

Wekiva Parkway Traffic and Revenue Study

Conducted For:



Conducted by:



February 2012

Wekiva Parkway Traffic and Revenue Study

Prepared For:

Orlando-Orange County Expressway Authority 4974 ORL Tower Road Orlando, FL 32807

Prepared By:

HNTB Corporation 610 Crescent Executive Court, Suite 400 Lake Mary, FL 32746

And

Stantec 50 West 23rd Street New York, NY 10010

February 2012



Table of Contents

Exec	utive Summary	1
1. Inti	roduction	1
2. Pro	bject Overview and Methodology	3
2.1.	Project History and Overview	3
2.2.	Project Description	6
2.3.	Project Assumptions	8
2.3	.1 Project Phasing	8
2.3	.2 Project Toll Operation	8
2.3	.3 Project Toll Structure	8
2.3	.4 Project Toll Rates	8
2.3	.5 Toll Indexing	9
2.4.	Project Travel Demand Model	10
2.4	.1 Travel Demand Model Development	10
2.4	.2 Model Validation	10
2.4	.3 Future Land Use Development	12
2.4	.4 Future Highway Transportation Networks	12
2.4	.5 Future Transit Transportation Networks	13
2.5.	Project Sensitivities	13
3. Exi	sting Conditions	14
3.1.	Existing Roadway Network	14
3.1.	1 Orange County	14
3.1.	2 Lake County	17
3.1.	3 Seminole County	18
3.2.	Existing Traffic Count Data	19
3.3.	Historical Traffic Trends	24
3.3	.1 SR 46	24
3.3	.2 US 441	26
4. I	Land Use Development/Economic Assumptions	28
4.1.	Land Use Development	28
4.2.	Methodology	29
4.3.	Existing (2010)	35
4.4.	Future Years (2015-2050)	40
4.5.	Land Use Sensitivities	52
5. I	Model Validation	74



5.1.	Base Model Development	74
5.1.	1 Base Year Network	74
5.1.	2 Base Year Land Use	74
5.1.	3 Base Year Traffic Counts	78
5.1.	4 Value of Time	78
5.2.	Model Validation Results	82
5.2	.1 Validation – Key Roadway Corridors	82
5.2	.2 Validation - Cutlines	
5.2	.3 Validation - RMSE	
5.3.	Origin and Destination Study	
5.3	.1 Origin and Destination Patterns	95
5.4.	Travel Time Comparison	
5.5.	Conclusion	
6. I	Build Scenario	110
6.1.	Build Assumptions	
6.1.	1 Toll Operation	110
6.1.	2 Toll Operation	110
6.1.	3 Toll Structure	112
6.1.	4 Toll Rates	116
6.1.	5 Traffic Ramp-Up	116
6.1.	6 Transportation Network	
6.1.	7 Service Road	127
6.2.	Baseline Revenue Forecasts	
6.2	.1 Baseline Scenario 1	
6.2	.2 Baseline Scenario 2	135
6.2	.3 Baseline Scenario 3	
6.2	.4 Baseline Scenario 4	147
6.2	.5 Baseline Scenario Summary	
7. Lar	nd Use Sensitivity	
7.1.	Land Use Sensitivity - Low Land Use Scenario	
7.2.	Land Use Sensitivity - High Land Use Scenario	160
7.3.	Land Use Sensitivity Summary	
8. ⁻	Toll Sensitivity	
8.1.	Toll Sensitivity 1 - Three Percent Indexing	167
8.2.	Toll Sensitivity 2 - No Toll Increase	172
8.3.	Toll Sensitivity Summary	



9.	Network Sensitivity	179
9.1.	Network Sensitivity 1 - Uninterrupted Service Road	179
9.2.	Network Sensitivity 2 – Uninterrupted Service Road and Low Land Use	185
9.3.	Network Sensitivity 3 - US 441 Widening	
9.4.	Network Sensitivity Summary	196
10.	E-PASS Discount	198
11.	Elasticity	
12.	Disclaimers	
12.1.	Revenue Forecast Assumptions	208
13.	Conclusions	210
APPE	NDICES	211



List of Tables

Table E-1- Annual Transactions for Baseline Scenarios	4
Table E-2 - Annual Net Revenue for Baseline Scenarios	5
Table 3-1- 2010 AADT (Orange County)	20
Table 3-2- 2010 AADT (Lake County)	
Table 3-3- 2010 AADT (Seminole County)	
Table 4-1- ZDATA 1 for the 2010 Base Year	
Table 4-2- ZDATA 2 for the 2010 Base Year	
Table 4-3- Population Totals and CAGR for Future Years	
Table 4-4- Employment Totals and CAGR for Future Years	
Table 4-5- Study Area Population Totals and CAGR for Future Years	
Table 4-6- Study Area Employment Totals and CAGR for Future Years	
Table 4-7- 2015 Land Use	72
Table 4-8- 2020 Land Use	72
Table 4-9- 2025 Land Use	72
Table 4-10- 2030 Land Use	73
Table 5-1 - Traffic Analysis Zone (TAZ) Ranges by County	75
Table 5-2- Calendar Year 2010 Population Estimates	75
Table 5-3 - Calendar Year 2010 Employment Estimates	76
Table 5-4- Model Output Conversion Factors (MOCF)	78
Table 5-5 - FSUTMS Model Calibration and Validation Standards	83
Table 5-6 - US 441 Corridor Summary	
Table 5-7 - SR 46 Corridor Summary	84
Table 5-8- Regional Cutline Validation Results	
Table 5-9- Study Area Cutline Validation Results	
Table 5-10- Study Area Validation Root Mean Square Error (RMSE)	
Table 5-11- Regional Validation Root Mean Square Error (RMSE)	
Table 5-12 - Travel Times	107
Table 6-1 - Baseline Scenario 1 Annual Transactions	132
Table 6-2 - Baseline Scenario 1 Annual Gross Revenue	133
Table 6-3 - Baseline Scenario 1 Annual Gross Revenue Less Leakage	134
Table 6-4 - Baseline Scenario 2 Annual Transactions	138
Table 6-5 - Baseline Scenario 2 Annual Gross Revenue	139
Table 6-6 - Baseline Scenario 2 Annual Gross Revenue Less Leakage	140
Table 6-7 - Baseline Scenario 3 Annual Transactions	144
Table 6-8 - Baseline Scenario 3 Annual Gross Revenue	145



Table 6-9 - Baseline Scenario 3 Annual Gross Revenue Less Leakage	146
Table 6-10 - Baseline Scenario 4 Annual Transactions	150
Table 6-11 - Baseline Scenario 4 Annual Gross Revenue	151
Table 6-12 - Baseline Scenario 4 Annual Gross Revenue Less Leakage	152
Table 6-13 - Baseline Scenario Summary - Annual Gross Revenue Less Leakage	154
Table 7-1 - Low Land Use Scenario 1 - Toll Structure 1 with 15 cpm Toll Rate	156
Table 7-2 - Low Land Use Scenario 2 - Toll Structure 1 with 18 cpm Toll Rate	157
Table 7-3 - Low Land Use Scenario 3 - Toll Structure 2 with 15 cpm Toll Rate	158
Table 7-4 - Low Land Use Scenario 4 - Toll Structure 2 with 18 cpm Toll Rate	159
Table 7-5 - High Land Use Scenario 1 - Toll Structure 1 with 15 cpm Toll Rate	161
Table 7-6 - High Land Use Scenario 2 - Toll Structure 1 with 18 cpm Toll Rate	162
Table 7-7 - High Land Use Scenario 3 - Toll Structure 2 with 15 cpm Toll Rate	163
Table 7-8 - High Land Use Scenario 4 - Toll Structure 2 with 18 cpm Toll Rate	164
Table 7-9 - Land Use Scenarios - Gross Revenue Less Leakage Comparison	166
Table 8-1 - Toll Sensitivity 1: Scenario 1 - Toll Structure 1 with 15 cpm Toll Rate	168
Table 8-2 - Toll Sensitivity 1: Scenario 2 - Toll Structure 1 with 18 cpm Toll Rate	169
Table 8-3 - Toll Sensitivity 1: Scenario 3 - Toll Structure 2 with 15 cpm Toll Rate	170
Table 8-4 - Toll Sensitivity 1: Scenario 4 - Toll Structure 2 with 18 cpm Toll Rate	171
Table 8-5 - Toll Sensitivity 2: Scenario 1 - Toll Structure 1 with 15 cpm Toll Rate	173
Table 8-6 - Toll Sensitivity 2: Scenario 2 - Toll Structure 1 with 18 cpm Toll Rate	174
Table 8-7 - Toll Sensitivity 2: Scenario 3 - Toll Structure 2 with 15 cpm Toll Rate	175
Table 8-8 - Toll Sensitivity 2: Scenario 4 - Toll Structure 2 with 18 cpm Toll Rate	176
Table 8-9 - Toll Sensitivity Scenarios Summary - Gross Revenue Less Leakage	178
Table 9-1 - Network Sensitivity 1: Scenario 1 - Toll Structure 1 with 15 cpm Toll Rate	181
Table 9-2 - Network Sensitivity 1: Scenario 2 - Toll Structure 1 with 18 cpm Toll Rate	182
Table 9-3 - Network Sensitivity 1: Scenario 3 - Toll Structure 2 with 15 cpm Toll Rate	183
Table 9-4 - Network Sensitivity 1: Scenario 4 - Toll Structure 2 with 18 cpm Toll Rate	184
Table 9-5 - Network Sensitivity 2: Scenario 1 - Toll Structure 1 with 15 cpm Toll Rate	186
Table 9-6 - Network Sensitivity 2: Scenario 2 - Toll Structure 1 with 18 cpm Toll Rate	187
Table 9-7 - Network Sensitivity 2: Scenario 3 - Toll Structure 2 with 15 cpm Toll Rate	188
Table 9-8 - Network Sensitivity 2: Scenario 4 - Toll Structure 2 with 18 cpm Toll Rate	189
Table 9-9 - Network Sensitivity 3: Scenario 1 - Toll Structure 1 with 15 cpm Toll Rate	192
Table 9-10 - Network Sensitivity 3: Scenario 2 - Toll Structure 1 with 18 cpm Toll Rate	193
Table 9-11 - Network Sensitivity 3: Scenario 3 - Toll Structure 2 with 15 cpm Toll Rate	194
Table 9-12 - Network Sensitivity 3: Scenario 4 - Toll Structure 2 with 18 cpm Toll Rate	195
Table 9-13 - Network Sensitivity Summary - Gross Revenue Less Leakage	



Table 10-1 - Baseline Scenario 1 - Wekiva Parkway Gross Revenue Less E-PASS Discount	
Table 10-2 - Baseline Scenario 2 - Wekiva Parkway Gross Revenue Less E-PASS Discount	200
Table 10-3 - Baseline Scenario 3 - Wekiva Parkway Gross Revenue Less E-PASS Discount	201
Table 10-4 - Baseline Scenario 4 - Wekiva Parkway Gross Revenue Less E-PASS Discount	202
Table 11-1 -Wekiva Parkway 2030 Elasticities	204



List of Figures

Figure E-1 - Project Study Area	2
Figure 1-1 - Central Florida Expressways	2
Figure 2-1 - Project Study Area	4
Figure 2-2 - National CPI vs. Orlando Per Capita Income	9
Figure 3-1 - Project Location Map	15
Figure 3-2 - Existing Study Area Roadway Geometry	16
Figure 3-3 - 2010 Traffic Count Data	23
Figure 3-4 - SR 46 Historical Traffic Trend	24
Figure 3-5 - Competing Facilities	25
Figure 3-6 - SR 46 Traffic Profile by Time of Day	26
Figure 3-7 - US 441 Historical Traffic Trend	27
Figure 3-8 - US 441 Traffic Profile by Time of Day	27
Figure 4-1 - Region Wide TAZ Map	
Figure 4-2 - Study Area TAZ Map	31
Figure 4-3 - Regional Employment Centers	34
Figure 4-4 - 2010 Population Density	
Figure 4-5 - 2010 Employment Density	
Figure 4-6 - 2010 Land Use by District	
Figure 4-7 - 2015 Population Density	43
Figure 4-8 - 2020 Population Density	44
Figure 4-9- 2025 Population Density	45
Figure 4-10 - 2030 Population Density	46
Figure 4-11 - 2015 Employment Density	47
Figure 4-12 - 2020 Employment Density	48
Figure 4-13- 2025 Employment Density	49
Figure 4-14 - 2030 Employment Density	50
Figure 4-15 - 2030 Land Use by District	51
Figure 4-16 - 2015 Low Land Use Scenario Population Density	53
Figure 4-17 - 2020 Low Land Use Scenario Population Density	54
Figure 4-18 - 2025 Low Land Use Scenario Population Density	55
Figure 4-19 - 2030 Low Land Use Scenario Population Density	56
Figure 4-20 - 2015 Low Land Use Scenario Employment Density	57
Figure 4-21 - 2020 Low Land Use Scenario Employment Density	58
Figure 4-22 - 2025 Low Land Use Scenario Employment Density	59
Figure 4-23 - 2030 Low Land Use Scenario Employment Density	60



Figure 4-24 - 2030 Low Land Use Scenario by District	61
Figure 4-25 - 2015 High Land Use Scenario Population Density	63
Figure 4-26 - 2020 High Land Use Scenario Population Density	64
Figure 4-27 - 2025 High Land Use Scenario Population Density	65
Figure 4-28 - 2030 High Land Use Scenario Population Density	66
Figure 4-29 - 2015 High Land Use Scenario Employment Density	67
Figure 4-30 - 2020 High Land Use Scenario Employment Density	68
Figure 4-31 - 2025 High Land Use Scenario Employment Density	69
Figure 4-32 - 2030 High Land Use Scenario Employment Density	70
Figure 4-33 - 2030 Land Use by District	71
Figure 5-1 - 2010 Land Use by District	77
Figure 5-2 - Study Area Count Locations	79
Figure 5-3- Model Validation Regional Cutlines	85
Figure 5-4- Model Validation Study Area Cutlines	
Figure 5-5 - Survey Locations	
Figure 5-6 - Origin and Destination Study Districts	
Figure 5-7 - Planning Groups	94
Figure 5-8 - Location 1 O&D Survey vs. Model Results	96
Figure 5-9 - Location 2 O&D Survey vs. Model Results	
Figure 5-10 - Location 3 O&D Survey vs. Model Results	
Figure 5-11 - Location 4 O&D Survey vs. Model Results	
Figure 5-12 - Location 5 O&D Survey vs. Model Results	101
Figure 5-13 - Location 6 O&D Survey vs. Model Results	102
Figure 5-14 - Location 7 O&D Survey vs. Model Results	104
Figure 5-15 - Location 8 O&D Survey vs. Model Results	105
Figure 5-16 - Location 9 O&D Survey vs. Model Results	106
Figure 5-17 - Travel Time Run Corridors	108
Figure 6-1 - Wekiva Parkway Phasing Plan	111
Figure 6-2 - Toll Structure 1 Configuration	
Figure 6-3 - Toll Structure 2 Configuration	115
Figure 6-4 - 2018 Regional Toll Rates	
Figure 6-5 - Toll Structure 1 Toll Rates	118
Figure 6-6 - Toll Structure 2 Toll Rates	119
Figure 6-7 - YR 2015 No-Build Highway Network	
Figure 6-8 - YR 2020 No-Build Highway Network	
Figure 6-9 - YR 2025 No-Build Highway Network	



Figure 6-10 - YR 2030 No-Build Highway Network	124
Figure 6-11 - YR 2030 Build Highway Network	125
Figure 6-12 - YR 2030 Build Transit Network	126
Figure 6-13 - Baseline Toll Scenario 1 Year 2017 Traffic	
Figure 6-14 - Baseline Scenario 1 Year 2030 Traffic	
Figure 6-15 - Baseline Scenario 2 Year 2017 Traffic	136
Figure 6-16 - Baseline Scenario 2 Year 2030 Traffic	
Figure 6-17 - Baseline Scenario 3 Year 2017 Traffic	142
Figure 6-18 - Baseline Scenario 3 Year 2030 Traffic	143
Figure 6-19 - Baseline Scenario 4 Year 2017 Traffic	148
Figure 6-20 - Baseline Scenario 4 Year 2030 Traffic	149
Figure 9-1 - Network Sensitivity 1	
Figure 9-2 - Network Sensitivity -US 441 Widening Limits	
Figure 11-1 - Toll Structure 1 - Orange ML Modeled Toll Curve	205
Figure 11-2 - Toll Structure 2 - Orange ML Modeled Toll Curve	205
Figure 11-3 - Toll Structure 1 - East Lake ML Modeled Toll Curve	206
Figure 11-4 - Toll Structure 2 - East Lake ML Modeled Toll Curve	206
Figure 11-5 - Toll Structure 1 - Total Wekiva Parkway Modeled Toll Curve	207
Figure 11-6 - Toll Structure 2 - Total Wekiva Parkway Modeled Toll Curve	



EXECUTIVE SUMMARY

The purpose of this study is to provide investment grade traffic and revenue forecasts for the SR 429/Wekiva Parkway (Wekiva Parkway) project, the northwest and final segment of the Orlando Beltway. The project revenue forecast included in this report will be used for the financial evaluation of the Wekiva Parkway project as a potential expansion of the Orlando area expressway system. This Investment Grade Traffic and Revenue Study for Wekiva Parkway was prepared by HNTB Corporation in association with Stantec, as the Traffic and Earnings Consultant to the Orlando-Orange County Expressway Authority (the Authority). Fishkind and Associates was also retained to provide independent land use and socioeconomic forecasts for the study area.

Wekiva Parkway is the proposed extension of SR 429 to the north and east and completes the final section of the Orlando Beltway. This facility would connect areas of northwest Orange County near Apopka to the Mount Dora area of east Lake County and the I-4 corridor in Seminole County. Figure E-1 shows the Wekiva Parkway alignment and the project study area.

Traffic and revenue forecasts were prepared for four baseline scenarios for the project. The assumptions related to the baseline scenarios were developed through significant coordination with the Wekiva Parkway partners, namely the Authority, the Florida's Turnpike Enterprise (FTE) and the Florida Department of Transportation District 5 (FDOT D5). The goal of the coordination effort was the development of traffic and revenue forecasts for Wekiva Parkway that would incorporate input and assumptions from all partnership agencies and, in so doing, accommodated the varying business practices, toll policies and preferences of all three partners. The resulting Wekiva Parkway traffic and revenue forecasts presented in this report could then be utilized by both the Authority and FTE in their financial evaluation of the project.

The coordination with the Wekiva Parkway partners resulted in the following project assumptions for the baseline conditions:

- Wekiva Parkway will operate as an all electronic tolling (AET) facility, accommodating E-PASS/SunPass transponders and video tolling of license plates.
- Wekiva Parkway will open in two phases. Phase 1 will open in 2017 and Phase 2 will open in 2019.



FIGURE E-1 PROJECT STUDY AREA





- Two toll structures will be considered. Toll Structure 1 reflects a traditional mainline and ramp gantry system. Toll Structure 2 utilizes mainline gantries only and results in a toll by segment operation.
- Two sets of average base toll rates will be considered, 15 and 18 cents per mile.
- Wekiva Parkway toll rates will be indexed annually to inflation, which is assumed to be 2 percent for this Investment Grade Study.

These project assumptions resulted in the following four baseline scenarios for Wekiva Parkway:

- Baseline Scenario 1 Toll Structure 1 with base toll rate of 15 cents per mile
- Baseline Scenario 2 Toll Structure 1 with base toll rate of 18 cents per mile
- Baseline Scenario 3 Toll Structure 2 with base toll rate of 15 cents per mile
- Baseline Scenario 4 Toll Structure 2 with base toll rate of 18 cents per mile

Traffic and revenue forecasts were developed for each baseline scenario out to FY 2050. The total annual transactions for each of the four baseline scenarios are shown in Table E-1. Total net revenue for Wekiva Parkway was calculated as the annual gross revenues less leakage and E-PASS discount. The total net revenue for Wekiva Parkway is shown in Table E-2 for each of the four baseline scenarios. Total annual transactions for Baseline Scenario 1 are forecast to be 34.2 million in FY 2030 and 42.8 million in FY 2050 resulting in annual net revenues for Wekiva Parkway of \$46.3 million in FY 2030 and \$82.7 million in FY 2050. Similarly, the total annual transactions for Baseline Scenario 2 are forecast to be 28.1 million in FY 2030 and 34.5 million in FY 2050 resulting in annual net revenues for Wekiva Parkway of \$47.3 million in FY 2030 and \$83.2 million in FY 2030. Under Baseline Scenario 3, total annual transactions are forecast to be 79.1 million in FY 2030 and 98.9 million in FY 2030 resulting in annual net revenues for Wekiva Parkway of \$40.5 million in FY 2030 and \$75.1 million in FY 2030 and 84.8 million in FY 2050 resulting in annual net revenues for Wekiva Parkway of \$40.5 million in FY 2030 and \$75.1 million in FY 2030 and \$40.4 million in FY 2030 and \$75.4 million in FY 2050.



Fiend	Annual Transactions (millions)			
Fiscal	Baseline	Baseline	Baseline	Baseline
real	Scenario 1	Scenario 2	Scenario 3	Scenario 4
2018	2.7	2.0	3.5	2.6
2019	4.5	3.5	5.7	4.1
2020	16.3	13.5	42.9	35.1
2021	20.1	16.8	50.9	42.0
2022	23.3	19.7	59.2	49.1
2023	24.5	20.9	62.1	50.4
2024	25.9	22.1	65.1	53.6
2025	27.4	23.6	68.5	55.1
2026	29.0	25.1	72.1	58.5
2027	30.4	25.9	74.8	61.3
2028	31.8	26.8	75.6	63.6
2029	33.1	27.5	78.1	65.8
2030	34.2	28.1	79.1	67.5
2031	35.4	28.7	81.0	69.1
2032	36.5	29.4	82.3	70.7
2033	37.3	30.1	84.0	72.1
2034	38.0	30.7	85.3	73.7
2035	38.5	31.2	86.9	74.9
2036	39.0	31.5	88.4	76.1
2037	39.4	31.9	89.9	77.4
2038	39.9	32.2	91.0	78.3
2039	40.2	32.5	92.1	79.3
2040	40.6	32.8	93.4	80.4
2041	40.8	32.9	93.9	80.8
2042	41.0	33.1	94.5	81.2
2043	41.2	33.3	95.0	81.7
2044	41.5	33.5	95.5	82.1
2045	41.7	33.6	96.2	82.6
2046	41.9	33.8	96.7	83.1
2047	42.1	34.0	97.1	83.5
2048	42.3	34.1	97.7	83.9
2049	42.5	34.3	98.3	84.4
2050	42.8	34.5	98.9	84.8

Table E-1- Annual Transactions for Baseline Scenarios

*Traffic and revenue for FY 2018 - FY 2021 include a reduction for ramp-up.



Figeal	Annual Net Revenue (\$millions)			
Voor	Baseline	Baseline	Baseline	Baseline
rear	Scenario 1	Scenario 2	Scenario 3	Scenario 4
2018	\$1.4	\$1.3	\$1.4	\$1.3
2019	\$2.5	\$2.2	\$2.5	\$2.1
2020	\$18.8	\$18.6	\$17.6	\$16.8
2021	\$23.4	\$23.4	\$21.2	\$21.0
2022	\$27.6	\$27.9	\$25.3	\$24.6
2023	\$29.6	\$30.3	\$27.0	\$26.3
2024	\$31.8	\$32.9	\$29.4	\$28.2
2025	\$34.0	\$36.0	\$31.4	\$29.9
2026	\$36.7	\$39.3	\$33.8	\$32.3
2027	\$39.3	\$41.4	\$35.5	\$34.5
2028	\$41.8	\$43.9	\$37.4	\$36.6
2029	\$44.0	\$45.5	\$38.9	\$38.5
2030	\$46.3	\$47.3	\$40.5	\$40.4
2031	\$48.4	\$49.1	\$42.2	\$42.0
2032	\$50.5	\$50.9	\$43.8	\$44.2
2033	\$52.1	\$52.7	\$45.7	\$46.1
2034	\$54.1	\$54.4	\$47.7	\$47.7
2035	\$55.8	\$56.1	\$49.3	\$49.7
2036	\$57.5	\$58.0	\$51.3	\$51.7
2037	\$59.2	\$59.6	\$53.3	\$53.4
2038	\$60.9	\$61.4	\$54.9	\$55.2
2039	\$62.7	\$63.0	\$56.7	\$57.1
2040	\$64.6	\$65.0	\$58.3	\$58.6
2041	\$66.2	\$66.7	\$60.1	\$60.2
2042	\$67.9	\$68.3	\$61.4	\$61.5
2043	\$69.8	\$69.8	\$62.9	\$63.2
2044	\$71.4	\$71.6	\$64.8	\$64.9
2045	\$73.1	\$73.4	\$66.1	\$66.5
2046	\$75.1	\$75.4	\$68.0	\$68.0
2047	\$77.0	\$77.3	\$69.9	\$69.9
2048	\$78.8	\$79.3	\$71.6	\$71.7
2049	\$80.7	\$81.2	\$73.2	\$73.4
2050	\$82.7	\$83.2	\$75.1	\$75.4

Table E-2 - Annual Net Revenue for Baseline Scenarios

*Traffic and revenue for FY 2018 - FY 2021 include a reduction for ramp-up.



In addition to the baseline scenarios, several sensitivities were also evaluated to identify potential impacts to the Wekiva Parkway traffic and revenue forecasts due to a change in one of the key assumptions in this study. These sensitivities were categorized into three types: land use, toll policy and network sensitivity. Revenue forecasts were developed for the sensitivities to be utilized in the financial analysis of the project as needed.

The Wekiva Parkway project has been identified as a regional transportation need for the Orlando urban area for several decades. The baseline revenue forecasts and sensitivity analyses developed as part of this Wekiva Parkway Investment Grade Study can be utilized by the Wekiva Parkway partners to determine the financial feasibility of this critical project.



1. Introduction

This Investment Grade Study for Wekiva Parkway was prepared by HNTB Corporation in association with Stantec, as the Traffic and Earnings Consultant to the Orlando-Orange County Expressway Authority (the Authority). Fishkind and Associates was also retained to provide independent land use and socioeconomic forecasts for the study area. The purpose of this study is to provide investment grade traffic and revenue forecasts for the SR 429/Wekiva Parkway (Wekiva Parkway) project, the northwest and final segment of the Orlando Beltway. The project revenue forecast included in this report will be used for the financial evaluation of the Wekiva Parkway project as a potential expansion of the Orlando area expressway system. The current Central Florida Expressway system is shown in Figure 1-1. This document outlines the study methodology, assumptions and the resulting traffic and revenue forecasts for Wekiva Parkway.

The main purpose of this report is to present the investment grade revenue forecasts for Wekiva Parkway that were developed to be used in a financial analysis that to determine the feasibility of the Wekiva Parkway project. If feasible, this project will be the last segment to complete the beltway loop around Orlando. The revenue forecasts were developed for the period covering fiscal year (FY) 2018 (assumed opening of Wekiva Parkway) through FY 2050. The Authority's fiscal year runs from July to June and overlaps two calendar years. Revenue is projected through FY 2050 and corresponds to the Authority's fiscal years to aid in the financial analysis of the project.

An announcement of a partnership between the Authority, FDOT D5 and Florida's Turnpike Enterprise (FTE) occurred in late May 2011. As a result of that announcement, a significant coordination effort was begun with Authority, FTE and Florida Department of Transportation (FDOT) D5 staff on the traffic and revenue forecast inputs and assumptions related to this Investment Grade Study. The goal of the coordination effort was the development of traffic and revenue forecasts for Wekiva Parkway that would incorporate input from all partnership agencies and, in so doing, accommodate the varying business practices, toll policies and preferences of all three partners. Input, including project assumptions, received from the different agencies involved in these partnership meetings has been incorporated into the Wekiva Parkway traffic and revenue forecasts. These traffic and revenue forecasts for Wekiva Parkway could then be utilized by both the Authority and FTE in their financial evaluation of the project.







2. Project Overview and Methodology

The methodology of this traffic and revenue study included the development of several analysis tools to reflect future traffic demand within the Wekiva Parkway study area. The support tools and analysis for this study included the development of a project travel demand model, development of base and future land use datasets, implementation of a trip origin and destination study within the project corridor and travel time runs on study area roadways. In addition, several key project assumptions related to the operation of the Wekiva Parkway were developed. The project assumptions and travel demand models are discussed in this section.

The Investment Grade study mostly focuses on a specific area to develop more detailed results; this area is called the study area and is shown in Figure 2-1. The Wekiva Parkway study area is generally located where Lake, Orange, and Seminole Counties meet in Central Florida. In Orange County, the study area follows US 441 north from the Apopka area, where US 441 and SR 46 intersect, to the Lake County boundary line. In Seminole County the study area includes the SR 46, SR 417 and Interstate 4 corridors. The study area portion in Lake County is bounded by SR 44 as well as the Orange and Seminole County lines.

2.1. Project History and Overview

The Wekiva Parkway project, generally represents the completion of the northwest portion of the Orlando beltway system, which has been studied by different organizations for several decades. The project's financial and environmental constraints, however, proved to be significant obstacles to overcome for it to move forward as a viable project. Due to the extensive environmental and transportation issues impacting the Wekiva Parkway project study area, reaching a consensus on the project's purpose and need was complicated for the project stakeholders.

In September 2002, the Wekiva Basin Area Task Force was formed by Executive Order of Governor Jeb Bush. The purpose of the task force was to identify the most appropriate location for a highway route connecting SR 429, from its current terminus at US 441, to Interstate 4, which would complete a western beltway around the Orlando Urban Area. A key component of the Task Force's evaluation was to focus on the protection of the Wekiva Basin while achieving the goal of connecting SR 429 and Interstate 4. A final report was submitted to the Governor in January 2003, which included recommendations for planning and locating



FIGURE 2-1 PROJECT STUDY AREA





the Wekiva Parkway. The report recommended a corridor that extends from the planned northern terminus of the SR 414/Maitland Boulevard Extension at US 441 to the SR 46 corridor in Lake County, then along the SR 46 corridor to I-4 in Seminole County.

In order to further the efforts of the Wekiva Basin Area Task Force, Governor Bush signed an Executive Order in July 2003 establishing the Wekiva River Basin Coordinating Committee. The purpose of the committee was to identify land use planning strategies and development standards which improve and ensure protection of surface and groundwater resources of the Wekiva Basin. The committee issued a final report in March 2004.

A recommendation of the Wekiva Task Force's report was to create the SR 429 Northwest Extension Corridor Working Group. The purpose of this group was to study the corridor for a limited-access highway linking US 441 and the proposed Wekiva Parkway. The Working Group, which included representation and significant involvement from the Authority, was formed in November 2003 and issued its final recommendations in January 2004. The recommendations included a corridor that consisted of two components: the Wekiva Parkway, which was similar to that defined by the Wekiva Task Force, and the SR 46 Connector, a limited-access facility connecting the Wekiva Parkway to SR 46 west of Sorrento, with a system interchange located near the Lake/Orange County line. It was determined that the Authority had the responsibility for the portion of the Wekiva Parkway in Orange County (referred to as the SR 429 Northern Extension), while the FDOT had the primary responsibility for the portion in Lake and Seminole Counties and for the SR 46 Connector.

Based on the recommendations of the Wekiva Basin Area Task Force, the Wekiva River Basin Coordinating Committee and the SR 429 Northwest Extension Corridor Working Group, Governor Jeb Bush signed the *Wekiva Parkway and Protection Act* into law in June 2004. The law authorizes building the Wekiva Parkway and provides protection to the Wekiva River system through the acquisition of environmental lands, control of land uses and conservation of water resources.

In August 2004, the Authority approved the execution of an agreement with the FDOT that the Authority would take the lead in conducting the Project Development and Environment (PD&E) study for the entire Wekiva Parkway project, with the FDOT reimbursing the Authority when funding becomes available.



The PD&E study for the Wekiva Parkway project began in late 2004 and continued into 2011. The PD&E Study has been conducted as a partnership between both the Authority and FDOT. Public hearings for the final preferred alignment occurred in October 2010, and the study is currently obtaining the final approvals from the historical, environmental and transportation agencies. The completion of the Wekiva Parkway PD&E Study is expected in early 2012. Once the PD&E study is completed and a funding plan has been developed, the project is expected to move forward through the design, right-of-way acquisition and construction phases.

As part of the Wekiva Parkway PD&E Study, Wekiva Parkway was originally assumed to be constructed by the Authority in Orange County and by the FDOT in Lake and Seminole Counties. Under this scenario, Wekiva Parkway would be a tolled, limited-access facility in Orange County and a non-tolled limited-access facility in Lake and Seminole Counties. As the PD&E Study progressed, it became clear that the financial resources may not be available from the FDOT to support the project in Lake and Seminole Counties as a non-tolled limited-access facility. This realization resulted in the modification of the preferred alternative to include a tolled, limited-access expressway throughout the study area in Orange, Lake and Seminole Counties. This new Preferred Alignment, called the Preferred Alternative with Service Road Concept, was approved in the October 2010 public hearings in Orange, Lake and Seminole Counties. This investment grade traffic and revenue study is being conducted on the Preferred Alignment of the project resulting from the Wekiva Parkway PD&E Study. The results of this study will be utilized by the Authority to identify a funding plan for the Wekiva Parkway.

2.2. Project Description

The Wekiva Parkway and the SR 46 Realignment projects are located in northwest Orange County, eastern Lake County and western Seminole County. The study area for the Wekiva Parkway and SR 46 Realignment projects is shown in Figure 2-1. The Wekiva Parkway is expected to be a four to six-lane limited-access expressway extending from SR 429 to its proposed terminus to I-4 in Seminole County. In doing so, the Wekiva Parkway will complete the final northwest segment of the Beltway around Orlando and will serve as both an alternative to US 441 for trips between Mount Dora and Apopka and as a high capacity alternative to the existing SR 46 corridor for east-west trips between Lake and Seminole Counties.



The Wekiva Parkway portion of SR 429 is proposed to begin at the planned terminus of SR 414/SR 429 (John Land Apopka Expressway) at an interchange with US 441 in Orange County in the vicinity of CR 437 (Plymouth Sorrento Road). From this interchange, the Wekiva Parkway will extend to the north to near the Orange/Lake County Line where it will extend to the northeast and then east into Lake County, generally following the existing SR 46 corridor. Upon crossing the Wekiva River into Seminole County, the expressway will continue east to a connection with Interstate 4. In Seminole County, Wekiva Parkway will consist of an expressway combined with a frontage road system to provide local access along the SR 46 corridor, while in Lake County a service road will provide access to local properties and neighborhoods.

The SR 46 Realignment project, also known as the SR 46 Bypass, will provide a connection from SR 46 to the east of Mount Dora with the Wekiva Parkway. This project begins at the US 441/SR 46 interchange in Lake County and extends to the east along the existing SR 46 corridor. East of Round Lake Road, the project turns southeast into Orange County and terminates with a systems interchange with Wekiva Parkway. This project consists of a six-lane divided, controlled access roadway along the existing alignment of SR 46 from US 441 to east of Round Lake Road. From east of Round Lake Road to Wekiva Parkway, the project is expected to be a four-lane limited access facility.

The Preferred Alternative from the PD&E Study provides the optimum transportation alternative that serves the community needs while minimizing social and environmental impacts. The four main goals of the Wekiva Parkway project as stated in the PD&E Study were:

- To improve regional connectivity by completing the Western Beltway around Orlando and providing a safe, high capacity east-west travel facility
- To meet increased travel demand from population growth in an environmentally sensitive and compatible manner
- To address traffic congestion and safety issues along the SR 46 east-west corridor and the US 441 north-south corridor
- To accomplish the objectives expressed in State legislation, Executive Orders and public-private committee recommendations

The Preferred Alternative for the Wekiva Parkway achieves these four goals.



2.3. Project Assumptions

2.3.1 Project Phasing

Through coordination with the Wekiva Parkway partnership, the construction of the Wekiva Parkway is expected to be completed in two phases. Phase 1 will include the extension of the SR 429 from its future terminus along US 441 just northwest of Apopka, to two locations along SR 46 in Lake County between Mount Dora and Sanford. Phase 1 is expected to be complete in the second half of 2017, within the Authority's FY 2018. Phase 2 will immediately follow Phase 1 of the project completing the project to the west to US 441 in Lake County and to the east to Interstate 4 in Seminole County. Phase 2 is anticipated to be complete in the second half of 2019, which corresponds to the Authority's FY 2020.

2.3.2 Project Toll Operation

As part of the coordination effort with the partnership group, it was determined that Wekiva Parkway would operate as an all-electronic tolling (AET) facility, accommodating E-PASS/SunPass transponders and video tolling of license plates. As such, Wekiva Parkway is not expected to accommodate cash transactions as the Authority's existing system does today.

2.3.3 Project Toll Structure

Through the partnership coordination, various toll structure alternatives were evaluated. Two toll structures for Wekiva Parkway were agreed upon to include in the baseline traffic and revenue forecasts. Toll Structure 1 includes a combination of both mainline and ramp gantry tolling locations. Toll Structure 2 includes mainline gantry locations only. These toll structures are discussed in more detail in later sections of this report.

2.3.4 Project Toll Rates

Two sets of toll rates were analyzed with each toll structure; one assumes a base toll rate set at 15 cents per mile and a second set at 18 cents per mile. These toll rates were developed through the partnership coordination and provide consistency with the toll rates on other Orlando area toll roads at the time of the Wekiva Parkway's opening.



2.3.5 Toll Indexing

Based on input from the partnership coordination, the toll rates on Wekiva Parkway were assumed to be annually indexed to inflation. This toll policy is consistent with the Authority and FTE's policy toward future toll increases on the existing regional toll facilities. In order to evaluate the appropriate inflation rate to assume for the future toll indexing, both the national consumer price index (CPI) and the Orlando per capita income historical data were researched. Figure 2-2 shows the historical trend of the national CPI and Orlando per capita income over the past 40 years. By comparing the two data sets, a comparison of the consumers buying power versus wage rate growth can be evaluated. The national CPI had a compounded average growth rate (CAGR) of 4.4 percent between 1969 and 2010 and a CAGR of 2.4 percent between 2000 and 2010. The Orlando per capita income increased at a CAGR of 5.9 percent between 1969 and 2009 and at a CAGR of 2.7 percent between 2000 and 2010. Based on this historical inflation data, the toll rates on the Wekiva Parkway are assumed to increase at an annual inflation rate of 2 percent per year, slightly less than the ten-year average for the national CPI and regional per capita income growth.



Figure 2-2 - National CPI vs. Orlando Per Capita Income



2.4. Project Travel Demand Model

Future year traffic estimates within the Wekiva Parkway study area were developed using a travel demand model developed specifically for this project. The project travel demand model was validated to existing traffic and travel patterns within the project study corridor. Future year traffic models were developed for both No-Build and Build conditions to evaluate the impact of the Wekiva Parkway on the surrounding transportation network.

2.4.1 Travel Demand Model Development

The basis of the Wekiva Parkway project model was the Authority's FY 2010 Traffic and Revenue model. This model had been validated to FY 2010 revenue and 2009 traffic conditions on the Authority's system. The Authority's Traffic and Revenue model is validated and calibrated more extensively than the off-the-shelf Orlando Metropolitan Planning Organization (MPO) model with an intense focus on the Authority's system and facilities that impact the system. The Authority's Traffic and Revenue model is annually updated to current traffic, revenue and economic conditions for use in the development of revenue forecasts for the Authority's entire system. Therefore this model was chosen as it best reflected the current conditions on the regional roadway network. The Authority's FY 2010 Traffic and Revenue model is based on the Orlando MPO's (METROPLAN ORLANDO) 2025 Long Range Transportation Plan model. The results of the 2010 model validation and future year model results are discussed in more detail in later sections. Traffic forecasts resulting from the base and future year model outputs were utilized to develop the revenue forecast for the Wekiva Parkway project.

2.4.2 Model Validation

A base year model was developed and validated for the project study area to reflect the year 2010 conditions. The year 2010 was chosen as the base year for the traffic model validation because of the availability of survey data, traffic counts and updated land use information. Validation of the project model ensures that it is appropriately reflecting the interaction between the transportation network and land use in terms of existing traffic volumes and travel movements. By validating the travel demand model to 2010 traffic counts and travel patterns, the model could be utilized to estimate future traffic demand within the study area.

The FY 2010 Traffic and Revenue model had a more refined traffic analysis zone (TAZ) structure than the standard METROPLAN ORLANDO model to better reflect traffic



distribution and loadings within the Orlando area. As part of the base year Wekiva Parkway model development, a series of additional TAZ splits were incorporated to further refine the land use in the Wekiva Parkway study area. Special emphasis for TAZ splits was given to the areas surrounding proposed interchanges of the Wekiva Parkway as well as the competing and feeder facilities to the project in northwest Orange, eastern Lake and western Seminole Counties.

While this study was underway, 2010 Census population data became available. As a result, the Census 2010 countywide population control totals were used for the base year land use development. Fishkind and Associates, Inc. developed the land use datasets using the refined model TAZ structure and the 2010 Census population data. This 2010 dataset represented the land use and economic conditions for 2010 within the Orlando area.

As part of the 2010 model validation, the highway network within the Authority's FY 2010 Traffic and Revenue model was updated to reflect the 2010 highway network. Additionally, some roadways were added within the study area to the Wekiva Parkway traffic model that were not included in previous model networks. These roadways were determined to be important to provide more accurate traffic forecasts on the study area roadway network and Wekiva Parkway.

In support of the model validation, a trip origin and destination study was completed in November 2010 to better understand travel patterns within the Wekiva Parkway study area. This study was used to determine the existing travel patterns and trip interactions within the study area that could impact travel demand along the Wekiva Parkway. These existing travel patterns were very crucial in the development and validation of the 2010 Wekiva Parkway model. Along with the trip origin and destination study, traffic counts were collected along study area roadways and at the survey locations.

Travel time runs were also conducted on study area roadways. Travel time information was used as a reference for the travel demand model travel speeds along critical corridors. Travel speeds were evaluated relative to each other and to the posted speed limit along a roadway to ensure the same traffic conditions were being represented in the base and future year models.



2.4.3 Future Land Use Development

Land use is a critical input component for the travel demand model. Assumptions related to economic and population growth in Central Florida has recently changed significantly. In the past few years the Orlando area experienced a housing boom, a severe economic recession, a foreclosure crisis and an unusually high and persistent unemployment rate. Recently, a slight improvement to the economic conditions within the Orlando urban area has been observed, albeit a slow improvement. As a result of this recent economic volatility, the development of the future year land use data was critical for reliable future year traffic forecasts. In previous traffic studies, future year datasets from the adopted METROPLAN ORLANDO plans and from population estimates from the Bureau of Economic and Business Research (BEBR) at the University of Florida were utilized. For the Wekiva Parkway Traffic and Revenue model, future year land use datasets were developed by an independent economist, Fishkind and Associates, Inc., to reflect the current economic forecasts for Central Florida and the nation. The development of the future year datasets included in-depth reviews and research of existing growth trends, existing and planned developments and proposed regional transportation improvements. Future land use forecasts were developed for the years of 2015, 2020, 2025 and 2030.

2.4.4 Future Highway Transportation Networks

Future year highway networks were developed for the four future year models: 2015, 2020, 2025 and 2030. The highway networks for these model years are based on the adopted LRTPs for the MPOs (METROPLAN ORLANDO and Lake-Sumter MPO) represented in the Wekiva Parkway Traffic and Revenue Model. These LRTP projects include a number of highway capacity improvements within the Wekiva Parkway study area, to both feeder and competing facilities for the Wekiva Parkway project. The Wekiva Parkway project itself is included in both the METROPLAN ORLANDO 2030 LRTP and the Lake-Sumter MPO 2035 LRTP. As part of this study of the traffic and revenue related to the Wekiva Parkway, highway networks were developed for each future year model with and without the Wekiva Parkway. These networks were considered the Build and No-Build networks and were utilized to analyze the traffic impact of the Wekiva Parkway on the surrounding roadway network. The Build condition was analyzed in two phases. Phase 1 included the north-south segment from US 441 to SR 46, with an additional connection to SR 46 just east of US 441. The Phase 2 model included the full Wekiva Parkway project, connecting to I-4 and SR 417 with a new systems interchange.



2.4.5 Future Transit Transportation Networks

The public transit system in the Orlando area currently only includes local bus service. In the future, the local LRTPs include premium rail service in the form of Commuter Rail Transit (CRT). There are two CRT projects included in the current adopted MPO LRTPs that were included in the Wekiva Parkway Traffic and Revenue Model. These projects are:

- SunRail (currently under construction)
- Orange Blossom Express

These transit projects were included as they could provide competing transportation service to the Wekiva Parkway for certain regional travel movements. The SunRail project provides commuter rail service from the northern and southern Orlando suburbs into Downtown Orlando. The SunRail corridor will run from DeLand in Volusia County to Poinciana in Osceola County. This project as currently designed would act as a north-south spine for future premium transit service to connect into. SunRail could compete with Interstate 4 and potentially with Wekiva Parkway for some trips from the north into Downtown Orlando. Orange Blossom Express is the general name given to the northwest CRT line connecting the Eustis/Tavares/Mount Dora area of Lake County to downtown Orlando. While the Orange Blossom Express CRT project is still in the planning stages of its project development, it would compete directly with Wekiva Parkway for some trips. These two premium transit projects were included in all future year transportation networks.

2.5. Project Sensitivities

Once the future year models were developed with the base case project assumptions, future year land use and future year highway and transit projects, several sensitivities were performed to evaluate how the traffic and revenue of the Wekiva Parkway project would be impacted by the changes in the regional land use, highway network and toll policies. These sensitivity model runs provide a basis for identifying potential positive and negative impacts for Wekiva Parkway traffic from a variety of events that, while currently not considered likely, could potentially occur. The results of these sensitivity analyses are discussed in later sections.



3. Existing Conditions

This section describes the existing traffic characteristics of roadway facilities within the study area. To establish the existing traffic demand of the study area roadway system, traffic counts were collected. The following sub-sections will describe the existing roadway facilities in each county and summarize the traffic data collected.

3.1. Existing Roadway Network

The project study area is shown in the context of the Orlando area in Figure 3-1 and the existing roadway network and lane configuration within the project study area is shown in Figure 3-2. The project area includes a road network consisting of expressways (limited access facilities), arterials and collectors in Orange, Lake and Seminole Counties.

3.1.1 Orange County

In Orange County, the project area includes two limited access facilities, two arterials and eleven collector roadways.

Limited Access Facilities

SR 429 (Western Beltway) is a four-lane divided, limited access expressway with a posted speed limit of 65 miles per hour (mph). The first section of SR 429 opened to traffic in 2000. The facility has a southern terminus at I-4 in Osceola County and a northern terminus at US 441 near Apopka. SR 429 links the Apopka area with the rest of the Orlando urban area via the regional expressway system and provides an alternate route to US 441 through the Orlando metro area.

In addition to SR 429, SR 414 is a six-lane divided, limited access tolled facility in west Orange County. This facility partially opened in 2009 and has a posted speed of 65 mph. It connects SR 429 south of Apopka with the non-tolled section of SR 414 east of US 441. The combination of both the tolled and non-tolled sections of SR 414 connects SR 429 to I-4.



FIGURE 3-1 PROJECT LOCATION MAP





FIGURE 3-2 EXISTING STUDY AREA ROADWAY GEOMETRY




Arterial Facilities

One of the two arterial facilities located within the Orange County section of the study area is US 441 (Orange Blossom Trail). US 441, which connects Orlando with Apopka and Mt. Dora, is a four-lane divided arterial that follows a northwesterly-southeasterly route through the study area. It has a posted speed limit that varies from 35 to 55 mph within the study area.

The other arterial facility is SR 436 (Semoran Boulevard). SR 436 is a six-lane divided arterial that passes through Seminole and Orange Counties beginning at the intersection with US 441 in Apopka and extending east into Seminole County. Within the study area, SR 436 has a posted speed limit of 45 mph in Orange County.

Collector Roadways

Orange County collector roads that follow a north-south route are Round Lake Road, CR 437 (Plymouth Sorrento Road), CR 435 (Rock Springs Road) and Vick Road. Orange County collector roads following an east-west route are Kelly Park Road, Ponkan Road, Sadler Avenue, Ondich Road, Haas Road and Yothers Road.

3.1.2 Lake County

In Lake County, the project area includes three arterials and five collector roadways.

Arterial Facilities

US 441 (Orange Blossom Trail) is a four-lane divided arterial that runs north-south from the Orange County Line to Mount Dora in the western portion of the study area. In Lake County, US 441 has a posted speed limit that varies from 55 to 45 mph in the study area.

SR 46 is a two-lane undivided arterial with a posted speed limit ranging from 45 to 55 mph that follows an east-west route through the northern portion of the study area. SR 46 connects Sanford and Mt. Dora and includes interchanges with I-4 and US 441.

SR 44 is an east-west two-lane undivided arterial that was realigned around downtown Eustis, to include what had been CR 44B between US 441 and SR 44 east of Eustis. SR 44 has a posted speed limit of 55 mph in the study area.



Collector Roadways

Lake County collector roads in the project area include CR 46A and Wolf Branch Road. A section of Round Lake Road, CR 437 (Plymouth Sorrento Road) and CR 435 (Rock Springs Road) also extend into Lake County from Orange County.

3.1.3 Seminole County

In Seminole County, the project area includes two limited access facilities, four arterials and eleven collector roadways.

Limited Access Facilities

I-4 varies from a six-lane to eight-lane facility in the project area. I-4 provides a southwest to northeast connection across the central section of Florida, providing access to the metropolitan areas of Tampa-St. Petersburg, Lakeland-Winter Haven, Orlando and Daytona Beach. The posted speed limit on this facility varies from 60 mph to 70 mph in the project area.

SR 417, also known as part of the Central Florida GreeneWay and Seminole Expressway, is a four-lane divided limited access facility in the project area. The posted speed limit on this facility is 65 mph in the project area. SR 417 is a tolled expressway forming the eastern portion of the beltway around the city of Orlando. SR 417 is one of the several toll roads that have been constructed over the years to provide alternate routes and relief to I-4. SR 417 has recently been extended from I-4 west to International Parkway.

Arterial Facilities

SR 436 functions as a six-lane divided arterial from Orange/Seminole County line to SR 434 and as an eight-lane divided arterial from SR 434 to Palm Springs Road. In Seminole County, SR 436 has a posted speed limit of 45 mph in the study area.

SR 46 functions as a two-lane undivided arterial from Lake/Seminole County line to CR 431 (Orange Boulevard), a four-lane divided arterial from Orange Boulevard to I-4 and a six-lane divided arterial from I-4 to Rinehart Road. The posted speed limit on SR 46 varies from 55 mph to 45 mph.

US 17/92 is a four lane major arterial providing a connection between Volusia and Seminole counties. It also provides an alternative to I-4 across the St. John's River and provides access



to I-4 via an interchange in Seminole County. The posted speed limit on US 17/92 varies from 55 mph to 50 mph in Seminole County.

CR 46A is an east-west four-lane divided roadway. CR 46A is considered an arterial due to its interchange with I-4. CR 46A has a posted speed limit of 40 mph in the study area.

Collector Roadways

Seminole County collector roads include CR 431B (Rinehart Road), International Parkway, Longwood-Markham Road, Orange Boulevard and Markham Road. Rinehart Road and International Parkway are four-lane divided roadways. Longwood-Markham Road, Orange Boulevard and Markham Road are two-lane major county roadways. Other collector roads within the study area include Wekiva Park Drive, Lake Markham Road, Lake Forest Boulevard, Oregon Avenue and Wayside Drive.

