:  
**DAILY PROJECT  
TRIP DISTRIBUTION**

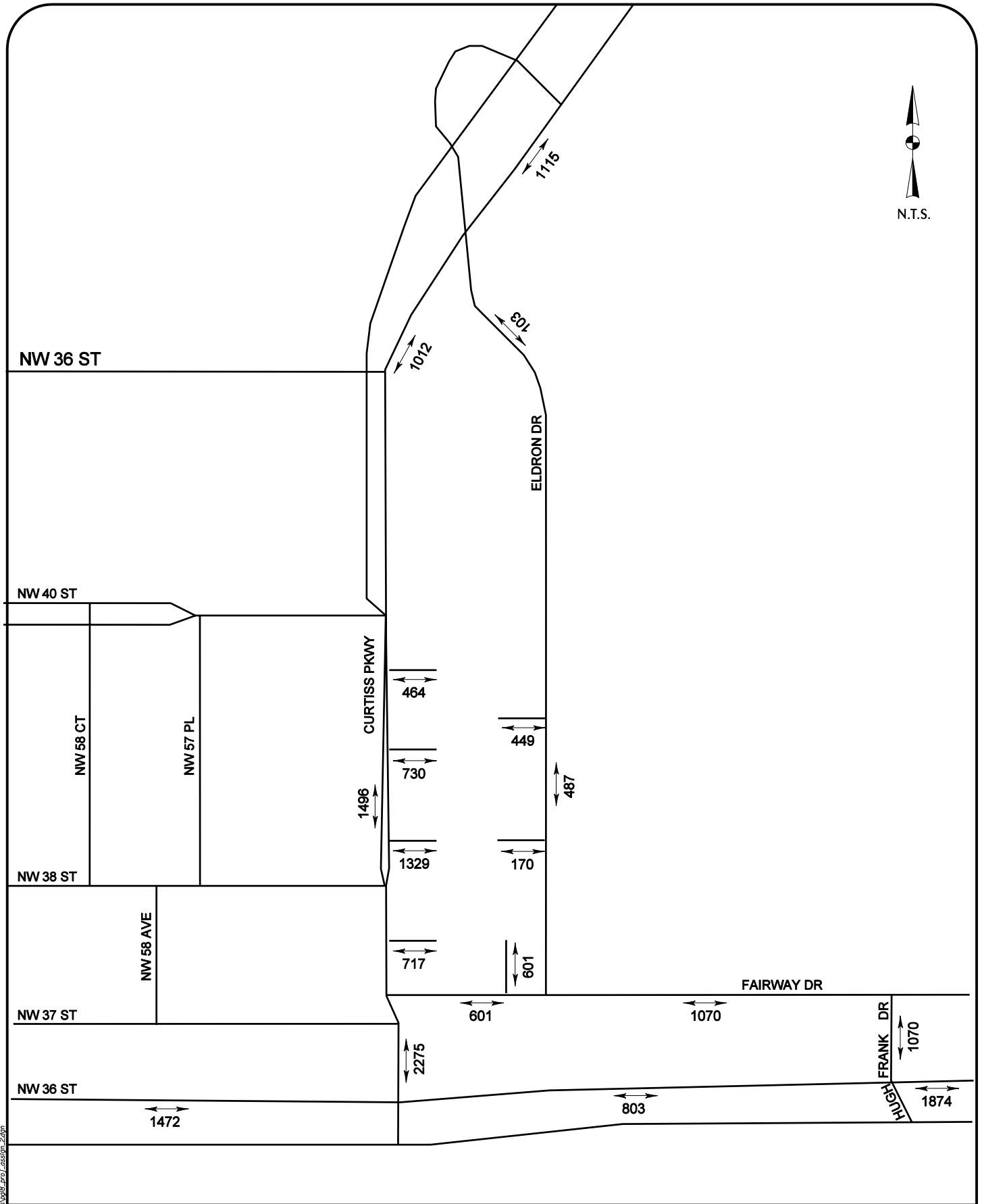
EXHIBIT No.  
**7**



PROJECT:  
**CURTISS PARKWAY/ NW 36 SREET  
TRAFFIC STUDY**

TITLE:  
**DAILY PROJECT ASSIGNMENT  
LAND USE SCENARIO I**

EXHIBIT No.  
**8A**



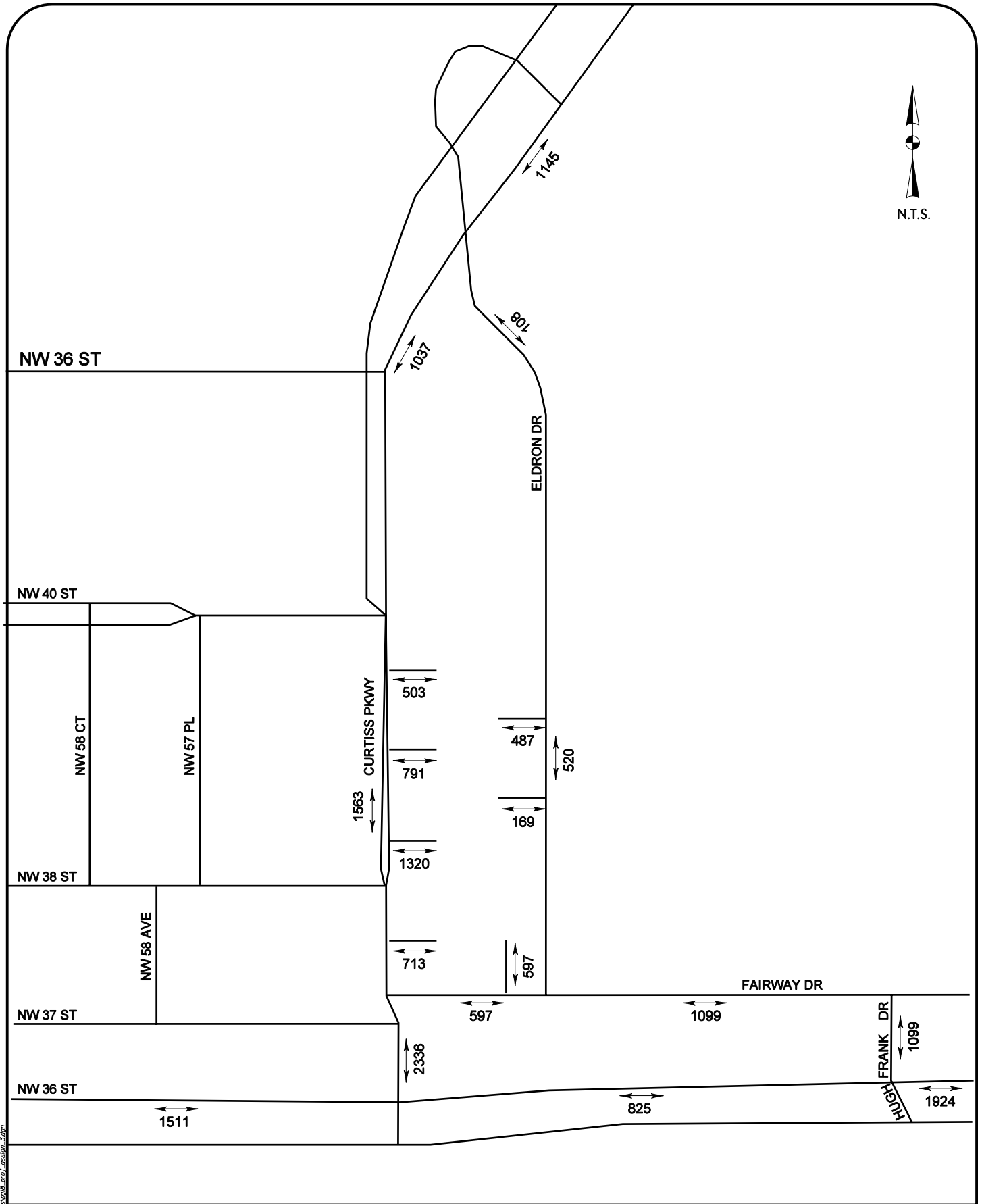
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PROJECT:  
**CURTISS PARKWAY/ NW 36 SREET  
TRAFFIC STUDY**

