SR 52 PD&E STUDY REEVALUATION

Florida Department of Transportation
Project Development and Environment (PD&E) Study Reevaluation

FINAL Traffic Forecast Report

SR 52 From East of Suncoast Parkway to West of I-75

WPI Segment No. 256243 1 FAP No. 1851-108

Florida Department of Transportation

District Seven

Tampa, Florida



FINAL TRAFFIC FORECAST REPORT

SR 52 Project Development & Environment Study Reevaluation

From East of the Suncoast Parkway to West of I-75
Pasco County, Florida

WPI Segment Number: 256243 1

FAP Number: 1851-108

The proposed action includes widening SR 52 from the existing two-lane rural roadway to a six-lane urban and six-lane rural divided roadway. The study limits extend approximately 13.9 miles, from east of the Suncoast Parkway to west of I-75 in Pasco County, Florida.

Florida Department of Transportation District Seven

Tampa, Florida

Prepared By: **PB Americas, Inc.**Tampa, Florida

June 5, 2007

EXECUTIVE SUMMARY

The Florida Department of Transportation (FDOT) conducted a Project Development and Environment (PD&E) Study Reevaluation of a previously approved study of the SR 52 project corridor from east of the Suncoast Parkway to west of I-75 in Pasco County. The Reevaluation assessed the engineering and environmental effects associated with the widening of the existing two-lane rural roadway to a six-lane divided urban and rural roadway for the segment of SR 52 from east of the Suncoast Parkway to west of I-75, approximately 13.9 miles.

In July 1988, the Federal Highway Administration (FHWA) approved the <u>Environmental Assessment/Finding of No Significant Impact</u> for the SR 52 PD&E Study from US 19 to I-75 (SR 93). The 1988 study proposed widening SR 52 to a multilane divided highway for approximately 23.3 miles. A six-lane divided urban cross section was proposed from US 19 to Moon Lake Road, and a four-lane rural cross section was proposed from Moon Lake Road to I-75. For this Reevaluation, a six-lane divided urban roadway is proposed from east of the Suncoast Parkway to Shady Hills Road, and a six-lane divided rural roadway is proposed from Shady Hills Road to west of I-75.

Since the original PD&E Study, two Design Change Reevaluations have been conducted within the project limits. The first Reevaluation (FHWA approved December 17, 2001) covered the segment from the Suncoast Parkway to US 41. The second Reevaluation (FHWA approved February 2, 2007) covered the segment from the Suncoast Parkway to I-75.

The traffic study concluded that six lanes would be needed for SR 52 from the Suncoast Parkway to I-75. The intersection configurations required for the project are provided on the Concept Plans.

TABLE OF CONTENTS

| EXE | CUT | IVE SUMMARY | - ES-1 |
|-----|-------|--|--------|
| 1.0 | IN | TRODUCTION | 1 |
| 1.1 | 1 | Project Description | 1 |
| 1.2 | 2 | Existing Facility | 1 |
| 1.3 | 3 | Proposed Improvements | 3 |
| | 1.3. | Typical Section | 3 |
| | 1.3.2 | 2 Alignment | 3 |
| | 1.3.3 | B Design Change Reevaluation | 3 |
| 1.4 | 1 | Purpose | 5 |
| 2.0 | TF | RAFFIC DATA COLLECTION | 5 |
| 2. | 1 | 72-Hour Machine Traffic Counts | 5 |
| 2.2 | 2 | PM Peak Period Vehicle Turning Movement Counts | 7 |
| 2.3 | 3 | 72-Hour Vehicle Classification Counts | 7 |
| 2.4 | 1 | Intersection Sketches | 7 |
| 2.5 | 5 | Count Program Summary Report | 7 |
| 2.6 | 3 | Existing Conditions | 8 |
| | 2.6. | Existing Roadway and Intersection Geometry | 8 |
| | 2.6.2 | Existing Annual Average Daily Traffic (AADT) Volumes | 8 |
| | 2.6.3 | Existing PM Peak Period Vehicle Turning Movement Volumes | 8 |
| 3.0 | DI | EVELOPMENT OF FORECAST TRAFFIC VOLUMES | 8 |
| 3. | 1 | Review of Relevant Studies | 8 |
| 3.2 | 2 | Forecast Traffic Volumes | 8 |
| | 3.2. | Data Available for Projecting Traffic Volumes | 12 |
| | 3.2.2 | Years 2030 And 2010 AADT Volume Projections | 12 |
| | 3.2.3 | Years 2030 and 2010 Directional Design Hour Volumes | 12 |
| | 3 2 4 | Years 2030 and 2010 Design Hour Turning Movement Volumes | 12 |

LIST OF FIGURES

| Figure 1 Project Location Map | 2 |
|--|-----|
| Figure 2 Proposed Roadway Typical Sections | |
| Figure 3 Traffic Volume Count Locations | · 6 |
| Figure 4 Existing Roadway And Intersection Geometry | g |
| Figure 5 Existing AADT Volumes | ·10 |
| Figure 6 Existing PM Peak Hour Turning Movement Volumes | 11 |
| Figure 7 Year 2030 AADT Volumes | ·14 |
| Figure 8 Year 2010 AADT Volumes | ·15 |
| Figure 9 Year 2030 Directional Design Hour Volumes | ·19 |
| Figure 10 Year 2010 Directional Design Hour Volumes | 20 |
| Figure 11 Year 2030 Design Hour Turning Movement Volumes | 21 |
| Figure 12 Year 2010 Design Hour Turning Movement Volumes | 22 |
| LIST OF TABLES | |
| Table 1 Annual Average Growth Rates | ·13 |
| Table 2 Calculation of Year 2030 and 2010 AADT Volumes | 16 |
| Table 3 Year 2030 Directional Design Hour Volumes | 17 |
| Table 4 Year 2010 Directional Design Hour Volumes | 18 |
| Table 5 Years 2010 and 2030 Design Hour Turning Movement Volumes | 23 |
| LICT OF ADDENDIOSE | |

LIST OF APPENDICES

Appendix A Sketches of Study Intersections

Appendix B FDOT Seasonal Adjustment Factor Table

Appendix C FDOT Axle Adjustment Factor Table

Appendix D FSUTMS Volume Plot - Year 2025 AADT Volumes

Appendix E FDOT Design Hour Factors Table

1.0 INTRODUCTION

The Florida Department of Transportation (FDOT) conducted a Reevaluation of the previously approved Project Development and Environment (PD&E) Study for the segment of SR 52 from east of the Suncoast Parkway to west of I-75 in Pasco County, Florida. The Reevaluation examined changes in the engineering and environmental effects between the originally selected alternative and the proposed design improvements.

In July 1988, the Federal Highway Administration (FHWA) approved the <u>Environmental Assessment/Finding of No Significant Impact</u> (EA/FONSI) for the SR 52 PD&E Study from US 19 to I-75 (SR 93). The 1988 study proposed widening SR 52 to a multilane divided highway for approximately 23.3 miles, and replacing a low level bridge over Bear Creek, located approximately 1.5 miles east of US 19. A six-lane divided urban roadway was proposed from US 19 to Moon Lake Road, and a four-lane rural roadway was proposed from Moon Lake Road to I-75. For this Reevaluation, a six-lane divided urban roadway is proposed from east of the Suncoast Parkway to Shady Hills Road, and a six-lane divided rural roadway is proposed from Shady Hills Road to west of I-75.

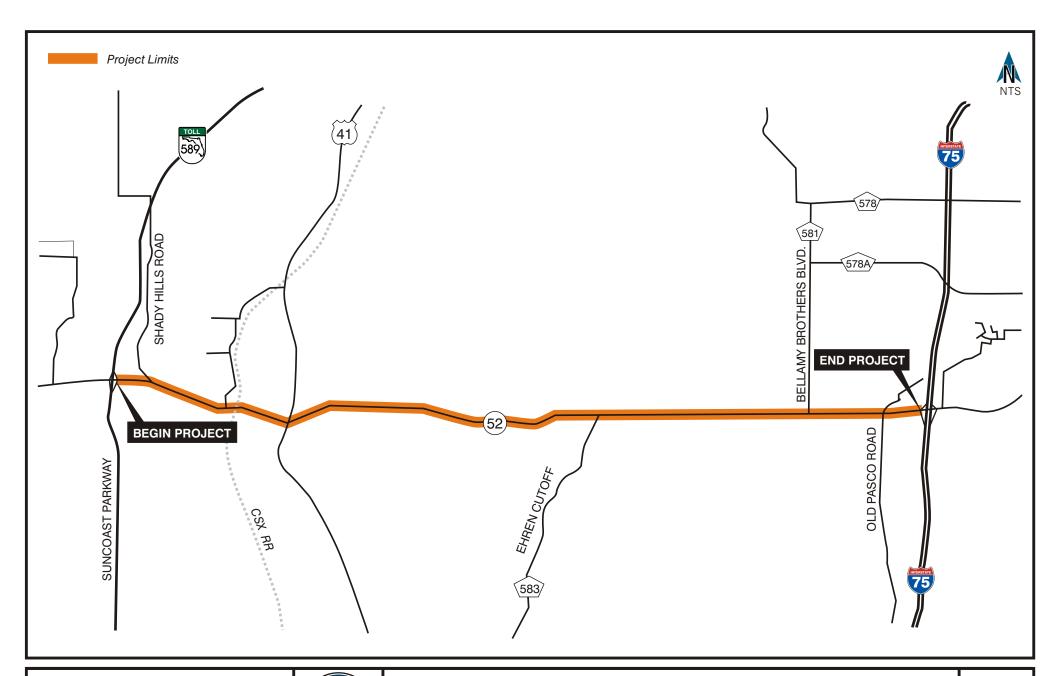
1.1 Project Description

The FDOT is proposing improvements to SR 52 from the Suncoast Parkway to I-75 in Pasco County, Florida, a distance of approximately 16 miles. The proposed improvements consist of widening the existing two-lane rural roadway to a six-lane divided urban highway from the Suncoast Parkway to Shady Hills Road and a six-lane divided rural highway from Shady Hills Road to east of I-75 to accommodate present and future traffic demands.