3.2. Existing Traffic Count Data

Traffic counts were collected at 66 locations during the months of October and November 2010 and were adjusted to average annual traffic conditions based on the most current FDOT seasonal and axle adjustment factors for Orange, Lake and Seminole Counties. Additional 2010 traffic count data was collected on study area roadways from available FDOT, Orange County, Lake County and Seminole County count programs.

Tables 3-1 to 3-3 identify the 2010 Annual Average Daily Traffic (AADT) for each traffic count location within the study area. The year 2010 AADT on the roadway network within the project study area is illustrated in Figure 3-3.



Roadway	Description	2010 AADT
	Orange County	
SR 414	Maitland Blvd Ext - Mainline Plaza	16,300
SR 429	South of US 441	26,600
SR 429	Forest Lake Mainline	31,500
US 441	Old US 441 to Sadler Rd	28,100
US 441	Sadler Rd to Jones Rd	28,300
US 441	Jones Rd to Yothers Rd	33,100
US 441	Yothers Rd to Plymouth- Sorrento Rd	35,400
US 441	Plymouth- Sorrento Rd to SR 429	39,200
US 441	SR 429 to Park Ave	35,800
US 441	Park Ave to SR 436	46,000
US 441	South of SR 436	34,000
Park Ave	North of US 441	25,100
Park Ave	South of US 441	13,100

Table 3-1- 2010 AADT (Orange County)



Roadway	Description	2010 A A D T
literative	Lake County	
US 441	N of Wolf Branch Rd	35,600
US 441	Wolf Branch to SR 46	31,500
US 441	SR 46 to Old US 441	26,900
SR 46	US 441 to Round Lake Rd	10,500
SR 46	Round Lake Rd to CR 437 S	9,500
SR 46	CR 437 S to CR 437 N	14,300
SR 46	CR 437 N to CR 435	14,900
SR 46	Mount Plymouth Rd to CR 46A	12,600
SR 46	CR 46A to Wekiva River Rd	19,400
CR 46 A	North of SR 46	7,100
Limit Ave	West of US 441	4,500
Wolf Branch Rd	Btw US 441 & Round Lake Rd	16,500
Wolf Branch Rd	Btw Round Lake Rd & CR 437	4,500
Highland St	North of 1st Ave (SR 46)	8,600
Highland St	South of 1st Ave (SR 46)	5,600
1st Ave (SR 46)	West of Highlands St	600
1st Ave (SR 46)	Btw Highlands & US 441	5,200
Sadler Rd	Btw US 441 & Round Lake Rd	2,200
Round Lake Rd	Btw SR 46 & Kelly Park Rd	4,000
Round Lake Rd	Btw Kelly Park Rd & Ponkan Rd	3,500
CR 437	North of SR 46	9,900
Plymouth- Sorrento Rd	Btw SR 46 & Kelly Park Rd	7,600
Plymouth- Sorrento Rd	Btw Kelly Park Rd & Ponkan Rd	7,800
Plymouth- Sorrento Rd	Btw Ponkan Rd & US 441	9,500
Mount Plymouth Rd	Btw SR 46 & Kelly Park Rd	8,400
Rock Springs Rd	Btw Kelly Park Rd & Ponkan Rd	16,700
Rock Springs Rd	Btw Ponkan Rd & US 441	19,700
Kelly Park Rd	Btw Round Lake Rd & Plymouth- Sorrento Rd	2,700
Kelly Park Rd	Btw Plymouth- Sorrento Rd & Rock Springs Rd	4,600
Ponkan Rd	Btw Round Lake Rd & Plymouth- Sorrento Rd	3,300
Ponkan Rd	Btw Plymouth-Sorrento Rd & Rock Springs Rd	5.500

Table 3-2- 2010 AADT (Lake County)



Roadway	Description	2010 AADT					
	Seminole County						
-4	North of SR 46	108,000					
-4	.128 Mi SW of CR 46A	125,000					
SR 417	East of I-4	24,600					
SR 417	Rinehart Rd to CR 46A	31,900					
SR 46	Longwood-Markham to Lake Markham Rd	21,900					
SR 46	Lake Markham Rd to Orange Blvd	22,800					
SR 46	Orange Blvd to International Pkwy	26,400					
SR 46	International Pkwy to I-4	30,900					
SR 46	I-4 to Towne Center Blvd	42,500					
SR 46	Towne Center Pkwy to Rinehart Rd	34,300					
SR 46	East of Rinehart Rd	29,800					
CR 46A	Btw Orange Blvd & International Pkwy	14,200					
CR 46A	Btw International Pkwy & I4	30,900					
CR 46A	Btw I4 & Rinehart Rd	39,700					
Longwood- Markham Rd	Btw SR 46 & Markham Rd	3,000					
Lake Markham Rd	Btw SR 46 & Markham Rd	1,700					
Orange Blvd	Btw SR 46 & I4	4,200					
Orange Blvd	Btw SR 46 & Markham Rd	6,300					
Markham Rd	Btw Longwood-Markham & Lake Markham Rd	3,500					
Markham Rd	Btw Markham Woods Rd & Orange Blvd	5,700					
International Pkwy	South of SR 46	7,100					
International Pkwy	North of CR 46A	8,000					
Rinehart Rd	Btw SR 46 & SR 417	17,400					
Rinehart Rd	Btw SR 417 & Towne Center Blvd	22,600					
Rinehart Rd	Btw Towne Center Blvd & CR 46A	30,600					
Towne Center Blvd	South of SR 46	17,500					
Towne Center Blvd	North of Rinehart Rd	10,400					
WP Ball Blvd	Btw Towne Center Blvd & Rinehart Rd	4,900					

Table 3-3- 2010 AADT (Seminole County)



FIGURE 3-3 YEAR 2010 DAILY TRAFFIC COUNT DATA





3.3. Historical Traffic Trends

3.3.1 SR 46

The SR 46 corridor has experienced steady growth throughout the past 20 years, partly due to the lack of competing east-west facilities. The historical traffic trend is shown below in Figure 3-4. As shown in Figure 3-5, the nearest competing facility to the north is SR 44, while to the south the nearest competitor is SR 436. The separation between SR 46 and SR 44 to the north ranges from 4 to 13 miles, while the distance between SR 46 and SR 436 to the south ranges from 10 to 11 miles. Between 2000 and 2010, the historical growth rate of traffic along SR 46 at the Lake/Seminole County line has been 2.53 percent per year. This period includes a reduction of traffic profile by time of day at several locations along SR 46 within the Wekiva Parkway study area.



Figure 3-4 - SR 46 Historical Traffic Trend



FIGURE 3-5 COMPETING FACILITIES







Figure 3-6 - SR 46 Traffic Profile by Time of Day

3.3.2 US 441

US 441 has seen relatively steady traffic levels over the past 20 years, and is the major arterial roadway in northwest Orange County. It serves as the primary connection from the Mount Dora, Eustis and Leesburg area to Orlando. The historical traffic trend for US 441 north of CR 437 is shown below in Figure 3-7. Between 2000 and 2010, the historical growth rate of traffic along US 441 north of CR 437 has been 0.56 percent per year. This period includes a reduction of traffic during the recession in the 2008-2009 time period. Figure 3-8 shows the 2010 traffic profile by time of day for several locations along US 441 within the Wekiva Parkway study area.







Figure 3-8 - US 441 Traffic Profile by Time of Day





4. Land Use Development/Economic Assumptions

Land use is a critical input into the travel demand model and can have a significant impact on the traffic demand within a region or subarea. Land use forecasts are developed based on a combination of factors including, but not limited to, historical population and employment growth, Developments of Regional Impact (DRIs), local area sector plans, new transportation projects, population projections and economic conditions. The previous five years have confirmed the importance of economic conditions on the growth trends in both population and employment of a region. With varying opinions of future economic conditions, it is more important than ever to have reliable land use assumptions as part of the Wekiva Parkway travel demand model. Due to the critical function of the land use assumptions, Fishkind and Associates, independent Central Florida economists, were contracted to develop the land use forecasts to be utilized in this study.

4.1. Land Use Development

Land use datasets were developed by Fishkind and Associates for a 2010 base year for the three counties surrounding the Wekiva Parkway study area: Lake, Orange and Seminole Counties. Fishkind and Associates also developed future year datasets for 2015, 2020, 2025, 2030 and 2050 for Lake, Orange and Seminole Counties. The Orlando MPO, METROPLAN ORLANDO, model also includes Osceola County and portions of northeast Polk and west Volusia Counties. Land use datasets for these counties were developed utilizing the latest population projections from the University of Florida's Bureau of Economic and Business Research (BEBR). Countywide control totals for the year 2010 from the 2010 U.S. Census were utilized in the land use dataset development for the Wekiva Parkway travel demand model. The socioeconomic estimates were developed for the following component by Traffic Analysis Zones (TAZ):

- 1. Population and Dwelling Units
 - a. Single Family Dwelling Units and Population
 - b. Multi-Family Dwelling Units and Population
- 2. Employment
 - a. Industrial Employment
 - b. Commercial Employment
 - c. Service Employment
- 3. Hotel/Motel Units (includes Timeshare) and Hotel/Motel occupants



4. Student Enrollment

The final socioeconomic data were developed by TAZ and separated into two different land use data input files for the travel demand model, ZDATA1 and ZDATA2. ZDATA1 includes the population, dwelling units, and hotel/motel units and ZDATA2 includes the employment and school enrollments, all of which are individually broken down into each of the 2000 TAZ's in the Wekiva Parkway travel demand model. The resulting files were then incorporated into the model, which are used to develop the trip generation throughout the model and in the Wekiva Parkway study area.

Figure 4-1 shows the TAZs for the entire Central Florida region used in the Wekiva Parkway travel demand model. The 2000 TAZ's included in the land use datasets representing Osceola, Orange, Seminole, Lake, northeast Polk and west Volusia Counties.

4.2. Methodology

As part of the development of the baseline analysis, Fishkind and Associates were provided with the TAZ boundaries for the Wekiva Parkway travel demand model via Geographic Information System (GIS) shape files. The TAZs for the study area are shown in Figure 4-2. TAZ shapes were overlaid and intersected with each of the county's GIS parcel shape files. The county shape files for each county are dated as follows:

- Seminole County, dated January 2011
- Orange County, dated January 2011
- Lake County, dated January 2011

This intersection allows the Year 2010 land use attributes associated with each parcel and associated TAZ to be easily identified. As part of the creation of the 2010 baseline datasets, dwelling units, non-residential space and school locations were identified using parcel land use categories. Other third party data sources (e.g. Florida Department of Business and Professional Regulation (DBPR) for hotels and timeshares and GIS school location data provided by local school districts) were also utilized to identify the existing land use in the TAZs.

For Osceola, northeast Polk and west Volusia Counties the 2010 land use data sets were developed using the new 2010 Census countywide population control totals. Regional



FIGURE 4-1 REGION WIDE TAZ MAP







FIGURE 4-2 STUDY AREA TAZ MAP





employment was calculated on a county-by-county basis using the employment estimates from the 2010 Woods and Poole State Profile for Florida. The distribution of the land use within Osceola, northeast Polk and west Volusia Counties reflects the distribution of land use in the METROPLAN ORLANDO model and from the Volusia TPO. Since only portions of Polk and Volusia Counties are included in the Wekiva Parkway travel demand model, the 2010 land use datasets were developed using a ratio of the countywide population and employment that was included in the portions of the counties in the base METROPLAN ORLANDO model.

As part of the development of the future year forecast analysis for Orange, Seminole, and Lake Counties, the intersected GIS shape files and parcels were then intersected with the U.S. Fish and Wildlife National Wetlands Inventory layer and all sensitive wetland areas were removed from the analysis. By doing this, estimated developable uplands in each county were determined. Then these uplands were intersected with each county's adopted Comprehensive Plan Future Land Use (FLU) Layer and known Developments of Regional Impact (DRIs). These intersections provided the ability to quantify the residential and non-residential capacity in any given TAZ based on the remaining DRI entitlements and remaining uplands by FLU category. It should be noted that the only proposed DRI within the Wekiva Parkway study area is Kelly Park Crossings, located near the Wekiva Parkway interchange with Kelly Park Road in Orange County.

In addition, the market was analyzed and specific locations within each county were identified which appear more or less attractive to future growth. Four primary zones were created of TAZs in each County and a fifth zone containing the remaining TAZs in each county was also created. These zones were created using an index of attractiveness, which is a collection of criteria that make areas within each county more likely to see growth. These criteria include: 1) transportation access in terms of highway, rail and/or airports, 2) concentration of proposed DRI development, 3) juxtaposition to current employment centers, 4) favorable future land use overlays or sector plans (e.g. Innovation Way in Orange County), and 5) other factors. Using these criteria, the following zones in each county were identified:

Seminole

- Altamonte Springs
- Lake Mary
- Orlando-Sanford Airport
- Technology Way Corridor on SR 417



Orange

- Downtown Orlando (urban core)
- Innovation Way Corridor Lake Nona Biomedical Cluster
- Disney Attractions Area and SR 429 Corridor
- Apopka

Lake

- Clermont
- Leesburg
- Mount Dora
- East Mount Dora

The existing major employment activity centers within the Orlando area are shown graphically in Figure 4-3. By applying its understanding of the local market dynamics, known environmental constraints, and FLU limitations, a pattern of growth for each county through 2050 was constructed.

The development of future year countywide population control totals (2015, 2020, 2025 and 2030) for Polk, Volusia, and Osceola Counties were based on the BEBR medium growth estimates for the Central Florida region. Careful consideration was given to the dramatic change in the BEBR estimates compared to estimates just a few years ago as well as the 2010 Census totals. A five year average of the BEBR population estimates was incorporated to reflect the recent volatility in the population forecasts, which closely mirrors the latest BEBR forecasts. The new BEBR estimates incorporate the impact of the current economic conditions and housing crisis, resulting in much lower population estimates than in previous years. For the future year 2015, 2020, 2025 and 2030 employment estimates for Polk, Volusia, and Osceola Counties used in the land use development were based on employment data from the Woods and Poole 2010 Florida State Profile report.





FIGURE 4-3 EXISTING REGIONAL EMPLOYMENT CENTERS (Employment/Square Mile)





4.3. Existing (2010)

For population, dwelling units, employment, hotel units, and school enrollment in Seminole, Orange, and Lake Counties, several checks were included to ensure the correct data was formulated. The development of the 2010 baseline population and dwelling unit data for Seminole, Orange and Lake Counties involved the following steps:

- 1. Identify the population control total for each county
- 2. Identify land use categories for single family, multi-family and mobile home units in each county
- 3. Allocate population via persons per household to each unit taking into account current residential vacancy rates
- 4. Provide summation of dwelling units and population by TAZ

The development of the 2010 baseline employment data for Seminole, Orange and Lake Counties involved the following steps:

- 1. Identify the employment control total for each county
- 2. Identify land use categories for industrial, commercial and service employment in each county
- 3. Allocate employment via the estimated non-residential square footage and multipliers with respect to employees per square foot of space
- 4. Provide employment profile by TAZ

The development of the 2010 baseline hotel dataset for Seminole, Orange and Lake Counties involved the following steps:

- 1. Map the location of hotels, motels and timeshare units in each county
- 2. Estimate hotel/motel occupants
- 3. Estimate hotel/motel/timeshare employment at each location

The development of the 2010 baseline school enrollment dataset for Seminole, Orange and Lake Counties involved the following steps:

1. Identify the enrollment control total for public school enrollment as provided by the Florida Department of Education for each county



- 2. Identify current school locations within each county and the number of students enrolled at each public school facility
- 3. Identify private school locations and locations of colleges and universities and allocated estimated enrollment at each facility
- 4. Estimate education employment at each location

For Osceola, Polk, and Volusia Counties, the data for population, dwelling units, employment, hotel/motel units, and school enrollment was used from MPO datasets and BEBR estimates. Tables 4-1 and 4-2 represent the summaries from the ZDATA1 and ZDATA2. Seminole, Orange, and Lake Counties represent a significant portion of the developed land use within the Wekiva Parkway travel demand model. Figures 4-4 and 4-5 show the 2010 population density and 2010 employment density for the Wekiva Parkway travel demand model area. Figure 4-6 shows the 2010 land use within the study area summarized by district.

County	Total SF DU	Total SF POP	Total MF DU	Total MF POP	Total Hotel/Motel Units
Seminole	128,081	308,636	48,388	116,571	5,019
Orange	292,247	729,466	166,385	413,954	99,584
Osceola	91,961	222,013	25,908	46,672	38,741
Lake	95,040	196,805	48,317	100,244	3,123
W. Volusia	62,287	165,498	14,854	24,858	993
N.E Polk	5,646	14,032	5,779	10,723	978
Total	675,262	1,636,450	309,631	713,022	148,438

Table 4-1- ZDATA 1 for the 2010 Base Year

Table 4-2- ZDATA 2 for the 2010 Base Year

County	Industrial Commercial		Service	Total Employment	School Enrollment
Seminole	e 61,111 47,640		112,877	221,628	94,615
Orange	155,411	5,411 224,655		803,833	308,976
Osceola	10,793	23,707	52,624	87,124	69,763
Lake	27,676	31,804	54,331	113,811	52,375
W. Volusia	10,544	14,496	27,113	52,126	38,904
N.E Polk	1,163	1,624	2,826	5,614	877
Total	266,698	343,926	673,538	1,284,136	565,510



FIGURE 4-4 2010 POPULATION DENSITY (Population/Square Mile)





FIGURE 4-5 2010 EMPLOYMENT DENSITY (Employment/Square Mile)





FIGURE 4-6 2010 LAND USE BY DISTRICT





4.4. Future Years (2015-2050)

Population and employment, in Seminole, Orange, and Lake Counties, were forecasted through 2050, to target countywide control totals. Population was converted to dwelling units taking into account that any market has a functional vacancy rate. The employment forecast is based on the Woods and Poole Economics data which forecasts county employment through 2040. Employment was applied to population ratios to verify and establish the employment control totals through 2050. The employment forecast was then allocated into the three employment categories.

Historic figures were used as a guide to forecasting hotel/motel and timeshare growth through the 2050 time horizon for Orange, Seminole, and Lake Counties. The hotel units were allocated to various TAZs in each county using the following characteristics as a guide; DRIs with hotel entitlements, major highway intersections, airport access, downtown areas, universities, and theme parks.

In forecasting student enrollment by county, BEBR data was used with respect to forecasted age cohort data for those between age 5 and age 17. Using the cohort data, the student enrollment population was estimated in the 5-year growth increments, and the number of new schools necessary to support the growth through 2050 was determined.

The Polk, Osceola, and Volusia interim and horizon year datasets used, account for the current economic conditions and the slower growth that is currently being experienced in the Central Florida area. They also reflect the assumption of a return of growth in Central Florida after the recovery from the recent recession. The current BEBR projected growth assumptions, however, are reduced from the BEBR medium projections in previous years and the MPO official future year datasets. The use of the BEBR medium growth estimates as a source for future population countywide control totals is consistent with the methodology used in the development of the regional socioeconomic datasets in previous revenue forecasts for the Authority's system. These countywide population forecasts were then distributed to each county's TAZs based on the distribution of the projected land use growth obtained from the official MPO datasets. In doing so, the growth characteristics and patterns from the official MPO datasets were reflected in the system traffic model datasets. Countywide hotel room, and school enrollment forecasts from the official MPO datasets were also utilized.



Cumulative average growth rates (CAGR) for the future year land use datasets are shown in Tables 4-3 and 4-4 for Seminole, Orange, Osceola and Lake Counties within the project model. In addition, the CAGRs for population and employment growth rates are also shown in Tables 4-5 and 4-6 for the study area.

		Population						CAGR			
County	2010	2015	2020	2025	2030	Year 2010	Year 2015	Year 2020	Year 2025		
County	Total	Total	Total	Total	Total	to Year	to Year	to Year	to Year		
	Population	Population	Population	Population	Population	2015	2020	2025	2030		
Seminole	425,207	445,261	466,788	482,939	492,667	0.9%	0.9%	0.7%	0.4%		
Orange	1,143,420	1,225,169	1,336,596	1,441,343	1,539,216	1.4%	1.8%	1.5%	1.3%		
Osceola	268,685	315,700	393,857	444,084	491,623	3.3%	4.5%	2.4%	2.1%		
Lake	297,049	335,582	373,845	412,677	448,967	2.5%	2.2%	2.0%	1.7%		
Total	2,134,361	2,321,712	2,571,086	2,781,043	2,972,473	1.7%	2.1%	1.6%	1.3%		

	Fable 4-3- Population	Totals and	CAGR for	Future	Years
--	------------------------------	------------	----------	--------	-------

Table 4-4- Employment	Totals and CAG	R for Future Years
-----------------------	----------------	--------------------

		Employment						CAGR			
County	2010 Total Employment	2015 Total Employment	2020 Total Employment	2025 Total Employment	2030 Total Employment	Year 2010 to Year 2015	Year 2015 to Year 2020	Year 2020 to Year 2025	Year 2025 to Year 2030		
Seminole	221,673	244,888	266,396	289,235	306,385	2.0%	1.7%	1.7%	1.2%		
Orange	803,446	870,294	927,774	987,002	1,047,820	1.6%	1.3%	1.2%	1.2%		
Osceola	87,466	109,250	124,560	142,049	161,961	4.5%	2.7%	2.7%	2.7%		
Lake	113,811	126,712	138,839	151,802	165,611	2.2%	1.8%	1.8%	1.8%		
Total	1,226,396	1,351,144	1,457,569	1,570,088	1,681,777	2.0%	1.5%	1.5%	1.4%		



			Populatior	ı	CAGR				
County	2010	2015	2020	2025	2030				
County	Total	Total	Total	Total	Total	Year 2010 to	Year 2015 to	Year 2020 to	Year 2025 to
	Population	Population	Population	Population	Population	Year 2015	Year 2020	Year 2025	Year 2030
Seminole	123,862	132,758	145,566	157,078	159,812	1.4%	1.9%	1.5%	0.3%
Orange	72,664	79,450	86,522	91,895	101,291	1.8%	1.7%	1.2%	2.0%
Lake	46,712	51,681	55,997	62,701	70,033	2.0%	1.6%	2.3%	2.2%
Total	243,238	263,889	288,085	311,674	331,136	1.6%	1.8%	1.6%	1.2%

Table 4-5- Study	/ Area Pon	ulation Totals	s and CAGR f	or Future Years
			und CAON I	

Table 4-6- Study Area Employment Totals and CAGR for Future Years

			Employmen	t	CAGR				
County	2010	2015	2020	2025	2030				
County	Total	Total	Total	Total	Total	Year 2010 to	Year 2015 to	Year 2020 to	Year 2025 to
	Employment	Employment	Employment	Employment	Employment	Year 2015	Year 2020	Year 2025	Year 2030
Seminole	112,142	121,325	133,131	145,952	157,365	1.6%	1.9%	1.9%	1.5%
Orange	24,869	27,465	30,519	33,183	36,919	2.0%	2.1%	1.7%	2.2%
Lake	22,722	23,937	24,278	24,924	26,108	1.0%	0.3%	0.5%	0.9%
Total	159,733	172,727	187,928	204,059	220,392	1.6%	1.7%	1.7%	1.6%

Figures 4-7 through 4-10 show the population density by TAZ based on the baseline land use forecast within the Wekiva Parkway model area for the years 2015, 2020, 2025 and 2030, respectively. In addition, Figures 4-11 through 4-14 show the baseline land use employment density by TAZ within the model area for 2015, 2020, 2025 and 2030, respectively.

Shown in Figure 4-15 there are eleven districts that are represent groups of TAZs within the study area. These districts were created to analyze the growth rates within subareas of the Wekiva Parkway study area. A table is associated with each district, displaying the base year 2010 population and employment. The 2030 baseline population and employment are also shown for each district for comparison. The Southwest Seminole County district has the highest population and employment, with 2010 having 214,000 people and 86,000 employees, and in the baseline 2030 dataset having a population of 227,000 and total employment of 103,000.









FIGURE 4-8 2020 POPULATION DENSITY (Population/Square Mile)





FIGURE 4-9 2025 POPULATION DENSITY (Population/Square Mile)



































FIGURE 4-15 2030 LAND USE BY DISTRICT





4.5. Land Use Sensitivities

As part of the analysis, two additional socioeconomic data series were developed. One data series represents a low population and employment scenario for the Central Florida Region. The other scenario represents a high population and employment scenario for the region. To construct the control totals for these scenarios, the latest BEBR population forecast through 2035 for each of the counties which provides a low, medium and high forecast was used.

Using this data, the percentage difference between the high and low forecast from the medium forecast for each county was evaluated. The percentages were then applied in calculating the high and low forecasts using the baseline 2015 through 2050 population forecast for each County.

Using the forecasted high and low population forecasts, the employment totals were based on the applicable employment to population ratios used as part of the baseline 2015 through 2050 forecast.

The high population and employment analysis involved a similar allocation approach for the units as the baseline 2015 to 2050 forecasts. This allocation was done using the index of attractiveness used as part of the baseline forecast development. For Orange, Seminole, and Lake Counties these attractions were grouped into the primary zones listed earlier.

Likewise, the approach to the allocation of the low population and employment analysis was similar to the original baseline 2015 to 2050 forecast. This allocation was effectively done by reducing the population and employment levels throughout each county's index of attractiveness zone.

Figures 4-16 through 4-19 shows the population density by TAZ based on the low land use forecast within the Wekiva Parkway model area for the years 2015, 2020, 2025 and 2030, respectively. Figures 4-20 through 4-23 show the low land use employment density by TAZ within the model area for 2015, 2020, 2025 and 2030. A comparison of the base year 2010 land use and the low land use 2030 forecast is shown in Figure 4-24 for the districts within the project study area. In some cases the 2030 low land use forecast is actually lower than the existing land use due to the changing population demographics assumed in the future, particularly in Seminole County.








54

2,001 to 10,000

Above 10,000









































Figures 4-25 through 4-28 shows the population density by TAZ based on the high land use forecast within the Wekiva Parkway model area for the years 2015, 2020, 2025 and 2030, respectively. Figures 4-29 through 4-32 show the high land use employment density by TAZ within the model area for 2015, 2020, 2025 and 2030. A comparison of the base year 2010 land use and the high land use 2030 forecast is shown in Figure 4-33 for the districts within the project study area.



















































Tables 4-7 to 4-10 compare, by year, the baseline population and employment to the Low and High values that could occur. The tables also show how far the low and high land uses deviate from the baseline by percentage. With the exception of 2015 Low Scenario, Osceola County deviates the farthest from the baseline forecast in both population and employment in all four future years.

					20)15							
County	Population						Employment ange Baseline Low % Change High % Change % 244,888 225,878 -8% 265,154 8% % 870,294 803,771 -8% 943,536 8% % 109,250 104,298 -5% 134,387 19%			Employment			
	Baseline	Low	% Change	High	% Change	Baseline	Low	% Change	High	% Change			
Seminole	445,261	408,062	-9%	479,036	7%	244,888	225,878	-8%	265,154	8%			
Orange	1,225,169	1,134,145	-8%	1,331,601	8%	870,294	803,771	-8%	943,536	8%			
Osceola	315,700	301,400	-5%	388,320	19%	109,250	104,298	-5%	134,387	19%			
Lake	335,582	303,735	-10%	371,258	10%	126,712	114,661	-11%	140,176	10%			

Table 4-7- 2015 Land Use

Table 4-8- 2020 Land Use

					20	20				
County	Population					ZO20 Employment nge Baseline Low % Change High % Change 266,396 234,623 -14% 298,614 11% 927,774 817,436 -13% 1,040,402 11% 124,560 103,349 -21% 149,950 17%				
	Baseline	Low	% Change	High	% Change	Baseline	Low	% Change	High	% Change
Seminole	466,788	411,117	-14%	523,247	11%	266,396	234,623	-14%	298,614	11%
Orange	1,336,596	1,177,633	-13%	1,498,981	11%	927,774	817,436	-13%	1,040,402	11%
Osceola	393,857	326,780	-21%	474,140	17%	124,560	103,349	-21%	149,950	17%
Lake	373,845	318,198	-17%	430,585	13%	138,839	118,177	-17%	159,915	13%

Table 4-9- 2025 Land Use

					20	25				
County	Population					2025 Employment nge Baseline Low % Change High % Change 289,235 242,918 -19% 318,664 9% 987,002 828,796 -19% 1,144,522 14% 142,049 110,307 -29% 180,741 21%				
	Baseline	Low	% Change	High	% Change	Baseline	Low	% Change	High	% Change
Seminole	482,939	405,597	-19%	532,078	9%	289,235	242,918	-19%	318,664	9%
Orange	1,441,343	1,210,298	-19%	1,671,425	14%	987,002	828,796	-19%	1,144,522	14%
Osceola	444,084	344,860	-29%	565,040	21%	142,049	110,307	-29%	180,741	21%
Lake	412,677	329,917	-25%	494,900	17%	151,802	121,359	-25%	182,057	17%



					20	30				
County			Populatior	I		Employment nge Baseline Low % Change High % Change 306,385 245,108 -25% 338,194 9%				
	Baseline	Low	% Change	High	% Change	Baseline	Low	% Change	High	% Change
Seminole	492,667	394,140	-25%	543,813	9%	306,385	245,108	-25%	338,194	9%
Orange	1,539,216	1,231,031	-25%	1,846,594	17%	1,047,820	838,031	-25%	1,252,251	16%
Osceola	491,623	355,880	-38%	660,920	26%	161,961	117,243	-38%	217,734	26%
Lake	448,967	336,610	-33%	560,978	20%	165,611	124,171	-33%	206,939	20%

Table 4-10- 2030 Land Use



5. Model Validation

5.1. Base Model Development

5.1.1 Base Year Network

The base year 2010 highway network for the Wekiva Parkway Investment Grade Study Model (Wekiva Parkway travel demand model) was developed to reflect calendar year 2010 conditions within the model coverage area that includes Orange, Osceola, Seminole, Lake, northeast Polk and west Volusia Counties. The number of lanes and facility characteristics of the roadways within the Wekiva Parkway study area were verified to ensure that the calendar year 2010 model network accurately reflects the calendar year 2010 roadway system. Regional roadways were also carefully examined for consistency with actual 2010 conditions related to geometry and access locations.

The capacity and speed look-up tables in the calendar year 2010 Wekiva Parkway travel demand model are based on the most current capacity and speed data provided by the FDOT. A roadway's capacity and speed are a function of three link attributes: number of lanes, area type and facility type.

5.1.2 Base Year Land Use

The socioeconomic data that is presented in this study is the most current for Seminole, Orange, Osceola, Lake and parts of Volusia and Polk Counties. TAZ splits were conducted within the Wekiva Parkway study area compared to the METROPLAN ORLANDO model to better reflect land use distribution and traffic loadings. Due to the number of zonal splits in Orange County, some 'dummy zones' were required to be utilized from the unused TAZs in Seminole County. As a result Seminole County has thirteen TAZs less in Wekiva Parkway travel demand model than in the METROPLAN ORLANDO model. Table 5-1 shows the new TAZ ranges used in this model. There are a total of 2,000 internal and 36 external TAZs.



County	From	То
Seminole	1	243
Orange	244	1025
Osceola	1026	1200
Lake	1201	1500
Volusia (Partial)	1501	1989
Polk (Partial)	1990	2000

Table 5-1 -	Traffic Ana	lysis Zone ($(T\Delta 7)$	Ranges	by County
	TTUTIL ATTU	y sis Zurie	(174)	Runges	by County

The 2010 population estimates utilized in the base year 2010 Wekiva Parkway travel demand model are shown in Table 5-2. This estimate includes single family dwelling units and population, multi-family dwelling units and population, as well as the number of hotel rooms. As shown in Table 5-2, Orange County houses a majority of the Central Florida's residential development, population and hotel rooms in the region.

	Single Family		Multi	-Family		
	Dwelling		Dwelling		Total	Hotel
County	Units	Population	Units	Population	Population	Rooms
Seminole	128,081	308,636	48,388	116,571	425,207	5,019
Orange	292,247	729,466	166,385	413,954	1,143,420	99,584
Osceola	91,961	222,013	25,908	46,672	268,685	38,741
Lake	95,040	196,805	48,317	100,244	297,049	3,123
W. Volusia	62,287	165,498	14,854	24,858	190,356	993
N.E Polk	5,646	14,032	5,779	10,723	24,755	978

Table 5-2- Calendar Year 2010 Population Estimates

In the model, employment is split into three different categories: industrial, commercial, and service employment. Table 5-3 shows the number of employees for each category for each county in the Central Florida Region for the calendar year 2010. As can be seen in Table 5-3, Orange County contains the highest number of employees as expected since large regional employment centers including Walt Disney World, Universal Orlando, Downtown Orlando, the Orlando International Airport and the University of Central Florida are located within that county.



	Employees							
County	Industrial	Commercial	Service	Total				
Seminole	61,111	47,640	112,877	221,628				
Orange	155,411	224,655	423,767	803,833				
Osceola	10,793	23,707	52,624	87,124				
Lake	27,676	31,804	54,331	113,811				
W. Volusia	10,544	14,496	27,113	52,126				
N.E Polk	1,163	1,624	2,826	5,614				

	Table 5-3 -	Calendar	Year 2010	Employ	vment Es	timates
--	-------------	----------	-----------	--------	----------	---------

Figure 5-1 shows the total 2010 population and employment land use by district within the Wekiva Parkway study area. The Longwood/Altamonte Springs area (District 9) has the highest total population and dwelling units, for both single family (SF) and multi-family (MF), as well as the highest amount of employment in the study area. While the entire region was broken up into districts to summarize land use and the regional travel patterns, only the districts within the Wekiva Parkway study area are shown in this figure to highlight the land use around the proposed project.





Figure 5-1 - 2010 Land Use by District



5.1.3 Base Year Traffic Counts

Traffic counts for the calendar year 2010 were collected and reviewed for the purpose of conducting the calendar year 2010 model validation. A total of 886 counts were used to validate the 2010 base year Wekiva Parkway travel demand model, of which 112 were located within the study area. The study area traffic counts were collected as part of the Wekiva Parkway Origin and Destination Study, with additional counts both inside and outside of the study area obtained from other sources including Orange, Seminole and Lake Counties, as well as the Authority and FDOT. The study area count locations are shown in Figure 5-2.

Use of the calendar year 2010 traffic counts allows for a comparison between assigned model volumes and actual traffic volumes. The model is calibrated to project peak season weekday average daily traffic (PSWADT) which represent the average of the 13 consecutive weeks of the year with the highest traffic volume. The actual traffic count data is reported in terms of average annual daily traffic (AADT). A model output conversion factor (MOCF) was applied to the model volumes to convert them to AADT count volumes for comparison. The MOCFs used in the model validation, summarized below in Table 5-4 are taken from the FDOT's 2010 peak season factor report.

County	MOCF
Lake	0.94
Orange	0.98
Osceola	0.97
Seminole	0.98
Volusia	0.95

Table 5-4- Model Output Conversion Factors (MOCF)

5.1.4 Value of Time

The value of time is an important factor utilized by the travel demand model to determine a driver's sensitivity to a toll rate. As a person's value of time increases, their perceived benefit from travel time savings increases. A person with a high value of time would be more likely to take a toll road versus someone with a low value of time. The value of time of a driver varies by time of day and by the purpose of the trip. In the Wekiva Parkway model, the value of time is represented by a CTOLL factor. This variable converts a toll rate to a time impedance factor that the travel demand model uses to determine the impact that a toll would have on a particular trip. This CTOLL factor is a single value for the entire model, which



FIGURE 5-2 STUDY AREA COUNT LOCATIONS





determines the trip making behavior for the entire region. The higher the CTOLL value, the more time a toll adds to the total trip.

The Central Florida region contains many toll facilities, including the Florida's Turnpike, SR 408, SR 414, SR 417, SR 429 and SR 528. Interstate 4 is the only non-tolled expressway in the Orlando area. As a result, many times the quickest way to complete a trip around town is via a tolled facility. As such, drivers in the Orlando region have a higher tolerance to paying tolls than other areas of the state and nation without toll facilities or where more non-tolled alternatives are available.

Due to the mature Central Florida toll market there is a wealth of information as to how the residents of the Central Florida region make decisions about their use of toll facilities. The actual economic choices with respect to toll facilities expressed everyday by Central Florida commuters is revealed based on the existing travel patterns. The revealed preferences shown in actual driver behavior include the evaluation of choice factors used when deciding to use the toll road such as:

- Travel time reliability (particularly during the peak hours)
- Higher safety standards of the toll road
- Convenience of using the toll road (includes such variables as the availability of easy payment options and the accessibility of the toll road)

Empirical data were analyzed on the current OOCEA system both before and after the system-wide toll increase that took place in April 2009. In order to analyze the revealed preference of Orlando area drivers as it pertains to the use of toll roads, existing local conditions and driver behavior were analyzed. The east-west corridor through Orlando was chosen for this analysis because of the presence of a tolled expressway (SR 408) and nearby competing parallel facilities (SR 50, Lake Underhill Road and Old Winter Garden Road). Specific travel times were compared for two parallel facilities, one tolled (SR 408) and one non-tolled (SR 50) to determine the revealed benefit of utilizing the tolled facility. Travel times and traffic patterns by time of day along these corridors were compared to understand how local drivers actually viewed their value of time. The AM peak, midday, PM peak and overnight conditions were analyzed, as the travel time savings between the tolled facility and the free facility changes during different periods of the day.



The result of this analysis was a final CTOLL value of 0.051, which is equivalent to an average wage rate of \$19.50 per hour, equivalent to an average household annual income of \$40,560. The average household income in the Orlando MSA from the Census Bureau's American Community Survey (2005-2009) is \$67,029. This CTOLL value was used in the base year 2010 model. Once the CTOLL value for the base year 2010 model was developed, it was then reduced 2% per year to account for inflation for the future 2015, 2020, 2025 and 2030 models. The details of the value of time analysis are presented in the memorandum in Appendix of this report.



5.2. Model Validation Results

The Wekiva Parkway project model validation was centered on two critical areas, model performance along roadways within the study area and on the regional expressway and arterial network. This two pronged validation approach ensures that the Wekiva Parkway project model reflects the existing conditions not only within the study area but along the major regional facilities as well, providing more confidence in the future year traffic forecasts. The validation effort focused on three critical areas of focus comparing existing traffic counts to model volumes:

- Key Roadway Corridors
- Regional and Study Area Cutlines
- Regional and Study Area Root Mean Square Error

These different aspects of the Wekiva Parkway base year model validation are discussed below.

5.2.1 Validation - Key Roadway Corridors

The corridor model validation focused on two critical roadway corridors. These corridors included US 441 from Mount Dora to Apopka and SR 46 from Mount Dora to Sanford. The Wekiva Parkway project will provide similar travel movements to those currently accommodated by these two facilities. As a result, the accurate reflection of existing traffic conditions along these corridors was an important component of the Wekiva Parkway model development.

Within each corridor, all of the links were validated well within the limits of the preferred FSUTMS model calibration and validation standards, shown below in Table 5-5. While the FDOT model calibration and validation criteria was used as a resource, the Wekiva Parkway travel demand model was validated to a higher standard as shown in the validation statistics. The validation results for the US 441 and SR 46 corridors are shown below in Tables 5-6 and 5-7. The validation achieved overall totals for each corridor of -1.9% and 1.3% respectively.



Table 5-5 - FSUTMS Model Calibration and Validation Standards

	Standards		
Statistic	Acceptable	Preferable	
Percent Error: < 10,000 Volume (2L Road)	± 50%	±25%	
Percent Error: 10,000-30,000 Volume (4L Road)	± 30%	±20%	
Percent Error: 30,000-50,000 Volume (6L Road)	±25%	±15%	
Percent Error: 50,000-65,000 Volume (4-6L Freeway)	±20%	±10%	
Percent Error: 65,000-75,000 Volume (6L Freeway)	±15%	±5%	
Percent Error: > 75,000 Volume (8+L Freeway)	±10%	±5%	

*Source: FSUTMS-Cube Framework Phase II Model Calibration and Validation Standards, Table 2.10

		2010		2010	Percent		
Roadway	Description	Count	County	Volume	Difference	Acceptable	Preferable
US 441	N of Wolf Branch Rd	35,619	Lake	35,743	0.3%	25%	15%
US 441	Btw Wolf Branch & SR 46	31,484	Lake	30,097	-4.4%	25%	15%
US 441	Btw SR 46 & Old US 441	26,869	Lake	26,605	-1.0%	30%	20%
US 441	Btw Old US 441 & Sadler Rd	28,071	Orange	30,709	9.4%	30%	20%
US 441	Btw Sadler Rd & Jones Rd	28,321	Orange	30,420	7.4%	30%	20%
US 441	Btw Jones Rd & Yothers Rd	33,132	Orange	35,320	6.6%	25%	15%
US 441	Btw Yothers & Plymouth-Sorrento Rd	35,410	Orange	30,353	-14.3%	25%	15%
US 441	Btw Plymouth- Sorrento Rd & SR 429	39,174	Orange	37,935	-3.2%	25%	15%
US 441	Btw SR 429 & Park Ave	35,828	Orange	31,500	-12.1%	25%	15%
US 441	Btw Park Ave & SR 436	46,047	Orange	44,503	-3.4%	25%	15%
US 441	South of SR 436	34,000	Orange	33,624	-1.1%	25%	15%
	Total	373,955	-	366,808	-1.9%	10%	5%

Table 5-6 - US 441 Corridor Summary



		2010		2010	Percent		
Roadway	Description	Count	County	Volume	Difference	Acceptable	Preferable
SR 46	Btw US 441 & Round Lake Rd	10,900	Lake	11,108	1.9%	30%	20%
SR 46	Btw Round Lake Rd & CR 437S	9,456	Lake	10,080	6.6%	50%	25%
SR 46	Btw CR 437 S &CR 437 N	14,264	Lake	13,249	-7.1%	30%	20%
SR 46	Btw CR 437 N & CR 435	14,908	Lake	14,903	0.0%	30%	20%
SR 46	Btw Mount Plymouth Rd & CR 46A	12,582	Lake	14,017	11.4%	30%	20%
SR 46	Btw CR 46A & Wekiva River Rd	19,357	Lake	20,070	3.7%	30%	20%
SR 46	Btw Longwood-Markham & Lk Markham Rd	21,880	Seminole	21,736	-0.7%	30%	20%
SR 46	Btw Lake Markham Rd & Orange Blvd	22,827	Seminole	21,567	-5.5%	30%	20%
SR 46	Btw Orange Blvd & International Pkwy	26,421	Seminole	25,367	-4.0%	30%	20%
SR 46	Btw International Pkwy & I4	30,912	Seminole	32,917	6.5%	25%	15%
SR 46	Btw I4 & Towne Center Blvd	42,519	Seminole	45,178	6.3%	25%	15%
SR 46	Btw Towne Center Pkwy & Rinehart Rd	34,335	Seminole	35,050	2.1%	25%	15%
SR 46	East of Rinehart Rd	29,756	Seminole	28,703	-3.5%	30%	20%
Total		290,115	-	293,946	1.3%	10%	5%

Table 5-7 - SR 46 Corridor Summary

5.2.2 Validation - Cutlines

Along with the validation of the US 441 and SR 46 corridors, the regional validation effort included 38 cutlines. Cutlines are used in the validation process to ensure that regional travel patterns are reflected in the model. These cutlines are used annually in the Authority's toll and revenue model, and cover the majority of east-west and north-south movements throughout the region. These regional cutlines are shown below in Figure 5-3. The results of the regional cutline validation are shown in Table 5-8, where all 38 cutlines are shown to be validated within 10 percent of the traffic counts and well within the FDOT standard validation criteria. Of the 38 cutlines, most fall under the preferred level of validation and as a whole, the total of all the cutlines are validated within 1 percent.

Along with the regional cutline validation, the study area validation effort included an additional 15 cutlines. As seen in Figure 5-4, cutlines 1 through 8 run north to south in the study area, reflecting the east-west travel flows within the study area. Likewise, cutlines 9 through 15 run east to west and reflect the north-south travel flows through the study area. The results of the study area cutline validation are presented in Table 5-9. All of the cutlines were validated to within acceptable FDOT standards and were validated within 10 percent of the 2010 traffic count totals. In addition, most cutlines were validated within the preferable range of validation. As noted in Table 5-9, all additional study area counts that were not included in one of the 15 cutlines, were validated to within 1.2 percent overall.







	2010	2010	%					
Cutline	Traffic Count	Model Volume	Difference	Standard				
University Area	Hume count	model volume	Difference	Standard				
U-1	181.385	164,607	-9.2%	Acceptable				
U-2	308.765	280.646	-9.1%	Acceptable				
U-3	275.392	251.699	-8.6%	Acceptable				
U-4	275.722	295.040	7.0%	Acceptable				
U-5	293,939	272.049	-7.4%	Acceptable				
U-6	214.113	206.136	-3.7%	Preferable				
U-7	218.184	208.882	-4.3%	Preferable				
U-8	270.683	290.228	7.2%	Acceptable				
U-9	124.161	121.658	-2.0%	Preferable				
U-10	164.430	160.258	-2.5%	Preferable				
Downtown Orlando Area								
D-1	429,259	450.118	4.9%	Preferable				
D-2	471,225	462,100	-1.9%	Preferable				
D-3	285 385	275 864	-3.3%	Preferable				
D-4	241 955	246 922	2 1%	Preferable				
D-5	446.760	441 362	-1.2%	Preferable				
Orlando International A	irport Area	441,50L	1.270	Treferuble				
Δ-1	196 222	197 696	0.8%	Preferable				
Δ-2	171.083	182 992	7.0%					
۸-3	290 271	281.825	-2.9%	Proforable				
Fast of Dispey Area	270,211	201,025	2.770	TTETETADIE				
East of Disiley Area	243.480	222 975	-8 /1%	Accentable				
ED-2	243,400	222,913	7 104	Acceptable				
ED-2	210,201	209,330	7.1%0	Droforable				
ED-3	290,950	416 290	2.0%	Dreferable				
	401,090	410,300	3.7%	Dreferable				
ED-D	201,399	213,293	2.2%	Preferable				
west Orange County Ar	ed 400.840	470 227	4 20/	Drafarable				
W-1	499,840	478,237	-4.3%	Preferable				
W-2	430,215	400,011	-7.0%	Acceptable				
W-3	114,071	114,732	0.6%	Preferable				
W-4	273,125	281,826	3.2%	Preferable				
W-5	183,837	190,739	3.8%	Preferable				
W-6	95,532	93,734	-1.9%	Preferable				
W-7	67,472	66,790	-1.0%	Preferable				
W-8 256,435 256,540 0.0% Preferable								
Upper West Orange County Area								
UW-1	291,922	276,066	-5.4%	Acceptable				
UW-2	439,542	423,700	-3.6%	Preferable				
UW-3	323,063	335,857	4.0%	Preterable				
UW-4	208,199	213,391	2.5%	Preferable				
UW-5	209,101	204,008	-2.4%	Preferable				
UW-6	60,043	58,418	-2.7%	Preferable				
External Station Cordon Line								
E-1	546,580	546,598	0.0%	Preferable				
All Cutlines	10,331,646	10,231,165	-1.0%	Preferable				



FIGURE 5-4 MODEL VALIDATION STUDY AREA CUTLINES





	r	r	r	
	2010	2010	%	
Cutline	Traffic Count	Model Volume	Difference	Standard
1	59,964	57,519	-4.1%	Preferable
2	50,684	51,404	1.4%	Preferable
3	55,472	50,697	-8.6%	Preferable
4	64,163	59,557	-7.2%	Preferable
5	91,642	86,930	-5.1%	Acceptable
6	34,525	34,115	-1.2%	Preferable
7	237,029	234,322	-1.1%	Preferable
8	333,542	336,029	0.7%	Preferable
9	59,568	56,833	-4.6%	Preferable
10	52,477	49,942	-4.8%	Preferable
11	56,149	56,122	0.0%	Preferable
12	62,345	63,093	1.2%	Preferable
13	97,745	90,471	-7.4%	Acceptable
14	130,464	122,546	-6.1%	Acceptable
15	170,869	158,425	-7.3%	Acceptable
Non-Cutline Links with Counts	1,070,010	1,082,605	1.2%	Preferable

Table 5-9- Study Area Cutline Validation Results

5.2.3 Validation - RMSE

As a final check to confirm that the validation process was complete, the root mean square error (RMSE) was calculated for both the study area and the regional validations. This analysis compared the validated 2010 model volumes to the 2010 traffic counts within the study area and for the regional model area. The RMSE was calculated for all count locations and was summarized by the volume range of these counts. Tables 5-10 and 5-11 show the RMSE results for each count range within the study area and regional model area. The RMSE achieved by the model validation effort for each count range as well as the overall study area and region are within FDOT acceptable levels. The study area RMSE is within the preferable range for all count ranges indicating a very well validated model.


Count Range (ADT)			RMSE Preferable Range	RMSE Acceptable Range	No. of Segments	Model RMSE
0	to	4,999	45%	100%	21	31%
5,000	to	9,999	35%	45%	21	16%
10,000	to	14,999	27%	35%	14	14%
15,000	to	19,999	25%	30%	6	13%
20,000	to	29,999	15%	27%	15	14%
30,000	to	49,999	15%	25%	24	10%
50,000	to	59,999	10%	20%	5	10%
Greater than 60,000		10%	19%	6	9%	
Total RMSE			35%	45%	112	8%

Table 5-10- Study Area	Validation Root Mea	an Square Error (RMSE)
------------------------	---------------------	------------------------

Table 5-11- Regional Validation Root Mean Square Error (RMSE)

Count Range (ADT)			RMSE Preferable Range	RMSE Acceptable Range	No. of Segments	Model RMSE
0	to	4,999	45%	100%	38	37%
5,000	to	9,999	35%	45%	100	34%
10,000	to	14,999	27%	35%	124	25%
15,000	to	19,999	25%	30%	84	20%
20,000	to	29,999	15%	27%	179	25%
30,000	to	49,999	15%	25%	251	19%
50,000	to	59,999	10%	20%	49	16%
Greater than 60,000		10%	19%	61	8%	
Total RMSE			35%	45%	886	21%



5.3. Origin and Destination Study

To assist in the validation of the travel demand model to be used in the Wekiva Parkway Investment Grade Study and better understand travel patterns within the study area, an Origin and Destination Study was performed in November 2010. As part of this effort, 23,910 survey questionnaires were distributed to drivers at nine different locations in the Wekiva Parkway Study area. The purpose of these surveys was to determine the existing travel patterns within northwest Orange, east Lake and west Seminole Counties.

The survey locations are shown in Figure 5-5. Once all the data from the surveys was compiled, the travel patterns were then compared against travel patterns produced by the Wekiva Parkway Investment Grade Model for the 2010 base year. To aid in this comparison, the TAZs within the Wekiva Parkway travel demand model were grouped into districts representing different areas, or subregions, of the Central Florida region. The survey results were used in validating the model to ensure that it accurately represents the current travel conditions. In areas where a difference in travel patterns occurred between the model and the survey results, the Wekiva Parkway travel demand model was adjusted to better replicate the actual, observed travel patterns from the Origin and Destination survey results. In addition, unrealistic travel patterns observed in the model that did not match the survey results were also corrected. Figure 5-6 shows the districts in the Central Florida Region and a description of the areas corresponding to the district numbers is listed after the figure.

To better summarize the origin and destination data for comparison, the origin and destination districts were aggregated into nine planning groups. The planning groups and the origin and destination districts they represent are shown in Figure 5-7. The travel patterns from the Origin and Destination Study and the Wekiva Parkway project model are compared using these planning districts.