TITLE:  
**DAILY PROJECT ASSIGNMENT  
LAND USE SCENARIO 2**

EXHIBIT No.  
**8B**



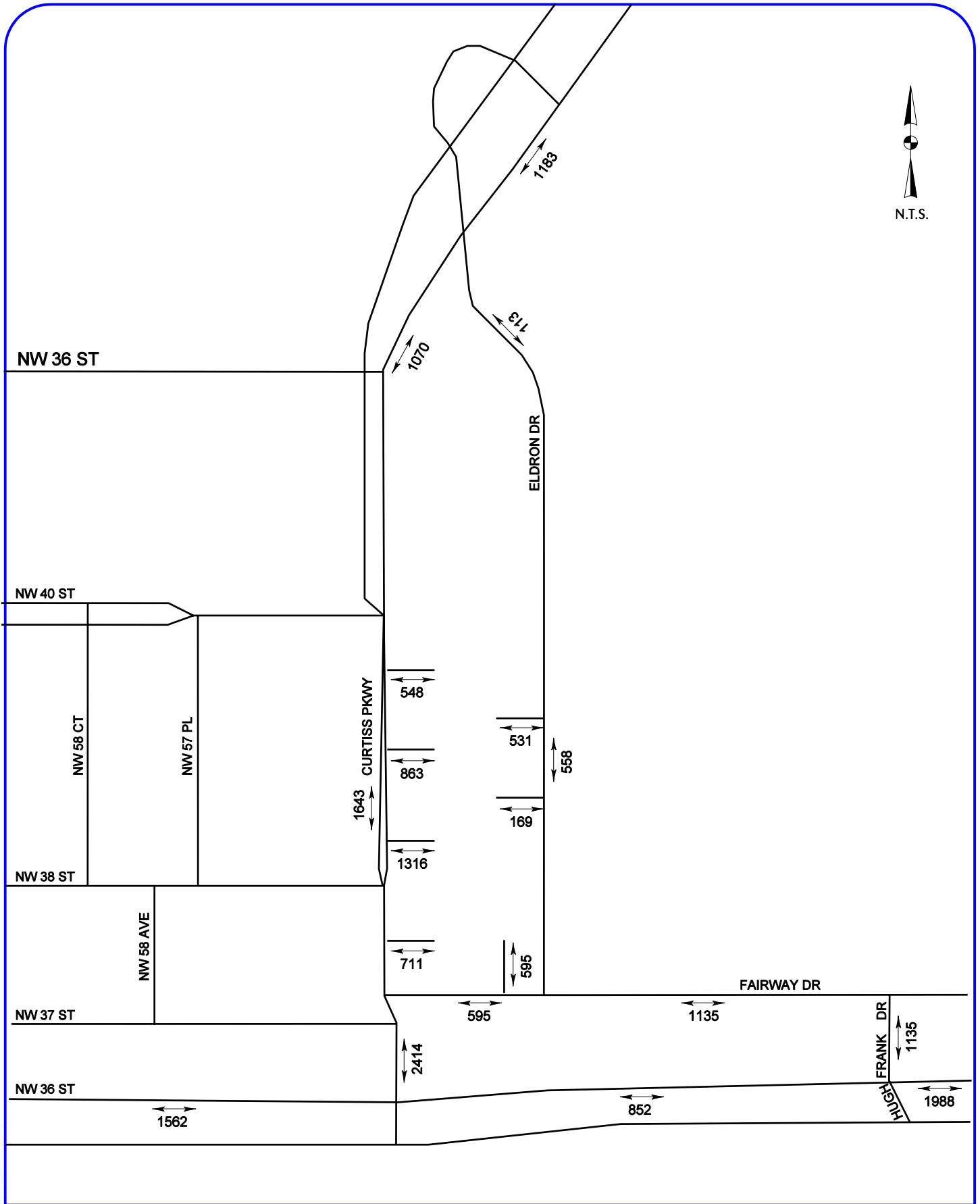
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PROJECT:  
**CURTISS PARKWAY/ NW 36 SREET  
TRAFFIC STUDY**

TITLE:  
**DAILY PROJECT ASSIGNMENT  
LAND USE SCENARIO 3**

EXHIBIT No.  
**8C**



PROJECT:  
**CURTISS PARKWAY/ NW 36 SREET  
TRAFFIC STUDY**

TITLE:  
**DAILY PROJECT ASSIGNMENT  
LAND USE SCENARIO 4**

EXHIBIT No.  
**8D**



#### **4.4 Future Traffic Conditions with Project**

The historic annual growth rate was used to forecast future traffic volumes before the Project. Project traffic was then added for each of the four different land development scenarios. Link analysis was performed based on the total traffic for each land use plan. Exhibits 9A through 9D provide the link analysis for the year 2008. The analysis shows that NW 36 Street currently operates at LOS (E+35%) and will operate at LOS (E+43%) in future conditions. The segments will still operate within the adopted LOS (50% above LOS E for NW 36 Street) adopted by the City in their Comprehensive Plan. Curtiss Road currently operates at LOS C or better, and is projected to operate at LOS D, which is within the acceptable LOS standard established in the City of Miami Springs Comprehensive Plan.

**Exhibit 9A**

**Future (2008) Link Analysis with Project**

**Curtiss Parkway/NW 36 Street Traffic Study**

**Alternative 1 - 238 DUs of Condominium; 28,456 SF of Retail & 52,000 SF Supermarket**

Roadway	Location	Number of Lanes	Future Volume (2008 AADT)	Generalized LOS E SV	V/C	LOS	% Project of Total Traffic
Curtiss Parkway	North of NW 36 Street	4 LD	23,540	32,900	0.72	D	9.4%
NW 36 Street	East of Curtiss Parkway	6 LD	67,735	47,600	1.42	(E+42%)	2.7%
	West of Curtiss Parkway	6 LD	68,828	53,500	1.29	(E+29%)	2.1%

**Notes:**

(1) Generalized Service Volumes were obtained from the 2002 Quality/Level of Service Handbook, published by The State of Florida Department of Transportation. The following categories were used: Non-State Major City/County Roadway for Curtiss Parkway. Class II State Two-way Arterial for NW 36 Street.

**Exhibit 9B**

**Future (2008) Link Analysis with Project**

**Curtiss Parkway/NW 36 Street Traffic Study**

**Alternative 2 - 278 DUs of Condominium; 28,456 SF of Retail & 52,000 SF Supermarket**

Roadway	Location	Number of Lanes	Future Volume (2008 AADT)	Generalized LOS E SV	V/C	LOS	% Project of Total Traffic
Curtiss Parkway	North of NW 36 Street	4 LD	23,603	32,900	0.72	D	9.6%
NW 36 Street	East of Curtiss Parkway	6 LD	67,787	47,600	1.42	(E+42%)	2.8%
	West of Curtiss Parkway	6 LD	68,869	53,500	1.29	(E+29%)	2.1%

**Notes:**

(1) Generalized Service Volumes were obtained from the 2002 Quality/Level of Service Handbook, published by The State of Florida Department of Transportation. The following categories were used: Non-State Major City/County Roadway for Curtiss Parkway. Class II State Two-way Arterial for NW 36 Street.

**Exhibit 9C**

**Future (2008) Link Analysis with Project**

**Curtiss Parkway/NW 36 Street Traffic Study**  
**Alternative 3 - 318 DUs of Condominium; 28,456 SF of Retail & 52,000 SF Supermarket**

Roadway	Location	Number of Lanes	Future Volume (2008 AADT)	Generalized LOS E SV	V/C	LOS	% Project of Total Traffic
Curtiss Parkway	North of NW 36 Street	4 LD	23,664	32,900	0.72	D	9.9%
NW 36 Street	East of Curtiss Parkway	6 LD	67,837	47,600	1.43	(E+43%)	2.8%
	West of Curtiss Parkway	6 LD	68,908	53,500	1.29	(E+29%)	2.2%

**Notes:**

(1) Generalized Service Volumes were obtained from the 2002 Quality/Level of Service Handbook, published by The State of Florida Department of Transportation. The following categories were used: Non-State Major City/County Roadway for Curtiss Parkway. Class II State Two-way Arterial for NW 36 Street.

**Exhibit 9D**

**Future (2008) Link Analysis with Project**

**Curtiss Parkway/NW 36 Street Traffic Study**

**Alternative 4 - 358 DUs of Condominium; 28,456 SF of Retail & 52,000 SF Supermarket**

Roadway	Location	Number of Lanes	Future Volume (2008 AADT)	Generalized LOS E SV	V/C	LOS	% Project of Total Traffic
Curtiss Parkway	North of NW 36 Street	4 LD	23,742	32,900	0.72	D	10.2%
NW 36 Street	East of Curtiss Parkway	6 LD	67,901	47,600	1.43	(E+43%)	2.9%
	West of Curtiss Parkway	6 LD	68,958	53,500	1.29	(E+29%)	2.3%

**Notes:**

(1) Generalized Service Volumes were obtained from the 2002 Quality/Level of Service Handbook, published by The State of Florida Department of Transportation. The following categories were used: Non-State Major City/County Roadway for Curtiss Parkway. Class II State Two-way Arterial for NW 36 Street.

## 5.0 CONCLUSIONS AND RECOMMENDATIONS

A traffic impact study to assess the possible impacts on traffic flow (i.e., increased congestion) in the vicinity of the intersection of Curtiss Parkway and N. W. 36th Street was completed. Based on established future traffic conditions with project for the year 2008, the analysis was completed for the four land use scenarios. Following is a summary of the findings.

- During existing conditions, year 2006, all roadways analyzed meet the adopted City of Miami Springs LOS Standards.
- Trip generation and internalization was performed for four different proposed land use scenarios for the proposed development. Total daily trips associated with each scenario are shown below.

Proposed Land Use Alternative	Two-Way Daily Trip Generation (Net New External Trips)
<i>Alternative 1</i> 238 DUs Condominium, 28,456 SF Specialty Retail 52,000 SF Supermarket	4,338 Vehicles per Day
<i>Alternative 2</i> 278 DUs Condominium, 28,456 SF Specialty Retail 52,000 SF Supermarket	4,461 Vehicles per Day
<i>Alternative 3</i> 318 DUs Condominium, 28,456 SF Specialty Retail 52,000 SF Supermarket	4,580 Vehicles per Day
<i>Alternative 4</i> 358 DUs Condominium, 28,456 SF Specialty Retail 52,000 SF Supermarket	4,733 Vehicles per Day

- The project trips were assigned to the study area using the Cardinal Distributions published in the Miami Urban Area Study. The following estimates show what % of the future (year 2008) traffic represent project traffic for each of the scenarios analyzed.

Proposed Land Use Alternative	% Project of Total (Year 2008) Traffic Volumes	
<b>Alternative 1</b> 238 DUs Condominium, 28,456 SF Specialty Retail 52,000 SF Supermarket	Curtiss Parkway N of NW 36 Street	9.4%
	NW 36 Street E of Curtiss Pkwy	2.7%
	NW 36 Street W of Curtiss Pkwy	2.1%
<b>Alternative 2</b> 278 DUs Condominium, 28,456 SF Specialty Retail 52,000 SF Supermarket	Curtiss Parkway N of NW 36 Street	9.6%
	NW 36 Street E of Curtiss Pkwy	2.8%
	NW 36 Street W of Curtiss Pkwy	2.1%
<b>Alternative 3</b> 318 DUs Condominium, 28,456 SF Specialty Retail 52,000 SF Supermarket	Curtiss Parkway N of NW 36 Street	9.9%
	NW 36 Street E of Curtiss Pkwy	2.8%
	NW 36 Street W of Curtiss Pkwy	2.2%
<b>Alternative 4</b> 358 DUs Condominium, 28,456 SF Specialty Retail 52,000 SF Supermarket	Curtiss Parkway N of NW 36 Street	10.2%
	NW 36 Street E of Curtiss Pkwy	2.9%
	NW 36 Street W of Curtiss Pkwy	2.3%

- The following increases in volume to capacity ratio are experienced for future traffic conditions for each of the proposed land use scenarios.