SR 52 is an east-west arterial highway in Pasco County, beginning at US 19 and terminating at the US 98 Dade City Bypass. The FDOT proposed improvements to SR 52 from east of the Suncoast Parkway to west of I-75 in Pasco County, a distance of approximately 13.9 miles. The proposed improvements consist of widening the existing two-lane rural roadway to a six-lane divided urban and rural roadway to accommodate present and future traffic demands. The project location is shown in Figure 1.

1.2 Existing Facility

The existing SR 52 roadway is typically a two-lane rural facility with one 12-foot travel lane in each direction and 12-foot shoulders (4 feet paved). The roadway cross section varies throughout the length of the project. Turn lanes have been added at certain intersections. The existing right-of-way varies in width with a minimum of 100 feet.



SR 52 From East of Suncoast Parkway to West of I-75



FIGURE

1.3 Proposed Improvements

1.3.1 Typical Section

In the EA/FONSI, the typical section proposed for the limits covered by this reevaluation provided a 52-foot median separating two 12-foot lanes for each direction of travel. Ten-foot shoulders would be provided on each side of the roadway. Five feet of the 10-foot width would be paved which would accommodate bicyclists. The total right-of-way width for this typical section totaled 212 feet.

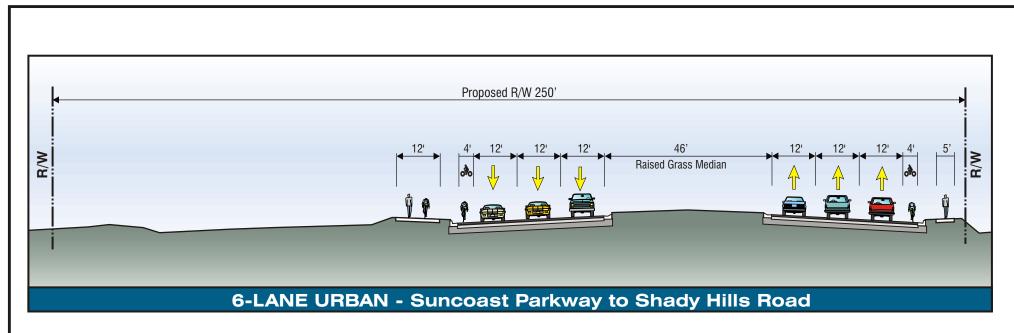
For the proposed design change, from the Suncoast Parkway to Shady Hills Road, the typical section provides a 46-foot raised grass median, separating three 12-foot lanes for each direction of travel. Four-foot bike lanes are provided on each side of the facility. A 5-foot sidewalk will be provided along the south side of the roadway and a 12-foot multi-use path will be provided on the north side of the roadway. From Shady Hills Road to I-75, the rural typical section provides a 46-foot median, separating three 12-foot lanes for each direction of travel. Ten-foot shoulders (5 feet paved) will accommodate bicyclists. A 12-foot multi-use path will be provided on the north side of the roadway. The proposed roadway typical sections are shown in Figure 2.

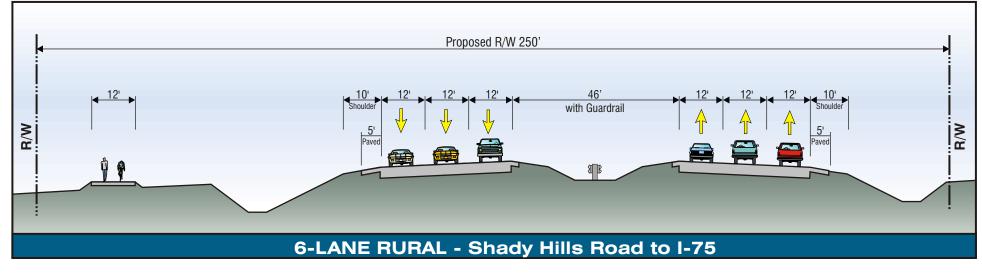
1.3.2 Alignment

The recommended alignment for the SR 52 project corridor was evaluated and compared to the approved EA/FONSI. The alignment is consistent with the 1988 study from the Suncoast Parkway to 3,400 feet west of Ehren Cutoff. From approximately 3,400 feet west of Ehren Cutoff to I-75, the proposed alignment is shifted to the north. This keeps the proposed multi-use path on the north side of the roadway, without a need for a bridge over SR 52 if the alignment from the approved EA/FONSI is used.

1.3.3 Design Change Reevaluation

Since the original PD&E Study, two Design Change Reevaluations have been conducted within the project limits. The first Reevaluation (FHWA approved December 17, 2001) covered the segment from the Suncoast Parkway to US 41. It kept the same alignment as the original PD&E Study, but changed the typical section from a 212-foot wide rural facility to a 156-foot wide urban facility. The second Reevaluation (FHWA approved February 2, 2007) covered the segment from the Suncoast Parkway to I-75. It provides for a 250-foot rural typical section. An alignment shift to the south was studied in the vicinity of Kent Grove Drive and the CSX Railroad. However, it was decided to keep the alignment to the north, consistent with the original PD&E Study. From US 41 to Ehren Cutoff, the alignment is consistent with the original PD&E Study. From Ehren Cutoff to I-75, the alignment is shifted to the north.





SR 52 From East of Suncoast Parkway to West of I-75 WPI Seg. No. 256243 1 / FPN 1851-108 SHE OF FLORIDA NO LIKE OF TRANSPORTED TO PERSON NO LIKE OF TRANSPO

1.4 Purpose

The purpose of this report is to document the preliminary estimate of forecast traffic volumes for the preferred alternative and to determine laneage requirements and intersection configurations.

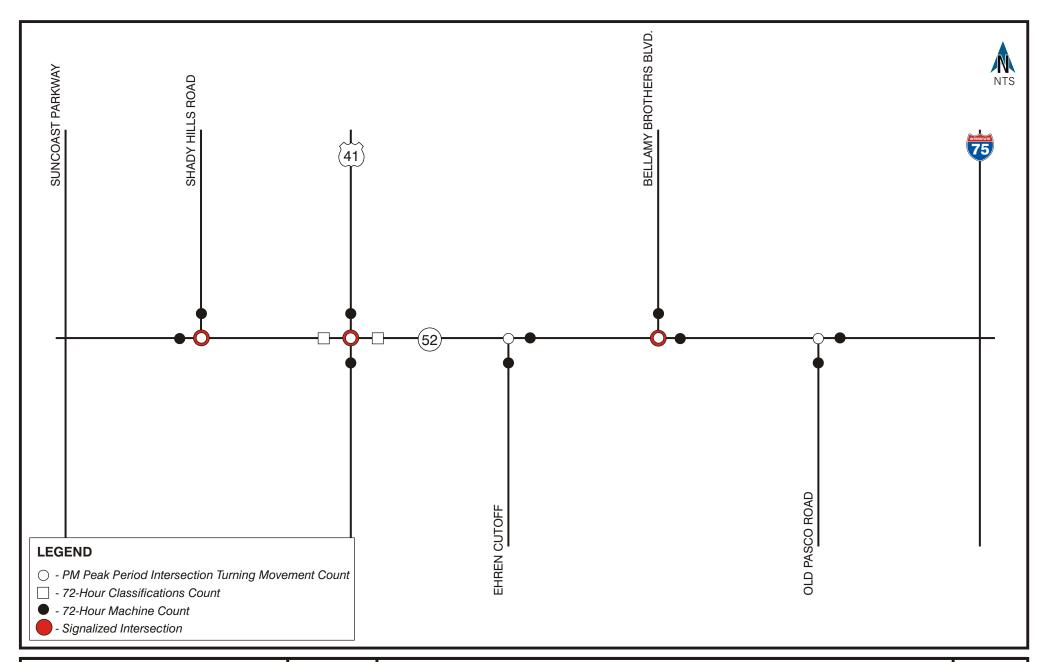
2.0 TRAFFIC DATA COLLECTION

The following data were acquired for use in the study. Traffic volume count locations and type of count are illustrated on Figure 3.