Figure 5-5 - Survey Locations







Figure 5-6 - Origin and Destination Study Districts



The 30 origin and destination districts in Figure 5-6 represent the following areas:

- District 1 Northwest Volusia County
- District 2 West Central Volusia County (DeLand)
- District 3 Southwest Volusia County (Orange City/Deltona)
- District 4 Northeast Lake County
- District 5 North Lake County (Eustis)
- District 6 Central Lake County (Leesburg)
- District 7 South Lake County (Clermont)
- District 8 Central Seminole County (Lake Mary/Heathrow)
- District 9 Southwest Seminole County (Longwood/Altamonte Springs)
- District 10 East Seminole County (Oviedo/Winter Springs)
- District 11 Apopka
- District 12 West Central Orange County
- District 13 North Central Orange County (Winter Park)
- District 14 East Central Orange County
- District 15 Southwest Orange County
- District 16 Orlando (including Orlando CBD)
- District 17 East Orange County
- District 18 University of Central Florida
- District 19 South Orange County
- District 20 Walt Disney World
- District 21 Northeast Polk County
- District 22 Northwest Osceola County
- District 23 West Osceola County
- District 24 Central Osceola County
- District 25 East Osceola County
- District 26 Sanford
- District 27 Northwest Seminole County
- District 28 East Lake County (Mount Plymouth/Sorrento)
- District 29 Mount Dora
- District 30 Northwest Orange County



Figure 5-7 - Planning Groups





The 9 origin and destination planning groups represent the following areas:

- Group 1 Southwest Lake County Group 2 - Northeast Lake County
- Group 3 West Volusia County
- Group 4 Seminole County
- Group 5 North Orange County

Group 6 - West Orange County Group 7 - Central Orange County Group 8 - East Orange County Group 9 - Osceola and Northeast Polk Counties

5.3.1 Origin and Destination Patterns

The travel patterns from the Origin and Destination Study were compared to the Wekiva Parkway base year travel demand model at each of the nine survey locations. Travel patterns were compared by looking at the trip origins and destinations. In addition, the origindestination pair trip patterns were also considered. The trip origin and destination pair that made a trip through the survey location was compared to the model results. Where necessary, the Wekiva Parkway base model was adjusted through the use of K-factors to better reflect the trip patterns from the surveyed data. The following figures show the origin and destination trip patterns from the survey compared to the adjusted Wekiva Parkway model. The major trip origin and destination pairs for each of the nine survey locations are discussed below.

Location 1

As shown in Figure 5-8, from this survey location, which is located in Group 2, specifically in District 29, the majority of trips begin in the Mount Dora and northeast Lake County areas. In the survey, the majority of the trips are travelling eastbound to northeast Lake County (53 percent) and southbound into southwest Lake County (13 percent). The model results reflect these same travel patterns with 48 percent travelling eastbound to northeast Lake County and 15 percent travelling southbound into southwest Lake County.

Location 2

Survey location 2 is located within Mount Dora. Figure 5-9 indicates that Group 2, Northeast Lake County, has the highest percentage of trips with 62 percent from the survey results. The model closely matches this trip pattern with 57 percent of the trips going through survey location 2 coming from or to northeast Lake County. The model also reflects the survey results with a larger percentage of trips through this survey location traveling between the northeast Lake County.





Model Origin and Destination Patterns





HNTB

Stantec



Model Origin and Destination Patterns







97





Location 3

Survey location 3 is located within east Lake County and the surveyed and modeled travel patterns are shown in Figure 5-10. Both the survey (49 percent) and model (40 percent) results show the highest percentage of origin and destination trips occur in the northeast Lake County area. In addition, the model results reflect the interaction between Apopka and northeast Lake County as seen in the survey results.

Location 4

As seen in Figure 5-11, the most popular group in the model (47 percent) and survey (63 percent) for location 4 is Group 2, located in northeast Lake County. In addition, the model results reflect the interaction between Lake and Seminole County as seen in the survey results. There is also an interaction shown, in both the model (11 percent) and survey (10 percent), between Lake County and northwest Orange County.

Location 5

The survey and model results for survey location 5 are shown in Figure 5-12. The survey results show a distinct travel pattern from northeast Lake County to Seminole County. In the survey there is 43 percent with an origin or destination in northeast Lake County and in the model there is 50 percent. Likewise, the Seminole County travel pattern is reflected in the model and survey with 29 percent and 36 percent, respectively. The northeast Lake and Seminole County groups are the most attractive for the origin and destination pairs through location 5 for both the survey and the model.

Location 6

The Group 4, located in Seminole County, is the most popular group for survey location 6 in both the survey (50 percent) and model (50 percent) as shown in Figure 5-13. The survey indicates a highly travelled movement from Seminole County to northeast Lake County, Group 2, with 26 percent. This same travel pattern is shown in the model results with Group 2 having 21 percent of the origins and destinations.



Figure 5-10 - Location 3 O&D Survey vs. Model Results

Survey Origin and Destination Patterns







Figure 5-11 - Location 4 O&D Survey vs. Model Results



Survey Origin and Destination Patterns

G-3 47.12% 8.7% G-2 9.38% 9.97% G-4 10.53% G-1 G-5 G-7 4.83% 1.23% 2.86% G-8 G-6 G-9 5.39% Legend District Boundary County Boundary Percentage of Total Trips From/To Each i., Group Area G-XX Group Area



Figure 5-12 - Location 5 O&D Survey vs. Model Results



Survey Origin and Destination Patterns

G-3 50.41% 7.53% G-2 29.08% 0.08% G-4 0% G-1 G-5 G-7 0.05% 11.34% 1.39% G-8 G-6 0.13% G-9 Legend District Boundary County Boundary Percentage of Total Trips From/To Each Group Area G-XX Group Area



Figure 5-13 - Location 6 O&D Survey vs. Model Results









Location 7

As shown in Figure 5-14, north Orange County (Group 5) is the most popular for origin and destination pairs through survey location 7 by a significant margin in both the survey and the model. In addition, the model reflects the trip interaction between Seminole County and northeast Lake County at this location as reflected in the survey.

Location 8

The survey and model results for survey location 8 are shown in Figure 5-15. In both the survey and the model, the highest origin and destination pairs at this location are to and from the north Orange County area. The survey results show a strong travel pattern between the central and west Orange County areas (including the Orlando CBD) to the northeast Lake County areas. These origin and destination trip patterns are reflected in the model results with the same magnitude.

Location 9

Figure 5-16 shows that both the model reflects the surveyed observation that a significant percentage of trips passing through survey location 9 have a trip origin or destination in north Orange County, Group 5. Both the survey and model results show the attractiveness of trips from Seminole County and central Orange County areas through survey location 9.





















Figure 5-16 - Location 9 O&D Survey vs. Model Results

G-3 0.72% 6.03% G-2 48.81% G-4 3.14% G-5 G-1 1.17% G-7 10.81% G-6 G-8 18.22% 1.39% G-9 Legend District Boundary County Boundary Percentage of Total Trips From/To Each Group Area G-XX Group Area



5.4. Travel Time Comparison

To assist in the model validation process, travel time and delay runs were conducted on three key roadways within the Wekiva Parkway study area. These roadway segments included US 441, Plymouth-Sorrento Road, and SR 46 and are shown in Figure 5-17. The limits of the US 441 corridor was between Park Avenue in Apopka and SR 44 in Mount Dora, with a one way trip length of 14.6 miles. The Plymouth-Sorrento Road corridor had a distance of 7.8 miles from US 441 to the south and SR 46 to the north. The third corridor was SR 46, with a one way trip length of this route of 18.8 miles between Highland Street in Lake County and Rinehart Road in Seminole County.

Data was collected by means of completing a travel time and delay study for each corridor. Each corridor was driven as many times as possible from one end to the other end between the hours of 7 am to 6 pm. The start time, end time and travel time between major intersections along the corridor were documented by the driver for each run.

Minimally congested conditions were experienced along the three corridors during the travel time and delay studies, resulting in consistent total travel times between runs to be consistent. Table 5-12 shows a comparison between the average travel times observed from the travel time and delay studies and those from the validated project model. The model travel time for US 441 and Plymouth-Sorrento Road are both within 2 percent of those observed from the travel time and delay runs. For SR 46, the project model has a slightly longer travel time, approximately 3.9 minutes, to traverse the 18.8 mile corridor.

Road Segment	From	То	Observed TTD Study (mins)	2010 Project Model (mins)	Percent Difference
US 441	Park Avenue	SR 44	19.9	20.1	0.8%
Plymouth-Sorrento Road	US 441	SR 46	10.3	10.5	1.6%
SR 46	Highland Avenue	Rinehart Road	25.7	29.6	15.1%

Table 5-12 - Travel Times



FIGURE 5-17 TRAVEL TIME CORRIDORS





5.5. Conclusion

Based on the above validation results, the Wekiva Parkway travel demand model is considered to be thoroughly and well validated to 2010 conditions and able to accurately replicate travel characteristics within the study area. The Wekiva Parkway travel demand model was validated to existing traffic counts along critical corridors, cutlines and regional facilities. In addition, the model was calibrated to origin and destination survey travel patterns and travel times within the study area. As a result, this validated 2010 base year model forms the foundation for the development of the future models. The future year models will be the basis for the development of the traffic demand along Wekiva Parkway and within the Wekiva Parkway study area for the future analysis years. The procedures included in the validation effort ensure that these models are the most accurate resource for the development of future traffic and revenue forecasts for the Wekiva Parkway Investment Grade Study.



6. Build Scenario

The preferred Build Scenario for Wekiva Parkway was developed through a coordination effort with the three partnering agencies: the Authority, FTE and FDOT D5. Through this coordination effort baseline project assumptions were developed for the Wekiva Parkway as a tolled facility. These operating assumptions for the Wekiva Parkway were developed through a series of meetings between the project partners. The core baseline project assumptions are outlined below.

6.1. Build Assumptions

6.1.1 Toll Operation

As part of the coordination effort with the partnership group, it was determined that Wekiva Parkway would operate as an all-electronic tolling (AET) facility, accommodating E-PASS/SunPass transponders and video tolling of license plates. This would be the first such facility in the Orlando area. Most mainline toll collection locations on the Orlando area toll facilities currently operate in an open road tolling configuration, accommodating both electronic toll collection via express lanes and cash transactions. Under AET operation, Wekiva Parkway is not expected to accommodate cash transactions as the other Orlando toll facilities do today. Non-electronic transactions on Wekiva Parkway will be captured via video tolling of license plates. Revenue from the video-tolling transactions is assumed to be collected via mailed invoices for the tolls traversed plus an administrative fee.

6.1.2 Toll Operation

These baseline forecasts assume that Wekiva Parkway will be opened in two phases, as shown in Figure 6-1. Phase 1 will include the extension of the SR 429 from its future terminus along US 441, just northwest of Apopka, to SR 46 in Lake County between Mount Dora and Sanford. Phase 1 includes the "Y" of the project in Orange and Lake Counties and is assumed to be completed in the second half of 2017, within the Authority's FY 2018. In Phase 1, Wekiva Parkway will connect to existing SR 46 at two locations, one west of the town of Sorrento and the other east of the town of Mount Plymouth. The "Y" of the Wekiva Parkway will create a bypass of existing SR 46 through the towns of Sorrento and Mount Plymouth. In addition to the Wekiva Parkway itself, Phase 1 also includes the widening of existing SR 46 from US 441 to Wekiva Parkway to a six-lane controlled access facility and the reconfiguration of the US 441/SR 46 interchange.



FIGURE 6-1 WEKIVA PARKWAY PHASING PLAN





The opening of Phase 2 is assumed to occur two years after the opening of Phase 1 of Wekiva Parkway. Phase 2 includes the completion of the Wekiva Parkway to the east, including a systems interchange with I-4 at SR 417 in Seminole County. Phase 2 is anticipated to be complete in the second half of 2019, which corresponds to the Authority's FY 2020. Phase 2 also includes the realignment of CR 46A in Lake County, the two-lane service road in east Lake County, the four-lane frontage roads in Seminole County and the widening of SR 46 to six-lanes between Wekiva Parkway and I-4 in Seminole County.

6.1.3 Toll Structure

Two toll structure assumptions were utilized for the development of baseline revenue forecasts. Toll Structure 1 includes a combination of mainline and ramp toll collection locations and reflects the traditional tolling structure used in the Orlando area. This structure includes a total of three mainline gantries located:

- between US 441 and Kelly Park Road
- along the SR 46 Bypass northwest connection between Wekiva Parkway and SR 46 and
- in east Lake County between the Old SR 46 and the Lake/Seminole County Line.

Three ramp gantries were also included in Toll Structure 1. These ramp gantries were located at:

- Kelly Park Road interchange ramps to/from the north
- Old SR 46 interchange ramps to/from the south and
- Seminole County slip ramps to/from the east.

Toll Structure 1 is shown in the Figure 6-2. This toll structure is consistent with the current operation of other toll facilities in the Orlando area.

Toll Structure 2 includes a mainline gantry on each segment of the Wekiva Parkway. This results in a tolling policy of tolling by each segment and is only made possible by the AET toll policy. Under a traditional electronic/cash collection toll policy, the additional expense of additional mainline toll collection locations would be a disadvantage. This toll structure provides for a uniform tolling rate whereas all customers would pay the same toll rate per mile. As shown in

FIGURE 6-2 TOLL STRUCTURE 1 CONFIGURATION





Figure 6-3, the eight mainline gantries included in this toll structure are located along Wekiva Parkway at the following locations:

- Between US 441 and Kelly Park Road
- Between Kelly Park Road and SR 46 Bypass systems interchange
- Between SR 46 Bypass systems interchange and SR 46 West
- Between SR 46 Bypass systems interchange and Old SR 46 interchange
- Between Old SR 46 interchange and Seminole slip ramps to/from the west
- Between Seminole slip ramps to/from the west and Seminole slip ramps to/from the east
- Between Seminole slip ramps to/from the east and SR 46 slip ramps to/from the west
- Between SR 46 slip ramps to/from the west and Interstate 4



FIGURE 6-3 TOLL STRUCTURE 2 CONFIGURATION





6.1.4 Toll Rates

The baseline toll structures were both analyzed under two sets of toll rates calculated on a per mile basis. These two toll rates were a base toll rate set at 15 cents per mile and a second base toll rate set at 18 cents per mile for the opening year. The toll rates along Wekiva Parkway were desired to be consistent with the other regional facilities at the assumed time of opening. Figure 6-4 shows the toll rates on other Orlando toll facilities in 2018 based on the current toll policies of the overseeing agencies. The base toll rates are assumed to be the initial toll rates on Wekiva Parkway through the opening of Phase 2 in 2019.

The toll rates on Wekiva Parkway are assumed to be annually indexed to inflation. This annual increase reflects a conservative assumption of a future annual inflation rate of 2 percent per year. The toll rates at each gantry location in Toll Structure 1 are shown in Figure 6-5 for the years of 2018, 2020, 2025 and 2030. Likewise the toll rates at each gantry location for the same years in Toll Structure 2 are shown in the Figure 6-6. Indexing of the toll rates along Wekiva Parkway is assumed to begin in 2020, one year after the opening of Phase 2.

6.1.5 Traffic Ramp-Up

Traffic ramp-up percentages were applied to the traffic and revenue forecast to account for the fact that it may take some time for toll users to get familiar with a new toll facility. This can have an impact on the traffic and revenue in the early years of a project as all expected traffic is not present from day one. It is important to note that Wekiva Parkway is in effect an extension of two existing toll facilities, SR 429 and SR 417. It is also located within the Orlando area, which has a mature system of tolled expressways. In addition, portions of Wekiva Parkway will be replacing existing heavily travelled routes, particularly in east Lake County.

The ramp-up factors for the Wekiva Parkway were based on the actual ramp-up experienced at the SR 429 Forest Lake mainline plaza location when it opened in 2000. This section of SR 429 is immediately adjacent to the Wekiva Parkway, south of US 441. A five year ramp-up period is assumed for Wekiva Parkway. The Wekiva Parkway ramp-up factors are 35 percent for the opening year, 55 percent the second year, 75 percent the third year, 90 percent the fourth year and 100 percent in the fifth year.





Figure 6-4 - 2018 Regional Toll Rates

Cash EPASS\SunPass



FIGURE 6-5 TOLL STRUCTURE 1 TOLL RATES





FIGURE 6-6 TOLL STRUCTURE 2 TOLL RATES





6.1.6 Transportation Network

Future baseline transportation networks were created to reflect the anticipated future transportation system within the Orlando area. As such, this baseline transportation network includes the planned and programmed transportation improvements within the study area and the Orlando region that are included in the currently adopted MPO LRTPs. This baseline network was first developed as a No-Build network, reflecting the future transportation system without Wekiva Parkway. Figures 6-7 through 6-10 show the No-Build study area transportation network for the years 2015, 2020, 2025 and 2030, respectively.

For the Build condition, the Wekiva Parkway project was added to the regional transportation network as a tolled limited access facility. The Wekiva Parkway project also encompasses several associated non-expressway improvements such as widening of existing SR 46, US 441/SR 46 interchange reconfiguration, east Lake County service road and the CR 46A realignment. Figure 6-11 shows the 2030 Build study area roadway transportation network with the addition of Wekiva Parkway.

In addition to the incorporation of the planned roadway improvements within the Orlando area, transit improvements were also considered. While transit mode split is currently a very small percentage of overall trips in the Orlando area, the region has recently committed to providing premium transit service in the future. With the approval of SunRail and the premium transit projects included in the adopted MPO LRTPs, the regional transit service will be enhanced in the future. As a result, the SunRail and Orange Blossom Express commuter rail transit projects have been included in the project traffic model. These two transit projects are shown in Figure 6-12.

The combination of Wekiva Parkway and the existing section of SR 429 would be an alternative to I-4 for trips passing through the Orlando area. During events causing intense congestion along I-4 through Orlando, Wekiva Parkway and SR 429 would provide significant time savings for these through trips. In addition, SR 429 provides direct access to the Walt Disney World Resort and as a result some tourist trips from the north could be directed to use SR 429 and Wekiva Parkway for access to this resort area. However, because the comparable trip along Wekiva Parkway and SR 429 is significantly longer in distance and tolled, the traffic diversion from I-4 for these daily through trips is assumed to be relatively minor.

The number of through trips traveling end to end along SR 429 has been estimated to be less than 2,000 per day in 2030. From the I-4/SR 429 interchange south of Orlando to the



FIGURE 6-7 YEAR 2015 NO-BUILD NETWORK





FIGURE 6-8 YEAR 2020 NO-BUILD NETWORK





FIGURE 6-9 YEAR 2025 NO-BUILD NETWORK





FIGURE 6-10 YEAR 2030 NO-BUILD NETWORK


FIGURE 6-11 YEAR 2030 BUILD HIGHWAY NETWORK





FIGURE 6-12 2030 TRANSIT NETWORK





I-4/SR 429/SR 417 interchange north of Orlando the travel distance is approximately 42 miles along I-4 and 55 miles along SR 429, a difference of 13 miles. In addition to the longer distance traveled along SR 429, the toll rate in 2030 to travel on a one-way trip for the entire length of SR 429 is expected to be between \$8.50 - \$9.25, depending on the toll rates at that time.

6.1.7 Service Road

In the existing condition, CR 46A and SR 46 operate as free arterials providing mobility between Lake and Seminole Counties and property access along their corridors in east Lake County. However, with the incorporation of the Wekiva Parkway project into the future roadway network in northwest Orange, east Lake and west Seminole Counties, the existing SR 46 and CR 46A through movements are truncated and the east-west through movement in east Lake County is replaced with the Wekiva Parkway project. As part of the Wekiva Parkway project, the existing CR 46A roadway will be realigned and a service road and a tolled limited access expressway replace existing SR 46 in east Lake County.

An important consideration for the Build highway network was how to model the proposed service road that runs alongside the Wekiva Parkway in east Lake County. This roadway is included in the Wekiva Parkway project to provide local access to the property owners in east Lake County. Since Wekiva Parkway is proposed to be a tolled limited access expressway, the service road also serves a dual purpose of providing a free alternative for east-west movement between Lake and Seminole Counties. This service road concept accommodates the concern from the general public and local agencies of replacing an existing free movement with a future tolled movement without providing a free alternative.

While the service road will provide essentially the same access as exists today along existing SR 46, it is not expected to reflect the existing operating conditions of SR 46 in east Lake County. As currently designed, the east Lake County service road will be a two-lane (one lane in each direction) low-speed collector with multiple stop controlled intersections. If traffic volumes warrant in the future, the stop controlled intersections may be upgraded to be signalized intersections. The service road is proposed to have a posted speed of 35 mph. However, in this analysis of the traffic and revenue forecasts for Wekiva Parkway, the service road was modeled with a higher posted speed of 45 mph. The capacity of the roadway was assumed to reflect a two-lane collector with multiple stops.



6.2. Baseline Revenue Forecasts

Four baseline revenue forecasts were developed for Wekiva Parkway. The four baseline scenarios included different combinations of the baseline toll structures and the baseline toll rates. The baseline toll structures and base toll rates were combined into these four baseline scenarios:

- Baseline Scenario 1 Toll Structure 1 with base toll rate of 15 cents per mile
- Baseline Scenario 2 Toll Structure 1 with base toll rate of 18 cents per mile
- Baseline Scenario 3 Toll Structure 2 with base toll rate of 15 cents per mile
- Baseline Scenario 4 Toll Structure 2 with base toll rate of 18 cents per mile

Each baseline scenario was analyzed under the two-phase opening described previously. Additionally, the baseline land use and transportation networks were the same for all baseline scenarios. The annual traffic and revenue forecasts for each baseline scenario are described below.

6.2.1 Baseline Scenario 1

Baseline Scenario 1 represents Wekiva Parkway with a toll policy of Toll Structure 1 opening with a base toll rate of 15 cents per mile. Toll rates on Wekiva Parkway were assumed to be indexed at 2 percent annually beginning in the year 2020. Figure 6-13 shows the opening year traffic in year 2017 for the Wekiva Parkway in Baseline Scenario 1. The opening year traffic and the subsequent 3 years reflect the application of ramp-up factors to take into account that drivers will become more familiar with the Wekiva Parkway for Baseline Scenario 1. Total annual transactions for Wekiva Parkway Baseline Scenario 1 are shown in Table 6-1. The annual transactions are also shown for each toll collection location in Baseline Scenario 1. Total gross revenue for Wekiva Parkway Baseline Scenario 1 is shown in Table 6-2. Gross revenues are also shown by toll collection location.

Due to the AET collection assumption along Wekiva Parkway, a percentage of leakage was assumed in which some toll transactions may not be recovered because of various reasons such as equipment malfunctions, illegible license plates, out of state vehicles and general toll violations. A conservative 5 percent leakage percentage was assumed for Wekiva Parkway to account for the portion of toll transactions that may be unrecoverable. This is in addition to the



normal toll violation rate, which for Wekiva Parkway was assumed to be similar to the approximately 3 percent violation rate on the Authority's existing system. Total gross revenue for Wekiva Parkway less leakage is shown in Table 6-3 for Baseline Scenario 1.

Total annual transactions for Baseline Scenario 1 are forecast to be 16.3 million in FY 2020, 27.4 million in FY 2025, 34.2 million in FY 2030 and 42.8 million in FY 2050. Toll annual gross revenues less leakage for Wekiva Parkway are projected to be \$19.7 million in FY 2020, \$35.6 million in FY 2025, \$48.5 million in FY 2030 and \$86.6 million in FY 2050. This represents a CAGR of 12.6 percent between FY 2020 and FY 2025, 6.4 percent between FY 2025 and FY 2030 and 2.9 percent between FY 2030 and FY 2050.

The Baseline Scenario 1 transactions are forecasted to have a CAGR of 11.0 percent between FY 2020 and FY 2025, 4.6 percent between 2025 and 2030 and 1.1 percent from 2030 to 2050. This compares to the study area CAGR for population and employment growth of 1.2 percent and 1.6 percent, respectively, from 2025 to 2030. The high CAGR between 2020 and 2025 reflects the reduced traffic (and revenue) on Wekiva Parkway during the ramp-up period as potential users become more aware of the project and its benefits.



Wekiva Parkway Traffic and Revenue Study

FIGURE 6-13 YEAR 2017 BUILD - BASE SCENARIO 1 DAILY TRAFFIC



FIGURE 6-14 YEAR 2030 BUILD - BASE SCENARIO 1 DAILY TRAFFIC





	Annual Transactions										
				Phase I & II							
Fiscal Year							Wekiya				
riscur reur							Parkway				
	Orange	Kelly Park	West Lake	Old SR 46	East Lake	Seminole	Total				
	Mainline	Ramps	Mainline	Ramps	Mainline	Slip Ramps					
2018	1,346,000	392,000	424,000	516,000	0	0	2,678,000				
2019	2,275,000	666,000	729,000	876,000	0	0	4,546,000				
2020	4,319,000	1,408,000	2,760,000	37,000	6,187,000	1,565,000	16,276,000				
2021	5,348,000	1,782,000	3,450,000	42,000	7,530,000	1,935,000	20,087,000				
2022	6,340,000	2,089,000	4,059,000	52,000	8,688,000	2,085,000	23,313,000				
2023	6,797,000	2,160,000	4,299,000	75,000	9,105,000	2,097,000	24,533,000				
2024	7,286,000	2,268,000	4,621,000	108,000	9,542,000	2,109,000	25,934,000				
2025	7,811,000	2,334,000	4,893,000	155,000	10,001,000	2,178,000	27,372,000				
2026	8,373,000	2,450,000	5,205,000	209,000	10,481,000	2,249,000	28,967,000				
2027	8,758,000	2,573,000	5,402,000	312,000	11,003,000	2,397,000	30,445,000				
2028	9,160,000	2,661,000	5,607,000	467,000	11,442,000	2,458,000	31,795,000				
2029	9,581,000	2,767,000	5,820,000	604,000	11,788,000	2,497,000	33,057,000				
2030	10,021,000	2,878,000	6,040,000	722,000	12,027,000	2,511,000	34,199,000				
2031	10,383,000	2,948,000	6,463,000	827,000	12,272,000	2,525,000	35,418,000				
2032	10,706,000	3,052,000	6,777,000	888,000	12,514,000	2,538,000	36,475,000				
2033	10,967,000	3,111,000	7,076,000	937,000	12,637,000	2,551,000	37,279,000				
2034	11,183,000	3,204,000	7,285,000	970,000	12,760,000	2,563,000	37,965,000				
2035	11,350,000	3,251,000	7,465,000	1,003,000	12,885,000	2,576,000	38,530,000				
2036	11,406,000	3,349,000	7,612,000	1,028,000	13,012,000	2,589,000	38,996,000				
2037	11,462,000	3,414,000	7,762,000	1,054,000	13,139,000	2,601,000	39,432,000				
2038	11,519,000	3,483,000	7,915,000	1,069,000	13,268,000	2,614,000	39,868,000				
2039	11,576,000	3,552,000	7,993,000	1,085,000	13,398,000	2,627,000	40,231,000				
2040	11,634,000	3,587,000	8,071,000	1,102,000	13,529,000	2,640,000	40,563,000				
2041	11,691,000	3,623,000	8,150,000	1,107,000	13,596,000	2,653,000	40,820,000				
2042	11,749,000	3,641,000	8,190,000	1,113,000	13,664,000	2,666,000	41,023,000				
2043	11,807,000	3,677,000	8,231,000	1,118,000	13,731,000	2,680,000	41,244,000				
2044	11,866,000	3,696,000	8,272,000	1,124,000	13,799,000	2,693,000	41,450,000				
2045	11,924,000	3,714,000	8,313,000	1,129,000	13,867,000	2,706,000	41,653,000				
2046	11,983,000	3,751,000	8,354,000	1,135,000	13,936,000	2,720,000	41,879,000				
2047	12,043,000	3,770,000	8,395,000	1,140,000	14,005,000	2,733,000	42,086,000				
2048	12,102,000	3,807,000	8,437,000	1,146,000	14,074,000	2,747,000	42,313,000				
2049	12,162,000	3,826,000	8,478,000	1,152,000	14,144,000	2,760,000	42,522,000				
2050	12.222.000	3.864.000	8.520.000	1.157.000	14,214,000	2,774,000	42,751,000				

Table 6-1 -	- Baseline	Scenario ⁻	1 Annual	Transactions
-------------	------------	-----------------------	----------	--------------

*Traffic and revenue for FY 2018 - FY 2021 include a reduction for ramp-up.

CAGR (2020-2025) 11.0% CAGR (2025-2030) 4.6%

CAGR (2030-2050) 1.1%



	Annual Gross Revenue (\$millions)									
			F	hase I &						
Fiscal							Wakiya			
Year		Kelly	West	Old SR	East	Seminole	Parkway			
	Orange	Park	Lake	46	Lake	Slip	Total			
	Mainline	Ramps	Mainline	Ramps	Mainline	Ramps	Total			
2018	\$1.0	\$0.1	\$0.2	\$0.3	\$0.0	\$0.0	\$1.6			
2019	\$1.8	\$0.1	\$0.3	\$0.5	\$0.0	\$0.0	\$2.7			
2020	\$3.4	\$0.2	\$1.1	\$0.0	\$15.0	\$1.0	\$20.7			
2021	\$4.2	\$0.3	\$1.4	\$0.0	\$18.6	\$1.3	\$25.8			
2022	\$5.1	\$0.4	\$1.6	\$0.0	\$21.9	\$1.4	\$30.4			
2023	\$5.6	\$0.4	\$1.8	\$0.0	\$23.4	\$1.4	\$32.6			
2024	\$6.1	\$0.4	\$1.9	\$0.1	\$25.1	\$1.5	\$35.1			
2025	\$6.6	\$0.4	\$2.1	\$0.1	\$26.8	\$1.5	\$37.5			
2026	\$7.3	\$0.5	\$2.3	\$0.1	\$28.6	\$1.6	\$40.4			
2027	\$7.8	\$0.5	\$2.4	\$0.2	\$30.6	\$1.8	\$43.3			
2028	\$8.3	\$0.5	\$2.6	\$0.3	\$32.5	\$1.9	\$46.1			
2029	\$8.8	\$0.6	\$2.7	\$0.4	\$34.1	\$1.9	\$48.5			
2030	\$9.5	\$0.6	\$2.9	\$0.5	\$35.6	\$2.0	\$51.1			
2031	\$10.0	\$0.6	\$3.1	\$0.6	\$37.1	\$2.0	\$53.4			
2032	\$10.6	\$0.6	\$3.3	\$0.7	\$38.4	\$2.1	\$55.7			
2033	\$10.9	\$0.7	\$3.5	\$0.7	\$39.6	\$2.1	\$57.5			
2034	\$11.4	\$0.7	\$3.7	\$0.8	\$40.8	\$2.2	\$59.6			
2035	\$11.8	\$0.7	\$3.9	\$0.8	\$42.1	\$2.2	\$61.5			
2036	\$12.1	\$0.8	\$4.0	\$0.9	\$43.3	\$2.3	\$63.4			
2037	\$12.4	\$0.8	\$4.2	\$0.9	\$44.6	\$2.4	\$65.3			
2038	\$12.7	\$0.8	\$4.4	\$0.9	\$46.0	\$2.4	\$67.2			
2039	\$13.1	\$0.8	\$4.5	\$1.0	\$47.3	\$2.5	\$69.2			
2040	\$13.4	\$0.9	\$4.7	\$1.0	\$48.7	\$2.5	\$71.2			
2041	\$13.7	\$0.9	\$4.8	\$1.0	\$50.0	\$2.6	\$73.0			
2042	\$14.0	\$0.9	\$4.9	\$1.1	\$51.2	\$2.7	\$74.8			
2043	\$14.5	\$1.0	\$5.0	\$1.1	\$52.6	\$2.7	\$76.9			
2044	\$14.8	\$1.0	\$5.2	\$1.1	\$53.8	\$2.8	\$78.7			
2045	\$15.1	\$1.0	\$5.3	\$1.1	\$55.1	\$2.9	\$80.5			
2046	\$15.5	\$1.0	\$5.5	\$1.2	\$56.6	\$2.9	\$82.7			
2047	\$15.9	\$1.1	\$5.6	\$1.2	\$58.0	\$3.0	\$84.8			
2048	\$16.3	\$1.1	\$5.7	\$1.2	\$59.4	\$3.1	\$86.8			
2049	\$16.7	\$1.1	\$5.8	\$1.3	\$60.9	\$3.2	\$89.0			
2050	\$17.1	\$1.2	\$6.0	\$1.3	\$62.4	\$3.2	\$91.2			
		a = 1/ a a a / .				2020-2025)	12 60/2			

Table 6-2 - Baseline Scenario 1 Annual Gross Revenue

Traffic and revenue for FY 2018 - FY 2021 include a reduction for ramp-up.

CAGR (2020-2025) 12.6% CAGR (2025-2030) 6.4% 2.9%

CAGR (2030-2050)



	Annu	al Revenue (\$mil	lions)
Fiscal Year	Wekiva Parkway Gross Revenue	Wekiva Parkway Assumed Leakage	Wekiva Parkway Gross Revenue Less Leakage
2018	\$1.6	\$0.1	\$1.5
2019	\$2.7	\$0.1	\$2.6
2020	\$20.7	\$1.0	\$19.7
2021	\$25.8	\$1.3	\$24.5
2022	\$30.4	\$1.5	\$28.9
2023	\$32.6	\$1.6	\$31.0
2024	\$35.1	\$1.8	\$33.3
2025	\$37.5	\$1.9	\$35.6
2026	\$40.4	\$2.0	\$38.4
2027	\$43.3	\$2.2	\$41.1
2028	\$46.1	\$2.3	\$43.8
2029	\$48.5	\$2.4	\$46.1
2030	\$51.1	\$2.6	\$48.5
2031	\$53.4	\$2.7	\$50.7
2032	\$55.7	\$2.8	\$52.9
2033	\$57.5	\$2.9	\$54.6
2034	\$59.6	\$3.0	\$56.6
2035	\$61.5	\$3.1	\$58.4
2036	\$63.4	\$3.2	\$60.2
2037	\$65.3	\$3.3	\$62.0
2038	\$67.2	\$3.4	\$63.8
2039	\$69.2	\$3.5	\$65.7
2040	\$71.2	\$3.6	\$67.6
2041	\$73.0	\$3.7	\$69.3
2042	\$74.8	\$3.7	\$71.1
2043	\$76.9	\$3.8	\$73.1
2044	\$78.7	\$3.9	\$74.8
2045	\$80.5	\$4.0	\$76.5
2046	\$82.7	\$4.1	\$78.6
2047	\$84.8	\$4.2	\$80.6
2048	\$86.8	\$4.3	\$82.5
2049	\$89.0	\$4.5	\$84.5
2050	\$91.2	\$4.6	\$86.6

Table 6-3 - Baseline Scenario 1 Annual Gross Revenue Less Leakage



6.2.2 Baseline Scenario 2

Baseline Scenario 2 represents Wekiva Parkway with a toll policy of Toll Structure 1 opening with a base toll rate of 18 cents per mile. Toll rates on Wekiva Parkway were assumed to be indexed at 2 percent annually beginning in the year 2020. Figure 6-15 shows the opening year traffic in year 2017 for the Wekiva Parkway in Baseline Scenario 2. The opening year traffic and the subsequent 3 years reflect the application of ramp-up factors to take into account that drivers will become more familiar with the Wekiva Parkway over time. Figure 6-16 shows the year 2030 projected traffic along the Wekiva Parkway for Baseline Scenario 2. Total annual transactions for Wekiva Parkway Baseline Scenario 2 are shown in Table 6-4. The annual transactions are also shown for each toll collection location in Baseline Scenario 2. Total gross revenue for Wekiva Parkway Baseline Scenario 2 is shown in Table 6-5. Gross revenues are also broken out by toll collection location. Total gross revenue for Wekiva Parkway less leakage is shown in Table 6-6 for Baseline Scenario 2.

Total annual transactions for Baseline Scenario 2 are forecast to be 13.5 million in FY 2020, 23.6 million in FY 2025, 28.1 million in FY 2030 and 34.5 million in FY 2050. Toll annual gross revenues less leakage for Wekiva Parkway are projected to be \$19.5 million in FY 2020, \$37.7 million in FY 2025, \$49.5 million in FY 2030 and \$87.1 million in FY 2050. This represents a CAGR of 14.1 percent between FY 2020 and FY 2025, 5.6 percent between FY 2025 and FY 2030 and 2.9 percent between FY 2030 and FY 2050. The high CAGR between 2020 and 2025 reflects the reduced revenue on the project during the ramp-up period as potential users become aware of the project and its benefits.

The Baseline Scenario 2 transactions are forecasted to have a CAGR of 11.8 percent between FY 2020 and FY 2025, 3.5 percent between 2025 and 2030 and 1.0 percent from 2030 to 2050. This compares to the study area CAGR for population and employment growth of 1.2 percent and 1.6 percent, respectively, from 2025 to 2030. Again, the high CAGR between 2020 and 2025 reflects the reduced revenue on the project during the ramp-up period as potential users become aware of the project and its benefits.



FIGURE 6-15 YEAR 2017 BUILD - BASE SCENARIO 2 DAILY TRAFFIC





FIGURE 6-16 YEAR 2030 BUILD - BASE SCENARIO 2 DAILY TRAFFIC





			Ann	ual Transact	ions		
				Phase I & II			
Fiscal Year							Wekiva
	Orange	Kelly Park	West Lake	Old SR 46	East Lake	Seminole	Parkway
	Mainline	Ramps	Mainline	Ramps	Mainline	Slip Ramps	Total
2018	1,101,000	278,000	301,000	347,000	0	0	2,027,000
2019	1,860,000	489,000	532,000	595,000	0	0	3,476,000
2020	3,588,000	1,219,000	2,134,000	39,000	5,129,000	1,399,000	13,508,000
2021	4,468,000	1,519,000	2,688,000	48,000	6,250,000	1,807,000	16,780,000
2022	5,314,000	1,806,000	3,187,000	57,000	7,273,000	2,045,000	19,682,000
2023	5,688,000	1,932,000	3,401,000	63,000	7,762,000	2,042,000	20,888,000
2024	6,088,000	2,005,000	3,629,000	73,000	8,285,000	2,040,000	22,120,000
2025	6,516,000	2,146,000	3,919,000	86,000	8,925,000	2,038,000	23,630,000
2026	6,974,000	2,206,000	4,182,000	104,000	9,615,000	2,036,000	25,117,000
2027	7,142,000	2,316,000	4,358,000	136,000	9,963,000	2,019,000	25,934,000
2028	7,313,000	2,396,000	4,542,000	192,000	10,325,000	2,003,000	26,771,000
2029	7,488,000	2,492,000	4,734,000	271,000	10,495,000	1,986,000	27,466,000
2030	7,596,000	2,552,000	4,933,000	383,000	10,669,000	1,970,000	28,103,000
2031	7,633,000	2,642,000	5,141,000	468,000	10,845,000	1,944,000	28,673,000
2032	7,899,000	2,693,000	5,391,000	494,000	10,951,000	1,960,000	29,388,000
2033	8,174,000	2,787,000	5,629,000	517,000	11,059,000	1,977,000	30,143,000
2034	8,377,000	2,828,000	5,796,000	537,000	11,167,000	1,996,000	30,701,000
2035	8,502,000	2,913,000	5,938,000	553,000	11,277,000	2,015,000	31,198,000
2036	8,544,000	2,970,000	6,055,000	567,000	11,387,000	2,025,000	31,548,000
2037	8,586,000	3,059,000	6,175,000	581,000	11,499,000	2,035,000	31,935,000
2038	8,628,000	3,089,000	6,235,000	590,000	11,611,000	2,045,000	32,198,000
2039	8,671,000	3,151,000	6,296,000	599,000	11,725,000	2,055,000	32,497,000
2040	8,714,000	3,182,000	6,358,000	607,000	11,840,000	2,066,000	32,767,000
2041	8,757,000	3,198,000	6,390,000	611,000	11,899,000	2,076,000	32,931,000
2042	8,801,000	3,230,000	6,421,000	614,000	11,958,000	2,086,000	33,110,000
2043	8,844,000	3,246,000	6,453,000	617,000	12,017,000	2,096,000	33,273,000
2044	8,888,000	3,278,000	6,485,000	620,000	12,076,000	2,107,000	33,454,000
2045	8,932,000	3,294,000	6,517,000	623,000	12,136,000	2,117,000	33,619,000
2046	8,976,000	3,311,000	6,549,000	626,000	12,196,000	2,128,000	33,786,000
2047	9,021,000	3,344,000	6,582,000	629,000	12,256,000	2,138,000	33,970,000
2048	9,065,000	3,360,000	6,614,000	632,000	12,317,000	2,149,000	34,137,000
2049	9,110,000	3,377,000	6,647,000	635,000	12,378,000	2,159,000	34,306,000
2050	9,155,000	3,394,000	6,680,000	638,000	12,439,000	2,170,000	34,476,000

Table 6-4 - Baseline Scenario 2 Annual Transactions

*Traffic and revenue for FY 2018 - FY 2021 include a reduction for ramp-up.

CAGR (2020-2025) 11.8% CAGR (2025-2030) 3.5%

CAGR (2030-2050) 1.0%



	Annual Gross Revenue (\$millions)									
				Phase I & II						
Fiscal Year						Seminole	Wekiva			
	Orange	Kelly Park	West Lake	Old SR 46	East Lake	Slip	Parkway			
	Mainline	Ramps	Mainline	Ramps	Mainline	Ramps	Total			
2018	\$1.0	\$0.1	\$0.1	\$0.3	\$0.0	\$0.0	\$1.5			
2019	\$1.7	\$0.1	\$0.2	\$0.4	\$0.0	\$0.0	\$2.4			
2020	\$3.3	\$0.2	\$1.0	\$0.0	\$14.9	\$1.1	\$20.5			
2021	\$4.2	\$0.3	\$1.3	\$0.0	\$18.6	\$1.4	\$25.8			
2022	\$5.1	\$0.4	\$1.6	\$0.0	\$22.0	\$1.6	\$30.7			
2023	\$5.6	\$0.4	\$1.7	\$0.0	\$24.0	\$1.7	\$33.4			
2024	\$6.1	\$0.4	\$1.8	\$0.1	\$26.1	\$1.7	\$36.2			
2025	\$6.7	\$0.5	\$2.0	\$0.1	\$28.7	\$1.7	\$39.7			
2026	\$7.3	\$0.5	\$2.2	\$0.1	\$31.5	\$1.8	\$43.4			
2027	\$7.6	\$0.5	\$2.3	\$0.1	\$33.3	\$1.8	\$45.6			
2028	\$8.0	\$0.6	\$2.5	\$0.2	\$35.3	\$1.8	\$48.4			
2029	\$8.3	\$0.6	\$2.7	\$0.2	\$36.5	\$1.8	\$50.1			
2030	\$8.6	\$0.6	\$2.8	\$0.3	\$37.9	\$1.9	\$52.1			
2031	\$8.8	\$0.7	\$3.0	\$0.4	\$39.3	\$1.9	\$54.1			
2032	\$9.3	\$0.7	\$3.2	\$0.5	\$40.5	\$1.9	\$56.1			
2033	\$9.8	\$0.7	\$3.4	\$0.5	\$41.7	\$2.0	\$58.1			
2034	\$10.3	\$0.8	\$3.5	\$0.5	\$42.9	\$2.0	\$60.0			
2035	\$10.6	\$0.8	\$3.7	\$0.5	\$44.1	\$2.1	\$61.8			
2036	\$10.9	\$0.8	\$3.9	\$0.6	\$45.5	\$2.2	\$63.9			
2037	\$11.1	\$0.9	\$4.0	\$0.6	\$46.9	\$2.2	\$65.7			
2038	\$11.5	\$0.9	\$4.1	\$0.6	\$48.3	\$2.3	\$67.7			
2039	\$11.7	\$0.9	\$4.2	\$0.6	\$49.8	\$2.3	\$69.5			
2040	\$12.0	\$1.0	\$4.4	\$0.7	\$51.2	\$2.4	\$71.7			
2041	\$12.4	\$1.0	\$4.5	\$0.7	\$52.5	\$2.4	\$73.5			
2042	\$12.6	\$1.0	\$4.6	\$0.7	\$53.9	\$2.5	\$75.3			
2043	\$12.9	\$1.0	\$4.8	\$0.7	\$55.1	\$2.5	\$77.0			
2044	\$13.3	\$1.0	\$4.8	\$0.7	\$56.5	\$2.6	\$78.9			
2045	\$13.6	\$1.1	\$5.0	\$0.7	\$57.9	\$2.7	\$81.0			
2046	\$14.0	\$1.1	\$5.1	\$0.8	\$59.4	\$2.8	\$83.2			
2047	\$14.3	\$1.1	\$5.3	\$0.8	\$60.9	\$2.8	\$85.2			
2048	\$14.7	\$1.2	\$5.4	\$0.8	\$62.4	\$2.9	\$87.4			
2049	\$15.0	\$1.2	\$5.5	\$0.8	\$64.0	\$3.0	\$89.5			
2050	\$15.4	\$1.3	\$5.6	\$0.8	\$65.6	\$3.0	\$91.7			

Table 6-5 - Baseline Scenario 2 Annual Gross Revenue

*Traffic and revenue for FY 2018 - FY 2021 include a reduction for ramp-up.

CAGR (2020-2025) 14.1% CAGR (2025-2030) 5.6% CAGR (2030-2050) 2.9%



	Annual Revenue (\$millions)								
Fiscal	Wakiya	Wekiva	Wekiva						
Voor	Darkway	Parkway	Parkway						
real	Faikway Gross Boyonuo	Assumed	Gross Revenue						
	GIOSS Revenue	Leakage	Less Leakage						
2018	\$1.5	\$0.1	\$1.4						
2019	\$2.4	\$0.1	\$2.3						
2020	\$20.5	\$1.0	\$19.5						
2021	\$25.8	\$1.3	\$24.5						
2022	\$30.7	\$1.5	\$29.2						
2023	\$33.4	\$1.7	\$31.7						
2024	\$36.2	\$1.8	\$34.4						
2025	\$39.7	\$2.0	\$37.7						
2026	\$43.4	\$2.2	\$41.2						
2027	\$45.6	\$2.3	\$43.3						
2028	\$48.4	\$2.4	\$46.0						
2029	\$50.1	\$2.5	\$47.6						
2030	\$52.1	\$2.6	\$49.5						
2031	\$54.1	\$2.7	\$51.4						
2032	\$56.1	\$2.8	\$53.3						
2033	\$58.1	\$2.9	\$55.2						
2034	\$60.0	\$3.0	\$57.0						
2035	\$61.8	\$3.1	\$58.7						
2036	\$63.9	\$3.2	\$60.7						
2037	\$65.7	\$3.3	\$62.4						
2038	\$67.7	\$3.4	\$64.3						
2039	\$69.5	\$3.5	\$66.0						
2040	\$71.7	\$3.6	\$68.1						
2041	\$73.5	\$3.7	\$69.8						
2042	\$75.3	\$3.8	\$71.5						
2043	\$77.0	\$3.9	\$73.1						
2044	\$78.9	\$3.9	\$75.0						
2045	\$81.0	\$4.1	\$76.9						
2046	\$83.2	\$4.2	\$79.0						
2047	\$85.2	\$4.3	\$80.9						
2048	\$87.4	\$4.4	\$83.0						
2049	\$89.5	\$4.5	\$85.0						
2050	Ş91.7	Ş4.6	\$87.1						

 Table 6-6 - Baseline Scenario 2 Annual Gross Revenue Less Leakage



6.2.3 Baseline Scenario 3

Baseline Scenario 3 represents Wekiva Parkway with a toll policy of Toll Structure 2 opening with a base toll rate of 15 cents per mile. Toll rates on Wekiva Parkway were assumed to be indexed at 2 percent annually beginning in the year 2020. Figure 6-17 shows the opening year traffic in year 2017 for the Wekiva Parkway in Baseline Scenario 3. The opening year traffic and the subsequent 3 years reflect the application of ramp-up factors to take into account that drivers will become more familiar with the Wekiva Parkway over time. Figure 6-18 shows the year 2030 projected traffic along the Wekiva Parkway for Baseline Scenario 3. Total annual transactions for Wekiva Parkway Baseline Scenario 3 are shown in Table 6-7. Note that the number of transactions for this scenario is higher than those in Baseline Scenarios 1 and 2, reflecting the increased number of toll locations along the Wekiva Parkway mainline. The annual transactions are also shown for each toll collection location in Baseline Scenario 3. Total gross revenue for Wekiva Parkway Baseline Scenario 3 is shown in Table 6-8. Gross revenues are also broken out by toll collection location. Total gross revenue for Wekiva Parkway Baseline Scenario 3.

Total annual transactions for Baseline Scenario 3 are forecast to be 42.9 million in FY 2020, 68.5 million in FY 2025, 79.1 million in FY 2030 and 98.9 million in FY 2050. Toll annual gross revenues less leakage for Wekiva Parkway are projected to be \$18.4 million in FY 2020, \$32.9 million in FY 2025, \$42.4 million in FY 2030 and \$78.6 million in FY 2050. This represents a CAGR of 12.3 percent between FY 2020 and FY 2025, 5.2 percent between FY 2025 and FY 2030 and 3.1 percent between FY 2030 and FY 2050. The high CAGR between 2020 and 2025 reflects the reduced revenue on the project during the ramp-up period as potential users become aware of the project and its benefits.

The Baseline Scenario 3 transactions are forecasted to have a CAGR of 9.8 percent between FY 2020 and FY 2025, 2.9 percent between 2025 and 2030 and 1.1 percent from 2030 to 2050. This compares to the study area CAGR for population and employment growth of 1.2 percent and 1.6 percent, respectively, from 2025 to 2030. Again, the high CAGR between 2020 and 2025 reflects the reduced revenue on the project during the ramp-up period as potential users become aware of the project and its benefits.