Proposed Land Use Alternative	Volume to Capacity Ratio for Future (Year 2008) Traffic Conditions	
<b>Existing Conditions</b>	Curtiss Parkway N of NW 36 Street	0.63
	NW 36 Street E of Curtiss Pkwy	1.35
	NW 36 Street W of Curtiss Pkwy	1.23
<b>Alternative 1</b> 238 DUs Condominium, 28,456 SF Specialty Retail 52,000 SF Supermarket	Curtiss Parkway N of NW 36 Street	0.72
	NW 36 Street E of Curtiss Pkwy	1.42
	NW 36 Street W of Curtiss Pkwy	1.29
<b>Alternative 2</b> 278 DUs Condominium, 28,456 SF Specialty Retail 52,000 SF Supermarket	Curtiss Parkway N of NW 36 Street	0.72
	NW 36 Street E of Curtiss Pkwy	1.42
	NW 36 Street W of Curtiss Pkwy	1.29
<b>Alternative 3</b> 318 DUs Condominium, 28,456 SF Specialty Retail 52,000 SF Supermarket	Curtiss Parkway N of NW 36 Street	0.72
	NW 36 Street E of Curtiss Pkwy	1.43
	NW 36 Street W of Curtiss Pkwy	1.29
<b>Alternative 4</b> 358 DUs Condominium, 28,456 SF Specialty Retail 52,000 SF Supermarket	Curtiss Parkway N of NW 36 Street	0.72
	NW 36 Street E of Curtiss Pkwy	1.43
	NW 36 Street W of Curtiss Pkwy	1.29



- Link analysis shows that NW 36 Street currently operates at LOS (E+35%) and will operate at LOS (E+43%) under future with project conditions. The segments will still operate within the adopted LOS Standard (50% above LOS E for NW 36 Street) adopted by the City in their Comprehensive Plan.
- Curtiss Road currently operates at LOS C or better, and is projected to operate at LOS D, which is within the acceptable LOS standard (LOS E) established in the City of Miami Springs Comprehensive Plan.
- Operational roadway improvements are not warranted by the growth associated with any of the proposed scenarios of this project since adopted levels of service standards are met.
- Because of the location of the project in relation to the City of Miami Springs Golf Course, opportunities to travel through residential neighborhoods to access the project are limited from the north and the east. Furthermore, trips generated by the proposed retail uses (supermarket and specialty retail) are generally local in nature (i.e. relatively short trips impacting a limited area), and are expected to satisfy nearby shopping needs from area residents. The proposed residential uses are cohesive with existing residential uses in the area. Neighborhood protection (traffic calming) improvements are not anticipated as a result of this development.
- The existing transportation network will appropriately accommodate within the adopted standards the impacts of any of the proposed scenarios for this project.

**APPENDIX A**

**DATA COLLECTION**

## **RAW COUNTS**

Traffic Survey Specialists, Inc. 624 Gardenia Terrace  
 Delray Beach, Florida 33444 Phone (561) 272-3255  
 Volume Report with 24 Hour Totals

Page 1

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Data File : D0302001.PRN  
 Station : 000000030104  
 Identification : 009601150099 Interval : 15 minutes  
 Start date : Mar 2, 06 Start time : 00:00  
 Stop date : Mar 2, 06 Stop time : 24:00  
 City/Town : Miami Springs, Fl County : Dade  
 Location : Curtiss Parkway North of NW 36 Street

\*\*\*\*\*

Mar 2 Northbound Volume for Lane 1

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	47	23	11	10	9	19	51	116	111	109	116	127
30	40	20	8	12	17	25	86	114	117	93	83	126
45	20	20	13	11	11	31	104	108	100	122	112	117
00	18	23	6	14	24	47	103	119	93	101	113	120

Hr Total 125 86 38 47 61 122 344 457 421 425 424 490

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	148	116	138	137	162	198	186	160	114	98	72	59
30	132	118	122	149	166	189	153	127	90	96	64	43
45	128	124	135	155	180	192	175	144	97	75	76	47
00	121	143	144	161	170	206	170	120	109	59	59	42

Hr Total 529 501 539 602 678 785 684 551 410 328 271 191

24 Hour Total : 9109  
 AM peak hour begins : 11:30 AM peak volume : 517 Peak hour factor : 0.87  
 PM peak hour begins : 17:00 PM peak volume : 785 Peak hour factor : 0.95

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Mar 2 Southbound Volume for Lane 2

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	25	5	8	14	12	32	103	195	340	197	151	148
30	21	10	3	11	11	44	154	260	305	199	142	148
45	17	13	7	12	27	80	203	321	328	153	160	166
00	20	14	5	18	24	80	232	327	277	177	131	172

Hr Total 83 42 23 55 74 236 692 1103 1250 726 584 634

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	142	166	151	188	175	206	146	161	136	105	99	51
30	192	170	172	207	182	189	173	133	109	87	77	36
45	188	178	196	214	153	199	147	122	83	64	76	38
00	185	186	189	186	183	172	147	130	96	90	57	42

Hr Total 707 700 708 795 693 766 613 546 424 346 309 167

24 Hour Total : 12276  
 AM peak hour begins : 07:45 AM peak volume : 1300 Peak hour factor : 0.96  
 PM peak hour begins : 14:45 PM peak volume : 798 Peak hour factor : 0.93

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Traffic Survey Specialists, Inc. 624 Gardenia Terrace  
 Delray Beach, Florida 33444 Phone (561) 272-3255  
 Volume Report with 24 Hour Totals

Page 2

\*\*\*\*\*

Data File : D0302001.PRN  
 Station : 000000030104  
 Identification : 009601150099 Interval : 15 minutes  
 Start date : Mar 2, 06 Start time : 00:00  
 Stop date : Mar 2, 06 Stop time : 24:00  
 City/Town : Miami Springs, Fl County : Dade  
 Location : Curtiss Parkway North of NW 36 Street

\*\*\*\*\*

Mar 2 Total Volume for All Lanes

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	72	28	19	24	21	51	154	311	451	306	267	275
30	61	30	11	23	28	69	240	374	422	292	225	274
45	37	33	20	23	38	111	307	429	428	275	272	283
00	38	37	11	32	48	127	335	446	370	278	244	292
Hr Total	208	128	61	102	135	358	1036	1560	1671	1151	1008	1124

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	290	282	289	325	337	404	332	321	250	203	171	110
30	324	288	294	356	348	378	326	260	199	183	141	79
45	316	302	331	369	333	391	322	266	180	139	152	85
00	306	329	333	347	353	378	317	250	205	149	116	84
Hr Total	1236	1201	1247	1397	1371	1551	1297	1097	834	674	580	358

24 Hour Total : 21385  
 AM peak hour begins : 07:30 AM peak volume : 1748 Peak hour factor : 0.97  
 PM peak hour begins : 17:00 PM peak volume : 1551 Peak hour factor : 0.96

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Traffic Survey Specialists, Inc. 624 Gardenia Terrace  
 Delray Beach, Florida 33444 Phone (561) 272-3255  
 Volume Report with 24 Hour Totals

Page 1

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Data File : D0302002.PRN  
 Station : 000000030102  
 Identification : 000110252041 Interval : 15 minutes  
 Start date : Mar 2, 06 Start time : 00:00  
 Stop date : Mar 2, 06 Stop time : 24:00  
 City/Town : Miami Springs, Fl County : Dade  
 Location : NW 36 Street East of Curtiss Parkway

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Mar 2 Eastbound Volume for Lane 1

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	127	47	42	31	41	101	288	523	617	457	455	420
30	98	43	31	30	53	113	404	588	578	459	440	397
45	64	55	34	47	69	165	467	572	558	476	429	402
00	60	42	24	44	66	189	557	607	559	467	440	449

Hr Total 349 187 131 152 229 568 1716 2290 2312 1859 1764 1668

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	420	474	500	462	578	561	566	448	279	250	225	155
30	488	441	478	455	558	580	583	375	248	221	184	158
45	508	460	488	409	489	598	500	317	245	217	189	128
00	490	479	492	433	563	575	444	307	222	204	149	121

Hr Total 1906 1854 1958 1759 2188 2314 2093 1447 994 892 747 562

24 Hour Total : 31939  
 AM peak hour begins : 07:15 AM peak volume : 2384 Peak hour factor : 0.97  
 PM peak hour begins : 17:30 PM peak volume : 2322 Peak hour factor : 0.97

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Mar 2 Westbound Volume for Lane 2

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	148	52	31	33	54	88	270	460	686	552	485	458
30	96	58	27	33	60	139	412	552	658	522	471	481
45	74	47	54	63	81	262	499	642	614	493	462	469
00	68	48	35	50	103	304	535	680	564	486	452	521

Hr Total 386 205 147 179 298 793 1716 2334 2522 2053 1870 1929

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	502	531	535	606	564	602	517	418	285	224	173	163
30	497	478	586	587	571	534	472	394	257	221	174	130
45	518	499	530	616	578	504	519	351	273	204	157	118
00	546	540	589	589	544	471	457	344	237	225	168	119