2.1 72-Hour Machine Traffic Counts

Seventy-two hour machine traffic counts were conducted at the following 10 locations:

| <u>Location</u> | <u>Data Collection Dates</u> |
|---|------------------------------|
| 1. SR 52 west of Shady Hills Road | August 3, 4 and 5, 2005 |
| 2. SR 52 east of Ehren Cutoff | August 3, 4 and 5, 2005 |
| 3. SR 52 east of Bellamy Brothers Road | August 3, 4 and 5, 2005 |
| 4. SR 52 east of Old Pasco Road | August 3, 4 and 5, 2005 |
| 5. Shady Hills Road north of SR 52 | August 3, 4 and 5, 2005 |
| 6. US 41 north of SR 52 | August 9, 10 and 11, 2005 |
| 7. US 41 south of SR 52 | August 9, 10 and 11, 2005 |
| 8. Ehren Cutoff south of SR 52 | August 3, 4 and 5, 2005 |
| 9. Bellamy Brothers Road north of SR 52 | August 3, 4 and 5, 2005 |
| 10. Old Pasco Road south of SR 52 | August 3, 4 and 5, 2005 |





2.2 PM Peak Period Vehicle Turning Movement Counts

Manual vehicle turning movement, pedestrian and bicycle counts were conducted between 4:00 p.m. and 7:00 p.m. at the following five intersections.

| <u>Intersection</u> | <u>Data Collection Date</u> |
|--------------------------------|-----------------------------|
| 1. SR 52/Shady Hills Road | August 3, 2005 |
| 2. SR 52/US 41 | August 9, 2005 |
| 3. SR 52/Ehren Cutoff | August 4, 2005 |
| 4. SR 52/Bellamy Brothers Road | August 9, 2005 |
| 5. SR 52/Old Pasco Road | August 9, 2005 |

2.3 72-Hour Vehicle Classification Counts

72-hour vehicle classification counts were conducted at the following two locations.

| | Location | Data Collection Dates |
|----|---------------------|---------------------------|
| 1. | SR 52 east of US 41 | August 9, 10 and 11, 2005 |
| 2. | SR 52 west of US 41 | August 9, 10 and 11, 2005 |

2.4 Intersection Sketches

Appendix A contains the sketches of the following five intersections.

- 1. SR 52/Shady Hills Road
- 2. SR 52/US 41
- 3. SR 52/Ehren Cutoff
- 4. SR 52/Bellamy Brothers Road
- 5. SR 52/Old Pasco Road

2.5 Count Program Summary Report

The traffic data collected were tabulated in computer summary form, in 15 minute increments, with hourly totals for each day on which counts were conducted. These data, plus the intersection sketches, were assembled into a "Count Program Summary Report," and is under separate cover.

2.6 Existing Conditions

2.6.1 Existing Roadway and Intersection Geometry

SR 52 is a two-lane undivided roadway throughout the project limits. It is approximately 24 feet in width. A summary of the existing intersection and roadway laneage is illustrated on Figure 4.

2.6.2 Existing Annual Average Daily Traffic (AADT) Volumes

The AADT volumes were calculated by multiplying the 24-hour traffic count volumes by an axle adjustment factor and a weekly seasonal factor. The seasonal adjustment factor is calculated annually by the FDOT and reflects the seasonal fluctuations in traffic throughout Pasco County. A copy of the seasonal adjustment factor table for Pasco County is contained in Appendix B. The 24-hour machine count volumes were derived by counting the number of axles and dividing by two. This does not account for truck volumes. Therefore, an axle adjustment factor was used to estimate the number of trucks in the traffic stream. The FDOT axle adjustment factors used in the analyses are contained in Appendix C. The existing AADT volumes are illustrated on Figure 5.

2.6.3 Existing PM Peak Period Vehicle Turning Movement Volumes

PM peak period vehicle turning movement volume counts were conducted at the five intersections in August 2005 (Figure 3). These counts were seasonally adjusted using the Pasco County seasonal adjustment factors contained in Appendix B. Figure 6 illustrates the seasonally adjusted peak hour turning movement volumes.

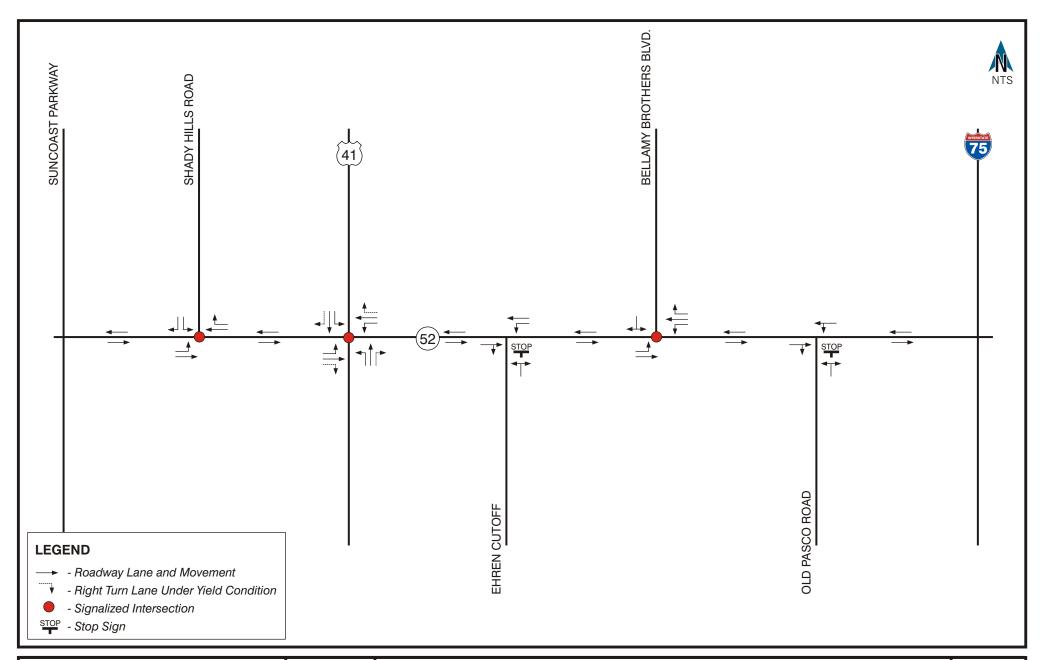
3.0 DEVELOPMENT OF FORECAST TRAFFIC VOLUMES

3.1 Review of Relevant Studies

The traffic projections for SR 52 were obtained from the FDOT District Seven Tampa Bay Regional Planning Model (FSUTMS), which includes the socioeconomic data for all the future developments in the area. Additional review of other Development of Regional Impact is not required for this project.

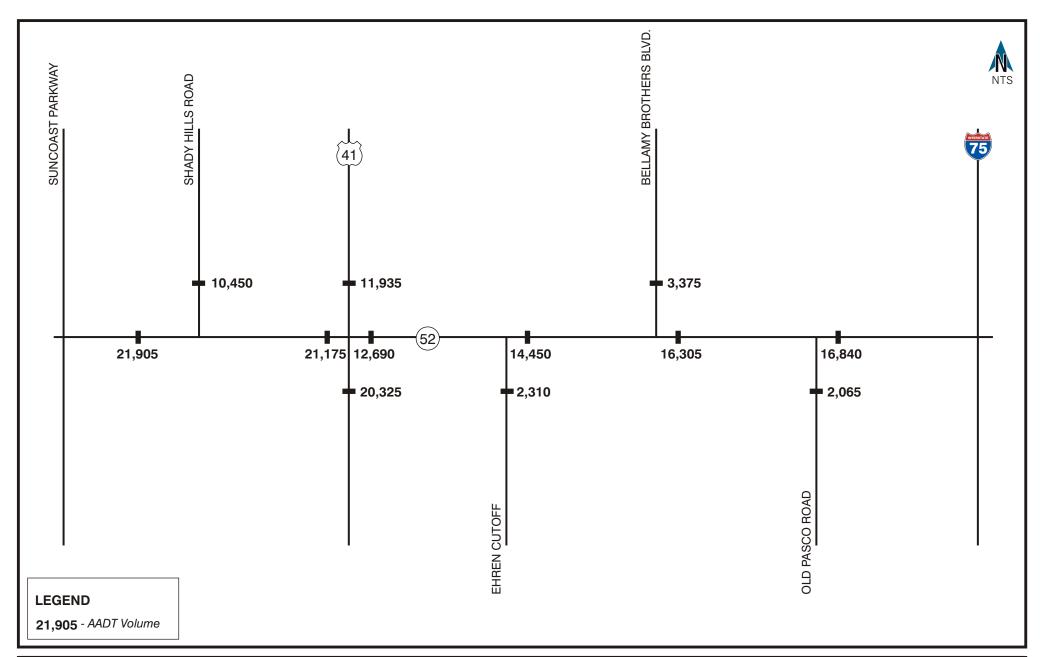
3.2 Forecast Traffic Volumes

This section summarizes the development of forecast traffic volumes for the opening year (2010) and the design year (2030).