FIGURE 6-17 YEAR 2017 BUILD - BASE SCENARIO 3 DAILY TRAFFIC



FIGURE 6-18 YEAR 2030 BUILD - BASE SCENARIO 3 DAILY TRAFFIC





				Ann	ual Transac	tions			
Figeal					Phase I & I	l			
Voar			West						Wekiva
real	Orange	Kelly	Lake	West Lake	East Lake	Seminole	Seminole	Seminole	Parkway
	Mainline	Park	MLI	ML II	Mainline	MLI	ML II	ML III	Total
2018	1,404,000	874,000	679,000	525,000	0	0	0	0	3,482,000
2019	2,349,000	1,483,000	1,014,000	878,000	0	0	0	0	5,724,000
2020	4,322,000	3,620,000	1,817,000	3,462,000	7,463,000	7,172,000	9,499,000	5,519,000	42,874,000
2021	5,406,000	4,585,000	1,934,000	4,059,000	8,903,000	8,668,000	10,654,000	6,735,000	50,944,000
2022	6,367,000	5,350,000	2,306,000	4,871,000	10,235,000	10,017,000	12,311,000	7,708,000	59,165,000
2023	6,749,000	5,617,000	2,476,000	5,261,000	10,789,000	10,417,000	12,803,000	7,939,000	62,051,000
2024	7,154,000	5,898,000	2,674,000	5,682,000	11,374,000	10,834,000	13,316,000	8,178,000	65,110,000
2025	7,583,000	6,134,000	2,871,000	6,136,000	11,990,000	11,484,000	13,848,000	8,423,000	68,469,000
2026	8,038,000	6,379,000	3,082,000	6,627,000	12,640,000	12,173,000	14,402,000	8,760,000	72,101,000
2027	8,278,000	6,634,000	3,211,000	6,789,000	13,033,000	12,903,000	14,978,000	9,007,000	74,833,000
2028	8,361,000	6,555,000	3,346,000	6,954,000	13,437,000	12,925,000	14,721,000	9,348,000	75,647,000
2029	8,446,000	6,751,000	3,487,000	7,123,000	13,724,000	13,572,000	15,309,000	9,702,000	78,114,000
2030	8,530,000	6,954,000	3,634,000	7,227,000	14,017,000	13,338,000	15,046,000	10,382,000	79,128,000
2031	8,616,000	6,809,000	3,888,000	7,333,000	14,316,000	13,738,000	15,498,000	10,775,000	80,973,000
2032	8,659,000	6,945,000	4,077,000	7,474,000	14,731,000	13,867,000	15,491,000	11,088,000	82,332,000
2033	8,702,000	6,943,000	4,235,000	7,621,000	15,158,000	14,283,000	15,801,000	11,300,000	84,043,000
2034	8,745,000	7,081,000	4,361,000	7,810,000	15,528,000	14,423,000	15,956,000	11,411,000	85,315,000
2035	8,788,000	7,151,000	4,468,000	8,004,000	15,907,000	14,712,000	16,275,000	11,639,000	86,944,000
2036	8,832,000	7,294,000	4,578,000	8,203,000	16,220,000	14,931,000	16,518,000	11,813,000	88,389,000
2037	8,875,000	7,293,000	4,669,000	8,407,000	16,540,000	15,230,000	16,848,000	11,989,000	89,851,000
2038	8,919,000	7,366,000	4,761,000	8,532,000	16,702,000	15,457,000	17,099,000	12,168,000	91,004,000
2039	8,963,000	7,440,000	4,807,000	8,659,000	16,865,000	15,687,000	17,354,000	12,349,000	92,124,000
2040	9,008,000	7,477,000	4,854,000	8,788,000	17,031,000	16,001,000	17,701,000	12,533,000	93,393,000
2041	9,052,000	7,551,000	4,878,000	8,832,000	17,115,000	16,080,000	17,788,000	12,595,000	93,891,000
2042	9,097,000	7,589,000	4,902,000	8,876,000	17,200,000	16,241,000	17,966,000	12,657,000	94,528,000
2043	9,142,000	7,665,000	4,927,000	8,920,000	17,285,000	16,321,000	18,055,000	12,720,000	95,035,000
2044	9,187,000	7,703,000	4,951,000	8,964,000	17,370,000	16,402,000	18,145,000	12,783,000	95,505,000
2045	9,233,000	7,741,000	4,976,000	9,008,000	17,456,000	16,566,000	18,326,000	12,846,000	96,152,000
2046	9,279,000	7,818,000	5,000,000	9,053,000	17,543,000	16,648,000	18,417,000	12,910,000	96,668,000
2047	9,325,000	7,857,000	5,025,000	9,097,000	17,630,000	16,730,000	18,508,000	12,974,000	97,146,000
2048	9,371,000	7,935,000	5,050,000	9,143,000	17,717,000	16,813,000	18,600,000	13,038,000	97,667,000
2049	9,417,000	7,975,000	5,075,000	9,188,000	17,805,000	16,981,000	18,786,000	13,102,000	98,329,000
2050	9,464,000	8,054,000	5,100,000	9,233,000	17,893,000	17,065,000	18,879,000	13,167,000	98,855,000

*Traffic and revenue for FY 2018 - FY 2021 include a reduction for ramp-up.

CAGR (2020-2025) 9.8% CAGR (2025-2030) 2.9%

CAGR (2030-2050) 1.1%



	Annual Gross Revenue (\$millions)									
Fiscal					Phase I & II					
Year			West						Wekiva	
i cui	Orange	Kelly	Lake	West Lake	East Lake	Seminole	Seminole	Seminole	Parkway	
	Mainline	Park	MLI	MLII	Mainline	MLI	ML II	ML III	Total	
2018	\$0.8	\$0.2	\$0.3	\$0.3	\$0.0	\$0.0	\$0.0	\$0.0	\$1.6	
2019	\$1.4	\$0.3	\$0.4	\$0.6	\$0.0	\$0.0	\$0.0	\$0.0	\$2.7	
2020	\$2.6	\$0.6	\$0.7	\$2.2	\$7.8	\$1.6	\$2.1	\$1.8	\$19.4	
2021	\$3.3	\$0.8	\$0.8	\$2.6	\$9.5	\$1.9	\$2.3	\$2.2	\$23.4	
2022	\$4.0	\$0.9	\$0.9	\$3.2	\$11.2	\$2.3	\$2.8	\$2.6	\$27.9	
2023	\$4.3	\$1.0	\$1.0	\$3.5	\$12.0	\$2.4	\$2.9	\$2.7	\$29.8	
2024	\$4.7	\$1.1	\$1.1	\$3.9	\$12.9	\$2.6	\$3.2	\$2.9	\$32.4	
2025	\$5.0	\$1.2	\$1.2	\$4.3	\$13.8	\$2.7	\$3.3	\$3.1	\$34.6	
2026	\$5.4	\$1.3	\$1.3	\$4.7	\$14.8	\$3.0	\$3.6	\$3.2	\$37.3	
2027	\$5.7	\$1.3	\$1.4	\$4.9	\$15.6	\$3.2	\$3.7	\$3.4	\$39.2	
2028	\$5.9	\$1.4	\$1.5	\$5.2	\$16.5	\$3.4	\$3.8	\$3.6	\$41.3	
2029	\$6.0	\$1.4	\$1.6	\$5.4	\$17.1	\$3.5	\$4.0	\$3.8	\$42.8	
2030	\$6.2	\$1.4	\$1.7	\$5.6	\$17.9	\$3.6	\$4.1	\$4.1	\$44.6	
2031	\$6.4	\$1.5	\$1.9	\$5.8	\$18.6	\$3.7	\$4.2	\$4.4	\$46.5	
2032	\$6.6	\$1.5	\$2.0	\$6.0	\$19.4	\$3.9	\$4.3	\$4.6	\$48.3	
2033	\$6.8	\$1.6	\$2.1	\$6.2	\$20.5	\$4.0	\$4.4	\$4.8	\$50.4	
2034	\$6.9	\$1.6	\$2.2	\$6.6	\$21.4	\$4.2	\$4.6	\$5.0	\$52.5	
2035	\$7.1	\$1.7	\$2.3	\$6.8	\$22.3	\$4.3	\$4.7	\$5.1	\$54.3	
2036	\$7.2	\$1.7	\$2.4	\$7.2	\$23.2	\$4.5	\$5.0	\$5.3	\$56.5	
2037	\$7.5	\$1.8	\$2.5	\$7.5	\$24.2	\$4.6	\$5.1	\$5.5	\$58.7	
2038	\$7.6	\$1.8	\$2.6	\$7.7	\$25.0	\$4.8	\$5.3	\$5.7	\$60.5	
2039	\$7.8	\$1.9	\$2.7	\$8.0	\$25.6	\$5.0	\$5.6	\$5.9	\$62.5	
2040	\$8.0	\$1.9	\$2.8	\$8.3	\$26.3	\$5.1	\$5.7	\$6.1	\$64.2	
2041	\$8.3	\$2.0	\$2.9	\$8.5	\$27.0	\$5.3	\$5.9	\$6.3	\$66.2	
2042	\$8.4	\$2.0	\$3.0	\$8.8	\$27.7	\$5.4	\$6.0	\$6.4	\$67.7	
2043	\$8.6	\$2.1	\$3.0	\$9.0	\$28.3	\$5.6	\$6.2	\$6.6	\$69.4	
2044	\$8.9	\$2.2	\$3.1	\$9.1	\$29.2	\$5.8	\$6.4	\$6.8	\$71.5	
2045	\$9.1	\$2.2	\$3.1	\$9.3	\$29.9	\$5.8	\$6.5	\$6.9	\$72.8	
2046	\$9.3	\$2.3	\$3.3	\$9.6	\$30.6	\$6.0	\$6.7	\$7.1	\$74.9	
2047	\$9.6	\$2.4	\$3.3	\$9.8	\$31.5	\$6.3	\$6.9	\$7.3	\$77.1	
2048	\$9.8	\$2.4	\$3.4	\$10.2	\$32.2	\$6.5	\$7.1	\$7.4	\$79.0	
2049	\$10.1	\$2.5	\$3.5	\$10.4	\$32.9	\$6.5	\$7.2	\$7.6	\$80.7	
2050	\$10.3	\$2.5	\$3.6	\$10.6	\$33.8	\$6.7	\$7.4	\$7.8	\$82.7	

Table 6-8 - Baseline Scenario 3 Annual Gross Revenue

*Traffic and revenue for FY 2018 - FY 2021 include a reduction for ramp-up.

CAGR (2020-2025) 12.3% CAGR (2025-2030) 5.2%

CAGR (2030-2050) 3.1%



	Annual Revenue (\$millions)								
Fiscal	Wakiya	Wekiva	Wekiva						
Voor	Wekiva	Parkway	Parkway						
real	Parkway Cross Dovonuo	Assumed	Gross Revenue						
	GIOSS Revenue	Leakage	Less Leakage						
2018	\$1.6	\$0.1	\$1.5						
2019	\$2.7	\$0.1	\$2.6						
2020	\$19.4	\$1.0	\$18.4						
2021	\$23.4	\$1.2	\$22.2						
2022	\$27.9	\$1.4	\$26.5						
2023	\$29.8	\$1.5	\$28.3						
2024	\$32.4	\$1.6	\$30.8						
2025	\$34.6	\$1.7	\$32.9						
2026	\$37.3	\$1.9	\$35.4						
2027	\$39.2	\$2.0	\$37.2						
2028	\$41.3	\$2.1	\$39.2						
2029	\$42.8	\$2.1	\$40.7						
2030	\$44.6	\$2.2	\$42.4						
2031	\$46.5	\$2.3	\$44.2						
2032	\$48.3	\$2.4	\$45.9						
2033	\$50.4	\$2.5	\$47.9						
2034	\$52.5	\$2.6	\$49.9						
2035	\$54.3	\$2.7	\$51.6						
2036	\$56.5	\$2.8	\$53.7						
2037	\$58.7	\$2.9	\$55.8						
2038	\$60.5	\$3.0	\$57.5						
2039	\$62.5	\$3.1	\$59.4						
2040	\$64.2	\$3.2	\$61.0						
2041	\$66.2	\$3.3	\$62.9						
2042	\$67.7	\$3.4	\$64.3						
2043	\$69.4	\$3.5	\$65.9						
2044	\$71.5	\$3.6	\$67.9						
2045	\$72.8	\$3.6	\$69.2						
2046	\$74.9	\$3.7	\$71.2						
2047	\$77.1	\$3.9	\$73.2						
2048	\$79.0	\$4.0	\$75.0						
2049	\$80.7	\$4.0	\$76.7						
2050	\$82.7	\$4.1	\$78.6						

Table 6-9 - Baseline Scenario 3 Annual Gross Revenue Less Leakage



6.2.4 Baseline Scenario 4

Baseline Scenario 4 represents Wekiva Parkway with a toll policy of Toll Structure 2 opening with a base toll rate of 18 cents per mile. Toll rates on Wekiva Parkway were assumed to be indexed at 2 percent annually beginning in the year 2020. Figure 6-19 shows the opening year traffic in year 2017 for the Wekiva Parkway in Baseline Scenario 4. The opening year traffic and the subsequent 3 years reflect the application of ramp-up factors to take into account that drivers will become more familiar with the Wekiva Parkway over time. Figure 6-20 shows the year 2030 projected traffic along the Wekiva Parkway for Baseline Scenario 4. Total annual transactions for Wekiva Parkway Baseline Scenario 4 are shown in Table 6-10. Similar to Baseline Scenario 3, the number of transactions for this scenario is higher than those in Baseline Scenario 4. Total gross revenue for Wekiva Parkway Baseline Scenario 4 is shown in Table 6-11. Gross revenues are also broken out by toll collection location. Total gross revenue for Wekiva Parkway Baseline Scenario 4.

Total annual transactions for Baseline Scenario 4 are forecast to be 35.1 million in FY 2020, 55.1 million in FY 2025, 67.5 million in FY 2030 and 84.8 million in FY 2050. Toll annual gross revenues less leakage for Wekiva Parkway are projected to be \$17.6 million in FY 2020, \$31.3 million in FY 2025, \$42.3 million in FY 2030 and \$79.0 million in FY 2050. This represents a CAGR of 12.2 percent between FY 2020 and FY 2025, 6.2 percent between FY 2025 and FY 2030 and 3.2 percent between FY 2030 and FY 2050. The high CAGR between 2020 and 2025 reflects the reduced revenue on the project during the ramp-up period as potential users become aware of the project and its benefits.

The Baseline Scenario 4 transactions are forecasted to have a CAGR of 9.4 percent between FY 2020 and FY 2025, 4.1 percent between 2025 and 2030 and 1.1 percent from 2030 to 2050. This compares to the study area CAGR for population and employment growth of 1.2 percent and 1.6 percent, respectively, from 2025 to 2030. Again, the high CAGR between 2020 and 2025 reflects the reduced revenue on the project during the ramp-up period as potential users become aware of the project and its benefits.



FIGURE 6-19 YEAR 2017 BUILD - BASE SCENARIO 4 DAILY TRAFFIC





Wekiva Parkway Traffic and Revenue Study

FIGURE 6-20 YEAR 2030 BUILD - BASE SCENARIO 4 DAILY TRAFFIC





Table 6-10 - Baseline Scenario 4 Annual Transactions

		Annual Transactions									
Fiend				-	Phase &						
FISCal	l ,	· · · · · · · · · · · · · · · · · · ·	West	· · · · · · · · · · · · · · · · · · ·		· · · · · · · · · · · · · · · · · · ·		· · · · · ·	Wekiva		
Tear	Orange	Kelly	Lake	West Lake	East Lake	Seminole	Seminole	Seminole	Parkway		
	Mainline	Park	MLI	MLII	Mainline	MLI	MLII	ML III	Total		
2018	1,196,000	599,000	437,000	339,000	0	0	0	0	2,571,000		
2019	1,954,000	998,000	621,000	568,000	0	0	0	0	4,141,000		
2020	3,695,000	2,941,000	974,000	2,469,000	5,810,000	5,551,000	8,662,000	5,029,000	35,131,000		
2021	4,418,000	3,530,000	1,203,000	3,112,000	7,312,000	6,795,000	9,422,000	6,178,000	41,970,000		
2022	5,232,000	4,236,000	1,429,000	3,622,000	8,240,000	8,002,000	11,097,000	7,277,000	49,135,000		
2023	5,629,000	4,438,000	1,528,000	3,794,000	8,597,000	7,951,000	11,026,000	7,475,000	50,438,000		
2024	6,055,000	4,793,000	1,650,000	3,975,000	8,969,000	8,587,000	11,908,000	7,678,000	53,615,000		
2025	6,514,000	5,021,000	1,765,000	4,164,000	9,357,000	8,532,000	11,832,000	7,887,000	55,072,000		
2026	7,008,000	5,423,000	1,887,000	4,362,000	9,761,000	9,215,000	12,779,000	8,101,000	58,536,000		
2027	7,288,000	5,802,000	2,019,000	4,651,000	10,129,000	9,627,000	13,223,000	8,587,000	61,326,000		
2028	7,580,000	5,898,000	2,160,000	4,867,000	10,511,000	9,962,000	13,684,000	8,895,000	63,557,000		
2029	7,807,000	6,134,000	2,311,000	5,092,000	10,908,000	10,261,000	14,094,000	9,214,000	65,821,000		
2030	7,963,000	6,379,000	2,473,000	5,277,000	11,213,000	10,516,000	14,304,000	9,361,000	67,486,000		
2031	8,123,000	6,369,000	2,646,000	5,469,000	11,526,000	10,832,000	14,590,000	9,510,000	69,065,000		
2032	8,163,000	6,624,000	2,803,000	5,659,000	11,860,000	11,101,000	14,808,000	9,651,000	70,669,000		
2033	8,203,000	6,751,000	2,941,000	5,800,000	12,204,000	11,377,000	15,028,000	9,795,000	72,099,000		
2034	8,244,000	6,953,000	3,029,000	5,944,000	12,502,000	11,718,000	15,329,000	9,941,000	73,660,000		
2035	8,285,000	7,090,000	3,103,000	6,091,000	12,807,000	11,893,000	15,557,000	10,089,000	74,915,000		
2036	8,326,000	7,232,000	3,180,000	6,243,000	13,059,000	12,070,000	15,789,000	10,240,000	76,139,000		
2037	8,367,000	7,231,000	3,242,000	6,398,000	13,316,000	12,311,000	16,105,000	10,392,000	77,362,000		
2038	8,408,000	7,304,000	3,306,000	6,493,000	13,447,000	12,495,000	16,345,000	10,547,000	78,345,000		
2039	8,450,000	7,377,000	3,339,000	6,590,000	13,578,000	12,681,000	16,588,000	10,704,000	79,307,000		
2040	8,492,000	7,413,000	3,371,000	6,688,000	13,712,000	12,934,000	16,920,000	10,864,000	80,394,000		
2041	8,534,000	7,487,000	3,388,000	6,721,000	13,779,000	12,998,000	17,004,000	10,917,000	80,828,000		
2042	8,576,000	7,524,000	3,405,000	6,755,000	13,848,000	13,063,000	17,088,000	10,972,000	81,231,000		
2043	8,619,000	7,600,000	3,422,000	6,788,000	13,916,000	13,127,000	17,172,000	11,026,000	81,670,000		
2044	8,661,000	7,637,000	3,439,000	6,822,000	13,985,000	13,192,000	17,257,000	11,080,000	82,073,000		
2045	8,704,000	7,675,000	3,456,000	6,855,000	14,054,000	13,324,000	17,430,000	11,135,000	82,633,000		
2046	8,747,000	7,752,000	3,473,000	6,889,000	14,124,000	13,390,000	17,516,000	11,190,000	83,081,000		
2047	8,790,000	7,790,000	3,490,000	6,923,000	14,194,000	13,457,000	17,603,000	11,246,000	83,493,000		
2048	8,834,000	7,868,000	3,507,000	6,958,000	14,264,000	13,523,000	17,690,000	11,301,000	83,945,000		
2049	8,878,000	7,907,000	3,525,000	6,992,000	14,335,000	13,590,000	17,778,000	11,357,000	84,362,000		
2050	8,922,000	7,986,000	3,542,000	7,027,000	14,406,000	13,657,000	17,866,000	11,414,000	84,820,000		

*Traffic and revenue for FY 2018 - FY 2021 include a reduction for ramp-up.

CAGR (2020-2025) 9.4%

CAGR (2025-2030) 4.1%

CAGR (2030-2050) 1.1%



	Annual Gross Revenue (\$millions)								
	Phase I & II								
Fiscal Year			West						
	Orange	Kelly	Lake	West Lake	East Lake	Seminole	Seminole	Seminole	
	Mainline	Park	MLI	ML II	Mainline	MLI	ML II	ML III	Total
2018	\$0.9	\$0.1	\$0.2	\$0.3	\$0.0	\$0.0	\$0.0	\$0.0	\$1.5
2019	\$1.4	\$0.2	\$0.3	\$0.4	\$0.0	\$0.0	\$0.0	\$0.0	\$2.3
2020	\$2.6	\$0.6	\$0.5	\$1.9	\$7.3	\$1.4	\$2.2	\$2.0	\$18.5
2021	\$3.3	\$0.8	\$0.6	\$2.4	\$9.3	\$1.8	\$2.5	\$2.5	\$23.2
2022	\$3.9	\$0.9	\$0.7	\$2.9	\$10.7	\$2.2	\$3.0	\$2.9	\$27.2
2023	\$4.3	\$1.0	\$0.8	\$3.1	\$11.4	\$2.2	\$3.1	\$3.1	\$29.0
2024	\$4.7	\$1.1	\$0.8	\$3.3	\$12.2	\$2.4	\$3.3	\$3.3	\$31.1
2025	\$5.2	\$1.1	\$0.9	\$3.5	\$12.9	\$2.5	\$3.4	\$3.4	\$32.9
2026	\$5.7	\$1.3	\$1.0	\$3.8	\$13.8	\$2.7	\$3.7	\$3.6	\$35.6
2027	\$6.1	\$1.4	\$1.1	\$4.1	\$14.6	\$2.9	\$4.0	\$3.8	\$38.0
2028	\$6.4	\$1.5	\$1.2	\$4.3	\$15.4	\$3.1	\$4.3	\$4.1	\$40.3
2029	\$6.7	\$1.5	\$1.3	\$4.7	\$16.3	\$3.2	\$4.4	\$4.3	\$42.4
2030	\$6.9	\$1.7	\$1.4	\$4.9	\$17.1	\$3.4	\$4.6	\$4.5	\$44.5
2031	\$7.2	\$1.7	\$1.5	\$5.2	\$17.9	\$3.5	\$4.7	\$4.6	\$46.3
2032	\$7.5	\$1.8	\$1.7	\$5.5	\$18.8	\$3.7	\$4.9	\$4.8	\$48.7
2033	\$7.7	\$1.8	\$1.8	\$5.7	\$19.8	\$3.9	\$5.1	\$5.0	\$50.8
2034	\$7.8	\$1.9	\$1.9	\$6.0	\$20.6	\$4.0	\$5.2	\$5.2	\$52.6
2035	\$8.0	\$2.0	\$1.9	\$6.3	\$21.5	\$4.2	\$5.5	\$5.3	\$54.7
2036	\$8.2	\$2.1	\$2.0	\$6.5	\$22.5	\$4.4	\$5.7	\$5.5	\$56.9
2037	\$8.4	\$2.1	\$2.1	\$6.8	\$23.4	\$4.5	\$5.8	\$5.7	\$58.8
2038	\$8.6	\$2.2	\$2.2	\$7.1	\$24.0	\$4.7	\$6.1	\$5.9	\$60.8
2039	\$8.9	\$2.2	\$2.3	\$7.3	\$24.8	\$4.9	\$6.4	\$6.1	\$62.9
2040	\$9.1	\$2.3	\$2.3	\$7.6	\$25.5	\$5.0	\$6.5	\$6.3	\$64.6
2041	\$9.3	\$2.4	\$2.4	\$7.7	\$26.2	\$5.1	\$6.7	\$6.5	\$66.3
2042	\$9.5	\$2.4	\$2.4	\$8.0	\$26.7	\$5.3	\$6.9	\$6.6	\$67.8
2043	\$9.7	\$2.5	\$2.5	\$8.2	\$27.4	\$5.4	\$7.1	\$6.9	\$69.7
2044	\$10.0	\$2.5	\$2.6	\$8.4	\$28.2	\$5.6	\$7.3	\$7.0	\$71.6
2045	\$10.3	\$2.6	\$2.7	\$8.5	\$28.9	\$5.7	\$7.4	\$7.2	\$73.3
2046	\$10.5	\$2.7	\$2.7	\$8.8	\$29.6	\$5.8	\$7.6	\$7.3	\$75.0
2047	\$10.8	\$2.7	\$2.8	\$9.0	\$30.3	\$6.0	\$7.9	\$7.6	\$77.1
2048	\$11.1	\$2.9	\$2.8	\$9.2	\$31.1	\$6.2	\$8.1	\$7.7	\$79.1
2049	\$11.3	\$3.0	\$2.9	\$9.4	\$31.8	\$6.3	\$8.3	\$7.9	\$80.9
2050	\$11.7	\$3.1	\$3.0	\$9.7	\$32.6	\$6.5	\$8.5	\$8.1	\$83.2

Table 6-11 - Baseline Scenario 4 Annual Gross Revenue

*Traffic and revenue for FY 2018 - FY 2021 include a reduction for ramp-up.

CAGR (2020-2025) 12.2% CAGR (2025-2030) 6.2% CAGR (2030-2050) 3.2%



В

	Annu	al Revenue (\$millions)			
Fiscal	Wakiya	Wekiva	Wekiva		
Voar	Darkway	Parkway	Parkway		
real	Falkway Gross Boyonuo	Assumed	Gross Revenue		
	GIOSS Revenue	Leakage	Less Leakage		
2018	\$1.5	\$0.1	\$1.4		
2019	\$2.3	\$0.1	\$2.2		
2020	\$18.5	\$0.9	\$17.6		
2021	\$23.2	\$1.2	\$22.0		
2022	\$27.2	\$1.4	\$25.8		
2023	\$29.0	\$1.5	\$27.5		
2024	\$31.1	\$1.6	\$29.5		
2025	\$32.9	\$1.6	\$31.3		
2026	\$35.6	\$1.8	\$33.8		
2027	\$38.0	\$1.9	\$36.1		
2028	\$40.3	\$2.0	\$38.3		
2029	\$42.4	\$2.1	\$40.3		
2030	\$44.5	\$2.2	\$42.3		
2031	\$46.3	\$2.3	\$44.0		
2032	\$48.7	\$2.4	\$46.3		
2033	\$50.8	\$2.5	\$48.3		
2034	\$52.6	\$2.6	\$50.0		
2035	\$54.7	\$2.7	\$52.0		
2036	\$56.9	\$2.8	\$54.1		
2037	\$58.8	\$2.9	\$55.9		
2038	\$60.8	\$3.0	\$57.8		
2039	\$62.9	\$3.1	\$59.8		
2040	\$64.6	\$3.2	\$61.4		
2041	\$66.3	\$3.3	\$63.0		
2042	\$67.8	\$3.4	\$64.4		
2043	\$69.7	\$3.5	\$66.2		
2044	\$71.6	\$3.6	\$68.0		
2045	\$73.3	\$3.7	\$69.6		
2046	\$75.0	\$3.8	\$71.2		
2047	\$77.1	\$3.9	\$73.2		
2048	\$79.1	\$4.0	\$75.1		
2049	\$80.9	\$4.0	\$76.9		
2050	\$83.2	\$4.2	\$79.0		

Table 6-12 - Baseline Scenario 4 Annual Gross Revenue Less Leakage



6.2.5 Baseline Scenario Summary

Through coordination with the Authority, the Florida's Turnpike Enterprise and the Florida Department of Transportation, four scenarios were chosen as the most likely toll configurations for Wekiva Parkway. These four Baseline Scenarios were chosen with the differences being the facility's toll structure and the opening toll rate per mile. Assumptions related to the surrounding roadway network, land use, access points, phasing and toll indexing remained the same in each of the four scenarios. Each scenario was analyzed independently of each other with the toll structure and toll rates being the only changes. Table 6-13 shows the gross revenue less leakage for each of the four Baseline Scenarios for comparison.

Baseline Scenarios 1 and 2 result in higher gross revenue through the forecast period as compared to Scenarios 3 and 4. The higher revenue is the result of the differences between Toll Structure 1 compared to Toll Structure 2. While the overall through trip along Wekiva Parkway from US 441 to I-4 is the same with both Toll Structure 1 and Toll Structure 2, shorter trips along the facility experience a higher toll rate under Toll Structure 1. The gross revenue forecasts between a 15 cent per mile or 18 cent per mile toll rate as shown to be similar under both Toll Structure 1 and Toll Structure 2 for the Baseline Scenarios.



Fiscal	Annual Revenue (\$millions)					
Vear	Baseline	Baseline	Baseline	Baseline		
Tear	Scenario 1	Scenario 2	Scenario 3	Scenario 4		
2018	\$1.5	\$1.4	\$1.5	\$1.4		
2019	\$2.6	\$2.3	\$2.6	\$2.2		
2020	\$19.7	\$19.5	\$18.4	\$17.6		
2021	\$24.5	\$24.5	\$22.2	\$22.0		
2022	\$28.9	\$29.2	\$26.5	\$25.8		
2023	\$31.0	\$31.7	\$28.3	\$27.5		
2024	\$33.3	\$34.4	\$30.8	\$29.5		
2025	\$35.6	\$37.7	\$32.9	\$31.3		
2026	\$38.4	\$41.2	\$35.4	\$33.8		
2027	\$41.1	\$43.3	\$37.2	\$36.1		
2028	\$43.8	\$46.0	\$39.2	\$38.3		
2029	\$46.1	\$47.6	\$40.7	\$40.3		
2030	\$48.5	\$49.5	\$42.4	\$42.3		
2031	\$50.7	\$51.4	\$44.2	\$44.0		
2032	\$52.9	\$53.3	\$45.9	\$46.3		
2033	\$54.6	\$55.2	\$47.9	\$48.3		
2034	\$56.6	\$57.0	\$49.9	\$50.0		
2035	\$58.4	\$58.7	\$51.6	\$52.0		
2036	\$60.2	\$60.7	\$53.7	\$54.1		
2037	\$62.0	\$62.4	\$55.8	\$55.9		
2038	\$63.8	\$64.3	\$57.5	\$57.8		
2039	\$65.7	\$66.0	\$59.4	\$59.8		
2040	\$67.6	\$68.1	\$61.0	\$61.4		
2041	\$69.3	\$69.8	\$62.9	\$63.0		
2042	\$71.1	\$71.5	\$64.3	\$64.4		
2043	\$73.1	\$73.1	\$65.9	\$66.2		
2044	\$74.8	\$75.0	\$67.9	\$68.0		
2045	\$76.5	\$76.9	\$69.2	\$69.6		
2046	\$78.6	\$79.0	\$71.2	\$71.2		
2047	\$80.6	\$80.9	\$73.2	\$73.2		
2048	\$82.5	\$83.0	\$75.0	\$75.1		
2049	\$84.5	\$85.0	\$76.7	\$76.9		
2050	\$86.6	\$87.1	\$78.6	\$79.0		

Table 6-13 - Baseline Scenario Summary - Annual Gross Revenue Less Leakage



7. Land Use Sensitivity

Land use is a major input into for travel demand forecasting and can significantly impact the traffic demand within a region or along a corridor. Future land use projections are dependent on the latest available data and the current long term forecasts for both the national and localized economy. The baseline land use forecasts utilized for the baseline revenue forecasts were developed by Fishkind and Associates, an independent economist, for use in this study. To analyze the impact different land use assumptions may have on the Wekiva Parkway traffic and revenue forecasts, two additional land use scenarios were developed: one representing a lower forecast for regional economic growth and another representing higher economic growth.

7.1. Land Use Sensitivity - Low Land Use Scenario

The first land use sensitivity assumes that regional population and employment growth will be weaker through the forecast period than currently assumed in the baseline land use forecast. While the distribution of the land use is similar to the baseline land use forecast, the reduction in growth in the future would result in less land use growth within the Wekiva Parkway study area. Less land use growth would result in less travel demand within the Wekiva Parkway corridor as compared to the baseline condition. The four baseline toll structure and toll rate combinations were analyzed with the low land use datasets. Tables 7-1 through 7-4 show the annual transactions and revenue for the four baseline scenario toll structures under the low land use sensitivity.

Total annual transactions in FY 2050 for Low Land Use Sensitivity are forecast to be 24.0 million, 20.1 million, 65.7 million and 53.4 million for the Baseline Scenario 1, Baseline Scenario 2, Baseline Scenario 3 and Baseline Scenario 4 toll structures, respectively. Likewise, toll annual gross revenues less leakage for Wekiva Parkway are projected to be \$54.0 million, \$54.2 million, \$50.4 million and \$49.6 million for the Baseline Scenario 1, Baseline Scenario 2, Baseline Scenario 3 and Baseline Scenario 4 toll structures, respectively under the Low Land Use Sensitivity.



	Annual Transactions and Gross Revenue					
		Phase	1.8.11			
Fiscal Year	Annual Transactions (millions)	Annual Gross Revenue (\$millions)	Annual Leakage (\$millions)	Annual Gross Revenue Less Leakage (\$millions)		
2018	2.1	\$1.2	\$0.1	\$1.1		
2019	3.5	\$2.2	\$0.1	\$2.1		
2020	12.9	\$16.7	\$0.8	\$15.9		
2021	15.0	\$19.4	\$1.0	\$18.4		
2022	17.2	\$22.6	\$1.1	\$21.5		
2023	17.8	\$24.0	\$1.2	\$22.8		
2024	18.4	\$25.6	\$1.3	\$24.3		
2025	19.0	\$27.1	\$1.4	\$25.7		
2026	19.7	\$28.9	\$1.4	\$27.5		
2027	20.4	\$30.7	\$1.5	\$29.2		
2028	20.8	\$31.9	\$1.6	\$30.3		
2029	21.0	\$32.8	\$1.6	\$31.2		
2030	21.1	\$33.5	\$1.7	\$31.8		
2031	21.2	\$34.2	\$1.7	\$32.5		
2032	21.4	\$35.2	\$1.8	\$33.4		
2033	21.5	\$36.2	\$1.8	\$34.4		
2034	21.7	\$37.2	\$1.9	\$35.3		
2035	21.9	\$38.4	\$1.9	\$36.5		
2036	22.1	\$39.4	\$2.0	\$37.4		
2037	22.2	\$40.5	\$2.0	\$38.5		
2038	22.4	\$41.7	\$2.1	\$39.6		
2039	22.6	\$42.9	\$2.1	\$40.8		
2040	22.8	\$44.3	\$2.2	\$42.1		
2041	22.9	\$45.4	\$2.3	\$43.1		
2042	23.1	\$46.6	\$2.3	\$44.3		
2043	23.2	\$47.9	\$2.4	\$45.5		
2044	23.3	\$48.9	\$2.4	\$46.5		
2045	23.4	\$50.1	\$2.5	\$47.6		
2046	23.5	\$51.4	\$2.6	\$48.8		
2047	23.6	\$52.7	\$2.6	\$50.1		
2048	23.8	\$54.0	\$2.7	\$51.3		
2049	23.9	\$55.4	\$2.8	\$52.6		
2050	24.0	\$56.8	\$2.8	\$54.0		

Table 7-1 - Low Land Use Scenario 1 - Toll Structure 1 with 15 cpm Toll Rate



	Annual Transactions and Gross Revenue					
		Phase	1811			
Fiscal Year	Annual Transactions (millions)	Annual Gross Revenue (\$millions)	Annual Leakage (\$millions)	Annual Gross Revenue Less Leakage (\$millions)		
2018	1.5	\$1.1	\$0.1	\$1.0		
2019	2.5	\$1.9	\$0.1	\$1.8		
2020	10.5	\$15.3	\$0.8	\$14.5		
2021	12.9	\$19.2	\$1.0	\$18.2		
2022	14.6	\$22.2	\$1.1	\$21.1		
2023	14.9	\$23.5	\$1.2	\$22.3		
2024	15.3	\$24.9	\$1.2	\$23.7		
2025	15.8	\$26.2	\$1.3	\$24.9		
2026	16.3	\$27.7	\$1.4	\$26.3		
2027	16.6	\$29.3	\$1.5	\$27.8		
2028	17.0	\$30.8	\$1.5	\$29.3		
2029	17.3	\$32.2	\$1.6	\$30.6		
2030	17.5	\$33.4	\$1.7	\$31.7		
2031	17.7	\$34.4	\$1.7	\$32.7		
2032	18.0	\$35.6	\$1.8	\$33.8		
2033	18.2	\$36.5	\$1.8	\$34.7		
2034	18.5	\$37.9	\$1.9	\$36.0		
2035	18.7	\$38.8	\$1.9	\$36.9		
2036	18.8	\$40.1	\$2.0	\$38.1		
2037	18.8	\$41.1	\$2.1	\$39.0		
2038	18.9	\$42.3	\$2.1	\$40.2		
2039	19.0	\$43.4	\$2.2	\$41.2		
2040	19.2	\$44.7	\$2.2	\$42.5		
2041	19.2	\$45.8	\$2.3	\$43.5		
2042	19.4	\$46.9	\$2.3	\$44.6		
2043	19.4	\$48.1	\$2.4	\$45.7		
2044	19.6	\$49.2	\$2.5	\$46.7		
2045	19.6	\$50.5	\$2.5	\$48.0		
2046	19.7	\$51.8	\$2.6	\$49.2		
2047	19.9	\$53.1	\$2.7	\$50.4		
2048	19.9	\$54.5	\$2.7	\$51.8		
2049	20.0	\$55.8	\$2.8	\$53.0		
2050	20.1	\$57.1	\$2.9	\$54.2		

Table 7-2 - Low Land Use Scenario 2 - Toll Structure 1 with 18 cpm Toll Rate



	Annual Transactions and Gross Revenue				
		Phase	1&11		
Fiscal Year	Annual Transactions (millions)	Annual Gross Revenue (\$millions)	Annual Leakage (\$millions)	Annual Gross Revenue Less Leakage (\$millions)	
2018	2.7	\$1.3	\$0.1	\$1.2	
2019	4.3	\$2.0	\$0.1	\$1.9	
2020	34.0	\$14.9	\$0.7	\$14.2	
2021	42.0	\$18.7	\$0.9	\$17.8	
2022	48.1	\$22.0	\$1.1	\$20.9	
2023	49.5	\$23.1	\$1.2	\$21.9	
2024	50.9	\$24.3	\$1.2	\$23.1	
2025	52.3	\$25.5	\$1.3	\$24.2	
2026	53.6	\$26.6	\$1.3	\$25.3	
2027	54.7	\$27.6	\$1.4	\$26.2	
2028	55.1	\$28.4	\$1.4	\$27.0	
2029	55.9	\$29.3	\$1.5	\$27.8	
2030	56.4	\$30.4	\$1.5	\$28.9	
2031	57.0	\$31.0	\$1.6	\$29.4	
2032	57.7	\$32.2	\$1.6	\$30.6	
2033	58.5	\$33.5	\$1.7	\$31.8	
2034	59.0	\$34.7	\$1.7	\$33.0	
2035	59.7	\$35.7	\$1.8	\$33.9	
2036	60.1	\$36.7	\$1.8	\$34.9	
2037	60.7	\$37.9	\$1.9	\$36.0	
2038	61.1	\$39.0	\$2.0	\$37.0	
2039	61.6	\$39.9	\$2.0	\$37.9	
2040	62.2	\$41.2	\$2.1	\$39.1	
2041	62.5	\$42.3	\$2.1	\$40.2	
2042	62.9	\$43.3	\$2.2	\$41.1	
2043	63.2	\$44.5	\$2.2	\$42.3	
2044	63.5	\$45./	\$2.3	\$43.4	
2045	63.9	\$46./	\$2.3	\$44.4	
2046	64.3	\$48.U	\$2.4 62 F	\$45.6	
2047	64.6	\$49.3 6505	⇒2.5 さっ ⊑	\$46.8 ¢40.0	
2048	64.9	۵۵۵.5 ۵۲۰۶	\$2.5 63.6	\$48.U	
2049	65.4 65.7	ې۲.۵ کارې	२८.७ ६२ ७	340.9 \$50 1	

Table 7-3 - Low Land Use Scenario 3 - Toll Structure 2 with 15 cpm Toll Rate



Table 7-4 - Low Land Lise	Sconario / -	Toll Structure 2	with 18 com	Toll Date
	Scenario 4 -	Ton Structure 2	. with to thi	I TOILRALE

	Annual Transactions and Gross Revenue					
		Phase	1.8.11			
Fiscal Year	Annual Transactions (millions)	Annual Gross Revenue (\$millions)	Annual Leakage (\$millions)	Annual Gross Revenue Less Leakage (\$millions)		
2018	2.1	\$1.2	\$0.1	\$1.1		
2019	3.3	\$1.9	\$0.1	\$1.8		
2020	29.4	\$16.1	\$0.8	\$15.3		
2021	35.1	\$20.1	\$1.0	\$19.1		
2022	40.9	\$23.3	\$1.2	\$22.1		
2023	41.3	\$24.1	\$1.2	\$22.9		
2024	42.9	\$25.4	\$1.3	\$24.1		
2025	43.3	\$26.1	\$1.3	\$24.8		
2026	44.9	\$27.2	\$1.4	\$25.8		
2027	45.6	\$28.3	\$1.4	\$26.9		
2028	45.8	\$29.0	\$1.5	\$27.5		
2029	47.0	\$30.2	\$1.5	\$28.7		
2030	46.8	\$30.7	\$1.5	\$29.2		
2031	47.4	\$31.4	\$1.6	\$29.8		
2032	47.7	\$32.5	\$1.6	\$30.9		
2033	48.1	\$33.3	\$1.7	\$31.6		
2034	48.8	\$34.5	\$1.7	\$32.8		
2035	49.1	\$35.4	\$1.8	\$33.6		
2036	49.4	\$36.6	\$1.8	\$34.8		
2037	49.8	\$37.5	\$1.9	\$35.6		
2038	50.1	\$38.5	\$1.9	\$36.6		
2039	50.3	\$39.7	\$2.0	\$37.7		
2040	50.7	\$40.4	\$2.0	\$38.4		
2041	51.0	\$41.7	\$2.1	\$39.6		
2042	51.2	\$42.6	\$2.1	\$40.5		
2043	51.5	\$43.9	\$2.2	\$41.7		
2044	51.8	\$44.9	\$2.2	\$42.7		
2045	52.1	\$46.0	\$2.3	\$43.7		
2046	52.4	\$47.1	\$2.4	\$44.7		
2047	52.7	\$48.4	\$2.4	\$46.0		
2048	52.9	\$49.7	\$2.5	\$47.2		
2049	53.2	\$50.9	\$2.5	\$48.4		
2050	53.4	\$52.2	S2.6	S49.6		



7.2.Land Use Sensitivity - High Land Use Scenario

The second land use sensitivity assumes that regional population and employment growth is stronger during the forecast period than is currently assumed in the baseline forecast. Similar to the low land use scenario, the distribution of the future land use will reflect that shown in the baseline land use forecast, however the higher regional growth rates will result in more land use growth within the Wekiva Parkway study area. This would result in more travel demand within the Wekiva Parkway corridor as compared to the baseline condition. Again, the four baseline toll structure and toll rate combinations were analyzed with the low land use datasets. Tables 7-5 through 7-8 show the annual transactions and revenue for the four baseline toll structures under the high land use sensitivity.

Total annual transactions in FY 2050 for High Land Use Sensitivity are forecast to be 70.4 million, 62.0 million, 171.6 million and 151.2 million for the Baseline Scenario 1, Baseline Scenario 2, Baseline Scenario 3 and Baseline Scenario 4 toll structures, respectively. Likewise, toll annual gross revenues less leakage for Wekiva Parkway are projected to be \$143.5 million, \$153.9 million, \$132.1 million and \$142.2 million for the Baseline Scenario 1, Baseline Scenario 2, Baseline Scenario 3 and Baseline Scenario 4 toll structures, respectively under the High Land Use Sensitivity.


	Annual Transactions and Gross Revenue				
		Phase	1&11		
Fiscal Year	Annual Transactions (millions)	Annual Gross Revenue (\$millions)	Annual Leakage (\$millions)	Annual Gross Revenue Less Leakage (\$millions)	
2018	4.4	\$2.7	\$0.1	\$2.6	
2019	7.4	\$4.4	\$0.2	\$4.2	
2020	25.1	\$31.6	\$1.6	\$30.0	
2021	32.0	\$41.1	\$2.1	\$39.0	
2022	37.8	\$49.5	\$2.5	\$47.0	
2023	40.2	\$53.7	\$2.7	\$51.0	
2024	42.8	\$58.1	\$2.9	\$55.2	
2025	45.4	\$62.7	\$3.1	\$59.6	
2026	48.4	\$68.0	\$3.4	\$64.6	
2027	50.7	\$72.0	\$3.6	\$68.4	
2028	52.8	\$76.4	\$3.8	\$72.6	
2029	54.8	\$80.4	\$4.0	\$76.4	
2030	56.7	\$84.5	\$4.2	\$80.3	
2031	58.5	\$88.9	\$4.4	\$84.5	
2032	60.1	\$92.6	\$4.6	\$88.0	
2033	61.4	\$95.8	\$4.8	\$91.0	
2034	62.5	\$98.9	\$4.9	\$94.0	
2035	63.4	\$102.4	\$5.1	\$97.3	
2036	64.2	\$105.1	\$5.3	\$99.8	
2037	64.9	\$108.2	\$5.4	\$102.8	
2038	65.6	\$111.4	\$5.6	\$105.8	
2039	66.2	\$114.6	\$5.7	\$108.9	
2040	66.7	\$118.0	\$5.9	\$112.1	
2041	67.2	\$121.0	\$6.1	\$114.9	
2042	67.5	\$124.0	\$6.2	\$117.8	
2043	67.9	\$127.3	\$6.4	\$120.9	
2044	68.2	\$130.5	\$6.5	\$124.0	
2045	68.6	\$133.4	\$6.7	\$126.7	
2046	68.9	5137.U	२७.७ ८२.०	\$130.1 6122 F	
2047	69.3	\$140.5 \$142.0	\$1.U 67 0		
2048	07.0 70.0	う143.9 6117 F	¢٦./ د ح ۸		
2049	70.0 70.4	\$147.5 \$151.1	\$1.4 \$7.6	\$140.1 \$1/12 5	

Table 7-5 - High Land Use	Scenario 1 - Toll Structure	1 with 15 cpm Toll Rate
Tuble 1 5 Thigh Earla 056		i with is opin ron Nate.



Table 7-6 - High Land Use Scenaric	2 - Toll Structure	l with 18 cpm Toll Rate
------------------------------------	--------------------	-------------------------

	Annual Transactions and Gross Revenue				
		Phase	1&11		
Fiscal Year	Annual Transactions (millions)	Annual Gross Revenue (\$millions)	Annual Leakage (\$millions)	Annual Gross Revenue Less Leakage (\$millions)	
2018	3.6	\$2.7	\$0.1	\$2.6	
2019	6.1	\$4.4	\$0.2	\$4.2	
2020	21.6	\$33.0	\$1.7	\$31.3	
2021	27.9	\$43.6	\$2.2	\$41.4	
2022	33.1	\$52.6	\$2.6	\$50.0	
2023	35.3	\$57.0	\$2.9	\$54.1	
2024	37.5	\$61.9	\$3.1	\$58.8	
2025	40.0	\$67.0	\$3.4	\$63.6	
2026	42.2	\$72.1	\$3.6	\$68.5	
2027	44.6	\$77.6	\$3.9	\$73.7	
2028	46.7	\$83.0	\$4.2	\$78.8	
2029	48.6	\$87.6	\$4.4	\$83.2	
2030	50.1	\$91.6	\$4.6	\$87.0	
2031	51.8	\$95.7	\$4.8	\$90.9	
2032	53.0	\$99.3	\$5.0	\$94.3	
2033	54.2	\$102.7	\$5.1	\$97.6	
2034	55.2	\$106.3	\$5.3	\$101.0	
2035	56.1	\$109.3	\$5.5	\$103.8	
2036	56.7	\$112.9	\$5.6	\$107.3	
2037	57.4	\$116.1	\$5.8	\$110.3	
2038	57.8	\$119.6	\$6.0	\$113.6	
2039	58.4	\$122.7	\$6.1	\$116.6	
2040	58.9	\$126.6	\$6.3	\$120.3	
2041	59.2	\$129.6	\$6.5	\$123.1	
2042	59.5	\$132.9	\$6.6	\$126.3	
2043	59.8	\$136.0	\$6.8	\$129.2	
2044	60.1	\$139.6	\$7.0	\$132.6	
2045	60.4	\$143.2	\$7.2	\$136.0	
2046	60.7	\$146.6	\$7.3	\$139.3	
2047	61.1	\$150.6	\$7.5	\$143.1	
2048	61.4	\$154.1	\$7.7	\$146.4	
2049	61.7	\$158.1	\$7.9	\$150.2	
2050	62.0	\$162.0	\$8.1	\$153.9	



	Table 7-7 - Hi	igh Land Use Scenario	o 3 - Toll Structure	2 with 15 cpm	Toll Rate
--	----------------	-----------------------	----------------------	---------------	------------------

	Annual Transactions and Gross Revenue				
		Phase	181		
Fiscal Year	Annual Transactions (millions)	Annual Gross Revenue (\$millions)	Annual Leakage (\$millions)	Annual Gross Revenue Less Leakage (\$millions)	
2018	5.8	\$2.6	\$0.1	\$2.5	
2019	9.2	\$4.3	\$0.2	\$4.1	
2020	64.6	\$29.8	\$1.5	\$28.3	
2021	79.2	\$36.9	\$1.8	\$35.1	
2022	92.5	\$44.0	\$2.2	\$41.8	
2023	96.8	\$47.0	\$2.4	\$44.6	
2024	101.8	\$50.5	\$2.5	\$48.0	
2025	108.4	\$54.6	\$2.7	\$51.9	
2026	114.0	\$58.5	\$2.9	\$55.6	
2027	120.4	\$62.7	\$3.1	\$59.6	
2028	124.7	\$67.1	\$3.4	\$63.7	
2029	129.5	\$70.6	\$3.5	\$67.1	
2030	133.5	\$74.4	\$3.7	\$70.7	
2031	137.5	\$77.5	\$3.9	\$73.6	
2032	141.3	\$81.1	\$4.1	\$77.0	
2033	145.1	\$84.6	\$4.2	\$80.4	
2034	148.0	\$88.3	\$4.4	\$83.9	
2035	151.0	\$91.3	\$4.6	\$86.7	
2036	153.6	\$95.0	\$4.8	\$90.2	
2037	156.0	\$98.5	\$4.9	\$93.6	
2038	158.0	\$101.7	\$5.1	\$96.6	
2039	159.9	\$104.9	\$5.2	\$99.7	
2040	162.0	\$108.1	\$5.4	\$102.7	
2041	162.9	\$111.3	\$5.6	\$105.7	
2042	164.0	\$113.7	\$5.7	\$108.0	
2043	164.9	\$116.6	\$5.8	\$110.8	
2044	165.7	\$119.9	\$6.0	\$113.9	
2045	166.8	\$122.6	\$6.1	\$116.5	
2046	167.7	\$125.9	\$6.3	\$119.6	
2047	168.6	\$129.4	\$6.5	\$122.9	
2048	169.5	\$132.7	\$6.6	\$126.1	
2049	170.6	\$135.4	\$6.8	\$128.6	
2050	171.6	I \$139.1	S7.0	I \$132.1	



Table 7-8 - High Land Use Scenario 4 - Toll Structure 2 with 18 cpm Toll Rate

Phase I & IIFiscal YearAnnual Annual TransactionsAnnual Gross RevenueAnnual Leakage (Smillions)Annual Revenue
Fiscal Year Annual Annual Gross Annual Revenue Transactions Revenue Leakage Less Leakage
(\$millions) (\$millions) (\$millions)
2018 4.8 \$2.6 \$0.1 \$2.5
2019 7.9 \$4.3 \$0.2 \$4.1
2020 55.8 \$30.4 \$1.5 \$28.9
2021 67.2 \$37.7 \$1.9 \$35.8
2022 80.1 \$45.4 \$2.3 \$43.1
2023 83.9 \$49.3 \$2.5 \$46.8
2024 89.4 \$53.0 \$2.7 \$50.3
2025 93.5 \$57.1 \$2.9 \$54.2
2026 99.5 \$61.6 \$3.1 \$58.5
2027 104.9 \$66.3 \$3.3 \$63.0
2028 109.2 \$70.6 \$3.5 \$67.1
2029 114.1 \$74.9 \$3.7 \$71.2
2030 117.4 \$79.0 \$4.0 \$75.0
2031 121.8 \$83.0 \$4.2 \$78.8
2032 124.9 \$87.1 \$4.4 \$82.7
2033 128.1 \$91.2 \$4.6 \$86.6
2034 130.9 \$94.5 \$4.7 \$89.8
2035 133.5 \$98.3 \$4.9 \$93.4
2036 135.5 \$102.5 \$5.1 \$97.4
2037 137.8 \$105.8 \$5.3 \$100.5
2038 139.4 \$109.2 \$5.5 \$103.7
2039 141.1 \$112.7 \$5.6 \$107.1
2040 143.0 \$115.9 \$5.8 \$110.1
2041 143.7 \$119.0 \$6.0 \$113.0
2042 144.5 \$122.0 \$6.1 \$115.9
2043 145.2 \$125.4 \$6.3 \$119.1
2044 146.1 \$128.6 \$6.4 \$122.2
2046 148.0 \$135.3 \$6.8 \$128.5
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$



7.3.Land Use Sensitivity Summary

Two land use sensitivity scenarios were developed to analyze the impacts of changes in future year land use growth to the traffic and revenue along Wekiva Parkway. The Low Land Use Scenario assumes lower land use growth in both the Wekiva Parkway study area and within the Central Florida region as compared to the Baseline Scenarios. The High Land Use Scenario, conversely, reflects higher land use growth rates through the forecast period as compared to the Baseline Scenarios within the same area. These land use sensitivity scenarios provide an indication of the range of traffic and revenue conditions on Wekiva Parkway given extreme future economic conditions.