Hr Total 2063 2048 2240 2398 2257 2111 1965 1507 1052 874 672 530

24 Hour Total : 34149  
 AM peak hour begins : 07:30 AM peak volume : 2666 Peak hour factor : 0.97  
 PM peak hour begins : 14:45 PM peak volume : 2398 Peak hour factor : 0.97

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Traffic Survey Specialists, Inc. 624 Gardenia Terrace  
 Delray Beach, Florida 33444 Phone (561) 272-3255  
 Volume Report with 24 Hour Totals

Page 2

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Data File : D0302002.PRN  
 Station : 000000030102  
 Identification : 000110252041 Interval : 15 minutes  
 Start date : Mar 2, 06 Start time : 00:00  
 Stop date : Mar 2, 06 Stop time : 24:00  
 City/Town : Miami Springs, Fl County : Dade  
 Location : NW 36 Street East of Curtiss Parkway

\*\*\*\*\*

Mar 2 Total Volume for All Lanes

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	275	99	73	64	95	189	558	983	1303	1009	940	878
30	194	101	58	63	113	252	816	1140	1236	981	911	878
45	138	102	88	110	150	427	966	1214	1172	969	891	871
00	128	90	59	94	169	493	1092	1287	1123	953	892	970
Hr Total	735	392	278	331	527	1361	3432	4624	4834	3912	3634	3597

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	922	1005	1035	1068	1142	1163	1083	866	564	474	398	318
30	985	919	1064	1042	1129	1114	1055	769	505	442	358	288
45	1026	959	1018	1025	1067	1102	1019	668	518	421	346	246
00	1036	1019	1081	1022	1107	1046	901	651	459	429	317	240
Hr Total	3969	3902	4198	4157	4445	4425	4058	2954	2046	1766	1419	1092

24 Hour Total : 66088

AM peak hour begins : 07:30

AM peak volume : 5040

Peak hour factor : 0.97

PM peak hour begins : 16:45

PM peak volume : 4486

Peak hour factor : 0.96

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Traffic Survey Specialists, Inc. 624 Gardenia Terrace  
 Delray Beach, Florida 33444 Phone (561) 272-3255  
 Volume Report with 24 Hour Totals

Page 1

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Data File : D0302004.PRN  
 Station : 000000030103  
 Identification : 009841110176 Interval : 15 minutes  
 Start date : Mar 2, 06 Start time : 00:00  
 Stop date : Mar 2, 06 Stop time : 24:00  
 City/Town : Miami Springs, Fl County : Dade  
 Location : NW 36 Street West of Curtiss Parkway

\*\*\*\*\*

Mar 2 Eastbound Volume for Lane 1

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	150	61	41	32	48	104	312	561	565	470	505	450
30	116	54	40	37	64	130	464	597	600	524	487	457
45	65	56	40	50	83	175	536	603	557	514	481	433
00	65	54	28	50	80	222	608	611	559	517	467	494
Hr Total	396	225	149	169	275	631	1920	2372	2281	2025	1940	1834

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	463	534	561	502	673	638	638	489	303	296	245	191
30	510	507	536	493	590	619	632	451	284	259	204	166
45	548	501	524	490	582	687	604	374	278	267	225	156
00	493	532	531	457	644	668	500	343	263	214	182	137
Hr Total	2014	2074	2152	1942	2489	2612	2374	1657	1128	1036	856	650

24 Hour Total : 35201

AM peak hour begins : 07:30

AM peak volume : 2379

Peak hour factor : 0.97

PM peak hour begins : 17:30

PM peak volume : 2625

Peak hour factor : 0.96

\*\*\*\*\*

Mar 2 Westbound Volume for Lane 2

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	145	45	30	34	48	78	235	452	627	525	455	448
30	82	44	27	34	51	113	399	538	624	546	451	448
45	67	43	44	45	65	229	506	616	594	485	452	451
00	63	43	23	35	90	274	561	643	561	489	458	507
Hr Total	357	175	124	148	254	694	1701	2249	2406	2045	1816	1854

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	464	487	504	531	531	526	427	418	289	233	191	165
30	508	436	536	593	506	487	457	373	266	218	182	132
45	501	481	513	604	517	459	418	323	237	198	168	114
00	493	534	525	521	509	450	416	340	246	229	169	126
Hr Total	1966	1938	2078	2249	2063	1922	1718	1454	1038	878	710	537

24 Hour Total : 32374

AM peak hour begins : 07:30

AM peak volume : 2510

Peak hour factor : 0.98

PM peak hour begins : 14:45

PM peak volume : 2253

Peak hour factor : 0.93

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Traffic Survey Specialists, Inc. 624 Gardenia Terrace  
 Delray Beach, Florida 33444 Phone (561) 272-3255  
 Volume Report with 24 Hour Totals

Page 2

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Data File : D0302004.PRN  
 Station : 000000030103  
 Identification : 009841110176 Interval : 15 minutes  
 Start date : Mar 2, 06 Start time : 00:00  
 Stop date : Mar 2, 06 Stop time : 24:00  
 City/Town : Miami Springs, Fl County : Dade  
 Location : NW 36 Street West of Curtiss Parkway

\*\*\*\*\*

Mar 2 Total Volume for All Lanes

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	295	106	71	66	96	182	547	1013	1192	995	960	898
30	198	98	67	71	115	243	863	1135	1224	1070	938	905
45	132	99	84	95	148	404	1042	1219	1151	999	933	884
00	128	97	51	85	170	496	1169	1254	1120	1006	925	1001
Hr Total	753	400	273	317	529	1325	3621	4621	4687	4070	3756	3688

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	927	1021	1065	1033	1204	1164	1065	907	592	529	436	356
30	1018	943	1072	1086	1096	1106	1089	824	550	477	386	298
45	1049	982	1037	1094	1099	1146	1022	697	515	465	393	270
00	986	1066	1056	978	1153	1118	916	683	509	443	351	263
Hr Total	3980	4012	4230	4191	4552	4534	4092	3111	2166	1914	1566	1187

24 Hour Total : 67575

AM peak hour begins : 07:30 AM peak volume : 4889 Peak hour factor : 0.97

PM peak hour begins : 16:45 PM peak volume : 4569 Peak hour factor : 0.98

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## **SUMMARIZED COUNTS**

## 24-HOUR COUNTS

**Project Name:** NW 36 Street and Curtiss Parkway  
**Location:** Curtiss Parkway North of NW 36 Street  
**Observer:** Traffic Survey Specialists, Inc.

**Project No.:** 05223  
**Count Date:** 03/02/06

BEGIN TIME	NORTHBOUND						TOTAL	BEGIN TIME	SOUTHBOUND						TOTAL	TWO-WAY TOTAL
	1st 1/4	2nd 1/4	3rd 1/4	4th 1/4					1st 1/4	2nd 1/4	3rd 1/4	4th 1/4				
12:00 AM	47	40	20	18			125	12:00 AM	25	21	17	20			83	208
01:00 AM	23	20	20	23			86	01:00 AM	5	10	13	14			42	128
02:00 AM	11	8	13	6			38	02:00 AM	8	3	7	5			23	61
03:00 AM	10	12	11	14			47	03:00 AM	14	11	12	18			55	102
04:00 AM	9	17	11	24			61	04:00 AM	12	11	27	24			74	135
05:00 AM	19	25	31	47			122	05:00 AM	32	44	80	80			236	358
06:00 AM	51	86	104	103			344	06:00 AM	103	154	203	232			692	1,036
07:00 AM	116	114	108	119			457	07:00 AM	195	260	321	327		1,103	1,560	
08:00 AM	111	117	100	93			421	08:00 AM	340	305	328	277		1,250	1,671	
09:00 AM	109	93	122	101			425	09:00 AM	197	199	153	177		726	1,151	
10:00 AM	116	83	112	113			424	10:00 AM	151	142	160	131		584	1,008	
11:00 AM	127	126	117	120			490	11:00 AM	148	148	166	172		634	1,124	
12:00 PM	148	132	128	121			529	12:00 PM	142	192	188	185		707	1,236	
01:00 PM	116	118	124	143			501	01:00 PM	166	170	178	186		700	1,201	
02:00 PM	138	122	135	144			539	02:00 PM	151	172	196	189		708	1,247	
03:00 PM	137	149	155	161			602	03:00 PM	188	207	214	186		795	1,397	
04:00 PM	162	166	180	170			678	04:00 PM	175	182	153	183		693	1,371	
05:00 PM	198	189	192	206			785	05:00 PM	206	189	199	172		766	1,551	
06:00 PM	186	153	175	170			684	06:00 PM	146	173	147	147		613	1,297	
07:00 PM	160	127	144	120			551	07:00 PM	161	133	122	130		546	1,097	
08:00 PM	114	90	97	109			410	08:00 PM	136	109	83	96		424	834	
09:00 PM	98	96	75	59			328	09:00 PM	105	87	64	90		346	674	
10:00 PM	72	64	76	59			271	10:00 PM	99	77	76	57		309	580	
11:00 PM	59	43	47	42			191	11:00 PM	51	36	38	42		167	358	
24-HOUR TOTAL							9,109	24-HOUR TOTAL							12,276	21,385

### DAILY TRAFFIC COUNT SUMMARY

#### NORTHBOUND

AM Peak Hour: Time: 11:45 AM Volume: 528  
 PM Peak Hour: Time: 05:00 PM Volume: 785

AM Peak Hour: Time: 07:45 AM Volume: 1,300  
 PM Peak Hour: Time: 02:45 PM Volume: 798

#### NORTHBOUND AND SOUTHBOUND

AM Peak Hour: Time: 07:30 AM Volume: 1,748  
 K-factor: 8.2% PHF: 0.97  
 D-factor: 74.0% SB  
 PM Peak Hour: Time: 05:00 PM Volume: 1,551  
 K-factor: 7.3% PHF: 0.96  
 D-factor: 50.6% NB

## 24-HOUR COUNTS

**Project Name:** NW 36 Street and Curtiss Parkway  
**Location:** NW 36 Street East of Curtiss Parkway  
**Observer:** Traffic Survey Specialists, Inc.