FIGURE

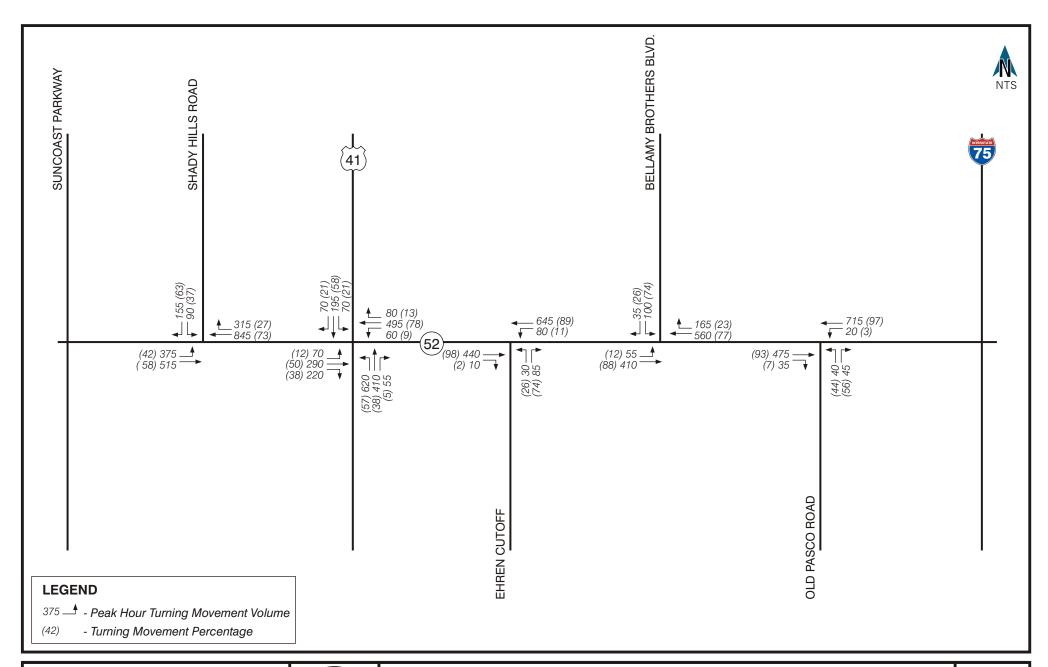




EXISTING AADT VOLUMES

FIGURE

5



TRAFFIC TECHNICAL MEMORANDUM SR 52 From East of Suncoast Parkway to West of I-75



FIGURE

3.2.1 Data Available for Projecting Traffic Volumes

The FDOT District Seven Tampa Bay Regional Planning Model (Year 2002) provided the traffic volume projections for the year 2025. A MOCF factor of 0.96 obtained from FDOT database (contained in Appendix B) was used to convert PSWADT volumes to AADT volumes. A FSUTMS volume plot for the year 2025 is provided in Appendix D.

3.2.2 Years 2030 And 2010 AADT Volume Projections

The year 2025 AADT volumes on SR 52 and the five intersecting streets on SR 52 were obtained from the FDOT District Seven Tampa Bay Regional Planning Model. The annual growth rates on the 12 roadway segments within the study area are summarized in Table 1. They were calculated by comparing the years 2005 and 2025 AADT volumes and were used to estimate the years 2030 and 2010 AADT volumes.

The 2025 AADT volume for the segment of Shady Hills Road north of SR 52 obtained from the model was less than the existing AADT volume, which is not reasonable. Therefore, an average annual growth rate of 2 percent was assumed to estimate the year 2025 AADT volume at this location.

Years 2030 and 2010 AADT volumes are illustrated on Figure 7 and Figure 8 respectively, and are summarized in Table 2.

3.2.3 Years 2030 and 2010 Directional Design Hour Volumes

Years 2030 and 2010 directional design hour volumes were developed for each segment of SR 52 and for each of the five study intersections on SR 52 by applying the average annual growth rates shown in Table 1 to the year 2005 PM peak hour approach volumes.

The calculated directional design hour volumes are summarized in Table 3 and Table 4. The predominant directions of flow on SR 52 and intersecting streets on SR 52 are west and north, respectively, during the p.m. peak hour. Years 2030 and 2010 directional design hour volumes are illustrated on Figure 9 and Figure 10, respectively.

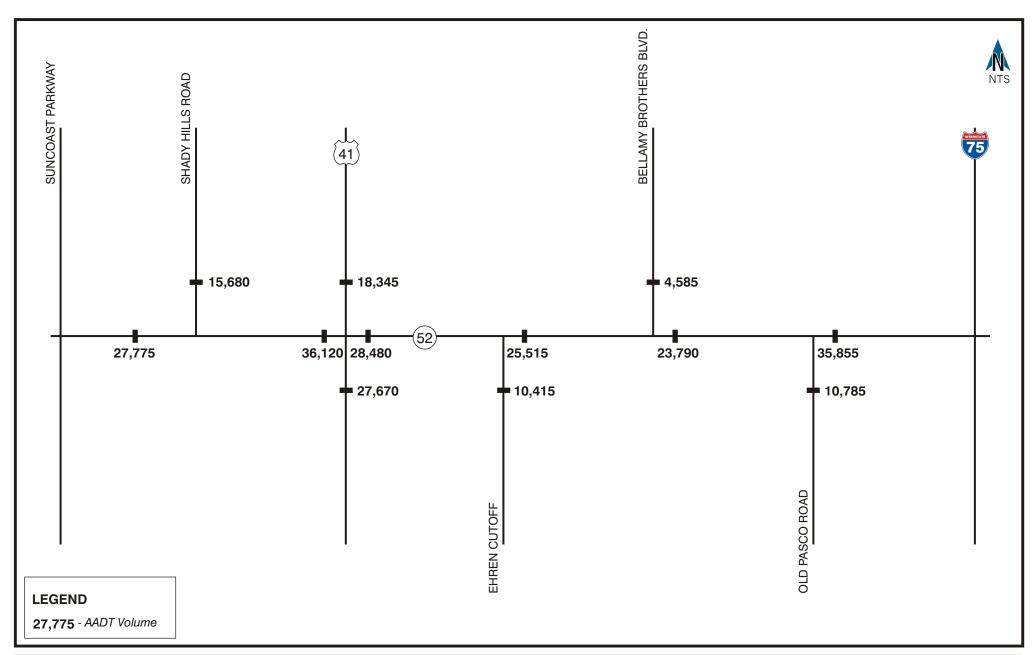
3.2.4 Years 2030 and 2010 Design Hour Turning Movement Volumes

Design hour turning movement volumes for years 2030 and 2010 were estimated by assuming that the percentage of traffic turning left, right or proceeding through an intersection will be approximately the same in years 2030 and 2010 as the existing Year 2005.

Year 2030 and 2010 design hour turning movement volumes are illustrated on Figure 11 and Figure 12, respectively, and are summarized in Table 5.

Table 1
Annual Average Growth Rates

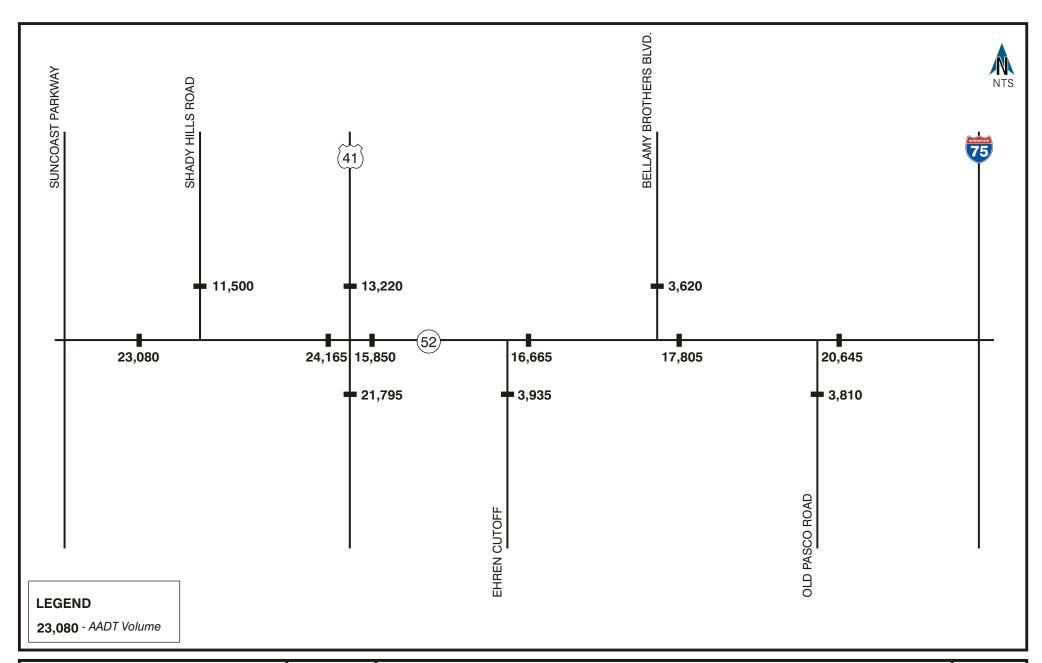
| No. | Roadway Segment | Year 2005 AADT Volumes | Year 2025 AADT Volumes | Growth Rate (%) |
|-----|---|---------------------------|---------------------------|-----------------------|
| 1 | On SR 52 west of Shady Hills Road | 21,905 | 26,600 | 1.07 |
| 2 | On SR 52 west of US 41 | 21,175 | 33,130 | 2.82 |
| 3 | On SR 52 east of US 41 | 12,690 | 25,320 | 4.98 |
| 4 | On SR 52 east of Ehren Cutoff | 14,450 | 23,300 | 3.06 |
| 5 | On SR 52 east of Bellamy Brothers Road | 16,305 | 22,290 | 1.84 |
| 6 | On SR 52 east of Old Pasco Road | 16,840 | 32,050 | 4.52 |
| 7 | On Shady Hills Road north of SR 52 | 10,450 | 14,630 | 2.00 |
| 8 | On US 41 north of SR 52 | 11,935 | 17,060 | 2.15 |
| 9 | On US 41 south of SR 52 | 20,325 | 26,200 | 1.45 |
| 10 | On Ehren Cutoff south of SR 52 | 2,310 | 8,790 | 14.03 |
| 11 | On Bellamy Brothers Road north of SR 52 | 3,375 | 4,340 | 1.43 |
| 12 | On Old Pasco Road south of SR 52 | 2,065 | 9,040 | 16.89 |