Table 7-9 shows a comparison between the gross revenue less leakage forecasts for each of the two land use sensitivities for each of the four baseline scenario conditions. As expected, the High Land Use Scenario results in higher revenue than the Low Land Use Scenario. The highest annual gross revenue less leakage in FY 2050 for Wekiva Parkway was in the High Land Use Scenario 2 at \$153.9 million, while the lowest was with the Low Land Use Scenario 4 at \$49.6 million.

When compared to the Baseline Scenarios, the Low Land Use Scenario results in a reduction of traffic and revenue while the High Land Use Scenario results in higher traffic and revenue. The Low Land Use Scenario results in a reduction in FY 2050 gross revenue for Wekiva Parkway ranging from -36 percent for Scenario 3 to -38 percent for Scenario 2 compared to the Baseline Scenarios. Compared to the Baseline Scenarios, the High Land Use Scenario results in increased FY 2050 gross revenue ranging from 66 percent for Scenario 1 to 80 percent for Scenario 4.



	Annual Gross Revenue Less Leakage (\$millions)							
Fiscal		Low Land Use Alternative High Land Use Alternative					1	
Year		Phase I & II			Phase I & II			
	Scenario 1	Scenario 2	Scenario 3	Scenario 4	Scenario 1	Scenario 2	Scenario 3	Scenario 4
2018	\$1.1	\$1.0	\$1.2	\$1.1	\$2.6	\$2.6	\$2.5	\$2.5
2019	\$2.1	\$1.8	\$1.9	\$1.8	\$4.2	\$4.2	\$4.1	\$4.1
2020	\$15.9	\$14.5	\$14.2	\$15.3	\$30.0	\$31.3	\$28.3	\$28.9
2021	\$18.4	\$18.2	\$17.8	\$19.1	\$39.0	\$41.4	\$35.1	\$35.8
2022	\$21.5	\$21.1	\$20.9	\$22.1	\$47.0	\$50.0	\$41.8	\$43.1
2023	\$22.8	\$22.3	\$21.9	\$22.9	\$51.0	\$54.1	\$44.6	\$46.8
2024	\$24.3	\$23.7	\$23.1	\$24.1	\$55.2	\$58.8	\$48.0	\$50.3
2025	\$25.7	\$24.9	\$24.2	\$24.8	\$59.6	\$63.6	\$51.9	\$54.2
2026	\$27.5	\$26.3	\$25.3	\$25.8	\$64.6	\$68.5	\$55.6	\$58.5
2027	\$29.2	\$27.8	\$26.2	\$26.9	\$68.4	\$73.7	\$59.6	\$63.0
2028	\$30.3	\$29.3	\$27.0	\$27.5	\$72.6	\$78.8	\$63.7	\$67.1
2029	\$31.2	\$30.6	\$27.8	\$28.7	\$76.4	\$83.2	\$67.1	\$71.2
2030	\$31.8	\$31.7	\$28.9	\$29.2	\$80.3	\$87.0	\$70.7	\$75.0
2031	\$32.5	\$32.7	\$29.4	\$29.8	\$84.5	\$90.9	\$73.6	\$78.8
2032	\$33.4	\$33.8	\$30.6	\$30.9	\$88.0	\$94.3	\$77.0	\$82.7
2033	\$34.4	\$34.7	\$31.8	\$31.6	\$91.0	\$97.6	\$80.4	\$86.6
2034	\$35.3	\$36.0	\$33.0	\$32.8	\$94.0	\$101.0	\$83.9	\$89.8
2035	\$36.5	\$36.9	\$33.9	\$33.6	\$97.3	\$103.8	\$86.7	\$93.4
2036	\$37.4	\$38.1	\$34.9	\$34.8	\$99.8	\$107.3	\$90.2	\$97.4
2037	\$38.5	\$39.0	\$36.0	\$35.6	\$102.8	\$110.3	\$93.6	\$100.5
2038	\$39.6	\$40.2	\$37.0	\$36.6	\$105.8	\$113.6	\$96.6	\$103.7
2039	\$40.8	\$41.2	\$37.9	\$37.7	\$108.9	\$116.6	\$99.7	\$107.1
2040	\$42.1	\$42.5	\$39.1	\$38.4	\$112.1	\$120.3	\$102.7	\$110.1
2041	\$43.1	\$43.5	\$40.2	\$39.6	\$114.9	\$123.1	\$105.7	\$113.0
2042	\$44.3	\$44.6	\$41.1	\$40.5	\$117.8	\$126.3	\$108.0	\$115.9
2043	\$45.5	\$45.7	\$42.3	\$41.7	\$120.9	\$129.2	\$110.8	\$119.1
2044	\$46.5	\$46.7	\$43.4	\$42.7	\$124.0	\$132.6	\$113.9	\$122.2
2045	\$47.6	\$48.0	\$44.4	\$43.7	\$126.7	\$136.0	\$116.5	\$125.2
2046	\$48.8	\$49.2	\$45.6	\$44.7	\$130.1	\$139.3	\$119.6	\$128.5
2047	\$50.1	\$50.4	\$46.8	\$46.0	\$133.5	\$143.1	\$122.9	\$132.0
2048	\$51.3	\$51.8	\$48.0	\$47.2	\$136.7	\$146.4	\$126.1	\$135.4
2049	\$52.6	\$53.0	\$48.9	\$48.4	\$140.1	\$150.2	\$128.6	\$138.8
2050	\$54.0	\$54.2	\$50.4	\$49.6	\$143.5	\$153.9	\$132,1	\$142.2

Table 7-9 - Land Use Scenarios - Gross Revenue Less Leakage Comparison



8. Toll Sensitivity

Revenue sensitivities were evaluated on the Wekiva Parkway toll structures to identify the project's revenue forecast under other tolling policies. For the two baseline toll structures, Toll Structure 1 and Toll Structure 2, tolls were analyzed under two different indexing alternatives than that assumed in the baseline forecasts.

8.1. Toll Sensitivity 1 - Three Percent Indexing

The first toll sensitivity assumes that tolls along Wekiva Parkway are indexed to be consistent with the Authority's current toll policy. The Authority's toll indexing policy consists of toll increases occurring every five years starting in 2012 on the existing system. The system toll rates will be indexed to the higher of the actual consumer price index (CPI) for the Southern Region or three percent per year over the period for electronic transactions. Under the Authority's toll structure, the minimum annual increase would be three percent. As a result this toll sensitivity assumes Wekiva Parkway toll rates are indexing at three percent per year which is applied every fifth year. Tables 8-1 through 8-4 show the annual transactions and revenue for the following four scenarios for this toll sensitivity:

- Scenario 1 Toll Structure 1 with base toll rate of 15 cents per mile
- Scenario 2 Toll Structure 1 with base toll rate of 18 cents per mile
- Scenario 3 Toll Structure 2 with base toll rate of 15 cents per mile
- Scenario 4 Toll Structure 2 with base toll rate of 18 cents per mile

Total annual transactions in FY 2050 for Toll Sensitivity 1 are forecast to be 32.2 million, 30.0 million, 88.4 million and 69.7 million for the Scenario 1, Scenario 2, Scenario 3 and Scenario 4 toll structures, respectively. Likewise, toll annual gross revenues less leakage for Wekiva Parkway are projected to be \$90.2 million, \$92.1 million, \$85.3 million and \$88.0 million for the Scenario 1, Scenario 2, Scenario 3 and Scenario 4 toll structures, respectively under Toll Sensitivity 1.



	Annual Transactions and Gross Revenue						
		Phase I & II					
Fiscal Year	Annual Transactions (millions)	Annual Gross Revenue (\$millions)	Annual Leakage (\$millions)	Annual Gross Revenue Less Leakage (\$millions)			
2018	2.6	\$1.5	\$0.1	\$1.4			
2019	4.4	\$2.6	\$0.1	\$2.5			
2020	16.3	\$20.4	\$1.0	\$19.4			
2021	20.7	\$26.3	\$1.3	\$25.0			
2022	24.8	\$31.7	\$1.6	\$30.1			
2023	24.1	\$34.2	\$1.7	\$32.5			
2024	25.7	\$36.8	\$1.8	\$35.0			
2025	27.5	\$39.4	\$2.0	\$37.4			
2026	29.4	\$42.2	\$2.1	\$40.1			
2027	31.4	\$45.1	\$2.3	\$42.8			
2028	29.0	\$48.2	\$2.4	\$45.8			
2029	30.7	\$50.8	\$2.5	\$48.3			
2030	32.2	\$53.1	\$2.7	\$50.4			
2031	33.9	\$55.5	\$2.8	\$52.7			
2032	35.6	\$57.8	\$2.9	\$54.9			
2033	32.0	\$59.6	\$3.0	\$56.6			
2034	33.1	\$61.4	\$3.1	\$58.3			
2035	34.3	\$63.8	\$3.2	\$60.6			
2036	35.3	\$65.6	\$3.3	\$62.3			
2037	36.3	\$67.6	\$3.4	\$64.2			
2038	33.2	\$72.0	\$3.6	\$68.4			
2039	34.0	\$73.8	\$3.7	\$70.1			
2040	34.8	\$75.6	\$3.8	\$71.8			
2041	35.5	\$77.1	\$3.9	\$73.2			
2042	36.2	\$78.6	\$3.9	\$74.7			
2043	32.6	\$82.8	\$4.1	\$78.7			
2044	33.1	\$83.9	\$4.2	\$79.7			
2045	33.6	\$85.2	\$4.3	\$80.9			
2046	34.1	\$86.7	\$4.3	\$82.4			
2047	34.6	\$88.0	\$4.4	\$83.6			
2048	31.2	\$92.1	\$4.6	\$87.5			
2049	31.7	\$93.5	\$4.7	\$88.8			
2050	32.2	\$94.9	\$4.7	\$90.2			



「able 8-2 - Toll Sensitivity 1: Scena	rio 2 - Toll Structure	1 with 18 cpm Toll Rate
---------------------------------------	------------------------	-------------------------

	Annual Transactions and Gross Revenue					
	Phase I & II					
Fiscal Year	Annual Transactions (millions)	Annual Gross Revenue (\$millions)	Annual Leakage (\$millions)	Annual Gross Revenue Less Leakage (\$millions)		
2018	2.1	\$1.5	\$0.1	\$1.4		
2019	3.5	\$2.6	\$0.1	\$2.5		
2020	13.6	\$20.9	\$1.0	\$19.9		
2021	17.3	\$26.0	\$1.3	\$24.7		
2022	20.9	\$31.6	\$1.6	\$30.0		
2023	19.9	\$33.7	\$1.7	\$32.0		
2024	21.4	\$36.5	\$1.8	\$34.7		
2025	23.1	\$39.6	\$2.0	\$37.6		
2026	24.7	\$42.7	\$2.1	\$40.6		
2027	26.4	\$45.2	\$2.3	\$42.9		
2028	23.7	\$47.3	\$2.4	\$44.9		
2029	25.1	\$49.5	\$2.5	\$47.0		
2030	26.6	\$51.8	\$2.6	\$49.2		
2031	28.1	\$54.1	\$2.7	\$51.4		
2032	29.6	\$56.4	\$2.8	\$53.6		
2033	25.7	\$58.5	\$2.9	\$55.6		
2034	27.0	\$60.7	\$3.0	\$57.7		
2035	28.3	\$62.9	\$3.1	\$59.8		
2036	29.6	\$65.0	\$3.3	\$61.7		
2037	30.8	\$66.9	\$3.3	\$63.6		
2038	28.7	\$71.0	\$3.6	\$67.4		
2039	29.7	\$72.9	\$3.6	\$69.3		
2040	30.6	\$74.5	\$3.7	\$70.8		
2041	31.5	\$76.3	\$3.8	\$72.5		
2042	32.3	\$78.1	\$3.9	\$74.2		
2043	29.8	\$82.9	\$4.1	\$78.8		
2044	30.3	\$84.3	\$4.2	\$80.1		
2045	30.7	\$85.4	\$4.3	\$81.1		
2046	31.2	\$87.0	\$4.4	\$82.6		
2047	31.6	\$88.2	\$4.4	\$83.8		
2048	29.1	\$94.2	\$4.7	\$89.5		
2049	29.6	\$95.6	\$4.8	\$90.8		
2050	30.0	\$96.9	\$4.8	\$92.1		



Table 8-3 - Toll Sensitivity 1: Scenario 3 - Toll Structure 2 with 15 cpm Toll Rate

	Annual Transactions and Gross Revenue					
		Phase	e I & II	1		
Fiscal Year	Annual Transactions (millions)	Annual Gross Revenue (\$millions)	Annual Leakage (\$millions)	Annual Gross Revenue Less Leakage (\$millions)		
2018	3.2	\$1.4	\$0.1	\$1.3		
2019	5.3	\$2.4	\$0.1	\$2.3		
2020	41.2	\$20.3	\$1.0	\$19.3		
2021	53.9	\$24.3	\$1.2	\$23.1		
2022	64.4	\$29.2	\$1.5	\$27.7		
2023	61.1	\$31.2	\$1.6	\$29.6		
2024	65.1	\$33.6	\$1.7	\$31.9		
2025	69.5	\$35.9	\$1.8	\$34.1		
2026	74.2	\$38.7	\$1.9	\$36.8		
2027	78.8	\$41.0	\$2.1	\$38.9		
2028	68.6	\$40.6	\$2.0	\$38.6		
2029	72.8	\$43.0	\$2.2	\$40.8		
2030	77.2	\$45.5	\$2.3	\$43.2		
2031	81.9	\$48.4	\$2.4	\$46.0		
2032	86.7	\$51.1	\$2.6	\$48.5		
2033	78.6	\$52.6	\$2.6	\$50.0		
2034	82.7	\$55.4	\$2.8	\$52.6		
2035	86.9	\$58.2	\$2.9	\$55.3		
2036	91.0	\$61.1	\$3.1	\$58.0		
2037	94.8	\$63.7	\$3.2	\$60.5		
2038	87.0	\$67.6	\$3.4	\$64.2		
2039	89.9	\$70.0	\$3.5	\$66.5		
2040	92.4	\$71.9	\$3.6	\$68.3		
2041	94.7	\$73.7	\$3.7	\$70.0		
2042	96.7	\$75.6	\$3.8	\$71.8		
2043	88.6	\$78.2	\$3.9	\$74.3		
2044	90.1	\$79.5	\$4.0	\$75.5		
2045	91.5	\$80.9	\$4.0	\$76.9		
2046	92.9	\$82.0	\$4.1	\$77.9		
2047	94.3	\$83.3	\$4.2	\$79.1		
2048	85.8	\$87.2	\$4.4	\$82.8		
2049	87.1	\$88.3	\$4.4	\$83.9		
2050	88.4	S89.8	S4.5	I \$85.3		



Table 8-4 - Toll Sensitivity 1: Scenario 4 - Toll Structure 2 with 18 cpm Toll Rate

	Annual Transactions and Gross Revenue					
		Phase	e I & II			
Fiscal Year	Annual Transactions (millions)	Annual Gross Revenue (\$millions)	Annual Leakage (\$millions)	Annual Gross Revenue Less Leakage (\$millions)		
2018	2.5	\$1.4	\$0.1	\$1.3		
2019	4.2	\$2.4	\$0.1	\$2.3		
2020	34.1	\$20.4	\$1.0	\$19.4		
2021	43.9	\$23.1	\$1.2	\$21.9		
2022	53.2	\$28.1	\$1.4	\$26.7		
2023	50.0	\$30.2	\$1.5	\$28.7		
2024	54.2	\$32.7	\$1.6	\$31.1		
2025	58.9	\$35.9	\$1.8	\$34.1		
2026	63.9	\$39.0	\$2.0	\$37.0		
2027	66.8	\$40.8	\$2.0	\$38.8		
2028	61.2	\$42.9	\$2.1	\$40.8		
2029	63.7	\$44.6	\$2.2	\$42.4		
2030	66.2	\$46.3	\$2.3	\$44.0		
2031	68.7	\$48.1	\$2.4	\$45.7		
2032	71.2	\$49.7	\$2.5	\$47.2		
2033	64.1	\$54.0	\$2.7	\$51.3		
2034	66.3	\$55.8	\$2.8	\$53.0		
2035	68.5	\$57.8	\$2.9	\$54.9		
2036	70.7	\$59.5	\$3.0	\$56.5		
2037	72.9	\$61.4	\$3.1	\$58.3		
2038	67.9	\$66.3	\$3.3	\$63.0		
2039	69.7	\$68.0	\$3.4	\$64.6		
2040	71.4	\$69.7	\$3.5	\$66.2		
2041	73.0	\$71.3	\$3.6	\$67.7		
2042	74.6	\$72.8	\$3.6	\$69.2		
2043	69.0	\$78.5	\$3.9	\$74.6		
2044	70.2	\$79.9	\$4.0	\$75.9		
2045	71.3	\$81.3	\$4.1	\$77.2		
2046	72.4	\$82.2	\$4.1	\$78.1		
2047	73.4	\$83.6	\$4.2	\$79.4		
2048	67.6	\$89.9	\$4.5	\$85.4		
2049	68.6	\$91.3	\$4.6	\$86.7		
2050	69.7	S92.6	I \$4.6	S88.0		



8.2. Toll Sensitivity 2 - No Toll Increase

The second toll sensitivity analysis assumes that tolls along Wekiva Parkway remain constant through the forecast period. In this case the tolls are not indexed to an inflation rate and remain the same as the opening year toll rates. The same four toll structures analyzed in the Three Percent Indexing toll sensitivity were utilized in this toll sensitivity. The annual transactions and revenue for the four scenarios for this toll sensitivity are shown in Tables 8-5 through 8-8.

Total annual transactions in FY 2050 for Toll Sensitivity 2 are forecast to be 57.3 million, 48.7 million, 146.6 million and 119.5 million for the Scenario 1, Scenario 2, Scenario 3 and Scenario 4 toll structures, respectively. Likewise, toll annual gross revenues less leakage for Wekiva Parkway are projected to be \$66.6 million, \$66.6 million, \$65.5 million and \$62.4 million for the Scenario 1, Scenario 2, Scenario 3 and Scenario 4 toll structures, respectively under Toll Sensitivity 1.



Tahla 8-5 - Tall Sansitivity	v 2. Sconario 1 -	Toll Structure	l with 15 cnm	Toll Rata
		I OII JUI UCUUTE	i with iS cpin	TOILINALE

	Annual Transactions and Gross Revenue					
		Phase	1.8.11			
Fiscal Year	Annual Transactions (millions)	Annual Gross Revenue (\$millions)	Annual Leakage (\$millions)	Annual Gross Revenue Less Leakage (\$millions)		
2018	2.7	\$1.6	\$0.1	\$1.5		
2019	4.5	\$2.7	\$0.1	\$2.6		
2020	16.3	\$20.7	\$1.0	\$19.7		
2021	20.7	\$26.3	\$1.3	\$25.0		
2022	24.5	\$31.2	\$1.6	\$29.6		
2023	26.1	\$33.6	\$1.7	\$31.9		
2024	27.9	\$36.0	\$1.8	\$34.2		
2025	29.9	\$38.8	\$1.9	\$36.9		
2026	32.2	\$41.8	\$2.1	\$39.7		
2027	34.3	\$44.5	\$2.2	\$42.3		
2028	36.2	\$46.6	\$2.3	\$44.3		
2029	38.1	\$48.5	\$2.4	\$46.1		
2030	39.9	\$50.4	\$2.5	\$47.9		
2031	41.7	\$52.5	\$2.6	\$49.9		
2032	43.3	\$54.0	\$2.7	\$51.3		
2033	44.9	\$55.4	\$2.8	\$52.6		
2034	46.2	\$56.7	\$2.8	\$53.9		
2035	47.3	\$57.9	\$2.9	\$55.0		
2036	48.3	\$59.0	\$3.0	\$56.0		
2037	49.2	\$60.0	\$3.0	\$57.0		
2038	50.1	\$61.2	\$3.1	\$58.1		
2039	51.0	\$62.3	\$3.1	\$59.2		
2040	51.8	\$63.5	\$3.2	\$60.3		
2041	52.4	\$64.2	\$3.2	\$61.0		
2042	53.0	\$64.7	\$3.2	\$61.5		
2043	53.5	\$65.4	\$3.3	\$62.1		
2044	54.0	\$66.1	\$3.3	\$62.8		
2045	54.6	\$66.8	\$3.3	\$63.5		
2046	55.1	\$67.4	\$3.4	\$64.0		
2047	55.7	\$68.1	\$3.4	\$64.7		
2048	56.2	\$68.8	\$3.4	\$65.4		
2049	56.8	\$69.5	\$3.5	\$66.0		
2050	57.3	I S(0.1	I 53.5	566.6		



Table 8-6 - Toll Sensitivity 2: Scenario 2 - Toll Structure 1 with 18 cpm Toll Rate

	Annual Transactions and Gross Revenue					
	Phase I & II					
Fiscal Year	Annual Transactions (millions)	Annual Gross Revenue (\$millions)	Annual Leakage (\$millions)	Annual Gross Revenue Less Leakage (\$millions)		
2018	2.0	\$1.5	\$0.1	\$1.4		
2019	3.5	\$2.4	\$0.1	\$2.3		
2020	13.6	\$20.5	\$1.0	\$19.5		
2021	17.3	\$26.0	\$1.3	\$24.7		
2022	20.4	\$30.6	\$1.5	\$29.1		
2023	21.9	\$33.0	\$1.7	\$31.3		
2024	23.4	\$35.5	\$1.8	\$33.7		
2025	25.0	\$38.1	\$1.9	\$36.2		
2026	26.8	\$41.0	\$2.1	\$38.9		
2027	28.7	\$43.8	\$2.2	\$41.6		
2028	30.5	\$46.6	\$2.3	\$44.3		
2029	32.2	\$48.9	\$2.4	\$46.5		
2030	33.8	\$50.7	\$2.5	\$48.2		
2031	35.5	\$52.3	\$2.6	\$49.7		
2032	37.0	\$54.0	\$2.7	\$51.3		
2033	38.3	\$55.4	\$2.8	\$52.6		
2034	39.4	\$57.0	\$2.9	\$54.1		
2035	40.4	\$58.1	\$2.9	\$55.2		
2036	41.2	\$59.1	\$3.0	\$56.1		
2037	42.0	\$60.2	\$3.0	\$57.2		
2038	42.7	\$61.3	\$3.1	\$58.2		
2039	43.4	\$62.4	\$3.1	\$59.3		
2040	44.1	\$63.5	\$3.2	\$60.3		
2041	44.5	\$64.2	\$3.2	\$61.0		
2042	45.0	\$64.8	\$3.2	\$61.6		
2043	45.4	\$65.4	\$3.3	\$62.1		
2044	45.9	\$66.0	\$3.3	\$62.7		
2045	46.3	\$66.7	\$3.3	\$63.4		
2046	46.8	\$67.4	\$3.4	\$64.0		
2047	47.2	\$68.1	\$3.4	\$64.7		
2048	47.7	\$68.8	\$3.4	\$65.4		
2049	48.2	\$69.5	\$3.5	\$66.0		
2050	48.7	\$70.1	\$3.5	\$66.6		



Table 8-7 - Toll Sensitivity 2: Scenario 3 - Toll Structure 2 with 15 cpm Toll Rate

Phase I & IIFiscal YearAnnual Transactions (millions)Annual Gross Revenue (\$millions)Annual Leakage (\$millions)Annual Leakage (\$millions)20183.5\$1.6\$0.1\$1.520195.7\$2.7\$0.1\$1.520205.7\$2.7\$0.1\$2.6		Annual Transactions and Gross Revenue					
Fiscal YearAnnual Transactions (millions)Annual Gross Revenue (\$millions)Annual Leakage (\$millions)Annual Leakage (\$millions)20183.5\$1.6\$0.1\$1.520195.7\$2.7\$0.1\$2.6		Phase I & II					
2018 3.5 \$1.6 \$0.1 \$1.5 2019 5.7 \$2.7 \$0.1 \$2.6	Fiscal Year	Annual Transactions (millions)	Annual Gross Revenue (\$millions)	Annual Leakage (\$millions)	Annual Gross Revenue Less Leakage (\$millions)		
2019 5.7 \$2.7 \$0.1 \$2.6	2018	3.5	\$1.6	\$0.1	\$1.5		
	2019	5.7	\$2.7	\$0.1	\$2.6		
2020 42.9 \$19.4 \$1.0 \$18.4	2020	42.9	\$19.4	\$1.0	\$18.4		
2021 53.6 \$24.2 \$1.2 \$23.0	2021	53.6	\$24.2	\$1.2	\$23.0		
2022 63.1 \$28.6 \$1.4 \$27.2	2022	63.1	\$28.6	\$1.4	\$27.2		
2023 67.3 \$30.7 \$1.5 \$29.2	2023	67.3	\$30.7	\$1.5	\$29.2		
2024 71.9 \$32.7 \$1.6 \$31.1	2024	71.9	\$32.7	\$1.6	\$31.1		
2025 76.8 \$35.3 \$1.8 \$33.5	2025	76.8	\$35.3	\$1.8	\$33.5		
2026 82.0 \$37.8 \$1.9 \$35.9	2026	82.0	\$37.8	\$1.9	\$35.9		
2027 86.9 \$40.1 \$2.0 \$38.1	2027	86.9	\$40.1	\$2.0	\$38.1		
2028 91.7 \$42.4 \$2.1 \$40.3	2028	91.7	\$42.4	\$2.1	\$40.3		
2029 96.5 \$44.6 \$2.2 \$42.4	2029	96.5	\$44.6	\$2.2	\$42.4		
2030 101.7 \$47.0 \$2.4 \$44.6	2030	101.7	\$47.0	\$2.4	\$44.6		
2031 106.9 \$49.3 \$2.5 \$46.8	2031	106.9	\$49.3	\$2.5	\$46.8		
2032 111.2 \$51.6 \$2.6 \$49.0	2032	111.2	\$51.6	\$2.6	\$49.0		
2033 114.8 \$53.2 \$2.7 \$50.5	2033	114.8	\$53.2	\$2.7	\$50.5		
2034 117.6 \$54.8 \$2.7 \$52.1	2034	117.6	\$54.8	\$2.7	\$52.1		
2035 120.4 \$56.5 \$2.8 \$53.7	2035	120.4	\$56.5	\$2.8	\$53.7		
2036 123.1 \$57.8 \$2.9 \$54.9	2036	123.1	\$57.8	\$2.9	\$54.9		
2037 125.7 \$59.1 \$3.0 \$56.1	2037	125.7	\$59.1	\$3.0	\$56.1		
2038 128.0 \$60.1 \$3.0 \$57.1	2038	128.0	\$60.1	\$3.0	\$57.1		
2039 130.3 \$61.2 \$3.1 \$58.1	2039	130.3	\$61.2	\$3.1	\$58.1		
2040 132.7 \$62.3 \$3.1 \$59.2	2040	132.7	\$62.3	\$3.1	\$59.2		
2041 134.0 \$63.1 \$3.2 \$59.9	2041	134.0	\$63.1	\$3.2	\$59.9		
2042 135.4 \$63.6 \$3.2 \$60.4	2042	135.4	\$63.6	\$3.2	\$60.4		
2043 136.7 \$64.3 \$3.2 \$61.1	2043	136.7	\$64.3	\$3.2	\$61.1		
2044 138.1 \$64.8 \$3.2 \$61.6	2044	138.1	\$64.8	\$3.2	\$61.6		
2045 139.5 \$65.5 \$3.3 \$62.2	2045	139.5	\$65.5	\$3.3	\$62.2		
2046 140.9 \$66.3 \$3.3 \$63.0	2046	140.9	\$66.3	\$3.3	\$63.0		
204/ 142.3 \$67.0 \$3.4 \$63.6	2047	142.3	\$67.0	\$3.4	\$63.6		
2048 143.7 \$67.5 \$3.4 \$64.1	2048	143.7	\$67.5	\$3.4	\$64.1		
2049 145.1 \$68.3 \$3.4 \$64.9	2049	145.1	\$68.3	\$3.4 \$3.5	\$64.9		



Table 8-8 - Toll Sensitivity 2: Scenario 4 - Toll Structure 2 with 18 cpm Toll Rate

	Annual Transactions and Gross Revenue					
		Phase	1 & 11			
Fiscal Year	Annual Transactions (millions)	Annual Gross Revenue (\$millions)	Annual Leakage (\$millions)	Annual Gross Revenue Less Leakage (\$millions)		
2018	2.6	\$1.5	\$0.1	\$1.4		
2019	4.1	\$2.3	\$0.1	\$2.2		
2020	35.2	\$18.6	\$0.9	\$17.7		
2021	43.9	\$23.1	\$1.2	\$21.9		
2022	52.2	\$27.4	\$1.4	\$26.0		
2023	55.9	\$29.3	\$1.5	\$27.8		
2024	59.7	\$31.6	\$1.6	\$30.0		
2025	63.8	\$33.8	\$1.7	\$32.1		
2026	68.2	\$36.3	\$1.8	\$34.5		
2027	72.2	\$38.4	\$1.9	\$36.5		
2028	76.1	\$40.6	\$2.0	\$38.6		
2029	80.0	\$42.7	\$2.1	\$40.6		
2030	83.7	\$44.9	\$2.2	\$42.7		
2031	87.4	\$46.9	\$2.3	\$44.6		
2032	90.6	\$48.9	\$2.4	\$46.5		
2033	93.4	\$50.8	\$2.5	\$48.3		
2034	95.9	\$52.2	\$2.6	\$49.6		
2035	98.2	\$53.7	\$2.7	\$51.0		
2036	100.4	\$54.8	\$2.7	\$52.1		
2037	102.5	\$56.3	\$2.8	\$53.5		
2038	104.4	\$57.3	\$2.9	\$54.4		
2039	106.3	\$58.3	\$2.9	\$55.4		
2040	108.2	\$59.4	\$3.0	\$56.4		
2041	109.3	\$60.0	\$3.0	\$57.0		
2042	110.4	\$60.7	\$3.0	\$57.7		
2043	111.5	\$61.1	\$3.1	\$58.0		
2044	112.6	\$61.8	\$3.1	\$58.7		
2045	113.7	\$62.5	\$3.1	\$59.4		
2046	114.9	\$63.1	\$3.2	\$59.9		
2047	116.0	\$63.6	\$3.2	\$60.4		
2048	117.2	\$64.4	\$3.2	\$61.2		
2049	118.4	\$64.9	\$3.2	\$61.7		
2050	119.5	\$65.7	\$3.3	\$62.4		



8.3. Toll Sensitivity Summary

Two toll sensitivities were conducted to analyze the revenue impact of different tolling policies. In the Baseline Scenarios, toll rates on Wekiva Parkway are assumed to be indexed annually by 2 percent. Toll Sensitivity 1 assumes that Wekiva Parkway toll rates are indexed annually by a rate of 3 percent. The toll policy under Toll Sensitivity 1 is reflective of the Authority's adopted toll policy for their current system. Toll Sensitivity 2 assumes that no toll increases occur on the Wekiva Parkway after it is opened to traffic.

Table 8-9 shows a comparison between the gross revenue less leakage forecasts for each of the two toll sensitivities for each of the four baseline scenario conditions. Toll Sensitivity 1 results in gross revenues less leakage in FY 2050 of \$85.3 million to \$92.1 million. Toll Sensitivity 2 results in less revenue due to the lack of toll increases during the forecast period. Gross revenues less leakage is between \$62.4 million and \$66.6 million for Toll Sensitivity 2.

Compared to the Baseline Scenarios, Toll Sensitivity 1 results in an increase of Wekiva Parkway traffic and revenue while the Toll Sensitivity 2 results in lower traffic and revenue. Toll Sensitivity 1 results in an increase in FY 2050 gross revenue for Wekiva Parkway ranging from 4 percent for Scenario 1 to 11 percent for Scenario 4 compared to the Baseline Scenarios. Toll Sensitivity 2 results in reduced FY 2050 gross revenue ranging from -17 percent for Scenario 3 to -24 percent for Scenario 2 compared to the Baseline Scenarios.



	Annual Gross Revenue Less Leakage (\$millions)							
Fiscal	(°)	3% CPI Increa	se Alternative	9	1	No Toll Increa	se Alternative	è
Year	Phase I & II			Phase I & II				
	Scenario 1	Scenario 2	Scenario 3	Scenario 4	Scenario 1	Scenario 2	Scenario 3	Scenario 4
2018	\$1.4	\$1.4	\$1.3	\$1.3	\$1.5	\$1.4	\$1.5	\$1.4
2019	\$2.5	\$2.5	\$2.3	\$2.3	\$2.6	\$2.3	\$2.6	\$2.2
2020	\$19.4	\$19.9	\$19.3	\$19.4	\$19.7	\$19.5	\$18.4	\$17.7
2021	\$25.0	\$24.7	\$23.1	\$21.9	\$25.0	\$24.7	\$23.0	\$21.9
2022	\$30.1	\$30.0	\$27.7	\$26.7	\$29.6	\$29.1	\$27.2	\$26.0
2023	\$32.5	\$32.0	\$29.6	\$28.7	\$31.9	\$31.3	\$29.2	\$27.8
2024	\$35.0	\$34.7	\$31.9	\$31.1	\$34.2	\$33.7	\$31.1	\$30.0
2025	\$37.4	\$37.6	\$34.1	\$34.1	\$36.9	\$36.2	\$33.5	\$32.1
2026	\$40.1	\$40.6	\$36.8	\$37.0	\$39.7	\$38.9	\$35.9	\$34.5
2027	\$42.8	\$42.9	\$38.9	\$38.8	\$42.3	\$41.6	\$38.1	\$36.5
2028	\$45.8	\$44.9	\$38.6	\$40.8	\$44.3	\$44.3	\$40.3	\$38.6
2029	\$48.3	\$47.0	\$40.8	\$42.4	\$46.1	\$46.5	\$42.4	\$40.6
2030	\$50.4	\$49.2	\$43.2	\$44.0	\$47.9	\$48.2	\$44.6	\$42.7
2031	\$52.7	\$51.4	\$46.0	\$45.7	\$49.9	\$49.7	\$46.8	\$44.6
2032	\$54.9	\$53.6	\$48.5	\$47.2	\$51.3	\$51.3	\$49.0	\$46.5
2033	\$56.6	\$55.6	\$50.0	\$51.3	\$52.6	\$52.6	\$50.5	\$48.3
2034	\$58.3	\$57.7	\$52.6	\$53.0	\$53.9	\$54.1	\$52.1	\$49.6
2035	\$60.6	\$59.8	\$55.3	\$54.9	\$55.0	\$55.2	\$53.7	\$51.0
2036	\$62.3	\$61.7	\$58.0	\$56.5	\$56.0	\$56.1	\$54.9	\$52.1
2037	\$64.2	\$63.6	\$60.5	\$58.3	\$57.0	\$57.2	\$56.1	\$53.5
2038	\$68.4	\$67.4	\$64.2	\$63.0	\$58.1	\$58.2	\$57.1	\$54.4
2039	\$70.1	\$69.3	\$66.5	\$64.6	\$59.2	\$59.3	\$58.1	\$55.4
2040	\$71.8	\$70.8	\$68.3	\$66.2	\$60.3	\$60.3	\$59.2	\$56.4
2041	\$73.2	\$72.5	\$70.0	\$67.7	\$61.0	\$61.0	\$59.9	\$57.0
2042	\$74.7	\$74.2	\$71.8	\$69.2	\$61.5	\$61.6	\$60.4	\$57.7
2043	\$78.7	\$78.8	\$74.3	\$74.6	\$62,1	\$62.1	\$61.1	\$58.0
2044	\$79.7	\$80.1	\$75.5	\$75.9	\$62.8	\$62.7	\$61.6	\$58.7
2045	\$80.9	\$81.1	\$76.9	\$77.2	\$63.5	\$63.4	\$62.2	\$59.4
2046	\$82.4	\$82.6	\$77.9	\$78.1	\$64.0	\$64.0	\$63.0	\$59.9
2047	\$83.6	\$83.8	\$79.1	\$79.4	\$64.7	\$64.7	\$63.6	\$60.4
2048	\$87.5	\$89.5	\$82.8	\$85.4	\$65.4	\$65.4	\$64.1	\$61.2
2049	\$88.8	\$90.8	\$83.9	\$86.7	\$66.0	\$66.0	\$64.9	\$61.7
2050	\$90.2	\$92,1	\$85.3	\$88.0	\$66.6	\$66.6	\$65.5	\$62.4

Table 8-9 - Toll Sensitivity Scenarios Summary - Gross Revenue Less Leakage



9. Network Sensitivity

Due to the proximity of several competing facilities to Wekiva Parkway, additional network sensitivities were conducted to analyze the impact of potential transportation improvements. These improvements to competing facilities are not expected to take place, however, if they did occur, they could potentially negatively impact revenue on the Wekiva Parkway. Three network sensitivity tests were identified for analysis:

- East Lake County Service Road as an Uninterrupted Facility
- East Lake County Service Road as an Uninterrupted Facility and Low Land Use
- Widening of US 441 between Plymouth Sorrento Road and SR 46 to Six Lanes

9.1. Network Sensitivity 1 - Uninterrupted Service Road

As currently designed, the east Lake County service road will serve as a low-speed collector with multiple stop controlled intersections. If traffic volumes warrant in the future, the stop controlled intersections may be improved to be signalized intersections. This network sensitivity assumes that the service road operates as an uninterrupted arterial instead of a low-speed interrupted collector facility. For this analysis it is assumed the service road would be assigned a higher operating speed and that through traffic along it would not stop at the cross streets as currently planned. This type of roadway facility would have a higher average speed and capacity compared to the planned service road. The limits of this potential improvement are shown in Figure 9-1. Due to the proximity of the service road to the Wekiva Parkway's east Lake County mainline plaza, traffic diversion would be expected from this part of the project as a result of this improvement.

For this network sensitivity, all baseline conditions remain the same except for the upgraded facility type along the service road in east Lake County. Tables 9-1 through 9-4 shows the annual transactions and revenue for the following four scenarios for this network sensitivity:

- Scenario 1 Toll Structure 1 with base toll rate of 15 cents per mile
- Scenario 2 Toll Structure 1 with base toll rate of 18 cents per mile
- Scenario 3 Toll Structure 2 with base toll rate of 15 cents per mile
- Scenario 4 Toll Structure 2 with base toll rate of 18 cents per mile

FIGURE 9-1 NETWORK SENSITIVITY - UNINTERRUPTED SERVICE ROAD





Table 9-1 - Network Sensitivity 1: Scenario 1 - Toll Structure 1 with 15 cpm Toll Rate

	Annual Transactions and Gross Revenue					
		Phase	1&11			
Fiscal Year	Annual Transactions (millions)	Annual Gross Revenue (\$millions)	Annual Leakage (\$millions)	Annual Gross Revenue Less Leakage (\$millions)		
2018	2.7	\$1.6	\$0.1	\$1.5		
2019	4.5	\$2.7	\$0.1	\$2.6		
2020	15.0	\$16.2	\$0.8	\$15.4		
2021	18.4	\$20.5	\$1.0	\$19.5		
2022	21.5	\$24.6	\$1.2	\$23.4		
2023	22.6	\$26.5	\$1.3	\$25.2		
2024	23.9	\$28.7	\$1.4	\$27.3		
2025	25.2	\$30.9	\$1.5	\$29.4		
2026	26.6	\$33.4	\$1.7	\$31.7		
2027	27.9	\$35.5	\$1.8	\$33.7		
2028	29.1	\$37.9	\$1.9	\$36.0		
2029	30.4	\$40.1	\$2.0	\$38.1		
2030	31.6	\$42.4	\$2.1	\$40.3		
2031	32.6	\$44.3	\$2.2	\$42.1		
2032	33.7	\$46.2	\$2.3	\$43.9		
2033	34.5	\$47.9	\$2.4	\$45.5		
2034	35.2	\$49.6	\$2.5	\$47.1		
2035	35.7	\$51.2	\$2.6	\$48.6		
2036	36.2	\$52.8	\$2.6	\$50.2		
2037	36.5	\$54.3	\$2.7	\$51.6		
2038	36.9	\$56.0	\$2.8	\$53.2		
2039	37.2	\$57.5	\$2.9	\$54.6		
2040	37.5	\$59.3	\$3.0	\$56.3		
2041	37.8	\$60.6	\$3.0	\$57.6		
2042	37.9	\$62.1	\$3.1	\$59.0		
2043	38.2	\$64.0 \$65.4	\$3.2	\$60.8		
2044	38.3	\$65.4	\$3.3	\$62.1 ¢62.6		
2045	38.5	\$66.9 \$60.7	\$3.3 62.4	\$63.6 ¢сгр		
2046	30.1 20 0	२०४./ ६७० ४	⇒3.4 ¢2 ⊑	305.3 \$66.0		
2047	30.7 20.1	⇒10.4 ぐてつつ	ې۲.۵ د ۲	Э00.У 660 7		
2048	37.1 20 2	२ <i>१८.</i> उ ६७० ०	うう.0 ぐつ 7	300.1 \$70.1		
2049	39.3 39.6	\$75.0 \$76.0	<i>२२.1</i> ६२.२	\$72.2		



Table 9-2 - Network	Sensitivity 1: Scenari	io 2 - Toll Structure	1 with 18 cpm Toll Rate
	benonen neg n beenan		i mare opini i on nate

	Annual Transactions and Gross Revenue					
		Phase	1&11			
Fiscal Year	Annual Transactions (millions)	Annual Gross Revenue (\$millions)	Annual Leakage (\$millions)	Annual Gross Revenue Less Leakage (\$millions)		
2018	2.0	\$1.5	\$0.1	\$1.4		
2019	3.5	\$2.4	\$0.1	\$2.3		
2020	12.2	\$15.1	\$0.8	\$14.3		
2021	15.1	\$18.9	\$0.9	\$18.0		
2022	17.7	\$22.9	\$1.1	\$21.8		
2023	18.9	\$24.8	\$1.2	\$23.6		
2024	20.0	\$26.8	\$1.3	\$25.5		
2025	21.4	\$29.3	\$1.5	\$27.8		
2026	22.8	\$31.8	\$1.6	\$30.2		
2027	24.0	\$34.3	\$1.7	\$32.6		
2028	25.2	\$37.4	\$1.9	\$35.5		
2029	26.5	\$40.4	\$2.0	\$38.4		
2030	27.7	\$43.3	\$2.2	\$41.1		
2031	28.8	\$45.6	\$2.3	\$43.3		
2032	29.5	\$47.5	\$2.4	\$45.1		
2033	30.4	\$49.7	\$2.5	\$47.2		
2034	31.0	\$51.7	\$2.6	\$49.1		
2035	31.6	\$53.6	\$2.7	\$50.9		
2036	32.0	\$55.5	\$2.8	\$52.7		
2037	32.3	\$57.1	\$2.9	\$54.2		
2038	32.6	\$58.8	\$2.9	\$55.9		
2039	32.9	\$60.3	\$3.0	\$57.3		
2040	33.1	\$62.1	\$3.1	\$59.0		
2041	33.3	\$63.7	\$3.2	\$60.5		
2042	33.5	\$65.3	\$3.3	\$62.0		
2043	33.7	\$66.8	\$3.3	\$63.5		
2044	33.8	\$68.5	\$3.4	\$65.1		
2045	34.0	\$70.2	\$3.5	\$66.7		
2046	34.2	\$72.1	\$3.6	\$68.5		
2047	34.4	\$74.0	\$3.7	\$70.3		
2048	34.5	\$75.8	\$3.8	\$72.0		
2049	34.7	\$77.6	\$3.9	\$73.7		
2050	34.9	\$79.5	\$4.0	\$75.5		



Table 9-3 - Network Sensitivity 1: Scenario 3 - Toll Structure 2 with 15 cpm Toll Rate

	Annual Transactions and Gross Revenue					
		Phase	1&11			
Fiscal Year	Annual Transactions (millions)	Annual Gross Revenue (\$millions)	Annual Leakage (\$millions)	Annual Gross Revenue Less Leakage (\$millions)		
2018	3.5	\$1.6	\$0.1	\$1.5		
2019	5.7	\$2.7	\$0.1	\$2.6		
2020	36.9	\$16.6	\$0.8	\$15.8		
2021	42.3	\$18.3	\$0.9	\$17.4		
2022	49.4	\$21.9	\$1.1	\$20.8		
2023	52.7	\$23.6	\$1.2	\$22.4		
2024	55.5	\$25.7	\$1.3	\$24.4		
2025	59.3	\$27.9	\$1.4	\$26.5		
2026	62.4	\$29.9	\$1.5	\$28.4		
2027	65.8	\$31.7	\$1.6	\$30.1		
2028	66.3	\$33.5	\$1.7	\$31.8		
2029	69.7	\$35.7	\$1.8	\$33.9		
2030	70.5	\$37.2	\$1.9	\$35.3		
2031	72.9	\$39.2	\$2.0	\$37.2		
2032	74.5	\$41.3	\$2.1	\$39.2		
2033	76.4	\$43.2	\$2.2	\$41.0		
2034	77.7	\$45.0	\$2.3	\$42.7		
2035	79.3	\$46.9	\$2.3	\$44.6		
2036	80.6	\$48.9	\$2.4	\$46.5		
2037	82.1	\$50.9	\$2.5	\$48.4		
2038	83.2	\$52.6	\$2.6	\$50.0		
2039	84.4	\$54.5	\$2.7	\$51.8		
2040	85.5	\$56.2	\$2.8	\$53.4		
2041	86.0	\$57.7	\$2.9	\$54.8		
2042	86.5	\$59.0	\$3.0	\$56.0		
2043	87.0	\$60.5	\$3.0	\$57.5		
2044	87.5	\$62.3	\$3.1	\$59.2		
2045	88.0	\$63.8	\$3.2	\$60.6		
2046	88.5	\$65.2	\$3.3	\$61.9		
2047	89.0	\$67.2	\$3.4	\$63.8		
2048	89.4	\$68.9	\$3.4	\$65.5		
2049	90.0	\$70.3	\$3.5	\$66.8		
2050	90.5	\$72.2	\$3.6	\$68.6		



Table 9-4 - Network Sensitivity 1: Scenario 4 - Toll Structure 2 with 18 cpm Toll Rate

	Annual Transactions and Gross Revenue				
		Phase	1&11	1	
Fiscal Year	Annual Transactions (millions)	Annual Gross Revenue (\$millions)	Annual Leakage (\$millions)	Annual Gross Revenue Less Leakage (\$millions)	
2018	2.6	\$1.5	\$0.1	\$1.4	
2019	4.1	\$2.3	\$0.1	\$2.2	
2020	30.2	\$15.5	\$0.8	\$14.7	
2021	35.0	\$18.2	\$0.9	\$17.3	
2022	41.5	\$21.7	\$1.1	\$20.6	
2023	42.5	\$23.0	\$1.2	\$21.8	
2024	45.5	\$25.1	\$1.3	\$23.8	
2025	46.5	\$26.6	\$1.3	\$25.3	
2026	49.6	\$28.7	\$1.4	\$27.3	
2027	51.2	\$30.3	\$1.5	\$28.8	
2028	52.4	\$32.1	\$1.6	\$30.5	
2029	55.3	\$34.5	\$1.7	\$32.8	
2030	56.6	\$36.2	\$1.8	\$34.4	
2031	59.1	\$38.2	\$1.9	\$36.3	
2032	60.6	\$40.3	\$2.0	\$38.3	
2033	62.1	\$42.2	\$2.1	\$40.1	
2034	63.6	\$43.7	\$2.2	\$41.5	
2035	65.0	\$45.5	\$2.3	\$43.2	
2036	66.0	\$47.5	\$2.4	\$45.1	
2037	67.0	\$49.1	\$2.5	\$46.6	
2038	67.8	\$50.5	\$2.5	\$48.0	
2039	68.7	\$52.4	\$2.6	\$49.8	
2040	69.6	\$53.6	\$2.7	\$50.9	
2041	70.0	\$55.0	\$2.8	\$52.2	
2042	70.3	\$56.5	\$2.8	\$53.7	
2043	70.7	\$58.1	\$2.9	\$55.2	
2044	71.1	\$59.6	\$3.0	\$56.6	
2045	71.6	\$60.7	\$3.0	\$57.7	
2046	71.9	\$62.5	\$3.1	\$59.4	
2047	72.3	\$64.1	\$3.2	\$60.9	
2048	72.7	\$65.7	\$3.3	\$62.4	
2049	73.1	\$67.4	\$3.4	\$64.0	
2050	73.5	\$69.0	\$3.5	\$65.5	



Total annual transactions in FY 2050 for Network Sensitivity 1 are forecast to be 39.6 million, 34.9 million, 90.5 million and 73.5 million for the Scenario 1, Scenario 2, Scenario 3 and Scenario 4 toll structures, respectively. Likewise, toll annual gross revenues less leakage for Wekiva Parkway are projected to be \$72.2 million, \$75.5 million, \$68.6 million and \$65.5 million for the Scenario 1, Scenario 2, Scenario 3 and Scenario 4 toll structures, respectively under Network Sensitivity 1.

9.2. Network Sensitivity 2 - Uninterrupted Service Road and Low Land Use

A variation of the Uninterrupted Service Road Network sensitivity was conducted to include the impact of lower than anticipated land use growth in the Orlando area. This network sensitivity includes both an uninterrupted service road facility in east Lake County and the low land use scenario datasets. These two sensitivities by themselves show a negative impact traffic and revenue on the Wekiva Parkway. In the case were it is assumed that the service road is allowed to operate as an uninterrupted facility and the regional land use growth is lower than expected, traffic and revenue along Wekiva Parkway is also negatively impacted. Tables 9-5 through 9-8 show the annual transactions and revenue for the four baseline scenarios for Network Sensitivity 2.

Total annual transactions in FY 2050 for Network Sensitivity 2 are forecast to be 23.5 million, 16.5 million, 59.9 million and 47.8 million for the Scenario 1, Scenario 2, Scenario 3 and Scenario 4 toll structures, respectively. Likewise, toll annual gross revenues less leakage for Wekiva Parkway are projected to be \$46.8 million, \$38.1 million, \$42.5 million and \$41.5 million for the Scenario 1, Scenario 2, Scenario 3 and Scenario 4 toll structures, respectively under Network Sensitivity 2.