**Project No.:** 05223  
**Count Date:** 03/02/06

BEGIN TIME	EASTBOUND								
	1st	1/4	2nd	1/4	3rd	1/4	4th	1/4	TOTAL
12:00 AM	127		98		64		60		349
01:00 AM	47		43		55		42		187
02:00 AM	42		31		34		24		131
03:00 AM	31		30		47		44		152
04:00 AM	41		53		69		66		229
05:00 AM	101		113		165		189		568
06:00 AM	288		404		467		557		1,716
07:00 AM	523		588		572		607		2,290
08:00 AM	617		578		558		559		2,312
09:00 AM	457		459		476		467		1,859
10:00 AM	455		440		429		440		1,764
11:00 AM	420		397		402		449		1,668
12:00 PM	420		488		508		490		1,906
01:00 PM	474		441		460		479		1,854
02:00 PM	500		478		488		492		1,958
03:00 PM	462		455		409		433		1,759
04:00 PM	578		558		489		563		2,188
05:00 PM	561		580		598		575		2,314
06:00 PM	566		583		500		444		2,093
07:00 PM	448		375		317		307		1,447
08:00 PM	279		248		245		222		994
09:00 PM	250		221		217		204		892
10:00 PM	225		184		189		149		747
11:00 PM	155		158		128		121		562
					24-HOUR TOTAL			31,939	

BEGIN TIME	WESTBOUND					TOTAL
	1st 1/4	2nd 1/4	3rd 1/4	4th 1/4		
12:00 AM	148	96	74	68	386	
01:00 AM	52	58	47	48	205	
02:00 AM	31	27	54	35	147	
03:00 AM	33	33	63	50	179	
04:00 AM	54	60	81	103	298	
05:00 AM	88	139	262	304	793	
06:00 AM	270	412	499	535	1,716	
07:00 AM	460	552	642	680	2,334	
08:00 AM	686	658	614	564	2,522	
09:00 AM	552	522	493	486	2,053	
10:00 AM	485	471	462	452	1,870	
11:00 AM	458	481	469	521	1,929	
12:00 PM	502	497	518	546	2,063	
01:00 PM	531	478	499	540	2,048	
02:00 PM	535	586	530	589	2,240	
03:00 PM	606	587	616	589	2,398	
04:00 PM	564	571	578	544	2,257	
05:00 PM	602	534	504	471	2,111	
06:00 PM	517	472	519	457	1,965	
07:00 PM	418	394	351	344	1,507	
08:00 PM	285	257	273	237	1,052	
09:00 PM	224	221	204	225	874	
10:00 PM	173	174	157	168	672	
11:00 PM	163	130	118	119	530	
24-HOUR TOTAL					34,149	

TWO-WAY TOTAL
735
392
278
331
527
1,361
3,432
4,624
4,834
3,912
3,634
3,597
3,969
3,902
4,198
4,157
4,445
4,425
4,058
2,954
2,046
1,766
1,419
1,092
66,088

### DAILY TRAFFIC COUNT SUMMARY

#### EASTBOUND

AM Peak Hour: Time: 07:15 AM Volume: 2,384  
 PM Peak Hour: Time: 05:30 PM Volume: 2,322

AM Peak Hour: Time: 07:30 AM Volume: 2,666  
 PM Peak Hour: Time: 02:45 PM Volume: 2,398

#### EASTBOUND AND WESTBOUND

AM Peak Hour:	Time: <u>07:30 AM</u>	Volume: <u>5,040</u>	
	K-factor: <u>7.6%</u>	PHF: <u>0.97</u>	
	D-factor: <u>52.9% WB</u>		
PM Peak Hour:	Time: <u>04:45 PM</u>	Volume: <u>4,486</u>	
	K-factor: <u>6.8%</u>	PHF: <u>0.96</u>	
	D-factor: <u>51.3% EB</u>		

## 24-HOUR COUNTS

**Project Name:** NW 36 Street and Curtiss Parkway  
**Location:** NW 36 Street West of Curtiss Parkway  
**Observer:** Traffic Survey Specialists, Inc.

**Project No.:** 05223  
**Count Date:** 03/02/06

BEGIN TIME	EASTBOUND						TOTAL	BEGIN TIME	WESTBOUND						TOTAL	TWO-WAY TOTAL		
	1st	1/4	2nd	1/4	3rd	1/4			4th	1/4	1st	1/4	2nd	1/4			3rd	1/4
12:00 AM	150		116		65		65	396	12:00 AM	145		82		67		63	357	753
01:00 AM	61		54		56		54	225	01:00 AM	45		44		43		43	175	400
02:00 AM	41		40		40		28	149	02:00 AM	30		27		44		23	124	273
03:00 AM	32		37		50		50	169	03:00 AM	34		34		45		35	148	317
04:00 AM	48		64		83		80	275	04:00 AM	48		51		65		90	254	529
05:00 AM	104		130		175		222	631	05:00 AM	78		113		229		274	694	1,325
06:00 AM	312		464		536		608	1,920	06:00 AM	235		399		506		561	1,701	3,621
07:00 AM	561		597		603		611	2,372	07:00 AM	452		538		616		643	2,249	4,621
08:00 AM	565		600		557		559	2,281	08:00 AM	627		624		594		561	2,406	4,687
09:00 AM	470		524		514		517	2,025	09:00 AM	525		546		485		489	2,045	4,070
10:00 AM	505		487		481		467	1,940	10:00 AM	455		451		452		458	1,816	3,756
11:00 AM	450		457		433		494	1,834	11:00 AM	448		448		451		507	1,854	3,688
12:00 PM	463		510		548		493	2,014	12:00 PM	464		508		501		493	1,966	3,980
01:00 PM	534		507		501		532	2,074	01:00 PM	487		436		481		534	1,938	4,012
02:00 PM	561		536		524		531	2,152	02:00 PM	504		536		513		525	2,078	4,230
03:00 PM	502		493		490		457	1,942	03:00 PM	531		593		604		521	2,249	4,191
04:00 PM	673		590		582		644	2,489	04:00 PM	531		506		517		509	2,063	4,552
05:00 PM	638		619		687		668	2,612	05:00 PM	526		487		459		450	1,922	4,534
06:00 PM	638		632		604		500	2,374	06:00 PM	427		457		418		416	1,718	4,092
07:00 PM	489		451		374		343	1,657	07:00 PM	418		373		323		340	1,454	3,111
08:00 PM	303		284		278		263	1,128	08:00 PM	289		266		237		246	1,038	2,166
09:00 PM	296		259		267		214	1,036	09:00 PM	233		218		198		229	878	1,914
10:00 PM	245		204		225		182	856	10:00 PM	191		182		168		169	710	1,566
11:00 PM	191		166		156		137	650	11:00 PM	165		132		114		126	537	1,187
24-HOUR TOTAL								35,201	24-HOUR TOTAL								32,374	67,575

### DAILY TRAFFIC COUNT SUMMARY

#### EASTBOUND

AM Peak Hour: Time: 07:30 AM Volume: 2,379  
 PM Peak Hour: Time: 05:30 PM Volume: 2,625

AM Peak Hour: Time: 07:30 AM Volume: 2,510  
 PM Peak Hour: Time: 02:45 PM Volume: 2,253

#### EASTBOUND AND WESTBOUND

AM Peak Hour:	Time: <u>07:30 AM</u>	Volume: <u>4,889</u>	
	K-factor: <u>7.2%</u>	PHF: <u>0.97</u>	
	D-factor: <u>51.3% WB</u>		
PM Peak Hour:	Time: <u>04:45 PM</u>	Volume: <u>4,569</u>	
	K-factor: <u>6.8%</u>	PHF: <u>0.98</u>	
	D-factor: <u>56.6% EB</u>		

## **APPENDIX B**

# **FDOT's Generalized Service Volumes**

**TABLE 4 - 1**  
**GENERALIZED ANNUAL AVERAGE DAILY VOLUMES FOR FLORIDA'S**  
**URBANIZED AREAS\***

UNINTERRUPTED FLOW HIGHWAYS						
		Level of Service				
Lanes Divided		A	B	C	D	E
2	Undivided	2,000	7,000	13,800	19,600	27,000
4	Divided	20,400	33,000	47,800	61,800	70,200
6	Divided	30,500	49,500	71,600	92,700	105,400
STATE TWO-WAY ARTERIALS						
Class I (>0.00 to 1.99 signalized intersections per mile)						
		Level of Service				
Lanes Divided		A	B	C	D	E
2	Undivided	**	4,200	13,800	16,400	16,900
4	Divided	4,800	29,300	34,700	35,700	***
6	Divided	7,300	44,700	52,100	53,500	***
8	Divided	9,400	58,000	66,100	67,800	***
Class II (2.00 to 4.50 signalized intersections per mile)						
		Level of Service				
Lanes Divided		A	B	C	D	E
2	Undivided	**	1,900	11,200	15,400	16,300
4	Divided	**	4,100	26,000	32,700	34,500
6	Divided	**	6,500	40,300	49,200	51,800
8	Divided	**	8,500	53,300	63,800	67,000
Class III (more than 4.5 signalized intersections per mile and not within primary city central business district of an urbanized area over 750,000)						
		Level of Service				
Lanes Divided		A	B	C	D	E
2	Undivided	**	**	5,300	12,600	15,500
4	Divided	**	**	12,400	28,900	32,800
6	Divided	**	**	19,500	44,700	49,300
8	Divided	**	**	25,800	58,700	63,800
Class IV (more than 4.5 signalized intersections per mile and within primary city central business district of an urbanized area over 750,000)						
		Level of Service				
Lanes Divided		A	B	C	D	E
2	Undivided	**	**	5,200	13,700	15,000
4	Divided	**	**	12,300	30,300	31,700
6	Divided	**	**	19,100	45,800	47,600
8	Divided	**	**	25,900	59,900	62,200
NON-STATE ROADWAYS						
Major City/County Roadways						
		Level of Service				
Lanes Divided		A	B	C	D	E
2	Undivided	**	**	9,100	14,600	15,600
4	Divided	**	**	21,400	31,100	32,900
6	Divided	**	**	33,400	46,800	49,300
Other Signalized Roadways (signalized intersection analysis)						
		Level of Service				
Lanes Divided		A	B	C	D	E
2	Undivided	**	**	4,800	10,000	12,600
4	Divided	**	**	11,100	21,700	25,200
Source:		Florida Department of Transportation Systems Planning Office 605 Suwannee Street, MS 19 Tallahassee, FL 32399-0450 <a href="http://www11.myflorida.com/planning/systems/sm/los/default.htm">http://www11.myflorida.com/planning/systems/sm/los/default.htm</a>				02/22/02