FIGURE

7



TRAFFIC TECHNICAL MEMORANDUM SR 52 From East of Suncoast Parkway to West of I-75



FIGURE

Table 2
Calculation of Year 2030 and 2010 AADT Volumes

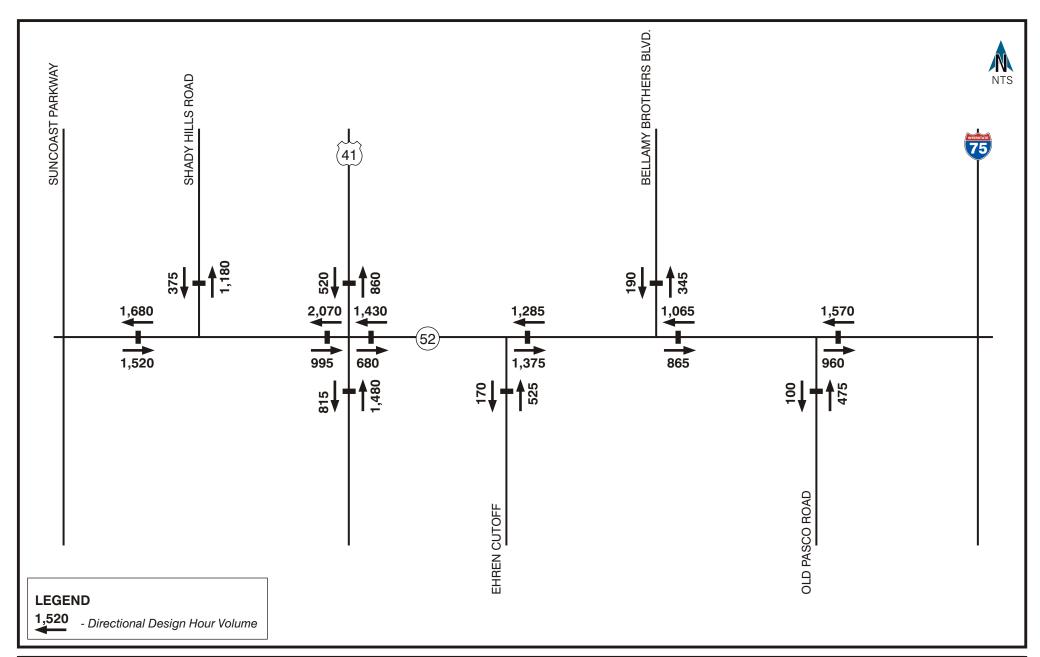
| No. | Roadway Segment | Year 2005 AADT Volumes | Growth Rate (%) | Year 2010 AADT Volumes | Year 2030 AADT Volumes |
|-----|---|------------------------------|-----------------------|------------------------------|------------------------------|
| 1 | On SR 52 west of Shady Hills Road | 21,905 | 1.07 | 23,080 | 27,775 |
| 2 | On SR 52 west of US 41 | 21,175 | 2.82 | 24,165 | 36,120 |
| 3 | On SR 52 east of US 41 | 12,690 | 4.98 | 15,850 | 28,480 |
| 4 | On SR 52 east of Ehren Cutoff | 14,450 | 3.06 | 16,665 | 25,515 |
| 5 | On SR 52 east of Bellamy Brothers Road | 16,305 | 1.84 | 17,805 | 23,790 |
| 6 | On SR 52 east of Old Pasco Road | 16,840 | 4.52 | 20,645 | 35,855 |
| 7 | On Shady Hills Road north of SR 52 | 10,450 | 2.00 | 11,500 | 15,680 |
| 8 | On US 41 north of SR 52 | 11,935 | 2.15 | 13,220 | 18,345 |
| 9 | On US 41 south of SR 52 | 20,325 | 1.45 | 21,795 | 27,670 |
| 10 | On Ehren Cutoff south of SR 52 | 2,310 | 14.03 | 3,935 | 10,415 |
| 11 | On Bellamy Brothers Road north of SR 52 | 3,375 | 1.43 | 3,620 | 4,585 |
| 12 | On Old Pasco Road south of SR 52 | 2,065 | 16.89 | 3,810 | 10,785 |

Table 3
Year 2030 Directional Design Hour Volumes

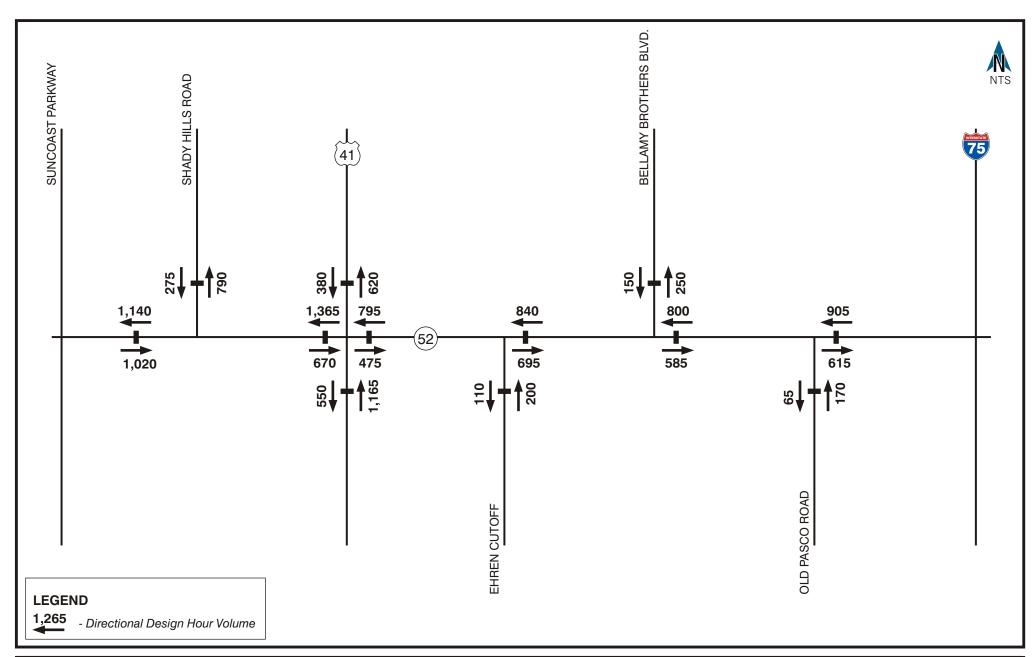
| No. | Roadway Segment | Two-way Design Hour Volumes | Design Hour Volumes (Peak Direction) | Design Hour Volumes (Non- Peak Direction) |
|-----|---|--------------------------------------|---|--|
| 1 | On SR 52 west of Shady Hills Road | 3,200 | 1,680 | 1,520 |
| 2 | On SR 52 west of US 41 | 3,065 | 2,070 | 995 |
| 3 | On SR 52 east of US 41 | 2,110 | 1,430 | 680 |
| 4 | On SR 52 east of Ehren Cutoff | 2,660 | 1,375 | 1,285 |
| 5 | On SR 52 east of Bellamy Brothers Road | 1,930 | 1,065 | 865 |
| 6 | On SR 52 east of Old Pasco Road | 2,530 | 1,570 | 960 |
| 7 | On Shady Hills Road north of SR 52 | 1,555 | 1,180 | 375 |
| 8 | On US 41 north of SR 52 | 1,380 | 860 | 520 |
| 9 | On US 41 south of SR 52 | 2,295 | 1,480 | 815 |
| 10 | On Ehren Cutoff south of SR 52 | 695 | 525 | 170 |
| 11 | On Bellamy Brothers Road north of SR 52 | 535 | 345 | 190 |
| 12 | On Old Pasco Road south of SR 52 | 575 | 475 | 100 |