	Annual Transactions and Gross Revenue				
		Phase			
Fiscal Year	Annual Transactions (millions)	Annual Gross Revenue (\$millions)	Annual Leakage (\$millions)	Annual Gross Revenue Less Leakage (\$millions)	
2018	2.1	\$1.2	\$0.1	\$1.1	
2019	3.3	\$2.1	\$0.1	\$2.0	
2020	12.0	\$13.3	\$0.7	\$12.6	
2021	14.4	\$16.4	\$0.8	\$15.6	
2022	16.5	\$19.2	\$1.0	\$18.2	
2023	17.0	\$20.5	\$1.0	\$19.5	
2024	17.7	\$21.9	\$1.1	\$20.8	
2025	18.3	\$23.1	\$1.2	\$21.9	
2026	19.0	\$24.7	\$1.2	\$23.5	
2027	19.5	\$25.9	\$1.3	\$24.6	
2028	19.9	\$27.1	\$1.4	\$25.7	
2029	20.2	\$28.0	\$1.4	\$26.6	
2030	20.5	\$29.0	\$1.5	\$27.5	
2031	20.8	\$29.8	\$1.5	\$28.3	
2032	21.0	\$30.8	\$1.5	\$29.3	
2033	21.2	\$31.6	\$1.6	\$30.0	
2034	21.3	\$32.6	\$1.6	\$31.0	
2035	21.5	\$33.6	\$1.7	\$31.9	
2036	21.7	\$34.5	\$1.7	\$32.8	
2037	21.8	\$35.5	\$1.8	\$33.7	
2038	22.0	\$36.3	\$1.8	\$34.5	
2039	22.1	\$37.5	\$1.9	\$35.6	
2040	22.3	\$38.6	\$1.9	\$36.7	
2041	22.4	\$39.5	\$2.0	\$37.5	
2042	22.5	\$40.4	\$2.0	\$38.4	
2043	22.7	\$41.5	\$2.1	\$39.4	
2044	22.8	\$42.7	\$2.1	\$40.6	
2045	22.9	\$43.7	\$2.2	\$41.5	
2046	23.0	\$44.8	\$2.2	\$42.6	
2047	23.1	\$45.9	\$2.3	\$43.6	
2048	23.3	\$47.0	\$2.4	\$44.6	
2049	23.4	\$48.1	\$2.4	\$45.7	
2050	23.5	\$49.3	\$2.5	\$46.8	

Table 9-5 - Network Sensitivity	2. Scenario 1 - Toll Structure	1 with 15 cpm Toll Rate
		i with is thin ton tate



Table 9-6 - Network Sensitivity 2: Scenario 2 - Toll Structure 1 with 18 cpm Toll Rate

	Annual Transactions and Gross Revenue				
	Phase I & II				
Fiscal Year	Annual Transactions (millions)	Annual Gross Revenue (\$millions)	Annual Leakage (\$millions)	Annual Gross Revenue Less Leakage (\$millions)	
2018	1.5	\$1.1	\$0.1	\$1.0	
2019	2.5	\$1.9	\$0.1	\$1.8	
2020	9.3	\$11.5	\$0.6	\$10.9	
2021	11.4	\$14.5	\$0.7	\$13.8	
2022	12.8	\$16.8	\$0.8	\$16.0	
2023	12.9	\$17.4	\$0.9	\$16.5	
2024	13.1	\$18.2	\$0.9	\$17.3	
2025	13.3	\$18.9	\$0.9	\$18.0	
2026	13.5	\$19.8	\$1.0	\$18.8	
2027	13.8	\$20.7	\$1.0	\$19.7	
2028	14.0	\$21.7	\$1.1	\$20.6	
2029	14.3	\$22.8	\$1.1	\$21.7	
2030	14.6	\$23.7	\$1.2	\$22.5	
2031	14.7	\$24.4	\$1.2	\$23.2	
2032	14.9	\$25.0	\$1.3	\$23.7	
2033	15.0	\$25.9	\$1.3	\$24.6	
2034	15.1	\$26.5	\$1.3	\$25.2	
2035	15.2	\$27.3	\$1.4	\$25.9	
2036	15.3	\$28.1	\$1.4	\$26.7	
2037	15.4	\$28.8	\$1.4	\$27.4	
2038	15.5	\$29.6	\$1.5	\$28.1	
2039	15.6	\$30.5	\$1.5	\$29.0	
2040	15.7	\$31.4	\$1.6	\$29.8	
2041	15.8	\$32.2	\$1.6	\$30.6	
2042	15.8	\$32.9	\$1.6	\$31.3	
2043	15.9	\$33.8	\$1.7	\$32.1	
2044	16.0	\$34.7	\$1.7	\$33.0	
2045	16.1	\$35.5	\$1.8	\$33.7	
2046	16.2	\$36.3	\$1.8	\$34.5	
2047	16.2	\$37.2	\$1.9	\$35.3	
2048	16.3	\$38.2	\$1.9	\$36.3	
2049	16.4	\$39.2	\$2.0	\$37.2	
2050	16.5	\$40.1	\$2.0	\$38.1	



Table 9-7 - Network Sensitivity 2: Scenario 3 - Toll Structure 2 with 15 cpm Toll Rate

	Annual Transactions and Gross Revenue				
	Phase I & II				
Fiscal Year	Annual Transactions (millions)	Annual Gross Revenue (\$millions)	Annual Leakage (\$millions)	Annual Gross Revenue Less Leakage (\$millions)	
2018	2.6	\$1.3	\$0.1	\$1.2	
2019	4.1	\$1.9	\$0.1	\$1.8	
2020	28.6	\$12.2	\$0.6	\$11.6	
2021	35.0	\$15.1	\$0.8	\$14.3	
2022	40.3	\$17.7	\$0.9	\$16.8	
2023	41.6	\$18.4	\$0.9	\$17.5	
2024	43.3	\$19.6	\$1.0	\$18.6	
2025	45.1	\$20.8	\$1.0	\$19.8	
2026	47.1	\$21.7	\$1.1	\$20.6	
2027	48.1	\$22.5	\$1.1	\$21.4	
2028	48.1	\$23.4	\$1.2	\$22.2	
2029	49.0	\$23.8	\$1.2	\$22.6	
2030	49.2	\$24.3	\$1.2	\$23.1	
2031	49.7	\$25.1	\$1.3	\$23.8	
2032	50.2	\$25.9	\$1.3	\$24.6	
2033	50.9	\$26.7	\$1.3	\$25.4	
2034	51.6	\$27.9	\$1.4	\$26.5	
2035	52.6	\$28.9	\$1.4	\$27.5	
2036	53.4	\$30.1	\$1.5	\$28.6	
2037	54.2	\$31.4	\$1.6	\$29.8	
2038	55.0	\$32.4	\$1.6	\$30.8	
2039	55.7	\$33.6	\$1.7	\$31.9	
2040	56.5	\$34.5	\$1.7	\$32.8	
2041	56.8	\$35.7	\$1.8	\$33.9	
2042	57.2	\$36.6	\$1.8	\$34.8	
2043	57.5	\$37.3	\$1.9	\$35.4	
2044	57.8	\$38.4	\$1.9	\$36.5	
2045	58.2	\$39.2	\$2.0	\$37.2	
2046	58.5	\$40.4	\$2.0	\$38.4	
2047	58.8	\$41.5	\$2.1	\$39.4	
2048	59.1	\$42.6	\$2.1	\$40.5	
2049	59.6	\$43.4	\$2.2	\$41.2	
2050	59.9	\$44.7	\$2.2	\$42.5	



Table 9-8 - Network Sensitivity 2: Scenario 4 - Toll Structure 2 with 18 cpm Toll Rate

	Annual Transactions and Gross Revenue				
	Phase I & II				
Fiscal Year	Annual Transactions (millions)	Annual Gross Revenue (\$millions)	Annual Leakage (\$millions)	Annual Gross Revenue Less Leakage (\$millions)	
2018	2.1	\$1.2	\$0.1	\$1.1	
2019	3.3	\$1.9	\$0.1	\$1.8	
2020	22.8	\$11.3	\$0.6	\$10.7	
2021	27.2	\$13.6	\$0.7	\$12.9	
2022	31.8	\$15.7	\$0.8	\$14.9	
2023	32.0	\$16.7	\$0.8	\$15.9	
2024	33.9	\$17.8	\$0.9	\$16.9	
2025	34.3	\$18.7	\$0.9	\$17.8	
2026	36.3	\$20.1	\$1.0	\$19.1	
2027	37.3	\$20.9	\$1.0	\$19.9	
2028	38.1	\$22.1	\$1.1	\$21.0	
2029	38.9	\$23.0	\$1.2	\$21.8	
2030	39.5	\$24.1	\$1.2	\$22.9	
2031	40.3	\$24.9	\$1.2	\$23.7	
2032	41.0	\$26.1	\$1.3	\$24.8	
2033	41.6	\$27.2	\$1.4	\$25.8	
2034	42.4	\$28.0	\$1.4	\$26.6	
2035	42.9	\$29.1	\$1.5	\$27.6	
2036	43.5	\$30.1	\$1.5	\$28.6	
2037	44.0	\$31.2	\$1.6	\$29.6	
2038	44.4	\$32.1	\$1.6	\$30.5	
2039	44.8	\$33.0	\$1.7	\$31.3	
2040	45.3	\$34.1	\$1.7	\$32.4	
2041	45.6	\$35.0	\$1.8	\$33.2	
2042	45.8	\$35.8	\$1.8	\$34.0	
2043	46.0	\$36.9	\$1.8	\$35.1	
2044	46.3	\$37.7	\$1.9	\$35.8	
2045	46.6	\$38.5	\$1.9	\$36.6	
2046	46.8	\$39.6	\$2.0	\$37.6	
2047	47.1	\$40.6	\$2.0	\$38.6	
2048	47.3	\$41.7	\$2.1	\$39.6	
2049	47.6	\$42.7	\$2.1	\$40.6	
2050	47.8	\$43.7	\$2.2	\$41.5	



9.3. Network Sensitivity 3 - US 441 Widening

US 441 is currently a four -lane divided arterial between Apopka in northwest Orange County and Mount Dora in Lake County. The US 441 corridor is the main north-south competing facility with the Wekiva Parkway. With the addition of Wekiva Parkway into the transportation network in northwest Orange County, US 441 is not planned to be widened in the future to a six-lane divided arterial. However, if it was widened to six lanes between Plymouth Sorrento Road (near SR 429) and SR 46, it would result in traffic diverting away from Wekiva Parkway in Orange County and the northwest SR 46 Bypass. The limits of this potential improvement are shown in Figure 9-2.

For this network sensitivity, the baseline conditions remain the same except for the widening of US 441 between Plymouth Sorrento Road in Orange County and SR 46 in Lake County. Tables 9-9 through 9-12 show the annual transactions and revenue for the four scenarios for Network Sensitivity 3.

Total annual transactions in FY 2050 for Network Sensitivity 3 are forecast to be 38.4 million, 30.1 million, 93.7 million and 78.7 million for the Scenario 1, Scenario 2, Scenario 3 and Scenario 4 toll structures, respectively. Likewise, toll annual gross revenues less leakage for Wekiva Parkway are projected to be \$81.1 million, \$75.8 million, \$73.4 million and \$72.9 million for the Scenario 1, Scenario 2, Scenario 3 and Scenario 4 toll structures, respectively under Network Sensitivity 3.

All three network sensitivities resulted in lower traffic and revenue for Wekiva Parkway compared to the Baseline Scenarios. Compared to the Baseline Scenarios, Network Sensitivity 1 results in an decrease in FY 2050 gross revenue for Wekiva Parkway ranging from -13 percent for Scenario 3 to -17 percent for Scenarios 4. Network Sensitivity 2 results in reduced FY 2050 gross revenue ranging from -46 percent for Scenarios 1 and 3 to -56 percent for Scenario 2 compared to the Baseline Scenarios. Similarly, Network Sensitivity 3 results in a decrease in FY 2050 gross revenue ranging from -6 percent for Scenario 1 to -13 percent for Scenario 2 compared to the Baseline Scenarios.



FIGURE 9-2 NETWORK SENSITIVITY - US 441 WIDENING





Table 9-9 - Network Sensitivity 3: Scenario 1 - Toll Structure 1 with 15 cpm Toll Rate

	Annual Transactions and Gross Revenue				
	Phase I & II				
Fiscal Year	Annual Transactions (millions)	Annual Gross Revenue (\$millions)	Annual Leakage (\$millions)	Annual Gross Revenue Less Leakage (\$millions)	
2018	2.5	\$1.5	\$0.1	\$1.4	
2019	4.2	\$2.5	\$0.1	\$2.4	
2020	15.4	\$19.7	\$1.0	\$18.7	
2021	18.9	\$24.6	\$1.2	\$23.4	
2022	21.9	\$28.9	\$1.4	\$27.5	
2023	22.8	\$30.9	\$1.5	\$29.4	
2024	24.0	\$33.0	\$1.7	\$31.3	
2025	25.1	\$35.2	\$1.8	\$33.4	
2026	26.3	\$37.6	\$1.9	\$35.7	
2027	27.6	\$40.3	\$2.0	\$38.3	
2028	28.7	\$42.9	\$2.1	\$40.8	
2029	29.9	\$45.5	\$2.3	\$43.2	
2030	31.0	\$47.8	\$2.4	\$45.4	
2031	32.0	\$50.3	\$2.5	\$47.8	
2032	32.8	\$52.3	\$2.6	\$49.7	
2033	33.5	\$54.0	\$2.7	\$51.3	
2034	34.1	\$55.9	\$2.8	\$53.1	
2035	34.6	\$57.6	\$2.9	\$54.7	
2036	35.0	\$59.4	\$3.0	\$56.4	
2037	35.4	\$61.1	\$3.1	\$58.0	
2038	35.8	\$63.1	\$3.2	\$59.9	
2039	36.1	\$64.7	\$3.2	\$61.5	
2040	36.4	\$66.9	\$3.3	\$63.6	
2041	36.7	\$68.6	\$3.4	\$65.2	
2042	36.9	\$70.1	\$3.5	\$66.6	
2043	37.1	\$72.1	\$3.6	\$68.5	
2044	37.2	\$73.8	\$3.7	\$70.1	
2045	37.4	\$75.5	\$3.8	\$71.7	
2046	37.6	\$77.5	\$3.9	\$73.6	
2047	37.8	\$79.4	\$4.0	\$75.4	
2048	38.0	\$81.4	\$4.1	\$77.3	
2049	38.2	\$83.4	\$4.2	\$79.2	
2050	38.4	\$85.4	\$4.3	\$81.1	



Table 9-10 - Network Sensitivity 3: Scenario 2 - Toll Structure 1 with 18 cpm Toll Rate

	Annual Transactions and Gross Revenue				
	Phase I & II				
Fiscal Year	Annual Transactions (millions)	Annual Gross Revenue (\$millions)	Annual Leakage (\$millions)	Annual Gross Revenue Less Leakage (\$millions)	
2018	2.0	\$1.5	\$0.1	\$1.4	
2019	3.3	\$2.3	\$0.1	\$2.2	
2020	12.9	\$19.5	\$1.0	\$18.5	
2021	15.7	\$24.0	\$1.2	\$22.8	
2022	18.2	\$28.3	\$1.4	\$26.9	
2023	18.9	\$30.1	\$1.5	\$28.6	
2024	19.6	\$32.0	\$1.6	\$30.4	
2025	20.5	\$33.9	\$1.7	\$32.2	
2026	21.3	\$35.9	\$1.8	\$34.1	
2027	22.1	\$37.8	\$1.9	\$35.9	
2028	22.8	\$40.3	\$2.0	\$38.3	
2029	23.7	\$42.5	\$2.1	\$40.4	
2030	24.4	\$44.5	\$2.2	\$42.3	
2031	25.0	\$46.3	\$2.3	\$44.0	
2032	25.5	\$48.2	\$2.4	\$45.8	
2033	26.2	\$50.2	\$2.5	\$47.7	
2034	26.8	\$52.2	\$2.6	\$49.6	
2035	27.2	\$53.8	\$2.7	\$51.1	
2036	27.5	\$55.5	\$2.8	\$52.7	
2037	27.8	\$57.2	\$2.9	\$54.3	
2038	28.1	\$58.9	\$2.9	\$56.0	
2039	28.3	\$60.6	\$3.0	\$57.6	
2040	28.6	\$62.3	\$3.1	\$59.2	
2041	28.7	\$63.9	\$3.2	\$60.7	
2042	28.9	\$65.4	\$3.3	\$62.1	
2043	29.0	\$67.2	\$3.4	\$63.8	
2044	29.2	\$68.8	\$3.4	\$65.4	
2045	29.3	\$70.5	\$3.5	\$67.0	
2046	29.5	\$72.2	\$3.6	\$68.6	
2047	29.6	\$74.2	\$3.7	\$70.5	
2048	29.8	\$75.9	\$3.8	\$72.1	
2049	29.9	\$77.9	\$3.9	\$74.0	
2050	30.1	\$79.8	\$4.0	\$75.8	



Table 9-11 - Network Sensitivity 3: Scenario 3 - Toll Structure 2 with 15 cpm Toll Rate

	Annual Transactions and Gross Revenue				
	Phase I & II				
Fiscal Year	Annual Transactions (millions)	Annual Gross Revenue (\$millions)	Annual Leakage (\$millions)	Annual Gross Revenue Less Leakage (\$millions)	
2018	3.1	\$1.4	\$0.1	\$1.3	
2019	5.0	\$2.3	\$0.1	\$2.2	
2020	39.8	\$18.1	\$0.9	\$17.2	
2021	49.2	\$22.5	\$1.1	\$21.4	
2022	56.2	\$26.7	\$1.3	\$25.4	
2023	58.8	\$28.2	\$1.4	\$26.8	
2024	60.8	\$29.8	\$1.5	\$28.3	
2025	63.7	\$31.8	\$1.6	\$30.2	
2026	66.0	\$33.6	\$1.7	\$31.9	
2027	69.6	\$35.6	\$1.8	\$33.8	
2028	70.8	\$37.7	\$1.9	\$35.8	
2029	74.5	\$39.9	\$2.0	\$37.9	
2030	75.2	\$41.5	\$2.1	\$39.4	
2031	77.3	\$43.4	\$2.2	\$41.2	
2032	78.6	\$45.2	\$2.3	\$42.9	
2033	80.4	\$47.2	\$2.4	\$44.8	
2034	81.2	\$49.1	\$2.5	\$46.6	
2035	82.7	\$50.7	\$2.5	\$48.2	
2036	83.8	\$52.8	\$2.6	\$50.2	
2037	85.2	\$54.7	\$2.7	\$52.0	
2038	86.3	\$56.3	\$2.8	\$53.5	
2039	87.3	\$58.2	\$2.9	\$55.3	
2040	88.5	\$60.0	\$3.0	\$57.0	
2041	89.0	\$61.6	\$3.1	\$58.5	
2042	89.6	\$63.0	\$3.2	\$59.8	
2043	90.1	\$64.6	\$3.2	\$61.4	
2044	90.5	\$66.4	\$3.3	\$63.1	
2045	91.2	\$68.1	\$3.4	\$64.7	
2046	91.6	\$69.6	\$3.5	\$66.1	
2047	92.1	\$71.7	\$3.6	\$68.1	
2048	92.6	\$73.5	\$3.7	\$69.8	
2049	93.2	\$75.2	\$3.8	\$71.4	
2050	93.7	\$77.3	\$3.9	\$73.4	



Table 9-12 - Network Sensitivity 3: Scenario 4 - Toll Structure 2 with 18 cpm Toll Rate

	Annual Transactions and Gross Revenue				
	Phase I & II				
Fiscal Year	Annual Transactions (millions)	Annual Gross Revenue (\$millions)	Annual Leakage (\$millions)	Annual Gross Revenue Less Leakage (\$millions)	
2018	2.4	\$1.3	\$0.1	\$1.2	
2019	3.9	\$2.2	\$0.1	\$2.1	
2020	34.1	\$18.4	\$0.9	\$17.5	
2021	41.1	\$22.9	\$1.1	\$21.8	
2022	48.5	\$26.9	\$1.3	\$25.6	
2023	50.2	\$28.9	\$1.4	\$27.5	
2024	53.3	\$31.2	\$1.6	\$29.6	
2025	55.2	\$33.1	\$1.7	\$31.4	
2026	58.7	\$35.8	\$1.8	\$34.0	
2027	60.2	\$37.7	\$1.9	\$35.8	
2028	61.0	\$39.3	\$2.0	\$37.3	
2029	63.8	\$41.2	\$2.1	\$39.1	
2030	64.4	\$42.8	\$2.1	\$40.7	
2031	66.2	\$44.6	\$2.2	\$42.4	
2032	66.9	\$46.3	\$2.3	\$44.0	
2033	67.7	\$47.8	\$2.4	\$45.4	
2034	69.0	\$49.3	\$2.5	\$46.8	
2035	69.8	\$51.0	\$2.6	\$48.4	
2036	70.7	\$52.9	\$2.6	\$50.3	
2037	71.7	\$54.4	\$2.7	\$51.7	
2038	72.7	\$56.3	\$2.8	\$53.5	
2039	73.6	\$58.1	\$2.9	\$55.2	
2040	74.6	\$59.6	\$3.0	\$56.6	
2041	75.0	\$61.3	\$3.1	\$58.2	
2042	75.4	\$62.6	\$3.1	\$59.5	
2043	75.8	\$64.5	\$3.2	\$61.3	
2044	76.1	\$66.1	\$3.3	\$62.8	
2045	76.7	\$67.6	\$3.4	\$64.2	
2046	77.1	\$69.4	\$3.5	\$65.9	
2047	77.5	\$71.3	\$3.6	\$67.7	
2048	77.9	\$73.2	\$3.7	\$69.5	
2049	78.3	\$74.9	\$3.7	\$71.2	
2050	78.7	\$76.7	\$3.8	\$72.9	



9.4. Network Sensitivity Summary

Network sensitivities were also evaluated to identify the revenue impact to the Wekiva Parkway if roadway improvements were made to competing facilities that are not currently under consideration by the local agencies and are not in any long range transportation plan. The three network sensitivities analyzed were:

- Network Sensitivity 1 Uninterrupted Service Road
- Network Sensitivity 2 Uninterrupted Service Road with Low Land Use
- Network Sensitivity 3 Six Lane Widening of US 441

These network sensitivities were chosen because these facilities are the main competing facilities for critical segments of Wekiva Parkway. The Service Road competes as a non-tolled facility alongside the Wekiva Parkway in east Lake County and US 441 competes as a high-speed, high capacity arterial in northwest Orange County. The gross revenue less leakage for the three network sensitivities are shown in Table 9-13. All three network sensitivities were analyzed under the four baseline conditions. Under Network Sensitivity 1, FY 2050 gross revenues less leakage ranged between \$65.5 million and \$75.5 million. FY 2050 gross revenues less leakage for Network Sensitivity 2 was between \$38.1 million and \$46.8 million. Network Sensitivity 3 resulted in gross revenue less leakage in FY 2050 from \$72.9 million to \$81.1 million.


	Annual Gross Revenue Less Leakage (\$millions)											
Fiscal	Network Se	ensitivity 1 - U	Ininterrupted	Service Rd	Network Sen	sitivity 2 - Ur	ninterrupted S	Service Rd &	Netwo	rk Sensitivity	3 - Widened	US 441
Year					Low Land Use							
	Phase I & II				Phase I & II			Phase I & II				
	Scenario 1	Scenario 2	Scenario 3	Scenario 4	Scenario 1	Scenario 2	Scenario 3	Scenario 4	Scenario 1	Scenario 2	Scenario 3	Scenario 4
2018	\$1.5	\$1.4	\$1.5	\$1.4	\$1.1	\$1.0	\$1.2	\$1.1	\$1.4	\$1.4	\$1.3	\$1.2
2019	\$2.6	\$2.3	\$2.6	\$2.2	\$2.0	\$1.8	\$1.8	\$1.8	\$2.4	\$2.2	\$2.2	\$2.1
2020	\$15.4	\$14.3	\$15.8	\$14.7	\$12.6	\$10.9	\$11.6	\$10.7	\$18.7	\$18.5	\$17.2	\$17.5
2021	\$19.5	\$18.0	\$17.4	\$17.3	\$15.6	\$13.8	\$14.3	\$12.9	\$23.4	\$22.8	\$21.4	\$21.8
2022	\$23.4	\$21.8	\$20.8	\$20.6	\$18.2	\$16.0	\$16.8	\$14.9	\$27.5	\$26.9	\$25.4	\$25.6
2023	\$25.2	\$23.6	\$22.4	\$21.8	\$19.5	\$16.5	\$17.5	\$15.9	\$29.4	\$28.6	\$26.8	\$27.5
2024	\$27.3	\$25.5	\$24.4	\$23.8	\$20.8	\$17.3	\$18.6	\$16.9	\$31.3	\$30.4	\$28.3	\$29.6
2025	\$29.4	\$27.8	\$26.5	\$25.3	\$21.9	\$18.0	\$19.8	\$17.8	\$33.4	\$32.2	\$30.2	\$31.4
2026	\$31.7	\$30.2	\$28.4	\$27.3	\$23.5	\$18.8	\$20.6	\$19.1	\$35.7	\$34.1	\$31.9	\$34.0
2027	\$33.7	\$32.6	\$30.1	\$28.8	\$24.6	\$19.7	\$21.4	\$19.9	\$38.3	\$35.9	\$33.8	\$35.8
2028	\$36.0	\$35.5	\$31.8	\$30.5	\$25.7	\$20.6	\$22.2	\$21.0	\$40.8	\$38.3	\$35.8	\$37.3
2029	\$38.1	\$38.4	\$33.9	\$32.8	\$26.6	\$21.7	\$22.6	\$21.8	\$43.2	\$40.4	\$37.9	\$39.1
2030	\$40.3	\$41.1	\$35.3	\$34.4	\$27.5	\$22.5	\$23.1	\$22.9	\$45.4	\$42.3	\$39.4	\$40.7
2031	\$42.1	\$43.3	\$37.2	\$36.3	\$28.3	\$23.2	\$23.8	\$23.7	\$47.8	\$44.0	\$41.2	\$42.4
2032	\$43.9	\$45.1	\$39.2	\$38.3	\$29.3	\$23.7	\$24.6	\$24.8	\$49.7	\$45.8	\$42.9	\$44.0
2033	\$45.5	\$47.2	\$41.0	\$40.1	\$30.0	\$24.6	\$25.4	\$25.8	\$51.3	\$47.7	\$44.8	\$45.4
2034	\$47.1	\$49.1	\$42.7	\$41.5	\$31.0	\$25.2	\$26.5	\$26.6	\$53.1	\$49.6	\$46.6	\$46.8
2035	\$48.6	\$50.9	\$44.6	\$43.2	\$31.9	\$25.9	\$27.5	\$27.6	\$54.7	\$51.1	\$48.2	\$48.4
2036	\$50.2	\$52.7	\$46.5	\$45.1	\$32.8	\$26.7	\$28.6	\$28.6	\$56.4	\$52.7	\$50.2	\$50.3
2037	\$51.6	\$54.2	\$48.4	\$46.6	\$33.7	\$27.4	\$29.8	\$29.6	\$58.0	\$54.3	\$52.0	\$51.7
2038	\$53.2	\$55.9	\$50.0	\$48.0	\$34.5	\$28.1	\$30.8	\$30.5	\$59.9	\$56.0	\$53.5	\$53.5
2039	\$54.6	\$57.3	\$51.8	\$49.8	\$35.6	\$29.0	\$31.9	\$31.3	\$61.5	\$57.6	\$55.3	\$55.2
2040	\$56.3	\$59.0	\$53.4	\$50.9	\$36.7	\$29.8	\$32.8	\$32.4	\$63.6	\$59.2	\$57.0	\$56.6
2041	\$57.6	\$60.5	\$54.8	\$52.2	\$37.5	\$30.6	\$33.9	\$33.2	\$65.2	\$60.7	\$58.5	\$58.2
2042	\$59.0	\$62.0	\$56.0	\$53.7	\$38.4	\$31.3	\$34.8	\$34.0	\$66.6	\$62.1	\$59.8	\$59.5
2043	\$60.8	\$63.5	\$57.5	\$55.2	\$39.4	\$32.1	\$35.4	\$35.1	\$68.5	\$63.8	\$61.4	\$61.3
2044	\$62.1	\$65.1	\$59.2	\$56.6	\$40.6	\$33.0	\$36.5	\$35.8	\$70.1	\$65.4	\$63.1	\$62.8
2045	\$63.6	\$66.7	\$60.6	\$57.7	\$41.5	\$33.7	\$37.2	\$36.6	\$71.7	\$67.0	\$64.7	\$64.2
2046	\$65.3	\$68.5	\$61.9	\$59.4	\$42.6	\$34.5	\$38.4	\$37.6	\$73.6	\$68.6	\$66.1	\$65.9
2047	\$66.9	\$70.3	\$63.8	\$60.9	\$43.6	\$35.3	\$39.4	\$38.6	\$75.4	\$70.5	\$68.1	\$67.7
2048	\$68.7	\$72.0	\$65.5	\$62.4	\$44.6	\$36.3	\$40.5	\$39.6	\$77.3	\$72.1	\$69.8	\$69.5
2049	\$70.1	\$73.7	\$66.8	\$64.0	\$45.7	\$37.2	\$41.2	\$40.6	\$79.2	\$74.0	\$71.4	\$71.2
2050	\$72.2	\$75.5	\$68.6	\$65.5	\$46.8	\$38.1	\$42.5	\$41.5	\$81.1	\$75.8	\$73.4	\$72.9

Table 9-13 - Network Sensitivity Summary - Gross Revenue Less Leakage

*Traffic and revenue for FY 2018 - FY 2021 include a reduction for ramp-up.



10.E-PASS Discount

If the Wekiva Parkway is owned, operated and maintained solely by the Authority, the Authority's E-PASS discount policy would also apply to its revenues. The Authority's E-PASS discount policy provides a 5 percent discount on monthly tolls to customers with 40 or more toll transactions at Authority toll plazas during a month. A 10 percent discount is given to customers with 80 or more toll transactions at Authority toll plazas during toll plazas during one month.

Tables 10-1, 10-2, 10-3 and 10-4 show the gross revenue for Wekiva Parkway less leakage and the E-PASS discount for the four baseline scenarios, respectively. The FY 2050 Wekiva Parkway gross revenue less leakage and the E-PASS discount is forecast to be \$82.7 million, \$83.2 million, \$75.1 million and \$75.4 million for the Baseline Scenario 1, Baseline Scenario 2, Baseline Scenario 3 and Baseline Scenario 4, respectively. Table 10-5 shows a comparison of the Wekiva Parkway gross revenue forecast less leakage and E-PASS discount for each of the four Baseline Scenarios.



Table 10-1 - Baseline Scenario 1 - Wekiva Parkway Gross Revenue Less E-PASS Discount

	Annual Revenue (\$millions)				
Fiscal	Wekiva	Wekiva	Wekiva Parkway		
Voor	Parkway	Parkway	Gross Revenue		
real	Gross Revenue	E-PASS	Less Leakage &		
	Less Leakage	Discount	E-PASS Discount		
2018	\$1.5	\$0.1	\$1.4		
2019	\$2.6	\$0.1	\$2.5		
2020	\$19.7	\$0.9	\$18.8		
2021	\$24.5	\$1.1	\$23.4		
2022	\$28.9	\$1.3	\$27.6		
2023	\$31.0	\$1.4	\$29.6		
2024	\$33.3	\$1.5	\$31.8		
2025	\$35.6	\$1.6	\$34.0		
2026	\$38.4	\$1.7	\$36.7		
2027	\$41.1	\$1.8	\$39.3		
2028	\$43.8	\$2.0	\$41.8		
2029	\$46.1	\$2.1	\$44.0		
2030	\$48.5	\$2.2	\$46.3		
2031	\$50.7	\$2.3	\$48.4		
2032	\$52.9	\$2.4	\$50.5		
2033	\$54.6	\$2.5	\$52.1		
2034	\$56.6	\$2.5	\$54.1		
2035	\$58.4	\$2.6	\$55.8		
2036	\$60.2	\$2.7	\$57.5		
2037	\$62.0	\$2.8	\$59.2		
2038	\$63.8	\$2.9	\$60.9		
2039	\$65.7	\$3.0	\$62.7		
2040	\$67.6	\$3.0	\$64.6		
2041	\$69.3	\$3.1	\$66.2		
2042	\$71.1	\$3.2	\$67.9		
2043	\$73.1	\$3.3	\$69.8		
2044	\$74.8	\$3.4	\$71.4		
2045	\$76.5	\$3.4	\$73.1		
2046	\$78.6	\$3.5	\$75.1		
2047	\$80.6	\$3.6	\$77.0		
2048	\$82.5	\$3.7	\$78.8		
2049	\$84.5	\$3.8	\$80.7		
2050	\$86.6	\$3.9	\$82.7		

*Traffic and revenue for FY 2018 - FY 2021 include a reduction for ramp-up.



Table 10-2 - Baseline Scenario 2 - Wekiva Parkway Gross Revenue Less E-PASS Discount

	Annual Revenue (\$millions)					
Figen	Wekiva	Wekiva	Wekiva Parkway			
Voor	Parkway	Parkway	Gross Revenue			
real	Gross Revenue	E-PASS	Less Leakage &			
	Less Leakage	Discount	E-PASS Discount			
2018	\$1.4	\$0.1	\$1.3			
2019	\$2.3	\$0.1	\$2.2			
2020	\$19.5	\$0.9	\$18.6			
2021	\$24.5	\$1.1	\$23.4			
2022	\$29.2	\$1.3	\$27.9			
2023	\$31.7	\$1.4	\$30.3			
2024	\$34.4	\$1.5	\$32.9			
2025	\$37.7	\$1.7	\$36.0			
2026	\$41.2	\$1.9	\$39.3			
2027	\$43.3	\$1.9	\$41.4			
2028	\$46.0	\$2.1	\$43.9			
2029	\$47.6	\$2.1	\$45.5			
2030	\$49.5	\$2.2	\$47.3			
2031	\$51.4	\$2.3	\$49.1			
2032	\$53.3	\$2.4	\$50.9			
2033	\$55.2	\$2.5	\$52.7			
2034	\$57.0	\$2.6	\$54.4			
2035	\$58.7	\$2.6	\$56.1			
2036	\$60.7	\$2.7	\$58.0			
2037	\$62.4	\$2.8	\$59.6			
2038	\$64.3	\$2.9	\$61.4			
2039	\$66.0	\$3.0	\$63.0			
2040	\$68.1	\$3.1	\$65.0			
2041	\$69.8	\$3.1	\$66.7			
2042	\$71.5	\$3.2	\$68.3			
2043	\$73.1	\$3.3	\$69.8			
2044	\$75.0	\$3.4	\$71.6			
2045	\$76.9	\$3.5	\$73.4			
2046	\$79.0	\$3.6	\$75.4			
2047	\$80.9	\$3.6	\$77.3			
2048	\$83.0	\$3.7	\$79.3			
2049	\$85.0	\$3.8	\$81.2			
2050	\$87.1	\$3.9	\$83.2			

 $\ast Traffic$ and revenue for FY 2018 - FY 2021 include a reduction for ramp-up.



Table 10-3 - Baseline Scenario 3 - Wekiva Parkway Gross Revenue Less E-PASS Discount

	Ann	iual Revenue (\$m	nillions)			
Fiend	Wekiva	Wekiva	Wekiva Parkway			
Voor	Parkway	Parkway	Gross Revenue			
rear	Gross Revenue	E-PASS	Less Leakage &			
	Less Leakage	Discount	E-PASS Discount			
2018	\$1.5	\$0.1	\$1.4			
2019	\$2.6	\$0.1	\$2.5			
2020	\$18.4	\$0.8	\$17.6			
2021	\$22.2	\$1.0	\$21.2			
2022	\$26.5	\$1.2	\$25.3			
2023	\$28.3	\$1.3	\$27.0			
2024	\$30.8	\$1.4	\$29.4			
2025	\$32.9	\$1.5	\$31.4			
2026	\$35.4	\$1.6	\$33.8			
2027	\$37.2	\$1.7	\$35.5			
2028	\$39.2	\$1.8	\$37.4			
2029	\$40.7	\$1.8	\$38.9			
2030	\$42.4	\$1.9	\$40.5			
2031	\$44.2	\$2.0	\$42.2			
2032	\$45.9	\$2.1	\$43.8			
2033	\$47.9	\$2.2	\$45.7			
2034	\$49.9	\$2.2	\$47.7			
2035	\$51.6	\$2.3	\$49.3			
2036	\$53.7	\$2.4	\$51.3			
2037	\$55.8	\$2.5	\$53.3			
2038	\$57.5	\$2.6	\$54.9			
2039	\$59.4	\$2.7	\$56.7			
2040	\$61.0	\$2.7	\$58.3			
2041	\$62.9	\$2.8	\$60.1			
2042	\$64.3	\$2.9	\$61.4			
2043	\$65.9	\$3.0	\$62.9			
2044	\$67.9	\$3.1	\$64.8			
2045	\$69.2	\$3.1	\$66.1			
2046	\$71.2	\$3.2	\$68.0			
2047	\$73.2	\$3.3	\$69.9			
2048	\$75.0	\$3.4	\$71.6			
2049	\$76.7	\$3.5	\$73.2			
2050	\$78.6	\$3.5	\$75.1			

*Traffic and revenue for FY 2018 - FY 2021 include a reduction for ramp-up.



Table 10-4 - Baseline Scenario 4 - Wekiva Parkway Gross Revenue Less E-PASS Discount

	Annual Revenue (\$millions)					
Fiscal	Wekiva	Wekiva	Wekiva Parkway			
r iscai Voor	Parkway	Parkway	Gross Revenue			
rear	Gross Revenue	E-PASS	Less Leakage & E-			
	Less Leakage	Discount	PASS Discount			
2018	\$1.4	\$0.1	\$1.3			
2019	\$2.2	\$0.1	\$2.1			
2020	\$17.6	\$0.8	\$16.8			
2021	\$22.0	\$1.0	\$21.0			
2022	\$25.8	\$1.2	\$24.6			
2023	\$27.5	\$1.2	\$26.3			
2024	\$29.5	\$1.3	\$28.2			
2025	\$31.3	\$1.4	\$29.9			
2026	\$33.8	\$1.5	\$32.3			
2027	\$36.1	\$1.6	\$34.5			
2028	\$38.3	\$1.7	\$36.6			
2029	\$40.3	\$1.8	\$38.5			
2030	\$42.3	\$1.9	\$40.4			
2031	\$44.0	\$2.0	\$42.0			
2032	\$46.3	\$2.1	\$44.2			
2033	\$48.3	\$2.2	\$46.1			
2034	\$50.0	\$2.3	\$47.7			
2035	\$52.0	\$2.3	\$49.7			
2036	\$54.1	\$2.4	\$51.7			
2037	\$55.9	\$2.5	\$53.4			
2038	\$57.8	\$2.6	\$55.2			
2039	\$59.8	\$2.7	\$57.1			
2040	\$61.4	\$2.8	\$58.6			
2041	\$63.0	\$2.8	\$60.2			
2042	\$64.4	\$2.9	\$61.5			
2043	\$66.2	\$3.0	\$63.2			
2044	\$68.0	\$3.1	\$64.9			
2045	\$69.6	\$3.1	\$66.5			
2046	\$71.2	\$3.2	\$68.0			
2047	\$73.2	\$3.3	\$69.9			
2048	\$75.1	\$3.4	\$71.7			
2049	\$76.9	\$3.5	\$73.4			
2050	\$79.0	\$3.6	\$75.4			

*Traffic and revenue for FY 2018 - FY 2021 include a reduction for ramp-up.



11. Elasticity

The toll elasticity of a project refers to the sensitivity of traffic to an increase in tolls and is measured by the ratio of the change in tolls to the change in traffic. Demand is generally considered elastic when this ratio is over a value of 1 and inelastic if the ratio is less than 1.

The elasticity of Wekiva Parkway traffic and revenue to a variety of toll rates was analyzed as part of this study. In general, as toll rates increase, traffic along a toll facility decreases as it becomes less attractive to some users. However, the traffic and revenue elasticity for Wekiva Parkway is also affected by many other factors. These factors include a user's value of time, the availability of alternative competing routes for the specific trip being made, the types of trips being made, the length of the individual trip and the magnitude of the toll rate.

The orientation and alignment of the Wekiva Parkway allows it to offer two distinct travel movements to connect to the other primary regional facilities. Users can use Wekiva Parkway to travel east-west between Lake and Seminole Counties or to travel north-south between Lake and Orange Counties. This orientation and alignment of the facility also impacts the traffic and revenue elasticity of Wekiva Parkway. Because there is not just one toll plaza, when tolls increase users can enter and exit the facility at different points to change their trip routing to use fewer toll plazas which will result in a lower toll and a shorter tolled distance. A decrease in usage at one plaza because of the increase in tolls could potentially result in more trips through another plaza if that redirected route results in a trip with a lower cost.

Table 11-1 shows the 2030 elasticities calculated using the model results at the Orange and east Lake mainline gantries for all toll structures for each of the baseline scenarios. The elasticities are calculated using the model in which the results with the 2030 toll rates reflected on the 2030 network are compared to the results in which the 2025 toll rates are reflected on the 2030 network. As shown, the resulting elasticities range from a low of -0.61 for Baseline Scenario 2 (Toll structure 1; \$0.18 per mile opening toll) at the east Lake mainline gantry, to a high of -1.99 for Baseline Scenario 2 at the Orange mainline gantry. These results indicate that potential users of this section of the Wekiva Parkway are sensitive to higher tolls and that the competing routes for the Orange mainline are able to provide a good alternative.



				Percent	Tra	ffic	Percent	
				Toll			Traffic	
Scenario	Plaza	Toll Before	Toll After	Change	Before	After	Change	Elasticity
Baseline Scenario	E Lake	\$2.63	\$2.91	11%	38,963	35,418	-9%	-0.85
1	Orange	\$0.84	\$0.93	11%	34,284	30,597	-11%	-1.00
Baseline Scenario	E Lake	\$3.16	\$3.49	10%	33,564	31,425	-6%	-0.61
2	Orange	\$1.01	\$1.11	10%	28,981	23,263	-20%	-1.99
Baseline Scenario	E Lake	\$1.13	\$1.25	11%	47,779	41,602	-13%	-1.22
3	Orange	\$0.65	\$0.72	11%	31,604	27,314	-14%	-1.26
Baseline Scenario	E Lake	\$1.36	\$1.50	10%	37,973	34,146	-10%	-0.98
4	Orange	\$0.78	\$0.86	10%	25,926	23,733	-8%	-0.82

Table 11-1 -Wekiva	Parkway	2030	Elasticities
--------------------	---------	------	--------------

In 2008, tolls increased at twelve of the toll plazas in the OOCEA system. The resulting elasticities as calculated from the traffic data before and after the toll increase showed elasticities at the individual toll plazas that ranged from a low of -0.08 to a high of -0.57. The modeled elasticities for Wekiva Parkway that were used in the traffic and revenue forecast indicate demand on the Wekiva Parkway is more elastic; the potential users are more sensitive to toll increases than users of the existing OOCEA system.

The following figures show the unadjusted 2030 model daily traffic volume versus the annual revenue for the Orange mainline gantry location, east Lake mainline gantry location and for the Wekiva Parkway in its entirety for three opening year base toll rates. These figures have been prepared for both baseline toll structures, Toll Structure 1 and Toll Structure 2. Three toll rates were analyzed at 15, 18 and 20 cents per mile. The Toll Structure 1 traffic and revenue elasticity is shown in Figures 11-1 and 11-2 for the Orange mainline gantry for both Toll Structure 2, respectively. Likewise, Figures 11-3 and 11-4 show the traffic and revenue sensitivity for the East Lake mainline gantry under Toll Structure 1 and Toll Structure 2, respectively. Finally, the total Wekiva Parkway traffic and revenue sensitivity is shown in Figures 11-6, respectively.

Under Toll Structure 1, the east Lake mainline location has its highest revenue at the highest toll rate while the Orange mainline results show lower revenues at higher toll rates. Under Toll Structure 2, the trend is reversed: the Orange mainline location has its highest revenue at the highest toll rates and the east Lake mainline has its lowest revenues at the highest toll rates. While this may seem illogical, this results from the differences in the two toll structures and from trips being rerouted through the study area and particularly on the Wekiva Parkway itself. As shown by the total project revenues shown in Figures 11-5 and 11-6, individual toll plaza elasticities caused the rerouting of trips which resulted in total Wekiva Parkway revenues for the 15 and 18 cent per mile toll rates that were very similar.





Figure 11-1 - Toll Structure 1 - Orange ML Modeled Toll Curve

Figure 11-2 - Toll Structure 2 - Orange ML Modeled Toll Curve





Figure 11-3 - Toll Structure 1 - East Lake ML Modeled Toll Curve



Figure 11-4 - Toll Structure 2 - East Lake ML Modeled Toll Curve





Figure 11-5 - Toll Structure 1 - Total Wekiva Parkway Modeled Toll Curve









12. Disclaimers

12.1. Revenue Forecast Assumptions

The revenue estimates projected herein were based on the following assumptions:

- Future toll increases on the Authority's system have been assumed for this forecast to be consistent with those approved by the Authority's Board in February 2009. As approved, future year toll increases beginning in FY 2013, and every five years thereafter, will be indexed to the higher of the actual consumer price index or three percent per year over the period. Future cash tolls will be rounded to the nearest quarter and future electronic tolls will be rounded up to the next penny.
- Future toll increases on the FTE system assumed as part of this forecast will be implemented beginning in 2012.
- The existing standards of operation and maintenance on all of the system will be maintained and financial arrangements will be the same.
- The general configuration and location of Wekiva Parkway and its interchanges will remain as discussed in this report.
- Access to and from the Wekiva Parkway will remain as discussed in this report.
- No other competing highway projects, tolled or non-tolled, are assumed to be constructed or significantly improved in the project corridor area during the forecast period except those identified in this report.
- Major highway improvements that are currently underway or fully funded will be completed as planned.
- The Authority's system will continue to be well maintained, efficiently operated, and effectively signed to encourage maximum usage.
- No reduced growth initiatives or related controls that would significantly inhibit normal development patterns will be introduced during the forecast period.
- Future population and employment projections for the Central Florida region will not decrease significantly from those assumed in this forecast.
- International and domestic tourist activity in the Central Florida region will not decrease significantly from current levels (February 2012).
- The average rate of inflation will be 2.0 percent.
- The forecast reflects the current consensus opinion by leading economists that the economy will continue to slowly improve through 2012, with unemployment recovery lagging improvements in other economic indicators.
- Regional traffic will continue to increase compared to the previous year in the remainder of FY 2012.



- There will be no future serious protracted recession during the forecast period.
- There will be no protracted fuel shortage during the forecast period.
- The average cost of owning and operating a personal vehicle will not increase at a rate greater than the general rate of inflation. Regular gas prices will remain stable and increases in fuel prices over time will roughly match driver's perception of inflation.
- No local, regional or national emergency will arise that would abnormally restrict travel or the use of motor vehicles.



13. Conclusions

The Wekiva Parkway project is a significant regional expressway in the Orlando area connecting northwest Orange, east Lake and west Seminole Counties. As the completion of the last segment of the Orlando beltway system, Wekiva Parkway will provide a critical link for mobility around the Central Florida region. A notable feature of Wekiva Parkway is that the project's configuration and access locations meet the anticipated future traffic demand in an environmentally sensitive and compatible manner. In addition, the Wekiva Parkway project addresses existing capacity and safety issues along both the north-south US 441 and eastwest SR 46 corridors. Finally, the preferred alternative of the Wekiva Parkway project accomplishes the objectives expressed in State legislation, Executive Orders and public-private committee recommendations.

As a tolled limited access facility, several features of Wekiva Parkway project are important to its future traffic demand and potential revenue. Wekiva Parkway will connect three existing limited access facilities (I-4, SR 417 and SR 429) and continuous movements between these facilities will increase regional mobility. In addition, the Wekiva Parkway study area already has strong north-south and east-west travel patterns. Wekiva Parkway will provide a higher speed and safer facility for these existing travel movements. There are several competing facilities for the north-south movement that may negatively impact revenue along the facility. Likewise, the proposed service road in east Lake County will also be a competing facility to Wekiva Parkway, not because of the type of the facility it is, but due to its proximity to the Wekiva Parkway.

Total gross revenue for Wekiva Parkway was analyzed under four baseline scenarios for toll structures and toll rates. The FY 2050 Wekiva Parkway gross revenue less leakage and the E-PASS discount is forecast to be \$82.7 million, \$83.2 million, \$75.1 million and \$75.4 million for the Baseline Scenario 1, Baseline Scenario 2, Baseline Scenario 3 and Baseline Scenario 4, respectively.

Several sensitivities were also considered to analyze the impact to Wekiva Parkway revenue for variations in the future year land use development, study area roadway improvements and toll policy. Network Sensitivity 2, which considered an uninterrupted service road with low land use resulted in the largest reduction in Wekiva Parkway traffic and revenue when compared to the Baseline Scenarios. Conversely, the High Land Use Scenario resulted in the largest reduction and revenue compared to the Baseline Scenarios.



APPENDICES

Appendix A - Wekiva Expressway 2010 Baseline Analysis and 2015-2050 Socioeconomic Data Forecast Analysis

Appendix B - Value of Time Memo



APPENDIX A

Wekiva Expressway 2010 Baseline Analysis and 2015 – 2050 Socioeconomic Data Forecast Analysis

May 17, 2011

Prepared for

Mr. Josiah Banet, Project Manager HNTB Corporation

Prepared by

Fishkind & Associates, Inc. 12051 Corporate Blvd. Orlando, Florida 32817 407-382-3256

Table of Contents

Section	Title	Page
1.0 Introd	duction	1
	1.1 Background 1.2 Organization	1 1
2.0 2010) Baseline Analysis	2
	 2.1 Population and Dwelling Units. 2.2 Employment. 2.3 Hotels. 2.4 Schools – Student Enrollment. 2.5 Summary. 	
3.0 Fore	cast (2015 – 2050)	13
	 3.1 Population and Dwelling Units. 3.2 Employment. 3.3 Hotels. 3.4 Schools – Student Enrollment. 3.5 Summary. 	
4.0 Fore	cast Sensitivity Analysis (2015 – 2050)	23
	4.1 Methodology.4.2 High Analysis.4.3 Low Analysis.	
APPEND	NX 1: Aerial Map Examples	
APPEND	IX 2: 2010 ZDATA1 and ZDATA2	

- APPENDIX 3: County Zone Maps
- APPENDIX 4: 2015 to 2050 ZDATA1 and ZDATA2

1.0 Introduction

1.1 Background

HNTB Corporation ("Client") is working with the Orlando Orange County Expressway Authority (OOCEA) in creating the traffic and revenue analysis associated with the Wekiva Expressway, a 26-mile limited access road extending from the current northern terminus of SR-429 to I-4 at the current intersection of I-4 and SR-417. The Client has asked Fishkind and Associates, Inc. ("Consultant") to provide the socioeconomic data for the 2010 base year and forecast the pertinent socioeconomic data in 5-year increments from 2015 through 2050 for the following counties by traffic analysis zone (TAZ): Seminole, Orange and Lake.

This report is to be of suitable and appropriate quality to be used for the purposes of securing investment funding. The Consultant is one of Florida's premier economic consultants. The Consultant is Financial Advisor to many special taxing districts throughout the State and maintains detailed economic forecast databases on all of Florida's 67 counties.