FREEWAYS						
Interchange spacing ≥ 2 mi. apart						
		Level of Service				
Lanes		A	B	C	D	E
4		23,800	39,600	55,200	67,100	74,600
6		36,900	61,100	85,300	103,600	115,300
8		49,900	82,700	115,300	140,200	156,000
10		63,000	104,200	145,500	176,900	196,400
12		75,900	125,800	175,500	213,500	237,100
Interchange spacing < 2 mi. apart						
		Level of Service				
Lanes		A	B	C	D	E
4		22,000	36,000	52,000	67,200	76,500
6		34,800	56,500	81,700	105,800	120,200
8		47,500	77,000	111,400	144,300	163,900
10		60,200	97,500	141,200	182,600	207,600
12		72,900	118,100	170,900	221,100	251,200
BICYCLE MODE						
(Note: Level of service for the bicycle mode in this table is based on roadway geometrics at 40 mph posted speed and traffic conditions, not number of bicyclists using the facility.) (Multiply motorized vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)						
Paved Shoulder/ Bicycle Lane		Level of Service				
Coverage		A	B	C	D	E
0-49%		**	**	3,200	13,800	>13,800
50-84%		**	2,500	4,100	>4,100	***
85-100%		3,100	7,200	>7,200	***	***
PEDESTRIAN MODE						
(Note: Level of service for the pedestrian mode in this table is based on roadway geometrics at 40 mph posted speed and traffic conditions, not number of pedestrians using the facility.) (Multiply motorized vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)						
Sidewalk Coverage		Level of Service				
		A	B	C	D	E
0-49%		**	**	**	6,400	15,500
50-84%		**	**	**	9,900	19,000
85-100%		**	2,200	11,300	>11,300	***
BUS MODE (Scheduled Fixed Route)						
(Buses per hour)						
(Note: Buses per hour shown are only for the peak hour in the single direction of the higher traffic flow.)						
Sidewalk Coverage		Level of Service				
		A	B	C	D	E
0-84%		**	>5	≥4	≥3	≥2
85-100%		>6	>4	≥3	≥2	≥1
ARTERIAL/NON-STATE ROADWAY ADJUSTMENTS						
DIVIDED/UNDIVIDED						
(alter corresponding volume by the indicated percent)						
Lanes	Median	Left Turns	Lanes	Adjustment Factors		
2	Divided	Yes		+5%		
2	Undivided	No		-20%		
Multi	Undivided	Yes		-5%		
Multi	Undivided	No		-25%		
ONE-WAY FACILITIES						
Decrease corresponding two-directional volumes in this table by 40% to obtain the equivalent one directional volume for one-way facilities						

\*This table does not constitute a standard and should be used only for general planning applications. The computer models from which this table is derived should be used for more specific planning applications. The table and deriving computer models should not be used for corridor or intersection design, where more refined techniques exist. Values shown are two-way annual average daily volumes (based on  $K_{100}$  factors) for levels of service and are for the automobile/truck modes unless specifically stated. Level of service letter grade thresholds are probably not comparable across modes and, therefore, cross modal comparisons should be made with caution. Furthermore, combining levels of service of different modes into one overall roadway level of service is not recommended. The table's input value defaults and level of service criteria appear on the following page. Calculations are based on planning applications of the Highway Capacity Manual, Bicycle LOS Model, Pedestrian LOS Model and Transit Capacity and Quality of Service Manual, respectively for the automobile/truck, bicycle, pedestrian and bus modes.

\*\*Cannot be achieved using table input value defaults.

\*\*\*Not applicable for that level of service letter grade. For automobile/truck modes, volumes greater than level of service D become F because intersection capacities have been reached. For bicycle and pedestrian modes, the level of service letter grade (including F) is not achievable, because there is no maximum vehicle volume threshold using table input value defaults.

## **APPENDIX C**

# **Historical Background Growth Calculations**



**AVERAGE ANNUAL DAILY  
TRAFFIC COUNTS**

## Historic Background Growth Rate Calculations Based on Historical Traffic Counts

### *Curtis Parkway/NW 36 Street Traffic Study*

Station	Location	YEAR / DAILY COUNT					
		2004	2003	2002	2001	2000	1999
870102	NW 36 Street W of LeJeune Road	49,500	46,000	52,500	57,000	55,000	51,000
871172	NW 36 Street E of NW 72 Avenue	66,500	62,500	70,000	71,500	73,000	68,500
9430	Curtiss Parkway W of NW 36 Street	66,822	64,330	68,344	69,465	63,285	NA
<b>TOTAL</b>		<b>182,822</b>	<b>172,830</b>	<b>190,844</b>	<b>197,965</b>	<b>191,285</b>	<b>NA</b>
Source: FDOT Florida Traffic Information and Miami-Dade County Public Works.							

	2004-00	2003-00	2002-00	2001-00
<b>Study Area Growth Rate</b>	<b>-1.1%</b>	<b>-3.3%</b>	<b>-0.1%</b>	<b>3.5%</b>

# **POPULATION**

# **Historic Growth Rate Based on Population Trends** *City of Miami Springs*

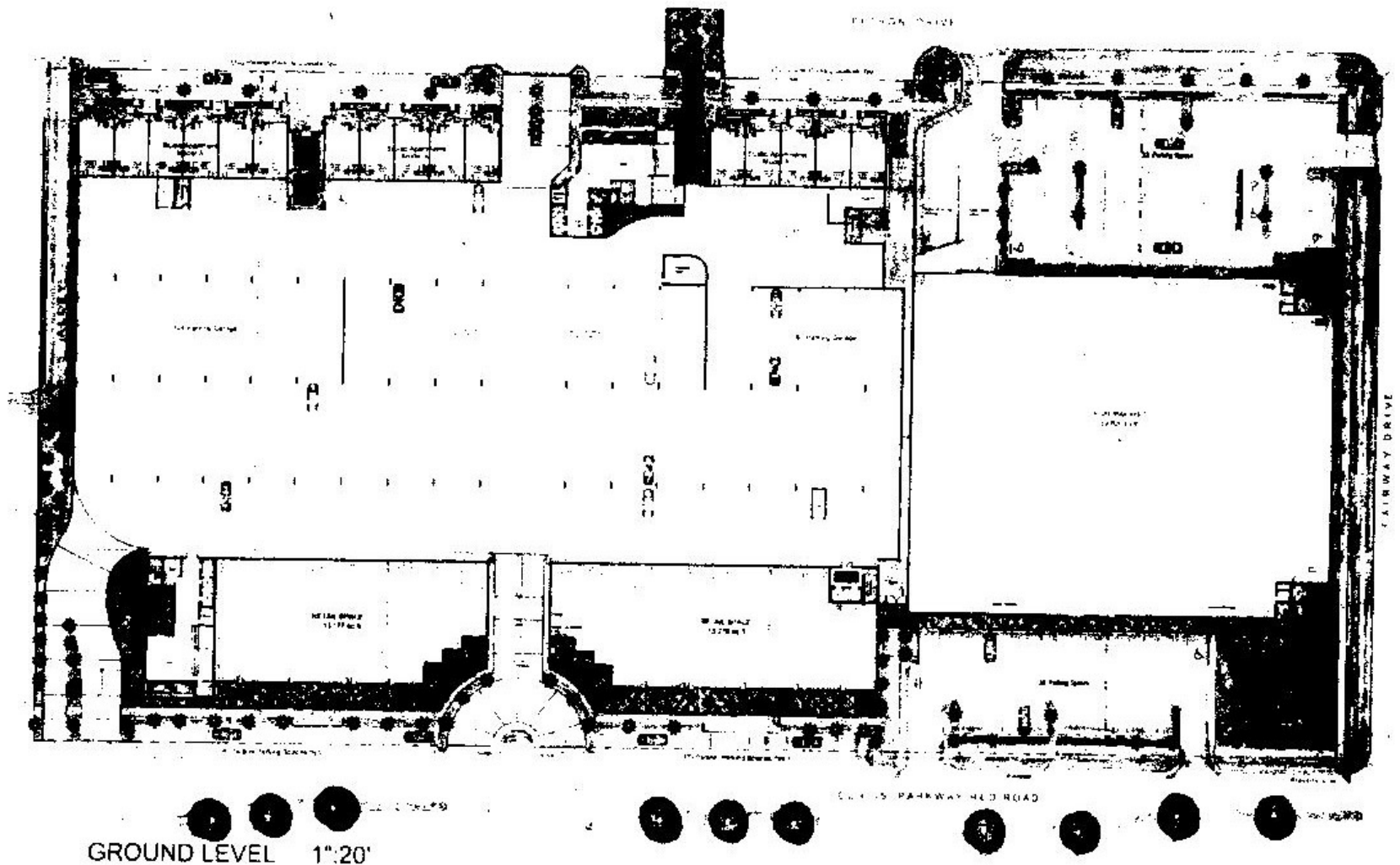
<i>Year</i>	<i>1980</i>	<i>1990</i>	<i>2000</i>
<i>Population</i>	12,350	13,268	13,712
<i>Growth Rate</i>	1980-00	0.5%	
	1990-00	0.3%	