Table 4
Year 2010 Directional Design Hour Volumes

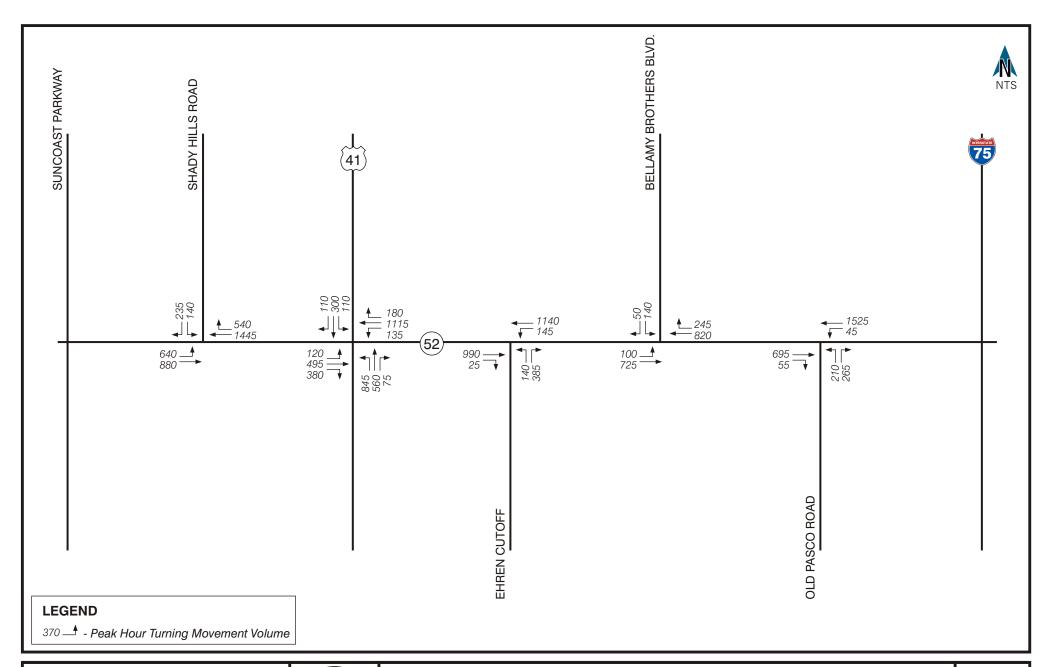
| No. | Roadway Segment | Two-way Design Hour Volumes | Design Hour Volumes (Peak Direction) | Design Hour Volumes (Non- Peak Direction) |
|-----|---|-----------------------------------|---|--|
| 1 | On SR 52 west of Shady Hills Road | 2,160 | 1,140 | 1,020 |
| 2 | On SR 52 west of US 41 | 2,035 | 1,365 | 670 |
| 3 | On SR 52 east of US 41 | 1,270 | 795 | 475 |
| 4 | On SR 52 east of Ehren Cutoff | 1,535 | 840 | 695 |
| 5 | On SR 52 east of Bellamy Brothers | 1,385 | 800 | 585 |
| | Road | | | |
| 6 | On SR 52 east of Old Pasco Road | 1,520 | 905 | 615 |
| 7 | On Shady Hills Road north of SR 52 | 1,065 | 790 | 275 |
| 8 | On US 41 north of SR 52 | 1,000 | 620 | 380 |
| 9 | On US 41 south of SR 52 | 1,715 | 1,165 | 550 |
| 10 | On Ehren Cutoff south of SR 52 | 310 | 200 | 110 |
| 11 | On Bellamy Brothers Road north of SR 52 | 400 | 250 | 150 |
| 12 | On Old Pasco Road south of SR 52 | 235 | 170 | 65 |













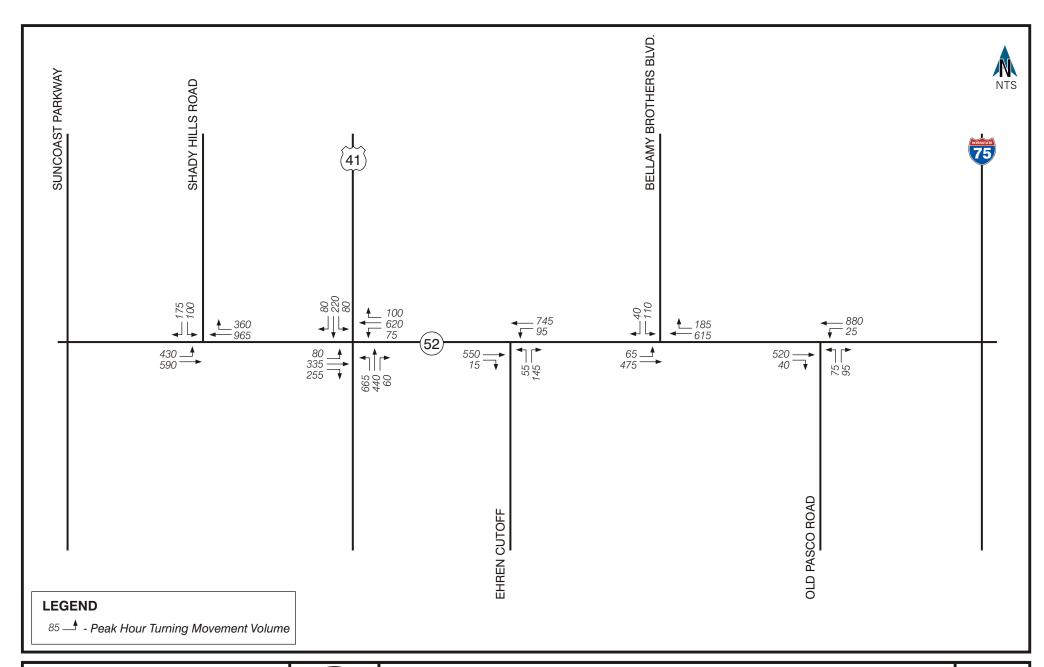




Table 5
Years 2010 and 2030 Design Hour Turning Movement Volumes

| Intersection | 2010 | 2030 |
|---------------------------|------|----------|
| SR52/SHADY HILLS ROAD | 2010 | 2030 |
| EBL | 430 | 640 |
| EBT | 590 | 880 |
| EBR | | |
| | 0 | 0 |
| WBL | 0 | 0 |
| WBT | 965 | 1445 |
| WBR | 360 | 540 |
| NBL NBT | 0 | 0 |
| NBT NBP | 0 | 0 |
| NBR | 0 | 0 |
| SBL | 100 | 140 |
| SBT | 0 | 0 |
| SBR | 175 | 235 |
| SR52/US41 | | |
| EBL | 80 | 120 |
| EBT | 335 | 495 |
| EBR | 255 | 380 |
| WBL | 75 | 135 |
| WBT | 620 | 1115 |
| WBR | 100 | 180 |
| NBL | 665 | 845 |
| NBT | 440 | 590 |
| NBR | 60 | 75 |
| SBL | 80 | 110 |
| SBT | 220 | 300 |
| SBR | 80 | 110 |
| SR52/EHREN CUTOFF | | |
| EBL | 0 | 0 |
| EBT | 550 | 990 |
| EBR | 15 | 25 |
| WBL | 95 | 145 |
| WBT | 745 | 1140 |
| WBR | 0 | 0 |
| NBL | 55 | 140 |
| NBT | 0 | 0 |
| NBR | 145 | 385 |
| SBL | 0 | 0 |
| SBT | 0 | 0 |
| SBR | 0 | 0 |
| SR52/BELLAMY BROTHERS ROA | | ~ |
| EBL | 65 | 100 |
| EBT | 475 | 725 |
| EBR | 0 | 0 |
| WBL | 0 | 0 |
| WBT | 615 | 820 |
| WBR | 185 | 245 |
| NBL | 0 | 0 |
| | | |
| NBT | 0 | 0 |

Table 5
Year 2010 and 2030 Design Hour Turning Movement Volumes (continued)

| Intersection | 2010 | 2030 |
|---------------------|------|------|
| NBR | 0 | 0 |
| SBL | 110 | 140 |
| SBT | 0 | 0 |
| SBR | 40 | 50 |
| SR52/OLD PASCO ROAD | | |
| EBL | 0 | 0 |
| EBT | 520 | 695 |
| EBR | 40 | 55 |
| WBL | 25 | 45 |
| WBT | 880 | 1525 |
| WBR | 0 | 0 |
| NBL | 75 | 210 |
| NBT | 0 | 0 |
| NBR | 95 | 265 |
| SBL | 0 | 0 |
| SBT | 0 | 0 |
| SBR | 0 | 0 |

Appendix A Sketches of Study Intersections

P.O. Box 997 Plant City, FL 33564 Tel:(813) 763-7763 Fax:(813) 659-8688

Project No.: 05073.01

Turning Movement Count Field Data Sheet

| ate: | 8/9/05 | Count Times: | 4-7pm |
|---------------|--|--|--|
| ajor Street: | <u>US 41</u> | Direction: | N-S Speed Limit: 55 mph |
| Inor Street: | SR 52 | Direction: | E-W Speed Limit: 55 mph |
| ty/County: | Gowers Comer Pasco | Weather: | Clear |
| 3 Cycles M | Phasing: | HXIM | 1 |
| tersection Sk | 50 | /8 35 /7 | 35 - 103 =. 27 - 109 s. 45 - 105 s |
| Cityo | ************************************** | The state of the s |) Vacant |
| Vacant | VIELDY VIELDY | echan le | Yiero Hess |

Plant City, FL 33564 Tel:(813) 763-7763 Fax:(813) 659-8688

Project No.: <u>05073.01</u>

Turning Movement Count Field Data Sheet

| | , , | | | | | |
|--|--------------|-------------|--------------|----------|--------------|--------|
| Date: | 8/4/05 | | Count Times: | | 4-7pm | |
| Major Street: | SR 52 | | Direction: | E-W | Speed Limit: | 55 mph |
| Vinor Street: | Ehren Cutoff | <u> </u> | Direction: | N-S | Speed Limit: | |
| City/County: | Chren /P | asco | Weather: | | Clear | |
| 3 Cycles Me | • | Unsig | nalized | | - | |
| , | | | | 1 | | |
| | | 11 | | 4 | | |
| | | Va | cant | 7 | | |
| | | | | | | |
|) | | | | | SR 52 | |
| | | | - | • | | |
| | | | , | | | |
| * ₹ *}} | | | | • | | |
| : | | 1 | Stop | | | |
| Vacan | f- | Aren Cutoff | | | Vaca | ut |
| Vacue | | Chren Cu | | · | V | |