1.2 Organization

The report that follows includes four (4) sections. Section 1 includes this Introduction. The second section of the report provides the methodology and discussion in the development of the 2010 baseline socioeconomic dataset. Section 3 provides a detailed discussion regarding the development of the socioeconomic datasets for 2015 through 2050. Lastly, Section 4 provides a sensitivity analysis, providing a high and a low forecast which provides additional socioeconomic datasets which bracket the development potential for the Seminole, Orange and Lake County markets.

The Consultant developed socioeconomic estimates for the following component of the TAZ datasets submitted to the Client for the development of their traffic and revenue study:

- 1. Population and Dwelling Units
 - a. Single Family Dwelling Units and Population
 - b. Multi-Family Dwelling Units and Population
- 2. Employment
 - a. Industrial
 - b. Commercial
 - c. Service
- 3. Hotel/Motel Units (includes Timeshare) and Hotel/Motel occupants
- 4. Student Enrollment



2.0 2010 Baseline Analysis

<u>Methodology</u>

As part of the development of the baseline analysis, the Client provided the TAZ zones via Geographic Information System (GIS) shape files for Seminole, Orange and Lake Counties. The Consultant overlayed and intersected these TAZ shapes with each of the county's GIS parcel shape files. The county shape files for each county are dated as follows:

- Seminole County, dated January 2011
- Orange County, dated January 2011
- Lake County, dated January 2011

This intersection allows the Consultant to identify the Year 2010 landuse attributes associated with each parcel and associated TAZ. With respect to the creation of the 2010 baseline dataset, the Consultant identified dwelling units, non-residential space, and school locations by parcel landuse categories, and other third party data sources (e.g. Florida Department of Business and Professional Regulation (DBPR) for hotels and timeshares and GIS school location data provided by local school districts).

2.1 Population and Dwelling Units

The development of the 2010 baseline population and dwelling unit data for Seminole, Orange and Lake Counties involved the following steps:

- 1. Identify the population control total for each county
- 2. Identify landuse categories for single family, multi-family and mobile home units in each county
- 3. Allocate population via persons per household to each unit taking into account current residential vacancy rates
- 4. Provide summation of dwelling units and population by TAZ

In the case of identifying population control totals for each County, the Consultant used the most recent published data by the U.S. Census as the control total for each county. Table 1 summarizes this data.

2010 Population
422,718
1,145,956
297,052

Table 1. Population Control Totals

Source: 2010 Census



In identifying the landuse categories the Consultant used the following standardized landuse categories when identifying residential units in each of the counties:

- 100 Single Family
- 200 Mobile Home
- 300 Multi-Family 10 units or more
- 400 Condominium
- 800 Multi-Family 10 units or less

In some counties, there are various derivatives of units of these standard units (e.g. 130 – single family lake front). In this case, this unit would be classified as a single family unit and included in the 100, single family unit category.

With respect to allocation of population throughout each county, the Consultant used the up to date data with respect to persons per household for each county and estimates for residential vacancy for each county. Table 2 summarizes the person per household estimates provided by the University of Florida Bureau of Business and Economic Research (UF BEBR) and Table 3 summarizes the residential vacancy estimates provided by the Census' American Community Survey (ACS).

Table 2. Persons Per Household Summary

	PPH (BEBR)			
Orange	2.64			
Seminole	2.58			
Lake	2.35			
Courses LIE DEDD (2000)				

Source: UF BEBR (2009)

	Total Units	Occupied	Vacant	Vacancy Rate
Orange	464,412	388,522	75,890	16.34%

143,543

119,455

31,326

25,949

17.91%

17.85%

Source: Census - ACS (2009)

174,869

145.404

Seminole

Lake

Using this information the Consultant was able to calculate the population in any given unit and then aggregate this data by TAZ. An example of this calculation is as follows:

TAZ Population = SFDUs x (1-Vacancy Rate) X PPH



In providing its estimate of population and dwelling unit by TAZ, the Consultant also took time to review aerial photographs of TAZs in the counties as a way to ground truth the finding via the GIS analysis. Appendix 1 contains some examples of aerial photographs used by the Consultant as a quality control check for the 2010 baseline socioeconomic dwelling unit and population data by TAZ.

Using these steps, the Consultant generated the population and dwelling unit data associated with the 2010 ZDATA1 dataset provided to the Client for traffic modeling purposes. Table 4 provides a summary of the population and dwelling units findings for the three county analysis.

	SFDU	SFPOP	MFDU	MFPOP	TOTDU	TOTPOP
Seminole	127,068	306,108	48,388	116,571	175,456	422,679
Orange	293,260	731,994	166,385	413,954	459,645	1,145,948
Lake	95,040	196,805	48,317	100,244	143,357	297,049

Table 4. Po	pulation an	d Dwelling	Unit S	Summary	(2010))
		• = ·· • ····g			(,

Source: Fishkind and Associates, Inc.

2.2 Employment

The development of the 2010 baseline employment data for Seminole, Orange and Lake Counties involved the following steps:

- 1. Identify the population control total for each county
- 2. Identify landuse categories for industrial, commercial and service employment in each county
- 3. Allocate employment via the estimated non-residential square footage and multipliers with respect to employees per square foot of space
- 4. Provide employment profile by TAZ

The TAZ ZDATA2 set includes the employment data in three categories: industrial, commercial and service. The Consultant used 2011 Woods and Poole Economics data which provided a 2010 employment dataset by category for Seminole, Orange and Lake County. The Consultant made assumptions with respect to which detailed category was associated with the broader description of industrial, commercial and service. Table 5 through Table 7 summarize each County's 2010 employment categories and the effective control totals.

SEMINOLE			Average Monthly
		NAICS	
Year	Industry Title	Code	Employment
2010	Total, All Industries	32	221,620
2010	Farm Employment	33	550
2010	Forestry, Fishing & Other	34	170
2010	Mining	35	230
2010	Utilities	36	1,010
2010	Construction	37	15,230
2010	Manufacturing	38	7,590
2010	Wholesale Trade	39	9,650
2010	Retail Trade	40	27,200
2010	Transportation & Warehousing	41	3,380
2010	Information	42	7,390
2010	Finance & Insurance	43	15,440
2010	Real Estate, Rental and Lease	44	13,980
2010	Professional & Tech Services	45	17,990
2010	Management & Enterprises	46	970
2010	Administration and Waste Services	47	23,300
2010	Educational Services	48	3,100
2010	Health Care & Social Assistance	49	21,360
2010	Arts, Entertainment and Recreation	50	5,270
2010	Accommodation & Food Service	51	15,170
2010	Other Services	52	13,710
2010	Federal Civilian Govt	53	1,700
2010	Federal Military Govt	54	790
2010	State and Local Govt	55	16,440

Table 5. Seminole County Employment (2010)

Source: Woods and Poole Economics (2011)

Seminole	IND	COM	SVC	TOTAL
Emp	61,110	47,640	112,870	221,620
Source: Woods and Poole and Fishkind and Associates, Inc.				

FISHKIND

ORANGE			Average Monthly
		NAICS	
Year	Industry Title	Code	Employment
2010	Total, All Industries	32	803,490
2010	Farm Employment	33	2,840
2010	Forestry, Fishing & Other	34	970
2010	Mining	35	640
2010	Utilities	36	620
2010	Construction	37	34,060
2010	Manufacturing	38	28,450
2010	Wholesale Trade	39	30,240
2010	Retail Trade	40	78,730
2010	Transportation & Warehousing	41	29,320
2010	Information	42	18,640
2010	Finance & Insurance	43	25,780
2010	Real Estate, Rental and Lease	44	37,330
2010	Professional & Tech Services	45	62,890
2010	Management & Enterprises	46	13,560
2010	Administration and Waste Services	47	71,460
2010	Educational Services	48	14,000
2010	Health Care & Social Assistance	49	73,770
2010	Arts, Entertainment and Recreation	50	65,900
2010	Accommodation & Food Service	51	102,150
2010	Other Services	52	40,780
2010	Federal Civilian Govt	53	9,370
2010	Federal Military Govt	54	2,340
2010	State and Local Govt	55	59,670

Table 6. Orange County Employment (2010)

Source: Woods and Poole Economics (2011)

Orange	IND	COM	SVC	TOTAL
Emp	198,600	246,780	358,130	803,510
Source: Weeds and Peole and Fishkind and Associates. Inc.				

Source: Woods and Poole and Fishkind and Associates, Inc.



LAKE			Average Monthly
		NAICS	
Year	Industry Title	Code	Employment
2010	Total, All Industries	32	113,820
2010	Farm Employment	33	2,480
2010	Forestry, Fishing & Other	34	900
2010	Mining	35	280
2010	Utilities	36	230
2010	Construction	37	8,090
2010	Manufacturing	38	3,130
2010	Wholesale Trade	39	2,780
2010	Retail Trade	40	14,430
2010	Transportation & Warehousing	41	3,610
2010	Information	42	1,390
2010	Finance & Insurance	43	4,150
2010	Real Estate, Rental and Lease	44	5,890
2010	Professional & Tech Services	45	5,160
2010	Management & Enterprises	46	220
2010	Administration and Waste Services	47	9,360
2010	Educational Services	48	2,020
2010	Health Care & Social Assistance	49	15,450
2010	Arts, Entertainment and Recreation	50	2,310
2010	Accommodation & Food Service	51	8,550
2010	Other Services	52	8,710
2010	Federal Civilian Govt	53	630
2010	Federal Military Govt	54	570
2010	State and Local Govt	55	13,470

Table 7. Lake County Employment (2010)

Source: Woods and Poole Economics (2011)

Lake	IND	COM	SVC	TOTAL
Emp	30,860	34,000	48,950	113,810
Source: Woods and Poole and Fishkind and Associates Inc				

ds and Poole and Fishkind and Associates, Inc.

The Consultant allocated the employment based on an assessment of the applicable non-residential landuse categories as defined in each county's property appraiser's data. The Consultant aggregated the constructed square footage associated with the applicable non-residential categories associated with the three broad categories as defined in the ZDATA2 set. Table 8 summarizes how the Consultant organized the landuse categories.

The Consultant aggregated the square footage by the categories above and calculated the county-specific employee per square foot. Table 9 summarizes the Consultant's findings.

	Industrial		Commercial		Service
Code	Description	Code	Description	Code	Description
4100	Light Manufacturing	1100	Stores - one story	1700	Office Bldg - one story
4200	Heavy Industrial	1200	Mixed Use	1800	Office Bldg - multi-story
4300	Lumber Yard	1300	Dept. Stores	1900	Professional Service Bldg
4400	Packing Plant	1400	Supermarkets	2300	Financial Institutions
4500	Canneries	1500	Regional Shopping Centers	2400	Insurance Company
4600	Other Food Processing	1600	Community Shopping Centers		
4700	Mineral Processing	2000	Airport		
4800	Warehousing / Distribution	2100	Restaurants, Cafeterias		
4900	Open Storage	2200	Drive-in Restaurants		
		2500	Repair Service Shops		
		2600	Service Stations		
		2700	Auto Sales, Auto Repair		
		2800	Parking Lots		
		2900	Wholesale Outlets		
		3000	Florists Greenhouses		
		3200	Enclosed Theatre		
		3300	Nightclubs, bars		
		3400	Bowling Alleys		
		3500	Tourist Attractions		
		3600	Camps		
		3700	Race Tracks		
		3800	Golf Course/Driving Range		

Table 8. Organization of Landuse Categories

Source: Fishkind and Associates, Inc.

Table 9. Employee per Square Foot Estimates

Lake	IND	COM	SVC*	TOTAL
Emp	30,860	34,000	36,465	101,325
SqFt	10,454,538	20,880,959	6,569,769	37,905,266
Emp/SqFt	339	614	180	374

Orange	IND	COM	SVC*	TOTAL
Emp	198,600	246,780	263,395	708,775
SqFt	106,402,531	128,509,039	63,064,957	297,976,527
Emp/SqFt	536	521	239	420

Seminole	IND	COM	SVC*	TOTAL
Emp	61,110	47,640	94,249	202,999
SqFt	17,770,543	23,641,346	18,490,945	59,902,834
Emp/SqFt	291	496	196	295

Source: Woods & Poole Economics, Inc. and County Property Appraiser Data

*Does not include Accommodation and Education in Service calculations (calculated separately)



The Consultant estimated the service employment for hotels (accommodation services) and education based on a separate set of calculations. These two categories were calculated separately as they are separate and distinct categories within the ZDATA2 set. And because the location of each hotel/motel/timeshare is defined as well as each school location is defined, the Consultant attempted to best allocate this employment to the proper TAZ. Table 10 summarizes the hotel/accommodation employee per square foot estimates and Table 11 summarizes the education employee per square foot estimates.

	EMP	HMROOMS	EMP/HMROOM
Seminole	2,580	5,020	0.51
Orange	44,978	99,580	0.45
Lake	1,640	3,126	0.52

 Table 10. Hotel/Accommodation Employee per Square Foot Estimates

Source: Fishkind and Associates, Inc.

Table 11. Education Employee per Square Foot Estimates

	EMP	Enrollees	Enrollee/EMP
Seminole	16,041	94,615	5.90
Orange	49,757	308,976	6.21
Lake	10,845	52,375	4.83

Source: Fishkind and Associates, Inc.

Using this information the Consultant was able to estimate each employment category in any given TAZ and then aggregate this data by TAZ. In providing its estimate of employment by TAZ, the Consultant also took time to review aerial photographs of TAZs in the counties as a way to ground truth the finding via the GIS analysis. Appendix 1 contains some examples of aerial photographs used by the Consultant as a quality control check for the 2010 baseline socioeconomic employment data by TAZ.

Using these steps, the Consultant generated the employment data associated with the 2010 ZDATA2 dataset provided to the Client for traffic modeling purposes. Table X provides a summary of the employment findings for the three county analysis.

2.3 Hotels

The development of the 2010 baseline hotel dataset for Seminole, Orange and Lake Counties involved the following steps:

- 1. Map the location of hotels, motels and timeshare units in each county
- 2. Estimate hotel/motel occupants
- 3. Estimate hotel/motel/timeshare employment at each location (included in service category as discussed in Section 2.2)



The Consultant mapped the locations of the hotels and timeshares in the three counties by property appraiser landuse code. The hotel landuse code is 3900 and the Orange County timeshare code is 430.

In the case of the hotel room estimates, the Consultant used the State of Florida's Department of Business and Professional Regulation (DBPR), which is the licensing agency for hotels in the state, to provide control totals for each county's volume of hotels and timeshares. Timeshare units were based on the Orange County Property Appraiser's unit count. The Consultant then calibrated the landuse property appraiser data by aggregating the hotel/motel square footage data and creating county-specific divisors to estimate hotel rooms by TAZ. Table 12 summarizes the specific divisors as provided in Table 12.

	Hotel	Timeshare	Total	Hotel SQFT	Hotel Divisor
Seminole	5,020		5,020	2,193,133	437
Orange	83,636	13,863	97,499	74,584,175	892
Lake	3,126		3,126	583,718	187

Table 12. Hotel and Timeshare Control Totals

Source: Florida DBPR and County Property Appraisers

The Consultant estimated the hotel/motel occupants in each county by applying either the population per hotel-motel unit factor or calculating the occupants as a function of persons per unit (PPU) multiplied by the associated occupancy rate. Specifically, the Consultant used the population per hotel-motel unit factor for estimating Orange County hotel-motel and timeshare occupants. In the case of Orange County, these factors were used to maintain consistency with the 2009 ZDATA1 series provided.

In the case of Seminole and Lake County, the Consultant applied the PPU multiplied by the associated occupancy rate. For Seminole and Lake County, this method was applied because the Consultant did an independent assessment of countywide occupancy rates. These occupancy estimates were derived from a seven year history of occupancy data for each County. Table 13 summarizes those factors.

	HMUNITS	HMPOP	POP/HMUNIT	PPU	HM % OCC
Seminole	5,206	6,430	1.235	1.93	61.3
Orange	102,132	213,198	2.087	3.21	69.5
Lake	2,319	4,501	1.941	3.03	54.9

Table 13. Hotel Occupant Assumption Data

Source: 2009 ZDATA, Smith Travel Research and Fishkind and Associates, Inc.



Using the data in Table 13, the Consultant estimated the 2010 hotel/motel and timeshare occupant population in each County. Table 14 summarizes the findings.

County	Hotel/Motel Population			
Seminole	5,938			
Orange	207,881			
Lake	5,199			
Source: Fishkind and Associates, Inc.				

Table 14. Hotel/Motel Occupant Estimates

2.4 Schools – Student Enrollment

The development of the 2010 baseline school enrollment dataset for Seminole, Orange and Lake Counties involved the following steps:

- 1. Identify the enrollment control total for public school enrollment as provided by the Florida Department of Education for each county
- 2. Identify current school locations within each county and the number of students enrolled at each public school facility
- 3. Identify private school locations and locations of colleges and universities and allocated estimated enrollment at each facility
- 4. Estimate education employment at each location (included in service category as discussed in Section 2.2)

The public school enrollment analysis for each county was done by each county's public school district. Each county provided a GIS shape file which provided the public school location and associated 2010 enrollment.

The Consultant's next step involved identifying private school locations and colleges and universities in the three counties. Using the property appraiser landuse codes for private schools and colleges (7200) and public colleges (8400), the Consultant identified the locations and allocated the estimated enrollees. For the colleges and universities, these enrollees were allocated based on the landuse code detailed information, which showed the name of the facility. Table 15 summarizes the 2010 Florida Statistical Abstract data with respect to colleges and universities.

County	Enrollment	No. of Schools
Lake	4,234	2
Orange	115,892	14
Seminole	17,598	7

Table 15. Colleges and University Enrollment

Source: FL Statistical Abstract (2010) – Table 4.50



For the private schools, the Consultant allocated the private enrollees based on the calculated divisor with respect to square feet per enrollee. Table 16 summarizes the Consultant's findings.

County	Enrollment	SqFt	SqFt/Enrollee	No. of Schools
Lake	3,794	127,161	33.5	40
Orange	25,626	2,103,900	82.1	157
Seminole	8,501	892,153	104.9	58

Table 16. Private School Enrollment and Divisors

Source: FL Statistical Abstract (2010) - Table 4.26

Based on the data provided by the three sources, the Consultant allocated enrollees throughout all three counties. Table 17 provides a summary of the total enrollment allocated among the TAZs in each county.

Table 17. Summary of Student Enrollment

	Public	Private	College	Total
Seminole	68,516	8,501	17,598	94,615
Orange	167,458	25,626	115,892	308,976
Lake	44,347	3,794	4,234	52,375

Source: FL Statistical Abstract, County School Districts and Fishkind and Associates, Inc.

2.5 Summary

The Consultant applied the assumptions and methods described in Section 2.1 through Section 2.4 in estimating the 2010 baseline socioeconomic data. Table 18 summarizes the ZDATA1 set and Table 19 summarizes the ZDATA2 set. Appendix 2 provides the detailed ZDATA1 and ZDATA2 datasets by TAZ.

Table 18. 2010 ZDATA1 Summary

	SFDU	SFPOP	MFDU	MFPOP	TOTDU	TOTPOP	HMUNITS	HMPOP
Seminole	127,068	306,108	48,388	116,571	175,456	422,679	5,019	5,938
Orange	293,260	731,994	166,385	413,954	459,645	1,145,948	99,584	207,881
Lake	95,040	196,805	48,317	100,244	143,357	297,049	3,123	5,199

Source: Fishkind and Associates, Inc.

Table 19. 2010 ZDATA2 Summary

	EMPIND	EMPCOM	EMPSVC	EMPTOT	SCHENR			
Seminole	61,111	47,640	112,877	221,628	94,615			
Orange	155,410	224,592	423,489	803,491	308,976			
Lake	27,676	31,804	54,331	113,811	52,375			

Source: Fishkind and Associates, Inc.



3.0 Forecast (2015 – 2050)

Methodology

As part of the development of the forecast analysis, the Consultant took the Client provided TAZ zones via Geographic Information System (GIS) shape files for Seminole, Orange and Lake Counties and intersected them with each county's GIS parcel shape files. The Consultant then intersected these parcel shape files with the U.S. Fish and Wildlife National Wetlands Inventory layer and removed all sensitive wetlands. By doing this, the Consultant then intersected these uplands with each county's adopted Comprehensive Plan Future Land Use (FLU) Layer and known Developments of Regional Impact (DRIs). These intersections provided the Consultant with the ability to quantify the residential and non-residential capacity in any given TAZ based on the remaining DRI entitlements and remaining uplands by FLU category.

In addition, the Consultant analyzed the market and identified specific locations within each county, which appear more or less attractive to future growth. In this way, the Consultant created four zones of TAZs in each County, with the fifth zone being the remaining TAZs in each county. Appendix 3 provides the zone maps. These zones were created using an index of attractiveness, which is a collection of criteria that make areas within each county more likely to see growth. These criteria include: 1) transportation access in term of highway, rail and/or airports, 2) concentration of proposed DRI development, 3) juxtaposition to current employment centers, 4) favorable future landuse overlays or sector plans (e.g. Innovation Way in Orange County), and 5) other factors. Using these criteria, the Consultant identified the following zones in each county:

<u>Seminole</u>

- Altamonte Springs
- Lake Mary
- Orlando-Sanford Airport
- Technology Way Corridor on SR 417

<u>Orange</u>

- Downtown Orlando (urban core)
- Innovation Way Corridor Lake Nona Biomedical Cluster
- Disney Attractions Area and SR 429 Corridor
- Apopka

Lake

- Clermont
- Leesburg
- Mount Dora
- East Mount Dora



By applying its understanding of the local market dynamics, known environmental constraints, and FLU limitations, the Consultant constructed a pattern of growth for each county through 2050. The following Sections 3.1 through 3.5 provide insight into the development of each dataset within the forecast.

3.1 Population and Dwelling Units

The Consultant created a population forecast for each county through 2050, which provided a control total. Table 20 summarizes each county's population forecast.

	2010	2015	2020	2025	2030	2035	2040	2045	2050
Seminole	420,588	442,405	466,783	482,935	492,665	499,783	506,758	515,941	523,646
Orange	1,145,956	1,228,016	1,336,594	1,441,352	1,539,208	1,642,868	1,745,633	1,832,112	1,911,642
Lake	297,540	335,586	373,844	412,652	448,936	484,058	518,977	550,947	579,941
Source: Fishkind and Associates, Inc.									

Table 20. County Population Forecasts

Source: Fishkind and Associates, Inc.

The Consultant then converted each county's population forecast to dwelling units taking into account that any market has a functional vacancy rate. Table 21 summarizes the population and dwelling unit forecast for each county through 2050.

Table 21.	County Po	pulation and	Dwellina I	Unit Growth	Forecast
	00001109 1 0	paration and			10100400

	2010	2015	2020	2025	2030	2035	2040	2045	2050	
					Seminole					
Рор	420,588	442,405	466,783	482,935	492,665	499,783	506,758	515,941	523,646	
Pop Growth		21,817	24,378	16,152	9,730	7,118	6,975	9,183	7,705	
DU Growth		9,971	11,140	7,381	4,446	3,253	3,189	4,196	3,522	
	2010	2015	2020	2025	2030	2035	2040	2045	2050	
	Orange									
Рор	1,145,956	1,228,016	1,336,594	1,441,352	1,539,208	1,642,868	1,745,633	1,832,112	1,911,642	
Pop Growth		82,060	108,579	104,758	97,855	103,661	102,764	86,479	79,530	
DU Growth		36,162	47,849	46,165	43,124	45,219	39,419	30,488	28,038	
	2010	2015	2020	2025	2030	2035	2040	2045	2050	
					Lake					
Рор	297,540	335,586	373,844	412,652	448,936	484,058	518,977	550,947	579,941	
Pop Growth		38,046	38,258	38,808	36,284	35,122	34,919	31,970	28,994	
DU Growth		19,079	19,185	19,462	18,196	17,613	17,511	16,032	14,540	

Source: Fishkind and Associates, Inc.



The Consultant then took the growth in Table 21 and allocated these units throughout their respective counties based on the available residential capacity in each TAZ. The Consultant's methodology allocated the population growth based on the forecasted growth, estimated holding capacity and the forecasted growth nodes throughout the three-county region. Appendix 4 provides the detailed allocation of future population and dwelling unit growth.

3.2 Employment

The Consultant created an employment forecast for each county through 2050, which provided a control total. The basis of the employment forecast is the Woods and Poole Economics data that forecasts county employment through 2040. The Consultant also applied employment to population ratios to verify and establish the employment control totals through 2050. Table 22 summarizes the employment forecast.

	2010	2015	2020	2025	2030	2035	2040	2045	2050		
Seminole					Seminole						
Рор	420,588	442,405	466,783	482,935	492,665	499,783	506,758	515,941	523,646		
Emp	221,620	244,888	266,417	289,235	306,385	314,995	325,065	332,378	337,462		
Emp/Pop Ratio	53%	55%	57%	60%	62%	63%	64%	64%	64%		
	2010	2015	2020	2025	2030	2035	2040	2045	2050		
Orange		Orange									
Рор	1,145,956	1,228,016	1,336,594	1,441,352	1,539,208	1,642,868	1,745,633	1,832,112	1,911,642		
Emp	803,490	870,290	927,770	987,000	1,047,820	1,110,685	1,173,550	1,235,988	1,297,551		
Emp/Pop Ratio	70%	71%	69%	68%	68%	68%	67%	67%	68%		
	2010	2015	2020	2025	2030	2035	2040	2045	2050		
Lake					Lake						
Рор	297,540	335,586	373,844	412,652	448,936	484,058	518,977	550,947	579,941		
Emp	113,820	126,710	138,840	151,800	165,610	180,700	195,790	210,650	225,036		
Emp/Pop Ratio	38%	38%	37%	37%	37%	37%	38%	38%	39%		

Table 22. County Population and Employment Forecasts

Source: Fishkind and Associates, Inc.

The Consultant then converted each county's employment forecast and allocated the growth among the three employment categories through 2050. Table 23 through Table 25 summarize the allocation of the employment by county.



	2015	2020	2025	2030	2035	2040	2045	2050
IND	6,416	5,936	6,291	4,729	2,373	2,775	2,015	1,400
COM	5,002	4,628	4,906	3,685	1,850	2,165	1,570	1,095
SVC	11,850	10,965	11,620	8,734	4,385	5,130	3,725	2,590
TOTAL	23,268	21,529	22,817	17,148	8,608	10,070	7,310	5,085

Table 23. Seminole Employment Allocation by Category

Source: Fishkind and Associates, Inc.

Table 24. Orange Employment Allocation by Category

	2015	2020	2025	2030	2035	2040	2045	2050
IND	16,510	14,207	14,641	15,034	15,538	15,540	15,435	15,215
COM	20,516	17,654	18,191	18,681	19,308	19,310	19,175	18,910
SVC	29,774	25,619	26,400	27,108	28,020	28,020	27,830	27,440
TOTAL	66,800	57,480	59,232	60,823	62,866	62,870	62,440	61,565

Source: Fishkind and Associates, Inc.

Table 25. Lake Employment Allocation by Category

	2015	2020	2025	2030	2035	2040	2045	2050
IND	3,496	3,288	3,515	3,744	4,091	4,090	4,030	3,900
COM	3,851	3,624	3,872	4,126	4,509	4,510	4,440	4,295
SVC	5,544	5,217	5,575	5,940	6,491	6,490	6,390	6,185
TOTAL	12,891	12,129	12,962	13,810	15,091	15,090	14,860	14,380

Source: Fishkind and Associates, Inc.

The Consultant then took the growth in Table 23 through Table 25 and allocated the employment throughout their respective counties based on the available employment capacity in each TAZ. The Consultant's methodology allocated the employment growth based on the forecasted growth, estimated holding capacity and the forecasted employment nodes throughout the three-county region. Appendix 4 provides the detailed allocation of the future industrial, commercial and service employment.

3.3 Hotels

The Consultant forecasted future hotel growth based on a historical analysis of growth over the past seven years in each county and then applied the applicable growth of hotel rooms over the project's 2050 time horizon. The Consultant's historic analysis summarizes the number of hotel rooms located in each county from 2004 through 2010 and calculated the average annual growth over that time period. Table 26 shows the number of hotel rooms in each county from 2004 through 2010 and Table 27 shows the annual growth over the same period.



	2004	2005	2006	2007	2008	2009	2010	Difference
Seminole	4,599	4,599	4,588	4,588	4,716	5,015	4,986	387
Orange	84,066	82,797	84,415	84,673	85,401	88,978	90,348	6,282
Lake	2,665	2,744	2,809	3,205	3,287	3,270	3,270	605

Table 26. Number of Hotel Rooms by County

Source: Smith Travel Research

Table 27. Hotel Room Growth by County

	2004	2005	2006	2007	2008	2009	2010	AVG Annual
Seminole		0	(11)	0	128	299	(29)	65
Orange		(1,269)	1,618	258	728	3,577	1,370	1,047
Lake		79	65	396	82	(17)	0	101

Source: Smith Travel Research

The Consultant used these historic figures as a guide to forecasting hotel/motel and timeshare growth through the 2050 time horizon. The Consultant then applied the applicable hotel unit growth rates and allocated the units throughout their respective counties. The hotel units were allocated to various TAZs with the following characteristics:

Seminole County

- DRIs with hotel entitlements
- Major highway intersections
- Airport access

Orange County

- Current theme park locations
- DRIs with hotel entitlements
- Major highway intersections
- Airport access
- University of Central Florida and Research Park locations
- Downtown Orlando
- Lake Nona Medical Center Corridor

Lake County

- DRIs with hotel entitlements
- Major highway intersections

In addition to forecasting the unit growth, the Consultant also calculated the hotel occupant population based on the factors in Table 13 in Section 2.3. Based on these factors and hotel forecast, the Consultant calculated the hotel occupant population. Table 28 summarizes the hotel unit and hotel occupant population. The detailed allocation is provided in Appendix 4.



	2010	2015	2020	2025	2030	2035	2040	2045	2050	
					Seminole					
Hotel Units	5,019	5,238	5,538	5,848	6,168	6,388	6,718	6,938	7,268	
Hotel Population	5,938	6,197	6,552	6,919	7,298	7,559	7,949	8,209	8,599	
	2010	2015	2020	2025	2030	2035	2040	2045	2050	
	Orange									
Hotel Units	99,584	102,397	105,710	109,223	111,915	115,249	118,041	121,104	123,604	
Hotel Population	207,881	213,752	220,667	228,001	233,619	240,579	246,407	252,802	258,019	
	2010	2015	2020	2025	2030	2035	2040	2045	2050	
					Lake					
Hotel Units	3,123	3,323	3,683	4,263	4,855	5,255	5,843	6,243	6,831	
Hotel Population	5,199	5,532	6,130	7,097	8,083	8,749	9,728	10,394	11,373	

Table 28	Hotel	Unit an	d Occupan	t Forecast	Summary
----------	-------	---------	-----------	------------	---------

Source: Fishkind and Associates, Inc.

3.4 Schools – Student Enrollment

In forecasting student enrollment by county, the Consultant used UF BEBR data with respect to forecasted age cohort data for those between age 5 and age 17. This data provided insight into the pipeline of students likely to attend K-8 and high schools within each county through the Year 2030 and what percentage of the total population this cohort comprises. Table 29 summarizes the findings by county.

				-	
Age	2010	2015	2020	2025	2030
Seminole	458,006	500,327	539,626	574,962	607,824
5-17	79,236	83,573	89,379	94,309	98,029
% 5-17	17.3%	16.7%	16.6%	16.4%	16.1%
Orange	1,204,474	1,347,777	1,481,409	1,600,463	1,711,106
5-17	218,132	238,995	261,655	278,956	291,707
% 5-17	18.1%	17.7%	17.7%	17.4%	17.0%
Lake	319,321	368,493	414,691	456,190	495,005
5-17	46,277	51,647	56,843	60,689	63,696
% 5-17	14.5%	14.0%	13.7%	13.3%	12.9%
<u> </u>					

Table 29. Analysis of Age Cohort 5-17

Source: UF BEBR
Using the cohort data, the Consultant estimated the student enrollment population, the 5-year growth increments, and the number of new schools necessary to support the growth through 2050. Table 30 summarizes this forecast.

	<u>2010</u>	<u>2015</u>	<u>2020</u>	<u>2025</u>	<u>2030</u>	<u>2035</u>	<u>2040</u>	<u>2045</u>	<u>2050</u>
					Seminole				
5-17	72,763	73,898	77,314	79,951	81,680	83,407	85,135	86,863	88,590
Growth		1,022	3,074	2,373	1,556	1,555	1,555	1,555	1,555
Schools		1	3	2	1	1	1	1	1
					Orange				
5-17	207,534	217,758	236,077	251,223	262,402	277,545	292,688	307,831	322,974
Growth		9,202	16,487	13,632	10,061	13,630	13,630	13,630	13,630
Schools		9	9	9	9	9	9	9	9
					Lake				
5-17	43,120	47,035	51,244	54,897	57,768	62,118	66,795	70,856	74,044
Growth		3,523	3,788	3,288	2,584	3,915	4,210	3,655	2,870
Schools		3	4	3	2	3	4	3	2

 Table 30. Forecasted Student Enrollment and Number of Schools

Source: Fishkind and Associates, Inc.

A summary of the student enrollment is provided in Table 31. The detailed allocation of student enrollment by TAZ is provided in Appendix 4.

Table 31. Summary of Student Enrollment

	2010	2015	2020	2025	2030	2035	2040	2045	2050
					Seminole				
Student Enrollment	94,615	95,635	98,710	101,085	102,640	104,195	105,750	107,305	108,860
	2010	2015	2020	2025	2030	2035	2040	2045	2050
					Orange				
Student Enrollment	308,976	321,474	338,559	353,394	363,538	377,196	391,045	404,895	418,640
	2010	2015	2020	2025	2030	2035	2040	2045	2050
					Lake				
Student Enrollment	52,375	55,900	59,690	62,980	65,565	69,480	73,690	77,345	80,215



In addition to forecasting the enrollment growth, the Consultant also calculated the school employment based on the factors in Table 11 in Section 2.2. Based on these factors and student enrollment forecast, the Consultant estimated the education employment and allocated amongst the school sites. The employment component is included in the service component of the ZDATA2 set. The detailed employment allocation is provided in Appendix 4.

3.5 Summary

The Consultant applied the assumptions and methods described in Section 3.1 through Section 3.4 in estimating the 2015 through 2050 socioeconomic data. Table 32 summarizes the ZDATA1 set and Table 33 summarizes the ZDATA2 set. Appendix 4 provides the detailed ZDATA1 and ZDATA2 datasets by TAZ.



YEAR	<u>SFDU</u>	<u>SFPOP</u>	<u>MFDU</u>	MFPOP	<u>TOTDU</u>	<u>TOTPOP</u>	<u>HMUNITS</u>	<u>HMPOP</u>	<u>Annual</u> <u>POP</u> <u>Growth</u>	<u>Annual</u> <u>%</u> <u>Growth</u>
2010	127,068	306,108	48,388	116,571	175,456	422,679	5,019	5,938		
2015	134,094	320,008	51,330	122,399	185,424	442,407	5,238	6,197	3,946	0.9%
2020	141,684	336,621	54,875	130,167	196,559	466,788	5,538	6,552	4,876	1.1%
2025	146,470	347,063	57,469	135,876	203,939	482,939	5,848	6,919	3,230	0.7%
2030	149,390	353,432	58,992	139,235	208,382	492,667	6,168	7,298	1,946	0.4%
2035	151,662	358,389	59,974	141,399	211,636	499,788	6,388	7,559	1,424	0.3%
2040	153,890	363,249	60,937	143,510	214,827	506,759	6,718	7,949	1,394	0.3%
2045	156,840	369,695	62,182	146,250	219,022	515,945	6,938	8,209	1,837	0.4%
2050	159,357	375,212	63,180	148,435	222,537	523,647	7,268	8,599	1,540	0.3%

Table 32. 2015 - 2050 ZDATA1 Summary

					Orange					
									Annual POP	Annual <u>%</u>
<u>YEAR</u>	<u>SFDU</u>	<u>SFPOP</u>	<u>MFDU</u>	<u>MFPOP</u>	<u>TOTDU</u>	<u>TOTPOP</u>	<u>HMUNITS</u>	<u>HMPOP</u>	<u>Growth</u>	<u>Growth</u>
2010	293,260	731,994	166,385	413,954	459,645	1,145,948	99,584	207,881		
2015	320,444	793,616	175,358	434,407	495,802	1,228,023	102,397	213,752	16,415	1.4%
2020	356,717	875,862	186,927	460,734	543,644	1,336,596	105,710	220,667	21,715	1.8%
2025	391,988	955,838	197,825	485,505	589,813	1,441,343	109,223	228,001	20,949	1.6%
2030	424,584	1,029,864	208,355	509,352	632,939	1,539,216	111,915	233,619	19,575	1.4%
2035	458,340	1,107,236	219,824	535,627	678,164	1,642,863	115,249	240,579	20,729	1.3%
2040	490,523	1,191,150	227,060	554,478	717,583	1,745,628	118,041	246,407	20,553	1.3%
2045	514,775	1,259,920	233,303	572,199	748,078	1,832,119	121,104	252,802	17,298	1.0%
2050	537,556	1,324,551	238,561	587,084	776,117	1,911,635	123,604	258,019	15,903	0.9%

					Lake					
									Annual POP	Annual <u>%</u>
<u>YEAR</u>	<u>SFDU</u>	<u>SFPOP</u>	<u>MFDU</u>	<u>MFPOP</u>	<u>TOTDU</u>	<u>TOTPOP</u>	<u>HMUNITS</u>	<u>HMPOP</u>	<u>Growth</u>	<u>Growth</u>
2010	95,040	196,805	48,317	100,244	143,357	297,049	3,123	5,199		
2015	109,099	225,245	53,334	110,337	162,433	335,582	3,323	5,532	7,707	2.6%
2020	122,743	252,498	58,879	121,347	181,622	373,845	3,683	6,130	7,653	2.3%
2025	136,159	279,234	64,943	133,443	201,102	412,677	4,263	7,097	7,766	2.1%
2030	148,620	304,077	70,682	144,890	219,302	448,967	4,855	8,083	7,258	1.8%
2035	160,629	328,019	76,280	156,066	236,909	484,085	5,255	8,749	7,024	1.6%
2040	173,026	352,729	81,396	166,271	254,422	519,000	5,843	9,728	6,983	1.4%
2045	184,540	375,688	85,916	175,295	270,456	550,983	6,243	10,394	6,397	1.2%
2050	194,888	396,381	89,975	183,350	284,863	579,731	6,831	11,373	5,750	1.0%



	Seminole											
YEAR	EMPIND	EMPCOM	<u>EMPSVC</u>	<u>EMPTOT</u>	<u>SCHENR</u>	<u>EMP -</u> <u>POP</u> <u>Ratio</u>	<u>Annual</u> <u>EMP</u> <u>Growth</u>	<u>Annual</u> <u>%</u> <u>Growth</u>				
2010	61,111	47,640	112,877	221,628	94,615	53%						
2015	70,542	53,610	131,890	256,042	95,635	55%	6,883	3.1%				
2020	77,578	58,640	143,479	279,697	98,710	57%	4,731	1.8%				
2025	85,077	63,958	155,159	304,194	101,085	60%	4,899	1.8%				
2030	91,006	67,845	165,393	324,244	102,640	62%	4,010	1.3%				
2035	93,373	69,507	169,555	332,435	104,195	63%	1,638	0.5%				
2040	96,068	71,782	174,970	342,820	105,750	64%	2,077	0.6%				
2045	98,083	73,237	178,413	349,733	107,305	64%	1,383	0.4%				
2050	99,478	74,332	181,011	354,821	108,860	64%	1,018	0.3%				

Table 33. 2015 - 2050 ZDATA2 Summary

YEAR	EMPIND	EMPCOM	<u>EMPSVC</u>	<u>EMPTOT</u>	<u>SCHENR</u>	<u>EMP -</u> <u>POP</u> <u>Ratio</u>	<u>Annual</u> <u>EMP</u> <u>Growth</u>	<u>Annual</u> <u>%</u> <u>Growth</u>
2010	155,410	224,592	423,489	803,491	308,976	70%		
2015	171,921	244,817	453,556	870,294	321,474	71%	13,361	1.7%
2020	186,119	262,481	479,174	927,774	338,559	69%	11,496	1.3%
2025	200,756	280,671	505,575	987,002	353,394	68%	11,846	1.3%
2030	215,784	299,901	532,135	1,047,820	363,538	68%	12,164	1.2%
2035	229,396	318,944	562,343	1,110,683	377,196	68%	12,573	1.2%
2040	241,922	337,478	594,150	1,173,550	391,045	67%	12,573	1.1%
2045	246,059	356,634	633,295	1,235,988	404,895	67%	12,488	1.1%
2050	248,110	372,648	676,796	1,297,554	418,640	68%	12,313	1.0%

				Lake				
YEAR	<u>EMPIND</u>	<u>EMPCOM</u>	<u>EMPSVC</u>	<u>EMPTOT</u>	<u>SCHENR</u>	<u>EMP -</u> <u>POP</u> <u>Ratio</u>	<u>Annual</u> <u>EMP</u> <u>Growth</u>	Annual <u>%</u> Growth
2010	27,676	31,804	54,331	113,811	52,375	38%		
2015	31,175	35,657	59,880	126,712	55,900	38%	2,580	2.3%
2020	34,461	39,280	65,098	138,839	59,690	37%	2,425	1.9%
2025	37,977	43,155	70,670	151,802	62,980	37%	2,593	1.9%
2030	41,716	47,280	76,615	165,611	65,565	37%	2,762	1.8%
2035	45,804	51,790	83,108	180,702	69,480	37%	3,018	1.8%
2040	49,894	56,302	89,594	195,790	73,690	38%	3,018	1.7%
2045	53,923	60,740	95,982	210,645	77,345	38%	2,971	1.5%
2050	57,823	65,034	102,183	225,040	80,215	39%	2,879	1.4%



4.0 Forecast Sensitivity Analysis (2015 – 2050)

4.1 Methodology

Population

As part of the analysis, the Client requested two additional data series. One data series represents a high population and employment scenario for the three counties. The other scenario represents a low population and employment scenario for the three counties. To construct the control totals for these scenarios, the Consultant used the latest UF BEBR population forecast through 2035 for each of the three counties which provides a low, medium and high forecast. Table 34 summarizes the population forecast data.

SEMINOLE	<u>2010</u>	<u>2015</u>	<u>2020</u>	<u>2025</u>	<u>2030</u>	<u>2035</u>
Low	406,800	411,100	417,200	420,600	420,800	417,700
Medium	423,700	445,700	473,700	500,800	526,000	548,900
High	440,700	482,600	531,000	580,800	631,100	681,500
ORANGE	<u>2010</u>	<u>2015</u>	<u>2020</u>	<u>2025</u>	<u>2030</u>	<u>2035</u>
Low	1,066,600	1,107,900	1,156,400	1,194,900	1,221,500	1,235,900
Medium	1,111,000	1,199,600	1,312,500	1,423,000	1,527,300	1,623,200
High	1,155,400	1,300,600	1,471,800	1,650,100	1,832,300	2,016,400
LAKE	<u>2010</u>	<u>2015</u>	<u>2020</u>	<u>2025</u>	<u>2030</u>	<u>2035</u>
Low	278,800	297,200	315,700	329,700	338,600	342,200
Medium	293,500	328,400	370,900	412,400	451,600	487,700
High	308,200	363,300	427,200	494,600	564,300	635,500

Table 34. UF BEBR Population Forecast Through 2035

Source: UF BEBR

Using this data, the Consultant evaluated the percentage difference between the high and low forecast from the medium forecast for each county. Table 35 provides a summary of the percentage difference from the medium population forecast for each county. The Consultant applied the percentage difference in Year 2035 to the years modeled beyond 2035.

Table 35. UF BEBR Population Forecast andPercentage Forecast Spread Through 2035

<u> </u>									1
SEMINOLE	<u>2010</u>	<u>2015</u>	2020	<u>2025</u>	<u>2030</u>	<u>2035</u>			
Low	406,800	411,100	417,200	420,600	420,800	417,700			
Medium	423,700	445,700	473,700	500,800	526,000	548,900			
High	440,700	482,600	531,000	580,800	631,100	681,500			
	<u>2010</u>	<u>2015</u>	2020	2025	2030	2035	2040	2045	2050
Low	96%	92%	88%	84%	80%	76%	76%	76%	76%
Medium									
High	104%	108%	112%	116%	120%	124%	124%	124%	124%
ORANGE	2010	2015	2020	2025	2030	2035			
Low	1.066.600	1.107.900	1.156.400	1.194.900	1.221.500	1.235.900			
Medium	1.111.000	1.199.600	1.312.500	1.423.000	1.527.300	1.623.200			
High	1,155,400	1.300.600	1.471.800	1.650.100	1.832.300	2.016.400			
	.,,	.,,	.,,	.,,	.,002,000	_,,			
	2010	2015	2020	2025	2030	2035	2040	2045	2050
Low	96%	92%	88%	84%	80%	76%	76%	76%	76%
				0.70	0070				
Medium									
Medium High	104%	108%	112%	116%	120%	124%	124%	124%	124%
Medium High	104%	108%	112%	116%	120%	124%	124%	124%	124%
Medium High	2010	2015	2020	2025	2030	2035	124%	124%	124%
Medium High	<u>104%</u> <u>2010</u>	<u>108%</u> <u>2015</u>	<u>2020</u>	<u>2025</u>	<u>120%</u>	<u>2035</u>	124%	124%	124%
Medium High LAKE Low	<u>104%</u> <u>2010</u> 278,800	<u>108%</u> <u>2015</u> 297,200	<u>112%</u> <u>2020</u> 315,700	<u>116%</u> <u>2025</u> 329,700	120% 2030 338,600	124% 2035 342,200	124%	124%	124%
Medium High LAKE Low Medium	<u>104%</u> <u>2010</u> 278,800 293,500	<u>108%</u> 2015 297,200 328,400	<u>2020</u> 315,700 370,900	<u>2025</u> 329,700 412,400	120% 2030 338,600 451,600	124% 2035 342,200 487,700	124%	124%	124%
Medium High LAKE Low Medium High	<u>104%</u> <u>2010</u> 278,800 293,500 308,200	<u>108%</u> 2015 297,200 328,400 363,300	<u>2020</u> 315,700 370,900 427,200	<u>2025</u> 329,700 412,400 494,600	<u>2030</u> 338,600 451,600 564,300	124% 2035 342,200 487,700 635,500	124%	124%	124%
Medium High LAKE Low Medium High	<u>2010</u> 278,800 293,500 308,200	<u>2015</u> 297,200 328,400 363,300	<u>2020</u> 315,700 370,900 427,200	<u>2025</u> 329,700 412,400 494,600	120% 2030 338,600 451,600 564,300	<u>2035</u> 342,200 487,700 635,500	124%	124%	124%
Medium High LAKE Low Medium High	<u>2010</u> 278,800 293,500 308,200 2010	108% 2015 297,200 328,400 363,300 2015	<u>2020</u> 315,700 370,900 427,200 <u>2020</u>	<u>2025</u> 329,700 412,400 494,600 <u>2025</u>	120% 2030 338,600 451,600 564,300 2030	124% <u>2035</u> 342,200 487,700 635,500 <u>2035</u>	<u>124%</u> 2040	2045	2050
Medium High LAKE Low Medium High	<u>104%</u> <u>2010</u> 278,800 293,500 308,200 <u>2010</u> 95%	<u>108%</u> <u>2015</u> 297,200 328,400 363,300 <u>2015</u> 90%	<u>2020</u> 315,700 370,900 427,200 <u>2020</u> 85%	<u>2025</u> 329,700 412,400 494,600 <u>2025</u> 80%	<u>2030</u> 338,600 451,600 564,300 <u>2030</u> 75%	<u>124%</u> <u>2035</u> 342,200 487,700 635,500 <u>2035</u> 70%	<u>124%</u> 2040 70%	<u>124%</u> 2045 70%	<u>124%</u> 2050 70%
Medium High LAKE Low Medium High Low Medium	<u>2010</u> 278,800 293,500 308,200 <u>2010</u> 95%	108% 2015 297,200 328,400 363,300 2015 90%	112% 2020 315,700 370,900 427,200 2020 85%	116% 2025 329,700 412,400 494,600 2025 80%	2030 338,600 451,600 564,300 2030 75%	124% 2035 342,200 487,700 635,500 2035 70%	<u>2040</u> 70%	<u>124%</u> 2045 70%	<u>2050</u> 70%

Source: UF BEBR and Fishkind and Associates, Inc.

Using this data as a guide, the Consultant applied the percentages in calculating its high and low population forecast using the Consultant's original 2015 through 2050 population forecast for each County. In the case of Seminole and Orange Counties, the high forecasts were adjusted down due to holding capacity limitations in each of the counties. Table 36 summarizes the high and low population forecast control totals for the three counties.

	2010	2015	2020	2025	2030	2035	2040	2045	2050
Seminole									
Control	420,588	442,405	466,783	482,935	492,665	499,783	506,758	515,941	523,646
Low	420,588	408,061	411,108	405,596	394,132	380,323	385,631	392,619	398,482
High	420,588	479,032	523,246	532,077	543,816	558,466	566,260	576,521	585,131
	2010	2015	2020	2025	2030	2035	2040	2045	2050
Orange									
Control	1,145,956	1,228,016	1,336,594	1,441,352	1,539,208	1,642,868	1,745,633	1,832,112	1,911,642
Low	1,145,956	1,134,144	1,177,629	1,210,310	1,231,023	1,250,876	1,329,120	1,394,965	1,455,519
High	1,145,956	1,331,408	1,498,819	1,671,381	1,846,586	2,023,906	2,120,161	2,224,640	2,300,875
	2010	2015	2020	2025	2030	2035	2040	2045	2050
Lake Control	297,540	335,586	373,844	412,652	448,936	484,058	518,977	550,947	579,941
Low	297,540	303,703	318,206	329,901	336,603	339,645	364,146	386,578	406,922
High	297,540	371,250	430,591	494,902	560,971	630,754	676,256	717,914	755,695

Table 36. High and Low Population Forecasts

Source: Fishkind and Associates, Inc.

Employment

Using the forecasted high and low population forecasts, the Consultant then modeled the employment totals based on the applicable employment to population ratios used as part of the Consultant's original 2015 through 2050 forecast. Table 37 summarizes the applicable employment to population ratios and the Consultant's forecasted employment based on these ratios.

 Table 37. High and Low Employment Forecasts

	2010	2015	2020	2025	2030	2035	2040	2045	2050
Seminole									
(emp/pop ratio)		55%	57%	60%	62%	63%	64%	64%	64%
Orange									
(emp/pop ratio)		71%	69%	68%	68%	68%	67%	67%	68%
Lake (emp/pop									
ratio)		38%	37%	37%	37%	37%	38%	38%	39%

	2010	2015	2020	2025	2030	2035	2040	2045	2050
Seminole - Low	221,620	225,870	234,617	242,912	245,104	239,700	247,774	252,930	256,799
Seminole - High	221,620	265,154	298,613	318,661	338,190	351,975	363,831	371,401	377,083
Orange - Low	803,490	803,763	817,427	828,788	838,022	845,673	893,538	941,078	987,952
Orange - High	803,490	943,564	1,040,375	1,144,518	1,257,069	1,368,291	1,425,337	1,500,797	1,561,748
Lake - Low	113,820	114,672	118,177	121,359	124,171	126,790	137,378	147,805	157,899
Lake - High	113,820	140,176	159,915	182,057	206,939	235,462	255,125	274,488	293,234



4.2 High Analysis

The high population and employment analysis required the Consultant to approach the allocation of units in a similar way to the original baseline 2015 to 2050 forecast. This allocation was done using the index of attractiveness criteria discussed in Section 3.0. Using these criteria, the Consultant identified the following zones in each county:

<u>Seminole</u>

- Altamonte Springs
- Lake Mary
- Orlando-Sanford Airport
- Technology Way Corridor on SR 417

<u>Orange</u>

- Downtown Orlando (urban core)
- Innovation Way Corridor Lake Nona Biomedical Cluster
- Disney Attractions Area and SR 429 Corridor
- Apopka

<u>Lake</u>

- Clermont
- Leesburg
- Mount Dora
- East Mount Dora

By applying its understanding of the local market dynamics, known environmental constraints, and FLU limitations, the Consultant constructed a pattern of growth for each county through 2050 for the high population and employment scenario as shown in the ZDATA 1 and ZDATA 2 series summaries in Table 38 and Table 39.