Source: US Bureau of Census, Census of Population, 2000, File PL94-171, Miami Dade County Department of Planning and Zoning

## **APPENDIX D**

# **Site Plan and Trip Generation & Internalization**

# **SITE PLAN**



POINCIANA GOLF VILLAGE  
STRATEGIC PROPERTIES  
MIAMI SPRINGS  
FLORIDA

SP1

# **TRIP GENERATION WORKSHEETS**



Summary of Trip Generation Calculation  
For 238 Dwelling Units of Residential Condominium / Townhouse  
June 15, 2006

	Average Rate	Standard Deviation	Adjustment Factor	Driveway Volume
Avg. Weekday 2-Way Volume	5.64	0.00	1.00	1341
7-9 AM Peak Hour Enter	0.07	0.00	1.00	18
7-9 AM Peak Hour Exit	0.36	0.00	1.00	86
7-9 AM Peak Hour Total	0.43	0.00	1.00	103
4-6 PM Peak Hour Enter	0.34	0.00	1.00	82
4-6 PM Peak Hour Exit	0.17	0.00	1.00	40
4-6 PM Peak Hour Total	0.51	0.00	1.00	122
Saturday 2-Way Volume	5.42	0.00	1.00	1289
Saturday Peak Hour Enter	0.25	0.00	1.00	60
Saturday Peak Hour Exit	0.22	0.00	1.00	51
Saturday Peak Hour Total	0.47	0.00	1.00	112

Note: A zero indicates no data available.

The above rates were calculated from these equations:

24-Hr. 2-Way Volume:  $\text{LN}(T) = .85\text{LN}(X) + 2.55$ ,  $R^2 = 0.83$   
7-9 AM Peak Hr. Total:  $\text{LN}(T) = .8\text{LN}(X) + .26$   
 $R^2 = 0.76$ , 0.17 Enter, 0.83 Exit  
4-6 PM Peak Hr. Total:  $\text{LN}(T) = .82\text{LN}(X) + .32$   
 $R^2 = 0.8$ , 0.67 Enter, 0.33 Exit  
AM Gen Pk Hr. Total:  $\text{LN}(T) = .82\text{LN}(X) + .17$   
 $R^2 = 0.8$ , 0.18 Enter, 0.82 Exit  
PM Gen Pk Hr. Total:  $T = .34(X) + 38.31$   
 $R^2 = 0.83$ , 0.64 Enter, 0.36 Exit  
Sat. 2-Way Volume:  $T = 3.62(X) + 427.93$ ,  $R^2 = 0.84$   
Sat. Pk Hr. Total:  $T = .29(X) + 42.63$   
 $R^2 = 0.84$ , 0.54 Enter, 0.46 Exit  
Sun. 2-Way Volume:  $T = 3.13(X) + 357.26$ ,  $R^2 = 0.88$   
Sun. Pk Hr. Total:  $T = .23(X) + 50.01$   
 $R^2 = 0.78$ , 0.49 Enter, 0.51 Exit

Source: Institute of Transportation Engineers  
Trip Generation, 7th Edition, 2003.

TRIP GENERATION BY MICROTRANS

Summary of Trip Generation Calculation  
For 278 Dwelling Units of Residential Condominium / Townhouse  
June 15, 2006

	Average Rate	Standard Deviation	Adjustment Factor	Driveway Volume
Avg. Weekday 2-Way Volume	5.51	0.00	1.00	1531
7-9 AM Peak Hour Enter	0.07	0.00	1.00	20
7-9 AM Peak Hour Exit	0.35	0.00	1.00	97
7-9 AM Peak Hour Total	0.42	0.00	1.00	117
4-6 PM Peak Hour Enter	0.34	0.00	1.00	93
4-6 PM Peak Hour Exit	0.17	0.00	1.00	46
4-6 PM Peak Hour Total	0.50	0.00	1.00	139
Saturday 2-Way Volume	5.16	0.00	1.00	1434
Saturday Peak Hour Enter	0.24	0.00	1.00	67
Saturday Peak Hour Exit	0.20	0.00	1.00	57
Saturday Peak Hour Total	0.44	0.00	1.00	123

Note: A zero indicates no data available.

The above rates were calculated from these equations:

24-Hr. 2-Way Volume:  $\text{LN}(T) = .85\text{LN}(X) + 2.55, R^2 = 0.83$   
7-9 AM Peak Hr. Total:  $\text{LN}(T) = .8\text{LN}(X) + .26$   
 $R^2 = 0.76, 0.17 \text{ Enter}, 0.83 \text{ Exit}$   
4-6 PM Peak Hr. Total:  $\text{LN}(T) = .82\text{LN}(X) + .32$   
 $R^2 = 0.8, 0.67 \text{ Enter}, 0.33 \text{ Exit}$   
AM Gen Pk Hr. Total:  $\text{LN}(T) = .82\text{LN}(X) + .17$   
 $R^2 = 0.8, 0.18 \text{ Enter}, 0.82 \text{ Exit}$   
PM Gen Pk Hr. Total:  $T = .34(X) + 38.31$   
 $R^2 = 0.83, 0.64 \text{ Enter}, 0.36 \text{ Exit}$   
Sat. 2-Way Volume:  $T = 3.62(X) + 427.93, R^2 = 0.84$   
Sat. Pk Hr. Total:  $T = .29(X) + 42.63$   
 $R^2 = 0.84, 0.54 \text{ Enter}, 0.46 \text{ Exit}$   
Sun. 2-Way Volume:  $T = 3.13(X) + 357.26, R^2 = 0.88$   
Sun. Pk Hr. Total:  $T = .23(X) + 50.01$   
 $R^2 = 0.78, 0.49 \text{ Enter}, 0.51 \text{ Exit}$

Source: Institute of Transportation Engineers  
Trip Generation, 7th Edition, 2003.

TRIP GENERATION BY MICROTRANS

Summary of Trip Generation Calculation  
For 318 Dwelling Units of Residential Condominium / Townhouse  
June 15, 2006

	Average Rate	Standard Deviation	Adjustment Factor	Driveway Volume
Avg. Weekday 2-Way Volume	5.40	0.00	1.00	1716
7-9 AM Peak Hour Enter	0.07	0.00	1.00	22
7-9 AM Peak Hour Exit	0.34	0.00	1.00	108
7-9 AM Peak Hour Total	0.41	0.00	1.00	130
4-6 PM Peak Hour Enter	0.33	0.00	1.00	104
4-6 PM Peak Hour Exit	0.16	0.00	1.00	51
4-6 PM Peak Hour Total	0.49	0.00	1.00	155
Saturday 2-Way Volume	4.97	0.00	1.00	1579
Saturday Peak Hour Enter	0.23	0.00	1.00	73
Saturday Peak Hour Exit	0.20	0.00	1.00	62
Saturday Peak Hour Total	0.42	0.00	1.00	135

Note: A zero indicates no data available.

The above rates were calculated from these equations:

24-Hr. 2-Way Volume:  $\text{LN}(T) = .85\text{LN}(X) + 2.55, R^2 = 0.83$   
7-9 AM Peak Hr. Total:  $\text{LN}(T) = .8\text{LN}(X) + .26$   
 $R^2 = 0.76, 0.17 \text{ Enter}, 0.83 \text{ Exit}$   
4-6 PM Peak Hr. Total:  $\text{LN}(T) = .82\text{LN}(X) + .32$   
 $R^2 = 0.8, 0.67 \text{ Enter}, 0.33 \text{ Exit}$   
AM Gen Pk Hr. Total:  $\text{LN}(T) = .82\text{LN}(X) + .17$   
 $R^2 = 0.8, 0.18 \text{ Enter}, 0.82 \text{ Exit}$   
PM Gen Pk Hr. Total:  $T = .34(X) + 38.31$   
 $R^2 = 0.83, 0.64 \text{ Enter}, 0.36 \text{ Exit}$   
Sat. 2-Way Volume:  $T = 3.62(X) + 427.93, R^2 = 0.84$   
Sat. Pk Hr. Total:  $T = .29(X) + 42.63$   
 $R^2 = 0.84, 0.54 \text{ Enter}, 0.46 \text{ Exit}$   
Sun. 2-Way Volume:  $T = 3.13(X) + 357.26, R^2 = 0.88$   
Sun. Pk Hr. Total:  $T = .23(X) + 50.01$   
 $R^2 = 0.78, 0.49 \text{ Enter}, 0.51 \text{ Exit}$

Source: Institute of Transportation Engineers  
Trip Generation, 7th Edition, 2003.

TRIP GENERATION BY MICROTRANS

Summary of Trip Generation Calculation  
For 358 Dwelling Units of Residential Condominium / Townhouse  
June 15, 2006

	Average Rate	Standard Deviation	Adjustment Factor	Driveway Volume
Avg. Weekday 2-Way Volume	5.30	0.00	1.00	1898
7-9 AM Peak Hour Enter	0.07	0.00	1.00	24
7-9 AM Peak Hour Exit	0.33	0.00	1.00	119
7-9 AM Peak Hour Total	0.40	0.00	1.00	143
4-6 PM Peak Hour Enter	0.32	0.00	1.00	115
4-6 PM Peak Hour Exit	0.16	0.00	1.00	56
4-6 PM Peak Hour Total	0.48	0.00	1.00	171
Saturday 2-Way Volume	4.82	0.00	1.00	1724
Saturday Peak Hour Enter	0.22	0.00	1.00	79
Saturday Peak Hour Exit	0.19	0.00	1.00	67
Saturday Peak Hour Total	0.41	0.00	1.00	146

Note: A zero indicates no data available.