Project No.: 05073.01

Turning Movement Count Field Data Sheet

| Date: | 8/9/05 | Count Times | 5: 4.7pm | • |
|------------------|------------------|-----------------------|---------------------------------------|-----|
| Major Street: | Sl 52 | Direction: | E-W Speed Limit: 55 | mph |
| Minor Street: | Bellamy Brothers | Bodeward Direction: | N-S Speed Limit: 45 | |
| City/County: | ~ | zsco Weather: | Clear | |
| 3 Cycles M | Phasing: | Bellany A A | SR 62 | |
| Intersection Si | cetch_ | 19 18 24 | 51 - 70s. 41 - 65s. 156 - 180s. | |
| Vacant Binldi |] | B. Hany Bar, Balanera | N Vacant | |
| | | | t. | |
| SR 52 | | | | |
| | | 1 | · F | |
| | | | | |
| Vaca | ~t | stop | Vacant | |

Project No.: <u>05073.01</u> Blaint City, FL 33584 fel:(813) 763-7763 Fax:(813) 659-8688 **Turning Movement Count** Field Data Sheet 8/9/05 Count Times: hate: SR 52 Major Street: Speed Limit 55 mph Direction: E-W Speed Limit: 30 mph Old Pasco Road linor Street: Direction: N-S Clear Clty/County: Weather: Phasing: Unsignalized 3 Cycles Measured: tersection Sketch Vacant SR 52 Stop Old Pasco Road)USC Vacant П

Appendix B FDOT Seasonal Adjustment Factor Table

Transportation Statistics Office

2004 Peak Season Factor Category Report

| PASCO COU | UNTYWIDE | 2004 2 | can ocason ractor Category Rep | .01¢ | | $MOCF = 0.96 _$ |
|----------------|----------|-----------------|--------------------------------|--------------|-------|---------------------------------------|
| | 1400 | Week | Dates | SF | PSCF | |
| } | | 1 | 01/01/2004 - 01/03/2004 | 0.98 | 1.02 | |
| | | 2 | 01/04/2004 - 01/10/2004 | 1.00 | 1.04 | \sim |
| 1 | | 3 | 01/11/2004 - 01/17/2004 | 1.02 | 1.06 | , , , , , , , , , , , , , , , , , , , |
|) | | 4 | 01/18/2004 - 01/24/2004 | 1.01 | 1.05 | j |
| | | 5 | 01/25/2004 - 01/31/2004 | 1.00 | 1.04 | ! |
| | | * 6 | 02/01/2004 - 02/07/2004 | 0.99 | 1.03 | ì |
| | | * 7 | 02/08/2004 - 02/14/2004 | 0.98 | 1.02 | |
| | | * . 8 | . 02/15/2004 - 02/21/2004 | 0.97 | 1.01 | |
| | • | * 9 | 02/22/2004 - 02/28/2004 | 0.96 | 1.00 | |
| · } | | * 10 | 02/29/2004 - 03/06/2004 | 0.95 | 0.99 | |
| .) | | * 11 | 03/07/2004 - 03/13/2004 | 0.94 | 0.98 | |
| | | * 12 | 03/14/2004 - 03/20/2004 | 0.93 | 0.97 | |
| | | * 13 | 03/21/2004 - 03/27/2004 | 0.94 | 0.98 | |
| ;) | | * 14 | 03/28/2004 - 04/03/2004 | 0.95 | 0.99 | |
| 1 | | * 15 | 04/04/2004 - 04/10/2004 | 0.95 | 0.99 | |
| 9.). | · - | * 16 | 04/11/2004 - 04/17/2004 | 0.96 | 1.00 | |
| - - | | * 17 | 04/18/2004 - 04/24/2004 | 0.97 | 1.00 | |
| | | * 18 | 04/25/2004 - 05/01/2004 | 0.98 | 1.02 | |
| r' · | | 19 | 05/02/2004 - 05/08/2004 | 1.00 | 1.02 | - |
| . { | | 20 | 05/09/2004 - 05/15/2004 | 1.01 | 1.04 | |
| | | 21 | 05/16/2004 - 05/22/2004 | 1.01 1.01 | 1.05 | |
| | • | 22 | 05/23/2004 - 05/29/2004 | 1.01 | 1.05 | |
| 1 | | 23 | 05/30/2004 - 06/05/2004 | 1.02 | 1.06 | |
| <u></u> | | 24 | 06/06/2004 - 06/12/2004 | 1.02 | 1.06 | • |
| l. | | 25 | 06/13/2004 - 06/19/2004 | 1.03 | 1.07 | |
| | | 26 | 06/20/2004 - 06/26/2004 | 1.03 | 1.07 | |
| 1 | | 27 | 06/27/2004 - 07/03/2004 | 1.03 | 1.07 | |
| | | 28 | 07/04/2004 - 07/10/2004 | 1.03 | 1.07 | |
| : | • | 29 | 07/11/2004 - 07/17/2004 | 1.03 | 1.07 | • |
| 1 | • | 30 | 07/18/2004 - 07/24/2004 | 1.03 | 1.07 | |
| | | 31 | 07/25/2004 - 07/31/2004 | 1.03 | 1.07 | |
| | • | * 32 | 08/01/2004 - 08/07/2004 | | 1.08 | |
| ; } . | | * 33 | 08/08/2004 - 08/14/2004 | | 1.08_ | |
| | | 34 | 08/15/2004 - 08/21/2004 | 1.04 | 1.08 | . |
| | | 35 | 08/22/2004 - 08/28/2004 | 1.06 | 1.10 | |
| - Y | | 36 | 08/29/2004 - 09/04/2004 | 1.08 | 1.13 | |
| 100 | | 37 | 09/05/2004 - 09/11/2004 | 1.10 | 1.15 | |
| | - | 38 | 09/12/2004 - 09/18/2004 | 1.12 | 1.17 | |
| · i | | 39 | 09/19/2004 - 09/25/2004 | 1.08 | 1.13 | |
| 1 | | 40 | 09/26/2004 - 10/02/2004 | 1.05 | 1.09 | |
| | | 41 | 10/03/2004 - 10/09/2004 | 1.02 | 1.06 | |
| | | 42 | 10/10/2004 - 10/16/2004 | 0.99 | 1.03 | |
| | | 43 | 10/17/2004 - 10/23/2004 | 0.98 | 1.02 | |
| i ì | | 44 | 10/24/2004 - 10/30/2004 | 0.97 | 1.01 | • |
| | | 45 | 10/31/2004 - 11/06/2004 | 0.97 | 1.01 | |
| 23 | | 46 | 11/07/2004 - 11/13/2004 | 0.96 | 1.00 | |
| I . | | 47 | 11/14/2004 - 11/20/2004 | 0.96 | 1.00 | |
| k | | 48 | 11/21/2004 - 11/27/2004 | 0.96 | 1.00 | |
| | | 49 | 11/28/2004 - 12/04/2004 | 0.97 | 1.01 | |
| -) | | 50 | 12/05/2004 - 12/11/2004 | 0.97 | 1.01 | |
| | | 51 | 12/12/2004 - 12/18/2004 | 0.98 | 1.02 | |
| | | 52 | 12/19/2004 - 12/25/2004 | 1.00 | 1.04 | |
| 1 | • ' | 53 | 12/26/2004 - 12/31/2004 | 1.02 | 1.06 | |
| . (| | | | 1.02 | 1.00 | |

1

Appendix C FDOT Axle Adjustment Factor Table

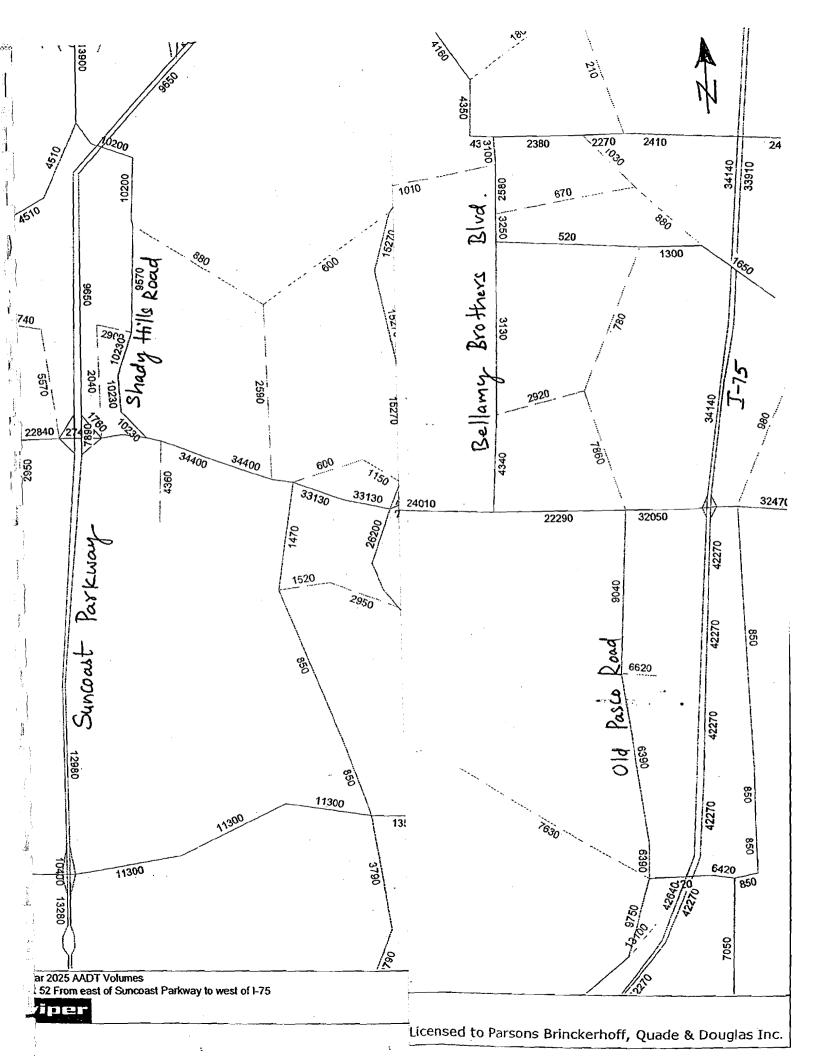
Florida Department of Transportation Transportation Statistics Office

2004 Weekly Axle Factor Category Report

County: 14 - PASCO rategory: 1415 SR52, C SR52, CR581 - CR577

| <u>Week</u> | Dates | ACF |
|-------------|--|--------------|
| 1 | 01/01/2004 - 01/03/2004 | 0.93 |
| 2 | 01/04/2004 - 01/10/2004 | 0.93 |
| 3 | 01/11/2004 - 01/17/2004 | 0.93 |
| 4 | 01/18/2004 - 01/24/2004 | 0.93 |
| 5 | 01/25/2004 - 01/31/2004 | 0.93 |
| 6 | 02/01/2004 - 02/07/2004 | 0.93 |
| 7 | 02/08/2004 - 02/14/2004 | 0.93 |
| 8 | 02/15/2004 - 02/21/2004 | 0.93 |
| 9 | 02/22/2004 - 02/28/2004 | 0.93 |
| 10 | 02/29/2004 - 03/06/2004 | 0.93 |
| 11 | 03/07/2004 - 03/13/2004 | 0.93 |
| 12 | 03/14/2004 - 03/20/2004 | 0.93 |
| 13 | 03/21/2004 - 03/27/2004 | 0.93 |
| 14 | 03/28/2004 - 04/03/2004 | 0.93 |
| 15 | 04/04/2004 - 04/10/2004 | 0.93 |
| 16 | 04/11/2004 - 04/17/2004 | 0.93 |
| 17 | 04/18/2004 - 04/24/2004 | 0.93 |
| 18 | 04/25/2004 - 05/01/2004 | 0.93 |
| 19 | 05/02/2004 - 05/08/2004 | 0.93 |
| 20 | 05/09/2004 - 05/15/2004 | 0.93 |
| 21 | 05/16/2004 - 05/22/2004 | 0.93 |
| 22 | 05/23/2004 - 05/29/2004 | 0.93 |
| 23 | 05/30/2004 - 06/05/2004 | 0.93 |
| 24 | 06/06/2004 - 06/12/2004 | 0.93 |
| 25 | 06/13/2004 - 06/19/2004 | 0.93 |
| 26 | 06/20/2004 - 06/26/2004 | 0.93 |
| 27 | 06/27/2004 - 07/03/2004 | 0.93 |
| 28 | 07/04/2004 - 07/10/2004 | 0.93 |
| 29 | 07/11/2004 - 07/17/2004 | 0.93 |
| 30 | 07/18/2004 - 07/24/2004 | 0.93 |
| 31 | 07/25/2004 - 07/31/2004 | 0.93 |
| 32 | 08/01/2004 - 08/07/2004 | 0.93 |
| 33 | 08/08/2004 - 08/14/2004 | 0.93 |
| 34 | 08/15/2004 - 08/21/2004 | 0.93 |
| 35 | 08/22/2004 - 08/28/2004 | 0.93 |
| 36 | 08/29/2004 - 09/04/2004 | 0.93 |
| 37 | 09/05/2004 - 09/11/2004 | 0.93 |
| 38 | 09/12/2004 - 09/18/2004 | 0.93 |
| 39 | 09/19/2004 - 09/25/2004 | 0.93 |
| 40 | 09/26/2004 - 10/02/2004 | 0.93 |
| 41 42 | 10/03/2004 - 10/09/2004 | 0.93 |
| 43 | 10/10/2004 - 10/16/2004 | 0.93 |
| 43 44 | 10/17/2004 - 10/23/2004 | 0.93 |
| 45 | 10/24/2004 - 10/30/2004 | 0.93 |
| 46 | 10/31/2004 - 11/06/2004 11/07/2004 - 11/13/2004 | 0.93 |
| 47 | 11/14/2004 - 11/13/2004 | 0.93 0.93 |
| 48 | 11/21/2004 - 11/20/2004 | 0.93 |
| 49 | 11/21/2004 - 11/2//2004 11/28/2004 - 12/04/2004 | 0.93 |
| 50 | 12/05/2004 - 12/11/2004 | 0.93 |
| 51 | 12/12/2004 - 12/11/2004 | 0.93 |
| 52 | 12/19/2004 - 12/16/2004 | 0.93 |
| 53 | 12/26/2004 - 12/23/2004 | 0.93 |
| | 12/20/2001 - 12/31/2007 | 0.73 |

Appendix D FSUTMS Volume Plot – Year 2025 AADT Volumes



Appendix E FDOT Design Hour Factors Table

__nspoi_____1 Sta_____ Offi

Volume Factor Category Summary Report

Category: 1400 PASCO COUNTYWIDE

| Co Site *Dir E | х Јап | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Sun | Mon | Tue | Wed | Thu | Fri | Sat | 9.45 | ''K100' 9.04 | 57.88 | FLG F | AADT 6,200 37,500 21,500 |
|-------------------------------------|-------|------|----------------------|------|------|------|------|------|------|------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|------|-----------------|-------|------------|-----------------------------------|
| 02 0044 B 02 0044 N 02 0044 S | 1.02 | 0.95 | 0.92 0.90 0.95 | 0.94 | 1.02 | 1.04 | 1.02 | 1.06 | 1,15 | 1.02 | 0.94 | 0.97 0.98 0.95 | 1.07 1.15 0.99 | 1.06 1.08 1.04 | | 1.01 1.01 1.01 | 1.00 0.98 1.02 | | 0.98 0.96 0.99 | 9.85 | 9.22 | 56.05 | A ; | 17,282 |
| 08 0283 B 08 0283 N 08 0283 S | 1.01 | 0.95 | 0,90 0.90 0.90 | 0.95 | 1.01 | 1.04 | 1.04 | 1.06 | 1.12 | 1.00 | 0.96 0.96 0.96 | 0.99 | 1.16 1.20 1.13 | 1.03 | 0.99 0.99 0.99 | 0.96 0.96 0.96 | 0.98 0.97 0.98 | 0.89 | 1.01 1.00 1.02 | 9.19 | 8.86 | 53.51 | A | 20,747 |
| 14 0013 B 14 0013 N 14 0013 S | 1,03 | 0.98 | 0.98 0.97 0.98 | 0.99 | 1.00 | 1.01 | 1.03 | 1.02 | 1.05 | 0.96 | 0.98 0.98 0.98 | 0.98 | 1.43 1.43 1.44 | 0.98 0.98 0.97 | 0.93 | 0.92 0.92 0.92 | 0.92 0.92 0.92 | 0.89 0.89 0.90 | 1.10 | 9.31 | 9.03 | 64.07 | A . | 45,992 |
| Category: | 1.02 | 0.97 | 0.93 | 0.96 | 1,01 | 1.03 | 1.03 | 1.04 | 1.12 | 0,99 | 0.96 | 0.98 | 1.22 | 1.02 | 0.98 | 0.96 | 0.97 | 0.89 | 1.03 | 945 | 9.04 | 5788 | * | |

Note: * 'B' = Both 'N' = North 'S' = South 'E' = East 'W' = West

"K/D" Flags: A = Actual; F = Volume Fctr Catg; D = Dist/Functional Class; P = Prior Year; S = State-wide Default; W = One-Way Road;

2004 Annual Average Daily Traffic Report

County: 14 -- PASCO

| | Cita | | | | | | AADT | 7 | "K30" | "D30" | "T |
|------|------|-----------------------|-----------|-------------|------------------|----|-------|---|---------|---------------|------|
| SITE | type | <u>Description</u> | Direction | <u>on 1</u> | <u>Direction</u> | 12 | Two-W | | | Factor | Fact |
| 0025 | P | SR 457 SOUTH OF SR 52 | 8,200 | N | 8,400 | S | 16600 | С | 90.45 P | 57.88 T. | 6.86 |

Site type: T = Telemetered; P = Portable

AADT Flags: C = Computed; E = Manual Estimate; F = First Year Est; S = Second Year Est; T = Third Year Est; X = Unknown "K/D" Flags: A = Actual; F = Volume Fctr Catg; D = Dist/Functional Class; P = Prior Year; S = State-wide Default; W = One-Way Road "T" Flags: A = Actual; F = Axle Fctr Catg; D = Dist/Functional Class; P = Prior Year; S = State-wide Default; X = Cross-Reference