The above rates were calculated from these equations:

24-Hr. 2-Way Volume:	$LN(T) = .85LN(X) + 2.55, R^2 = 0.83$
7-9 AM Peak Hr. Total:	$LN(T) = .8LN(X) + .26$ $R^2 = 0.76, 0.17 \text{ Enter}, 0.83 \text{ Exit}$
4-6 PM Peak Hr. Total:	$LN(T) = .82LN(X) + .32$ $R^2 = 0.8, 0.67 \text{ Enter}, 0.33 \text{ Exit}$
AM Gen Pk Hr. Total:	$LN(T) = .82LN(X) + .17$ $R^2 = 0.8, 0.18 \text{ Enter}, 0.82 \text{ Exit}$
PM Gen Pk Hr. Total:	$T = .34(X) + 38.31$ $R^2 = 0.83, 0.64 \text{ Enter}, 0.36 \text{ Exit}$
Sat. 2-Way Volume:	$T = 3.62(X) + 427.93, R^2 = 0.84$
Sat. Pk Hr. Total:	$T = .29(X) + 42.63$ $R^2 = 0.84, 0.54 \text{ Enter}, 0.46 \text{ Exit}$
Sun. 2-Way Volume:	$T = 3.13(X) + 357.26, R^2 = 0.88$
Sun. Pk Hr. Total:	$T = .23(X) + 50.01$ $R^2 = 0.78, 0.49 \text{ Enter}, 0.51 \text{ Exit}$

Source: Institute of Transportation Engineers  
Trip Generation, 7th Edition, 2003.

TRIP GENERATION BY MICROTRANS

Summary of Trip Generation Calculation  
 For 28.456 T.G.L.A. of Specialty Retail Center  
 June 15, 2006

	Average Rate	Standard Deviation	Adjustment Factor	Driveway Volume
Avg. Weekday 2-Way Volume	44.32	15.52	1.00	1261
7-9 AM Peak Hour Enter	0.00	0.00	1.00	0
7-9 AM Peak Hour Exit	0.00	0.00	1.00	0
7-9 AM Peak Hour Total	0.00	0.00	1.00	0
4-6 PM Peak Hour Enter	1.19	0.00	1.00	34
4-6 PM Peak Hour Exit	1.52	0.00	1.00	43
4-6 PM Peak Hour Total	2.71	1.83	1.00	77
Saturday 2-Way Volume	42.04	13.97	1.00	1196
Saturday Peak Hour Enter	0.00	0.00	1.00	0
Saturday Peak Hour Exit	0.00	0.00	1.00	0
Saturday Peak Hour Total	0.00	0.00	1.00	0

Note: A zero indicates no data available.  
 Source: Institute of Transportation Engineers  
 Trip Generation, 7th Edition, 2003.

TRIP GENERATION BY MICROTRANS

Summary of Trip Generation Calculation  
 For 52 Th.Gr.Sq.Ft. of Supermarket  
 June 15, 2006

	Average Rate	Standard Deviation	Adjustment Factor	Driveway Volume
Avg. Weekday 2-Way Volume	102.24	31.73	1.00	5316
7-9 AM Peak Hour Enter	1.98	0.00	1.00	103
7-9 AM Peak Hour Exit	1.27	0.00	1.00	66
7-9 AM Peak Hour Total	3.25	3.11	1.00	169
4-6 PM Peak Hour Enter	5.33	0.00	1.00	277
4-6 PM Peak Hour Exit	5.12	0.00	1.00	266
4-6 PM Peak Hour Total	10.45	4.97	1.00	543
Saturday 2-Way Volume	177.59	0.00	1.00	9235
Saturday Peak Hour Enter	5.49	0.00	1.00	285
Saturday Peak Hour Exit	5.27	0.00	1.00	274
Saturday Peak Hour Total	10.76	4.93	1.00	560

Note: A zero indicates no data available.  
 Source: Institute of Transportation Engineers  
 Trip Generation, 7th Edition, 2003.

TRIP GENERATION BY MICROTRANS

# **TRIP GENERATION MATRICES**

**(238 DUs of Condominium; 28,456 SF of Retail & 52,000 SF Supermarket)**



## Unconstrained Internalization Demand - AADT

## ***Curtiss Parkway/NW 36 Street Traffic Study***

**Alternative 2 - 278 DUs of Condominium; 28,456 SF of Retail & 52,000 SF Supermarket**

Specialty Retail		Residential Condominium	
Land Use 814		Land Use 230	
28,456 SF GLA		278 Dus	
<b>Supermarket</b>			
Land Use 850			
52,000 SF GLA			
6,577		1,531	
<b>Daily Trips</b>		<b>Daily Trips</b>	
IN	OUT	IN	OUT
3,289	3,289	766	766
	9%	33%	
	296	253	
	<b>253</b>		
11%			38%
362	<b>291</b>		291

### Balanced Internalization Demand - AADT

## Curtiss Parkway/NW 36 Street Traffic Study

**Alternative 2 - 278 DUs of Condominium; 28,456 SF of Retail & 52,000 SF Supermarket**

<b>Specialty Retail</b> Land Use 814 28,456 SF GLA		<b>Residential Condominium</b> Land Use 230 278 Dus		
<b>Supermarket</b> Land Use 850 52,000 SF GLA				
6,577 Daily Trips IN      OUT 3,289   3,289		1,531 Daily Trips IN      OUT 766     766		
				<b>8,108</b> <b>ITE TOTAL DAILY TRIPS</b>
				-40%      Adjustment to Internalization
<div> <div>-153</div> <div>-153</div> <div>-153</div> </div>		<div> <div>-153</div> <div>-153</div> </div>		611      Internal Trips
<b>6,271</b> 4.6% -1,820 -85		<b>1,225</b> 20.0% NA -23		<b>7,497</b> <b>Total</b> 7.5%      % Internal -35.9%   Pass-by (Supermarket) -1.9%     Transit/Pedestrians
<b>4,366</b>		<b>1,202</b>		<b>5,569</b> <b>Total</b> -1,108      Existing Uses <b>4,461</b> <b>Net New External</b> <b>Vehicular Trips</b>

## Unconstrained Internalization Demand - AADT

### Curtiss Parkway/NW 36 Street Traffic Study

Alternative 3 - 318 DUs of Condominium; 28,456 SF of Retail & 52,000 SF Supermarket

Specialty Retail		Residential Condominium	
Land Use 814 28,456 SF GLA		Land Use 230 318 Dus	
Supermarket			
Land Use 850 52,000 SF GLA			
6,577 Daily Trips		1,716 Daily Trips	
IN	OUT	IN	OUT
3,289	3,289	858	858
	9%	33%	
	296	283	
11%	362	38%	326
	326		

## Balanced Internalization Demand - AADT

### Curtiss Parkway/NW 36 Street Traffic Study

Alternative 3 - 318 DUs of Condominium; 28,456 SF of Retail & 52,000 SF Supermarket

Specialty Retail		Residential Condominium			
Land Use 814 28,456 SF GLA		Land Use 230 318 Dus			
Supermarket					
Land Use 850 52,000 SF GLA					
6,577 Daily Trips		1,716 Daily Trips		8,293	ITE TOTAL DAILY TRIPS
IN	OUT	IN	OUT		
3,289	3,289	858	858	-40%	Adjustment to Internalization
	-171		-171	685	Internal Trips
-171			-171		
6,234		1,373		7,608	Total
5.2%		20.0%		8.3%	% Internal
-1,810		NA		-35.9%	Pass-by (Supermarket)
-84		-26		-1.9%	Transit/Pedestrians
4,341		1,348		5,688	Total
				-1,108	Existing Uses
				4,580	Net New External Vehicular Trips

## Unconstrained Internalization Demand - AADT

## ***Curtiss Parkway/NW 36 Street Traffic Study***

**Alternative 4 - 358 DUs of Condominium; 28,456 SF of Retail & 52,000 SF Supermarket**

Specialty Retail		Residential Condominium	
Land Use 814		Land Use 230	
28,456 SF GLA		358 Dus	
<b>Supermarket</b>			
Land Use 850			
52,000 SF GLA			
6,577		1,898	
<b>Daily Trips</b>		<b>Daily Trips</b>	
IN	OUT	IN	OUT
3,289	3,289	949	949
	9%		33%
	296	296	313
11%			38%
362	361		361

### Balanced Internalization Demand - AADT

## ***Curtiss Parkway/NW 36 Street Traffic Study***

**Alternative 4 - 358 DUs of Condominium; 28,456 SF of Retail & 52,000 SF Supermarket**

<b>Specialty Retail</b> Land Use 814 28,456 SF GLA		<b>Residential Condominium</b> Land Use 230 358 Dus			
<b>Supermarket</b> Land Use 850 52,000 SF GLA					
6,577 Daily Trips IN      OUT 3,289   3,289		1,898 Daily Trips IN      OUT 949     949		<b>8,475</b>	<b>ITE TOTAL DAILY TRIPS</b>
				-40%	Adjustment to Internalization
<div> <div>-179</div> <div>-179</div> <div>-179</div> </div>				716	Internal Trips
<b>6,219</b> 5.4% -1,805 -84		<b>1,540</b> 18.9% NA -29		<b>7,759</b> 8.5% -35.9% -1.9%	<b>Total</b> % Internal Pass-by (Supermarket) Transit/Pedestrians
<b>4,330</b>		<b>1,511</b>		<b>5,841</b> -1,108 <b>4,733</b>	<b>Total</b> Existing Uses <b>Net New External Vehicular Trips</b>