					Semir	nole				
<u>YEAR</u>	<u>SFDU</u>	<u>SFPOP</u>	<u>MFDU</u>	MFPOP	<u>TOTDU</u>	<u>TOTPOP</u>	<u>HMUNITS</u>	<u>HMPOP</u>	<u>Annual</u> <u>POP</u> <u>Growth</u>	<u>Annual %</u> <u>Growth</u>
2010	127,068	306,108	48,388	116,571	175,456	422,679	5,019	5,938		
2015	141,692	343,894	55,573	135,142	197,265	479,036	5,238	6,197	11,271	2.67%
2020	152,193	372,168	61,490	151,079	213,683	523,247	5,538	6,552	8,842	1.85%
2025	154,292	377,568	62,821	154,510	217,113	532,078	5,848	6,919	1,766	0.34%
2030	157,473	385,754	64,200	158,059	221,673	543,813	6,168	7,298	2,347	0.44%
2035	161,494	396,101	65,873	162,365	227,367	558,466	6,388	7,559	2,931	0.54%
2040	163,891	401,972	66,659	164,284	230,550	566,256	6,718	7,949	1,558	0.28%
2045	166,827	409,524	67,714	166,997	234,541	576,521	6,938	8,209	2,053	0.36%
2050	169,266	415,796	68,622	169,333	237,888	585,129	7,268	8,599	1,722	0.30%

Table 38. HIGH 2015 - 2050 ZDATA1 Summary

Orange										
YEAR	<u>SFDU</u>	<u>SFPOP</u>	<u>MFDU</u>	MFPOP	<u>TOTDU</u>	TOTPOP	<u>HMUNITS</u>	<u>HMPOP</u>	<u>Annual</u> <u>POP</u> <u>Growth</u>	<u>Annual %</u> <u>Growth</u>
2010	293,260	731,994	166,385	413,954	459,645	1,145,948	99,584	207,881		
2015	339,408	836,537	201,975	495,064	541,383	1,331,601	102,397	213,752	37,131	3.24%
2020	381,395	931,747	233,697	567,234	615,092	1,498,981	105,710	220,667	33,476	2.51%
2025	424,604	1,029,733	266,461	641,692	691,065	1,671,425	109,223	228,001	34,489	2.30%
2030	470,707	1,134,423	297,589	712,171	768,296	1,846,594	111,915	233,619	35,034	2.10%
2035	520,683	1,248,983	324,985	774,923	845,668	2,023,906	115,249	240,579	35,462	1.92%
2040	551,557	1,329,472	331,037	790,689	882,594	2,120,161	118,041	246,407	19,251	0.95%
2045	582,387	1,416,895	337,044	807,745	919,431	2,224,640	121,104	252,802	20,896	0.99%
2050	606,021	1,483,937	340,290	816,938	946,311	2,300,875	123,604	258,019	15,247	0.69%

Lake										
<u>YEAR</u>	<u>SFDU</u>	<u>SFPOP</u>	<u>MFDU</u>	<u>MFPOP</u>	<u>TOTDU</u>	TOTPOP	<u>HMUNITS</u>	<u>HMPOP</u>	<u>Annual</u> <u>POP</u> <u>Growth</u>	<u>Annual %</u> <u>Growth</u>
2010	95,040	196,805	48,317	100,244	143,357	297,049	3,123	5,199		
2015	116,874	240,593	63,455	130,665	180,329	371,258	3,323	5,532	14,842	5.00%
2020	134,373	275,591	75,723	154,994	210,096	430,585	3,683	6,130	11,865	3.20%
2025	153,908	314,567	88,434	180,333	242,342	494,900	4,263	7,097	12,863	2.99%
2030	173,459	353,600	101,999	207,378	275,458	560,978	4,855	8,083	13,216	2.67%
2035	193,388	393,283	117,082	237,479	310,470	630,762	5,255	8,749	13,957	2.49%
2040	208,379	423,154	124,923	253,108	333,302	676,262	5,843	9,728	9,100	1.44%
2045	221,214	448,744	132,977	269,177	354,191	717,921	6,243	10,394	8,332	1.23%
2050	233,727	473,772	139,401	281,917	373,128	755,689	6,831	11,373	7,554	1.05%



				Seminole				
YEAR	<u>EMPIND</u>	<u>EMPCOM</u>	<u>EMPSVC</u>	<u>EMPTOT</u>	<u>SCHENR</u>	<u>EMP -</u> <u>POP</u> <u>Ratio</u>	<u>Annual</u> <u>EMP</u> <u>Growth</u>	<u>Annual %</u> <u>Growth</u>
2010	61,111	47,640	112,877	221,628	94,615	53%		
2015	73,115	57,339	134,700	265,154	95,635	55%	8,705	3.93%
2020	82,384	64,532	151,698	298,614	98,710	57%	6,692	2.52%
2025	87,820	68,866	161,978	318,664	101,085	60%	4,010	1.34%
2030	93,205	72,777	172,212	338,194	102,640	62%	3,906	1.23%
2035	97,005	75,743	179,227	351,975	104,195	63%	2,756	0.81%
2040	100,274	78,318	185,238	363,830	105,750	64%	2,371	0.67%
2045	102,229	79,973	189,199	371,401	107,305	64%	1,514	0.42%
2050	103,796	81,194	192,091	377,081	108,860	64%	1,136	0.31%

Table 39. HIGH 2015 - 2050 ZDATA2 Summary

				Orange				
YEAR	<u>EMPIND</u>	<u>EMPCOM</u>	<u>EMPSVC</u>	<u>EMPTOT</u>	<u>SCHENR</u>	<u>EMP -</u> <u>POP</u> <u>Ratio</u>	<u>Annual</u> <u>EMP</u> <u>Growth</u>	<u>Annual %</u> <u>Growth</u>
2010	155,410	224,592	423,489	803,491	308,976	70%		
2015	177,875	276,161	489,500	943,536	321,474	71%	28,009	3.49%
2020	193,660	306,845	539,897	1,040,402	338,559	69%	19,373	2.05%
2025	215,490	338,908	590,124	1,144,522	353,394	68%	20,824	2.00%
2030	234,473	369,819	647,959	1,252,251	363,538	68%	21,546	1.88%
2035	251,386	415,603	708,047	1,375,036	377,196	68%	24,557	1.96%
2040	269,261	437,375	746,743	1,453,379	391,045	69%	15,669	1.14%
2045	285,666	459,790	785,060	1,530,516	404,895	69%	15,427	1.06%
2050	303,028	484,233	824,262	1,611,523	418,640	70%	16,201	1.06%

				Lake				
<u>YEAR</u>	<u>EMPIND</u>	<u>EMPCOM</u>	<u>EMPSVC</u>	<u>EMPTOT</u>	<u>SCHENR</u>	<u>EMP -</u> <u>POP</u> <u>Ratio</u>	<u>Annual</u> <u>EMP</u> <u>Growth</u>	<u>Annual %</u> <u>Growth</u>
2010	27,676	31,804	54,331	113,811	52,375	38%		
2015	34,821	39,679	65,676	140,176	55,900	38%	5,273	4.63%
2020	40,477	45,573	73,865	159,915	59,690	37%	3,948	2.82%
2025	46,480	52,190	83,387	182,057	62,980	37%	4,428	2.77%
2030	53,223	59,623	94,093	206,939	65,565	37%	4,976	2.73%
2035	60,958	68,143	106,361	235,462	69,480	37%	5,705	2.76%
2040	66,288	74,018	114,819	255,125	73,690	38%	3,933	1.67%
2045	71,543	79,803	123,142	274,488	77,345	38%	3,873	1.52%
2050	76,628	85,401	131,205	293,234	80,215	39%	3,749	1.37%



4.3 Low Analysis

The Consultant's approach to the allocation of the low population and employment analysis was similar to the original baseline 2015 to 2050 forecast. This allocation was effectively done by reducing the population and employment levels throughout each county's index of attractiveness zone discussed in Section 3.0.

By applying its understanding of the local market dynamics, known environmental constraints, and FLU limitations, the Consultant constructed a pattern of growth for each county through 2050 for the low population and employment scenario. Table 40 summarizes the ZDATA1 set and Table 41 summarizes the ZDATA2 set.



								-		
					Sem	inole				
<u>YEAR</u>	<u>SFDU</u>	<u>SFPOP</u>	<u>MFDU</u>	MFPOP	<u>TOTDU</u>	<u>TOTPOP</u>	<u>HMUNITS</u>	<u>HMPOP</u>	<u>Annual</u> <u>POP</u> <u>Growth</u>	Annual % Growth
2010	127,068	306,108	48,388	116,571	175,456	422,679	5,019	5,938		
2015	127,096	295,305	48,518	112,757	175,614	408,062	5,238	6,197	-2,923	-0.69%
2020	127,385	296,767	49,035	114,350	176,420	411,117	5,538	6,552	611	0.15%
2025	127,634	291,442	49,734	114,155	177,368	405,597	5,848	6,919	-1,104	-0.27%
2030	127,674	282,798	50,038	111,342	177,712	394,140	6,168	7,298	-2,291	-0.56%
2035	127,674	272,903	50,038	107,424	177,712	380,327	6,388	7,559	-2,763	-0.70%
2040	127,674	276,991	50,038	108,643	177,712	385,634	6,718	7,949	1,061	0.28%
2045	127,674	281,969	50,038	110,657	177,712	392,626	6,938	8,209	1,398	0.36%
2050	127,674	286,256	50,038	112,207	177,712	398,463	7,268	8,599	1,167	0.30%

Table 40. LOW 2015 - 2050 ZDATA1 Summary

Orange										
<u>YEAR</u>	<u>SFDU</u>	<u>SFPOP</u>	<u>MFDU</u>	MFPOP	<u>TOTDU</u>	<u>TOTPOP</u>	<u>HMUNITS</u>	<u>HMPOP</u>	<u>Annual</u> <u>POP</u> <u>Growth</u>	<u>Annual %</u> <u>Growth</u>
2010	293,260	731,994	166,385	413,954	459,645	1,145,948	99,584	207,881		
2015	293,260	724,387	166,385	409,758	459,645	1,134,145	102,397	213,752	-2,361	-0.21%
2020	307,790	757,331	171,021	420,302	478,811	1,177,633	105,710	220,667	8,698	0.77%
2025	319,240	783,290	173,971	427,008	493,211	1,210,298	109,223	228,001	6,533	0.55%
2030	326,423	799,610	175,919	431,421	502,342	1,231,031	111,915	233,619	4,147	0.34%
2035	332,633	813,653	178,460	437,230	511,093	1,250,883	115,249	240,579	3,970	0.32%
2040	357,012	868,993	188,562	460,125	545,574	1,329,118	118,041	246,407	15,647	1.25%
2045	377,510	915,523	197,075	479,471	574,585	1,394,994	121,104	252,802	13,175	0.99%
2050	396,214	958,246	204,852	497,280	601,066	1,455,526	123,604	258,019	12,106	0.87%

Lake										
<u>YEAR</u>	<u>SFDU</u>	<u>SFPOP</u>	<u>MFDU</u>	MFPOP	<u>TOTDU</u>	TOTPOP	<u>HMUNITS</u>	<u>HMPOP</u>	<u>Annual</u> <u>POP</u> <u>Growth</u>	<u>Annual %</u> <u>Growth</u>
2010	95,040	196,805	48,317	100,244	143,357	297,049	3,123	5,199		
2015	97,131	201,335	49,315	102,400	146,446	303,735	3,323	5,532	1,337	0.45%
2020	101,520	210,026	52,201	108,172	153,721	318,198	3,683	6,130	2,893	0.95%
2025	104,725	216,446	54,861	113,471	159,586	329,917	4,263	7,097	2,344	0.74%
2030	105,945	218,876	57,001	117,734	162,946	336,610	4,855	8,083	1,339	0.41%
2035	107,286	221,423	57,260	118,226	164,546	339,649	5,255	8,749	608	0.18%
2040	114,754	236,310	62,078	127,830	176,832	364,140	5,843	9,728	4,898	1.44%
2045	123,557	253,865	64,527	132,718	188,084	386,583	6,243	10,394	4,489	1.23%
2050	131,580	269,868	66,708	137,054	198,288	406,922	6,831	11,373	4,068	1.05%



				Seminole	,			
YEAR	<u>EMPIND</u>	<u>EMPCOM</u>	<u>EMPSVC</u>	<u>EMPTOT</u>	<u>SCHENR</u>	<u>EMP -</u> <u>POP</u> <u>Ratio</u>	<u>Annual</u> <u>EMP</u> <u>Growth</u>	<u>Annual %</u> <u>Growth</u>
2010	61,111	47,640	112,877	221,628	94,615	53%		
2015	62,280	48,573	115,025	225,878	95,635	55%	850	0.38%
2020	64,690	50,472	119,461	234,623	98,710	57%	1,749	0.77%
2025	66,575	51,855	124,488	242,918	101,085	60%	1,659	0.71%
2030	67,120	52,285	125,703	245,108	102,640	62%	438	0.18%
2035	65,528	51,125	123,050	239,703	104,195	63%	-1,081	-0.44%
2040	67,753	52,860	127,165	247,778	105,750	64%	1,615	0.67%
2045	69,173	53,970	129,790	252,933	107,305	64%	1,031	0.42%
2050	70,138	54,800	131,865	256,803	108,860	64%	774	0.31%

Table 41. LOW 2015 - 2050 ZDATA2 Summary

				Orange				
YEAR	<u>EMPIND</u>	<u>EMPCOM</u>	<u>EMPSVC</u>	<u>EMPTOT</u>	<u>SCHENR</u>	<u>EMP -</u> POP <u>Ratio</u>	<u>Annual</u> <u>EMP</u> <u>Growth</u>	<u>Annual %</u> <u>Growth</u>
2010	155,410	224,592	423,489	803,491	308,976	70%		
2015	155,480	224,677	423,614	803,771	321,474	71%	56	0.01%
2020	158,860	228,872	429,704	817,436	338,559	69%	2,733	0.34%
2025	161,670	232,362	434,764	828,796	353,394	68%	2,272	0.28%
2030	163,955	235,200	438,876	838,031	363,538	68%	1,847	0.22%
2035	165,845	237,553	442,283	845,681	377,196	68%	1,530	0.18%
2040	177,674	248,258	467,614	893,546	391,045	67%	9,573	1.13%
2045	187,415	260,053	493,618	941,086	404,895	67%	9,508	1.06%
2050	196,625	269,994	521,342	987,961	418,640	68%	9,375	1.00%

				Lake				
YEAR	EMPIND	EMPCOM	<u>EMPSVC</u>	<u>EMPTOT</u>	<u>SCHENR</u>	<u>EMP -</u> <u>POP</u> <u>Ratio</u>	<u>Annual</u> <u>EMP</u> <u>Growth</u>	<u>Annual %</u> <u>Growth</u>
2010	27,676	31,804	54,331	113,811	52,375	38%		
2015	27,906	32,059	54,696	114,661	55,900	38%	170	0.15%
2020	28,815	33,104	56,258	118,177	59,690	37%	703	0.61%
2025	29,666	34,054	57,639	121,359	62,980	37%	636	0.54%
2030	30,427	34,894	58,850	124,171	65,565	37%	562	0.46%
2035	31,137	35,670	59,983	126,790	69,480	37%	524	0.42%
2040	33,522	38,836	65,020	137,378	73,690	38%	2,118	1.67%
2045	35,384	41,952	70,469	147,805	77,345	38%	2,085	1.52%
2050	37,218	44,967	75,714	157,899	80,215	39%	2,019	1.37%

APPENDIX 1 AERIAL MAP EXAMPLES

Legend

TAZ 306

- Org_Indus
- Org_Comm
- Orange_Off



TAZ 385



APPENDIX 2 2010 ZDATA1 and ZDATA2

ZDATA NO.	SECTOR NO.	TAZ	SFDU	% VAC NON PERM	% VAC	SFPOP	SFOCAR	SF1CAR	SF2+CAR	MFDU	% VAC NON PERM	% VAC	MFPOP	MF0CAR	MF1CAR	MF2+CAR	HMUNITS	HMPCTOCC	HMPOP
1	1	1	794	11	11	1913	2	18	80	0	10	10	0	2	18	80	0	0	0
1	1	2	950	0	0	2289	1	24	76	152	75	75	366	1	21	78	0	0	0
1	1	3	252	11	11	607	2	18	80	0	10	10	0	2	18	80	0	0	0
1	1	4	17	0	0	41	1	24	76	0	75	75	0	1	21	78	0	0	0
1	1	5	2005	7	6	4830	1	26	73	422	23	17	1017	2	44	80	0	0	0
1	1	6	1069	7	7	2575	2	8	91	0	0	0	0	0	33	80	0	0	0
1	1	7	1065	6	6	2566	1	6	93	22	0	0	53	0	36	80	0	0	0
1	1	8	0	0	0	0	0	10	90	452	0	0	1089	0	53	80	169	61.3	200
1	1	9	0	4	4	0	3	26	71	0	0	0	0	2	27	80	371	61.3	439
1	1	10	1493	4	4	3597	3	26	71	0	0	0	0	2	27	80	0	0	0
1	1	11	688	4	0	1657	0	17	83	142	5	4	342	0	43	80	0	0	0
1	1	12	20	2	2	48	2	28	70	218	7	6	525	5	48	80	0	0	0
1	1	13	322	0	0	776	2	20	79	266	7	7	641	9	31	80	0	0	0
1	1	14	1100	1	1	2650	1	18	80	0	38	28	0	3	28	80	0	0	0
1	1	15	337	1	1	812	1	18	80	22	38	28	53	3	28	80	0	0	0
1	1	16	274	1	1	660	1	18	80	228	38	28	549	3	28	80	0	0	0
1	1	17	1488	4	4	3585	2	28	70	87	5	4	210	3	38	80	18	61.3	21
1	1	18	563	4	4	1356	2	28	70	243	5	4	585	3	39	80	0	0	0
1	1	19	326	2	2	785	2	24	74	30	6	4	72	8	55	80	0	0	0
1	1	20	1199	4	4	2888	1	27	72	19	8	8	46	4	52	80	0	0	0
1	1	21	0	4	4	0	1	27	72	0	8	8	0	4	52	80	0	0	0
1	1	22	1392	3	3	3353	1	28	71	263	11	10	634	5	50	80	0	0	0
1	1	23	1548	3	2	3729	2	25	73	347	6	4	836	8	55	80	0	0	0
1	1	24	400	10	9	964	9	38	53	788	11	10	1898	22	54	80	0	0	0
1	1	25	299	10	9	720	9	38	53	221	11	10	532	22	54	80	0	0	0
1	1	26	516	8	7	1243	6	48	46	387	7	7	932	2	46	80	0	0	0
1	1	27	584	9	9	1407	9	41	49	244	0	0	588	17	67	80	0	0	0
1	1	28	335	0	0	807	9	35	56	9	0	0	22	19	40	80	0	0	0
1	1	29	840	6	0	2024	3	33	64	21	0	0	51	0	67	80	0	0	0
1	1	30	401	3	2	966	4	34	61	582	29	25	1402	10	34	80	0	0	0
1	1	31	0	4	3	0	2	40	58	0	11	7	0	7	44	80	0	0	0
1	1	32	57	4	3	137	2	40	58	83	11	7	200	7	44	80	0	0	0
1	1	33	36	4	3	87	2	40	58	150	11	7	361	7	44	50	0	0	0
1	1	34	508	4	3	1224	2	40	58	87	11	7	210	7	44	80	0	0	0
1	1	35	0	4	4	0	23	35	41	282	15	14	679	18	51	80	0	0	0
1	1	36	166	7	7	400	21	37	43	131	16	15	316	17	46	80	0	0	0
1	1	37	315	9	6	759	28	46	26	207	18	18	499	31	45	80	0	0	0
1	1	38	169	8	8	407	10	32	58	302	13	13	728	38	34	80	0	0	0
1	1	39	279	12	12	672	11	45	44	289	20	20	696	30	33	80	0	0	0
1	1	40	92	18	15	222	18	42	40	385	12	10	927	35	51	80	12	61.3	14
1	1	41	53	0	0	128	0	33	67	162	17	15	390	14	55	80	8	61.3	9
1	1	42	0	2	2	0	2	34	64	207	16	14	499	16	55	80	0	0	0
1	1	43	0	11	9	0	11	38	51	0	14	12	0	26	53	80	73	61.3	86
1	1	44	754	8	8	1816	14	25	61	170	0	0	410	18	39	80	0	0	0
1	1	45	197	11	11	475	5	46	49	0	43	43	0	5	44	80	0	0	0
1	1	46	183	11	11	441	5	46	49	7	43	43	17	5	44	80	0	0	0
1	1	47	699	9	9	1684	5	43	51	66	22	22	159	7	42	80	0	0	0
1	1	48	1518	5	5	3657	7	45	48	40	25	25	96	5	55	80	0	0	0
1	1	49	499	6	6	1202	8	40	52	355	12	12	855	16	50	80	0	0	0
1	1	50	344	7	7	829	6	45	48	98	10	10	236	13	55	80	0	0	0

ZDATA NO.	SECTOR NO.	TAZ	SFDU	% VAC NON PERM	% VAC	SFPOP	SF0CAR	SF1CAR	SF2+CAR	MFDU	% VAC NON PERM	% VAC	MFPOP	MF0CAR	MF1CAR	MF2+CAR	HMUNITS	HMPCTOCC	HMPOP
1	1	51	280	12	8	675	8	43	49	322	9	7	776	28	43	80	9	61.3	11
1	1	52	14	2	2	34	8	35	57	0	12	12	0	11	38	80	99	61.3	117
1	1	53	537	2	2	1294	8	35	57	217	12	12	523	11	38	80	0	0	0
1	1	54	413	6	6	995	3	30	67	61	0	0	147	23	49	80	0	0	0
1	1	55	369	4	4	889	3	35	62	192	0	0	463	0	59	80	0	0	0
1	1	56	152	9	9	366	5	46	49	289	0	0	696	0	59	80	80	61.3	95
1	1	57	517	5	5	1245	2	54	44	144	9	6	347	1	51	80	0	0	0
1	1	58	120	8	8	289	7	43	50	8	0	0	19	2	51	80	0	0	0
1	1	59	796	7	7	1918	4	38	58	0	0	0	0	21	51	80	0	0	0
1	1	60	601	4	4	1448	4	26	71	0	0	0	0	5	33	80	0	0	0
1	1	61	812	7	7	1956	0	26	74	9	0	0	22	1	25	80	0	0	0
1	1	62	94	2	2	226	0	54	46	43	0	0	104	1	67	80	0	0	0
1	1	63	78	7	7	188	0	28	72	10	4	4	24	0	26	80	0	0	0
1	1	64	231	8	5	556	3	21	76	0	32	16	0	2	35	80	0	0	0
1	1	65	601	8	5	1448	4	21	75	0	29	14	0	2	33	80	0	0	0
1	1	66	193	8	5	465	4	21	75	0	29	14	0	2	33	80	0	0	0
1	1	67	331	2	2	797	0	20	80	0	0	0	0	0	18	80	0	0	0
1	1	68	1273	2	2	3067	0	20	80	0	0	0	0	1	24	80	0	0	0
1	1	69	780	6	6	1879	2	24	74	218	9	8	525	0	45	80	0	0	0
1	1	70	767	3	3	1848	1	23	75	306	13	13	737	0	61	80	5	61.3	6
1	1	71	458	2	2	1103	0	12	87	0	0	0	0	7	12	80	0	0	0
1	1	72	704	4	3	1696	1	12	87	21	0	0	51	6	13	80	0	0	0
1	1	73	1099	4	3	2648	1	11	88	757	0	0	1824	7	12	80	7	613	8
1	1	74	164	3	3	395	1	13	86	0	2	1	0	7	16	80	, 0	0	0
1	1	75	796	1	1	1918	3	29	68	1255	12	11	3023	, 11	46	80	0	0	0
1	1	76	1316	4	3	3170	1	21	79	342	35	32	874	10	40	80	0	0	0
1	1	77	2137	1	1	51/8	1	23	76	51	30	30	123	10	38	80	0	0	0
1	1	78	4722	2	2	11375	3	23	70	560	10	8	1349	5	15	80	0	0	0
1	1	79	696	2	2	1677	2	14	84	0	7	7	0	5	29	80	0	0	0
1	1	80	1039	3	0	2503	2	19	79	294	0	,	708	18	40	80	0	0	0
1	1	81	616	2	2	1484	1	18	80	0	0	0	0	0	0	80	0	0	0
1	1	82	1272	2	2	3064	1	25	74	0	3	2	0	1	35	80	0	0	0
1	1	83	1650	2	2	3975	1	23	77	0	4	2	0	1	37	80	0	0	0
1	1	84	1152	2	1	2775	1	26	73	111	4	2	267	1	37	80	0	0	0
1	1	85	31	2	1	75	1	26	73	0	4	2	0	1	37	80	0	0	0
1	1	86	568	2	1	1368	2	17	81	223	0	0	537	2	20	80	0	0	0
1	1	87	1515	2	1	3650	1	15	84	0	0	0	0	1	16	80	0	0	0
1	1	88	784	2	1	1889	1	17	82	0	0	0	0	1	20	80	0	0	0
1	1	89	290	4	2	699	2	26	72	0	1	1	0	3	22	80	0	0	0
1	1	90	994	5	4	2395	4	46	50	110	10	10	265	8	49	80	0	0	0
1	1	91	1044	3	3	2515	1	25	74	327		5	788	2	29	80	0	0	0
1	1	92	664	0	0	1600	11	35	54	1096	10	10	2640	15	30	80	0	0	0
1	1	92	204	0	0	5	11	27	62	0	0	0	0	17	14	80	0	0	0
1	1	9/	606	1	1	1460	9	36	55	299	8	7	720	10	31	80	0	0	
1	1	95	676	2	2	1678	2	<u></u>	<u> </u>	<u>4</u> 51	19	14	1086	2	56	80	0	0	0
1	1	96	607	8	5	1462	2	49	19	188	15	10	153	6	60	80	4	61.3	5
1	1	97	1121	6	1	2701	2	20	58	112	10	7	272	5	46	80		01.5	0
1	1	0.2	1121	5	-+ 5	1106	2	45	52	20	10	,	12	2	26	20 20	0	0	0
1	1	00	50	5	5	1/0	2	45	52	18	4 A	4	40	2	36	20 20	07	61 2	115
1	1	100	557	J 1	1	13/12	5	37	58	201	4 Q	4 Q	701	3 7	47	80	0	01.3	0
1	1	100	557	1	T	1342	ر ا	57	70	271	0	0	101	/	4/	30	U	U	0

ZDATA NO.	SECTOR NO.	TAZ	SFDU	% VAC NON PERM	% VAC	SFPOP	SFOCAR	SF1CAR	SF2+CAR	MFDU	% VAC NON PERM	% VAC	MFPOP	MF0CAR	MF1CAR	MF2+CAR	HMUNITS	HMPCTOCC	HMPOP
1	1	101	189	0	0	455	5	37	58	43	9	9	104	7	49	80	0	0	0
1	1	102	981	3	3	2363	5	31	64	0	0	0	0	3	31	80	0	0	0
1	1	103	1304	5	5	3141	3	24	73	142	1	1	342	2	34	80	0	0	0
1	1	104	387	2	2	932	3	27	71	0	0	0	0	3	28	80	0	0	0
1	1	105	883	2	2	2127	2	25	74	0	0	0	0	2	23	80	0	0	0
1	1	106	654	2	2	1575	3	29	69	0	0	0	0	3	30	80	0	0	0
1	1	107	924	2	2	2226	1	29	70	346	7	6	834	2	32	80	0	0	0
1	1	108	699	2	1	1684	3	30	67	0	9	7	0	11	39	80	0	0	0
1	1	109	392	2	1	944	3	30	67	615	9	7	1482	11	39	80	0	0	0
1	1	110	1318	3	3	3175	2	33	65	228	1	1	549	2	34	80	0	0	0
1	1	111	1473	1	1	3548	2	23	75	0	13	12	0	9	53	80	0	0	0
1	1	112	764	3	3	1840	4	36	60	5	8	8	12	8	44	80	0	0	0
1	1	113	285	3	3	687	5	37	58	589	8	8	1419	8	45	80	0	0	0
1	1	114	140	0	0	337	1	22	77	151	12	12	364	9	53	80	0	0	0
1	1	115	1323	2	2	3187	5	39	56	1350	4	4	3252	5	43	80	0	0	0
1	1	116	848	4	2	2043	6	31	63	351	3	1	846	8	54	80	0	0	0
1	1	117	7	4	2	17	6	32	62	803	3	2	1934	8	54	80	0	0	0
1	1	118	200	2	1	482	6	47	47	1280	10	8	3084	10	57	80	0	0	0
1	1	119	412	0	0	993	8	40	52	357	9	9	860	9	51	80	0	0	0
1	1	120	411	2	2	990	1	33	67	295	6	6	711	10	51	80	0	0	0
1	1	121	646	2	2	1556	1	33	67	0	6	6	0	10	51	80	0	0	0
1	1	122	998	1	1	2404	7	44	49	166	4	4	400	15	46	80	16	61.3	19
1	1	123	84	2	1	202	6	43	51	201	5	4	484	14	47	80	0	0	0
1	1	124	0	2	2	0	3	36	61	0	5	5	0	12	49	80	0	0	0
1	1	125	202	4	3	487	5	36	59	140	11	10	337	8	54	80	0	0	0
1	1	126	294	4	4	708	3	37	61	7	6	5	17	8	55	80	62	61.3	73
1	1	127	498	4	4	1200	2	36	62	235	7	6	566	10	53	80	0	0	0
1	1	128	84	5	4	202	4	37	59	34	6	5	82	8	55	80	0	0	0
1	1	129	12	1	1	29	6	51	44	295	8	5	711	10	54	80	0	0	0
1	1	130	1	1	1	2	6	51	44	11	8	5	26	10	54	80	0	0	0
1	1	131	16	1	1	39	6	51	44	1477	8	5	3558	10	54	80	0	0	0
1	1	132	696	1	1	1677	6	48	46	747	7	5	1800	10	52	80	0	0	0
1	1	133	545	0	0	1313	2	29	70	46	1	1	111	13	21	80	0	0	0
1	1	134	344	2	2	829	4	29	67	0	5	3	0	10	52	80	0	0	0
1	1	135	0	2	2	0	4	29	67	0	5	3	0	10	52	80	579	61.3	685
1	1	136	22	1	1	53	5	36	59	353	13	8	850	10	51	80	431	61.3	510
1	1	137	0	1	1	0	5	36	59	0	13	8	0	10	51	80	0	0	0
1	1	138	10	1	1	24	5	36	59	497	13	8	1197	10	51	80	0	0	0
1	1	139	1044	1	1	2515	5	36	59	116	13	8	279	10	51	80	138	61.3	163
1	1	140	690	4	4	1662	7	36	57	56	5	5	135	13	53	80	0	0	0
1	1	141	53	8	8	128	10	33	57	227	2	2	547	15	55	80	0	0	0
1	1	142	505	0	0	1217	6	47	47	356	31	31	858	12	48	80	0	0	0
1	1	143	277	1	1	667	11	26	63	20	31	31	48	7	50	80	0	0	0
1	1	144	105	0	0	253	13	26	62	129	35	35	311	6	51	80	0	0	0
1	1	145	341	3	3	821	6	25	70	843	10	10	2031	8	44	80	7	61.3	8
1	1	146	284	3	1	684	7	23	69	58	11	6	140	21	45	80	15	61.3	18
1	1	147	179	3	1	431	7	23	69	179	11	6	431	21	45	80	0	0	0
1	1	148	381	4	4	918	3	33	65	1201	6	6	2893	1	35	80	0	0	0
1	1	149	879	3	2	2118	2	26	72	963	4	3	2320	4	29	80	0	0	0
1	1	150	113	2	2	272	2	23	75	34	17	12	82	4	28	80	0	0	0

ZDATA NO.	SECTOR NO.	TAZ	SFDU	% VAC NON PERM	% VAC	SFPOP	SFOCAR	SF1CAR	SF2+CAR	MFDU	% VAC NON PERM	% VAC	MFPOP	MF0CAR	MF1CAR	MF2+CAR	HMUNITS	HMPCTOCC	HMPOP
1	1	151	87	3	2	210	2	26	72	0	0	0	0	8	32	80	0	0	0
1	1	152	751	2	2	1809	2	28	70	48	0	0	116	7	32	80	0	0	0
1	1	153	441	2	2	1062	2	28	70	46	0	0	111	8	32	80	0	0	0
1	1	154	919	0	0	2214	2	17	82	0	0	0	0	2	18	80	0	0	0
1	1	155	597	0	0	1438	4	25	71	296	13	13	713	7	31	80	0	0	0
1	1	156	1	4	4	2	6	21	73	0	5	5	0	48	38	80	0	0	0
1	1	157	462	4	4	1113	6	21	73	0	5	5	0	48	38	80	0	0	0
1	1	158	579	1	1	1395	1	21	78	0	11	11	0	7	40	80	0	0	0
1	1	159	1001	4	3	2411	3	26	71	195	7	6	470	3	48	80	0	0	0
1	1	160	431	4	3	1038	3	26	72	1043	7	6	2513	3	48	80	0	0	0
1	1	161	1194	1	1	2876	2	9	89	42	7	6	101	3	48	80	0	0	0
1	1	162	1091	1	1	2628	0	21	79	241	0	0	581	0	28	80	0	0	0
1	1	163	2323	2	1	5596	1	19	80	304	5	3	732	1	21	80	0	0	0
1	1	164	801	2	2	1930	1	21	78	0	1	1	0	1	21	80	0	0	0
1	1	165	247	6	4	595	0	33	67	59	7	4	142	0	46	80	0	0	0
1	1	166	694	4	4	1672	6	24	70	561	7	7	1351	1	43	80	0	0	0
1	1	167	337	0	0	812	0	23	77	102	16	0	246	0	20	80	0	0	0
1	1	168	1356	2	2	3267	1	34	65	305	17	8	735	6	30	80	0	0	0
1	1	169	202	8	7	487	10	57	34	881	4	3	2122	10	58	80	0	0	0
1	1	170	295	2	2	711	4	38	58	686	7	7	1653	6	46	80	0	0	0
1	1	171	173	2	2	417	4	38	58	1414	7	7	3406	6	46	80	200	61.3	237
1	1	172	15	4	3	36	2	36	62	88	8	8	212	5	54	80	97	61.3	115
1	1	173	0	4	3	0	2	36	62	523	8	8	1260	5	54	80	59	61.3	70
1	1	174	286	5	5	689	3	28	68	313	8	7	754	2	34	80	0	0	0
1	1	175	607	6	5	1462	3	28	69	0	8	7	0	2	33	80	0	0	0
1	1	176	240	4	3	578	2	36	62	303	8	8	730	5	54	80	0	0	0
1	1	177	94	4	2	226	2	31	67	388	4	2	935	5	66	80	0	0	0
1	1	178	526	1	1	1267	3	24	73	0	8	7	0	2	56	80	0	0	0
1	1	179	649	4	2	1563	2	31	67	731	4	2	1761	5	66	80	0	0	0
1	1	180	1085	2	1	2614	2	24	73	21	0	0	51	2	27	80	0	0	0
1	1	181	594	2	0	1431	2	24	74	0	0	0	0	2	23	80	15	61.3	18
1	1	182	515	1	1	1241	0	22	78	0	0	0	0	0	45	80	0	0	0
1	1	183	1	10	9	2	9	38	53	191	11	10	460	22	54	80	15	61.3	18
1	1	184	858	2	2	2067	2	16	83	191	7	7	460	6	30	80	0	0	0
1	1	185	1118	2	2	2693	1	18	80	0	0	0	0	0	0	80	0	0	0
1	1	186	1047	2	2	2522	1	29	70	148	7	6	357	2	32	80	0	0	0
1	1	187	787	2	2	1896	1	29	70	0	7	6	0	2	32	80	0	0	0
1	1	188	260	2	1	626	3	30	67	449	9	7	1082	11	39	80	0	0	0
1	1	189	102	5	4	246	4	37	59	54	6	5	130	8	55	80	0	0	0
1	1	190	190	2	1	458	4	34	62	345	5	4	831	10	53	80	0	0	0
1	1	191	78	3	1	188	7	23	69	53	11	6	128	21	45	80	0	0	0
1	1	192	6	1	1	14	1	9	90	0	0	0	0	0	0	80	0	0	0
1	1	193	496	2	2	1195	1	21	77	8	2	1	19	1	21	80	0	0	0
1	1	194	621	6	4	1496	0	33	67	251	7	4	605	0	46	80	0	0	0
1	1	195	212	8	7	511	10	57	34	714	4	3	1720	10	58	80	0	0	0
1	1	196	402	2	2	968	4	38	58	140	7	7	337	6	46	80	0	0	0
1	1	197	698	1	1	1681	3	24	73	354	8	7	853	2	56	80	0	0	0
1	1	198	391	4	2	942	2	31	67	111	4	2	267	5	66	80	0	0	0
1	1	199	309	0	0	744	1	24	76	0	75	75	0	1	21	78	0	0	0
1	1	200	0	0	0	0	1	24	76	95	75	75	229	1	21	78	575	61.3	680

1 1 20 1 2 1 27 20 20 25 18 47 2 46 30 61.3 90 0.0 <th>ZDATA NO.</th> <th>SECTOR NO.</th> <th>TAZ</th> <th>SFDU</th> <th>% VAC NON PERM</th> <th>% VAC</th> <th>SFPOP</th> <th>SFOCAR</th> <th>SF1CAR</th> <th>SF2+CAR</th> <th>MFDU</th> <th>% VAC NON PERM</th> <th>% VAC</th> <th>MFPOP</th> <th>MF0CAR</th> <th>MF1CAR</th> <th>MF2+CAR</th> <th>HMUNITS</th> <th>НМРСТОСС</th> <th>HMPOP</th>	ZDATA NO.	SECTOR NO.	TAZ	SFDU	% VAC NON PERM	% VAC	SFPOP	SFOCAR	SF1CAR	SF2+CAR	MFDU	% VAC NON PERM	% VAC	MFPOP	MF0CAR	MF1CAR	MF2+CAR	HMUNITS	НМРСТОСС	HMPOP
1 1. 202 172 0 0 10 90 0 0 0 0 33 80 0 0 0 1 10 201 107 20 107 0 0 0 0 53 480 00 0 0 0 1 10 201 22 208 2 28 70 0 0 0 0 5 480 80 0	1	1	201	1	7	5	2	1	27	72	202	25	18	487	2	46	80	768	61.3	909
1 1 10 100 0	1	1	202	172	0	0	414	0	10	90	0	0	0	0	0	53	80	0	0	0
1 1 20 0 4 4 0 3 26 73 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 1 206 188 2 28 71 20 66 5 530 4 48 80 0	1	1	203	443	0	0	1067	0	10	90	0	0	0	0	0	53	80	0	0	0
1 1 10 <td>1</td> <td>1</td> <td>204</td> <td>0</td> <td>4</td> <td>4</td> <td>0</td> <td>3</td> <td>26</td> <td>71</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>2</td> <td>27</td> <td>80</td> <td>0</td> <td>0</td> <td>0</td>	1	1	204	0	4	4	0	3	26	71	0	0	0	0	2	27	80	0	0	0
1 10 20 20 2 20 6 5 530 4 485 80 0 0 0 0 1 10 207 1 4 4 41 1 22 86 8 8 8 10 34 80 0 0 0 0 1 10 209 0 4 3 0 4 0 11 7 60 7 44 80 0 0 0 1 1 211 44 4 3 10 7 80 7 510 2 30 0	1	1	205	1282	2	2	3088	2	28	70	787	6	5	1896	5	48	80	0	0	0
1 10 207 17 4 4 1 127 72 6.3 8 8 152 4 52 80 361 61.3 407 1 1 208 0.0 4 3 0 2 40 58 0 111 7 0 7 44 50 0 0 0 1 1 210 31 4 78 24 78 88 7 51 2 37 80 0 0 0 0 1 1 212 30 5 161 3 21 75 0 32 16 0 2 38 0 0 0 0 11 1 11 161 163 2 2 381 14 0 0 24 1 24 80 0 0 0 0 0 0 0 0 0 0 <td>1</td> <td>1</td> <td>206</td> <td>998</td> <td>2</td> <td>2</td> <td>2404</td> <td>2</td> <td>28</td> <td>71</td> <td>220</td> <td>6</td> <td>5</td> <td>530</td> <td>4</td> <td>48</td> <td>80</td> <td>0</td> <td>0</td> <td>0</td>	1	1	206	998	2	2	2404	2	28	71	220	6	5	530	4	48	80	0	0	0
1 1 209 0 4 3 0 2 400 50 70 74 400 00 0 0 1 1 210 11 4 3 26 2 400 58 37 11 7 680 7 44 50 0 0 0 1 11 211 494 4 3 120 38 62 9 88 8 7 51 2 30 0 0 0 1 121 300 5 134 4 21 75 0 22 156 830 0 0 0 23 800 0 0 0 0 101 101 101 101 101 101 101 101 101 110 101 101 101 101 101 101 101 101 101 101 101 101 101 <td>1</td> <td>1</td> <td>207</td> <td>17</td> <td>4</td> <td>4</td> <td>41</td> <td>1</td> <td>27</td> <td>72</td> <td>63</td> <td>8</td> <td>8</td> <td>152</td> <td>4</td> <td>52</td> <td>80</td> <td>361</td> <td>61.3</td> <td>427</td>	1	1	207	17	4	4	41	1	27	72	63	8	8	152	4	52	80	361	61.3	427
1 10 00 4 3 0 2 40 58 97 11 7 0 7 44 50 0 0 0 1 11 11 11 44 50 0 0 0 1 11 212 330 5 4 75 3 30 67 21 88 7 500 2 55 48 0 0 0 0 1 1213 801 8 5 1153 21 27 75 0 29 14 0 2 35 80 0 0 0 1 1216 663 2 2 3934 4 21 75 0 29 14 0 2 33 80 0 0 0 10 124 43 80 0 10 10 10 10 10 10 10 10	1	1	208	1033	3	2	2489	4	34	61	186	29	25	448	10	34	80	0	0	0
1 1 4 3 26 2 40 582 357 11 7 860 7 44 80 0 0 0 1 11 121 340 4 755 3 24 7 21 87 7 51 2 37 80 0 0 0 0 1 1 213 30 5 44 7 7 0 32 16 0 2 33 80 0 0 0 0 1 1 215 1633 2 2 334 0 2 80 118 0 0 243 1 24 80 0	1	1	209	0	4	3	0	2	40	58	0	11	7	0	7	44	50	0	0	0
1 11 121 494 4 3 110 2 3 5 6 7 7 51 2 35 80 0 0 0 1 1 213 2 1 1 5 3 20 67 21 88 7 5020 2 55 80 0 0 0 1 1 235 603 8 5 1514 4 21 75 0 29 14 0 2 33 80 0 <td>1</td> <td>1</td> <td>210</td> <td>11</td> <td>4</td> <td>3</td> <td>26</td> <td>2</td> <td>40</td> <td>58</td> <td>357</td> <td>11</td> <td>7</td> <td>860</td> <td>7</td> <td>44</td> <td>80</td> <td>0</td> <td>0</td> <td>0</td>	1	1	210	11	4	3	26	2	40	58	357	11	7	860	7	44	80	0	0	0
1 12 330 5 4 79 51 2 78 80 0 0 0 0 1 123 2 1 1 5 3 24 73 2084 8 7 5020 2 56 80 0 0 0 1 1215 803 8 5 1934 4 22 75 0 232 16 0 2 35 80 0 0 0 1 1215 1747 2 2 3934 0 20 80 188 0 0 433 24 80 0	1	1	211	494	4	3	1190	2	36	62	9	8	8	22	5	54	80	0	0	0
1 1 1 5 3 24 73 2884 8 7 5020 2 56 80 0 0 0 0 1 1 215 803 8 5 116 0 32 16 0 2 33 80 0 0 0 1 1 215 803 2 2 334 0 20 80 188 0 0 24 11 24 80 0 0 0 10 1 210 10 1 2 10 14 44 155 7 7 1084 5 29 80 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 21 18 80 0 0 0 0 0 0 0 0 0	1	1	212	330	5	4	795	3	30	67	21	8	7	51	2	37	80	0	0	0
1 1 124 482 8 5 1161 3 21 76 0 22 16 0 2 35 80 0 0 0 0 1 1 216 1633 2 2 3034 0 20 80 118 0 0 224 41 24 80 0 0 0 1 1 216 1633 2 2 1515 0 20 80 188 0 0 438 80 1 1 21 11 11 13 2 18 80 0 100 10 0 2 18 80 0 0 0 0 0 0 0	1	1	213	2	1	1	5	3	24	73	2084	8	7	5020	2	56	80	0	0	0
1 1 215 803 8 5 1934 4 21 75 0 29 14 0 2 33 80 0 0 0 1 11 217 1874 2 2 4515 0 20 80 188 0 0 453 1 24 80 0 0 0 0 1 1219 893 2 2 2151 2 14 84 450 7 7 1084 5 29 80 0	1	1	214	482	8	5	1161	3	21	76	0	32	16	0	2	35	80	0	0	0
1 1 1 1 1 216 1633 2 2 934 0 20 80 118 0 0 284 1 24 80 0 0 0 1 11 1218 1204 1 1 2900 1 23 76 45 30 30 108 5 29 80 0 0 0 0 1 12 298 2 2 14 84 450 7 7 304 5 29 80 11 11 123 12 18 80 0 100 0 2 18 80 0 0 0 0 10 10 10 12 18 80 0 0 0 0 </td <td>1</td> <td>1</td> <td>215</td> <td>803</td> <td>8</td> <td>5</td> <td>1934</td> <td>4</td> <td>21</td> <td>75</td> <td>0</td> <td>29</td> <td>14</td> <td>0</td> <td>2</td> <td>33</td> <td>80</td> <td>0</td> <td>0</td> <td>0</td>	1	1	215	803	8	5	1934	4	21	75	0	29	14	0	2	33	80	0	0	0
1 1 11 121 1874 2 4 455 0 20 80 188 0 0 453 1 24 80 0 0 0 0 1 11 213 893 2 2 2151 2 14 844 435 7 7 1084 5 29 80 0 0 0 1 1221 51 111 11 429 2 18 80 0 10 10 0 2 18 80 0 101 10 0 2 18 80 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 12 178 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1	1	216	1633	2	2	3934	0	20	80	118	0	0	284	1	24	80	0	0	0
1 1 1 1 200 1 23 76 45 30 30 108 0 38 80 0 0 0 0 0 1 11 210 77 2 2 1703 2 14 84 450 7 7 1084 5 29 80 0	1	1	217	1874	2	2	4515	0	20	80	188	0	0	453	1	24	80	0	0	0
1 1 219 893 2 2 2151 2 14 84 450 7 7 1084 5 29 80 0	1	1	218	1204	1	1	2900	1	23	76	45	30	30	108	0	38	80	0	0	0
1 120 70 2 2 100 2 14 84 135 7 7 325 5 29 80 0 0 0 0 1 121 51 111 11 122 18 80 0 10 10 0 2 18 80 0 0 0 1 1222 178 11 11 429 2 18 80 0 1 21 78 0 0 0 1 1223 162 0 978 1 24 76 0 75 75 0 1 21 78 0 0 0 0 0 0 0 0 0 0 1 11 11 11 11 124 76 0 10 10 0 2 18 80 0 0 0 0 0 0 0 10	1	1	219	893	2	2	2151	2	14	84	450	7	7	1084	5	29	80	0	0	0
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	1	1	220	707	2	2	1703	2	14	84	135	7	7	325	5	29	80	0	0	0
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	1	1	221	51	11	11	123	2	18	80	0	10	10	0	2	18	80	0	0	0
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	1	1	222	178	11	11	429	2	18	80	0	10	10	0	2	18	80	0	0	0
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	1	1	223	102	0	0	246	1	24	76	24	75	75	58	1	21	78	0	0	0
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	1	1	224	406	0	0	978	1	24	76	0	75	75	0	1	21	78	0	0	0
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	1	1	225	12	11	11	29	2	18	80	0	10	10	0	2	18	80	0	0	0
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	1	1	226	353	11	11	850	2	18	80	0	10	10	0	2	18	80	0	0	0
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	1	1	227	361	11	11	870	2	18	80	0	10	10	0	2	18	80	0	0	0
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	1	1	228	47	0	0	113	1	24	76	0	75	75	0	1	21	78	0	0	0
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	1	1	229	141	11	11	340	2	18	80	0	10	10	0	2	18	80	0	0	0
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	1	1	230	158	11	11	381	2	18	80	0	10	10	0	2	18	80	0	0	0
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	1	1	231	144	11	11	347	2	18	80	0	10	10	0	2	18	80	0	0	0
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	1	1	232	233	11	11	561	2	18	80	0	10	10	0	2	18	80	0	0	0
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	1	1	233	9	4	3	22	2	40	58	150	11	/	0	/	44	50	121	61.3	143
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1	1	234	12	4	3	29	2 1	40	58	150	11	7	361	1	44	50	40	61.3	47
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	1	1	235	0	0	0	0	1	24	70	0	75	75	0	1	21	78	0	0	0
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	1	1	230	162	4	3	200	2 1	40	58 76	177	75	75	126	1	44 21	50 70	U /10	61.2	105
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	1	2	23/	102	0	0	390	1	0	10	1//	0	13	420	1	0	70 80	410	01.5	400
1 2 235 0	1	2	230	0	0	0	0	0	0	0	0	0	0	0	0	0	80	0	0	0
1 2 0 3 2 0 4 34 61 0 29 25 0 10 34 80 0 0 0 1 1 242 0 3 2 0 4 34 61 0 29 25 0 10 34 80 0 0 0 0 1 1 243 352 4 3 848 2 40 58 0 11 7 0 7 44 80 0	1	1	239	0	4	3	0	2	40	58	0	11	7	0	7	44	80	158	61.3	187
1 1 1 241 0 3 2 0 4 34 01 0 25 0 10 34 80 0 0 0 1 1 242 0 3 2 0 4 34 61 0 29 25 0 10 34 80 0 0 0 1 1 243 352 4 3 848 2 40 58 0 11 7 0 7 44 80 0 0 0 1 2 244 319 4 2 796 2 19 79 0 0 0 0 0 0 87 0 1 2 245 694 7 4 1732 2 40 58 0 16 8 0 2 43 55 0 87 0 1 2 246 606 5 3 1513 2 39 59 36 8	1	1	240	0	2	2	0	2 /	3/	61	0	20	25	0	10	3/	80	130	01.5	107
1 1 21 0 1 0 1 1 21 0 1 <th1< th=""> <th1< th=""> <th1< th=""></th1<></th1<></th1<>	1	1	241	0	2	2	0	4	2/	61	0	29	25	0	10	34	80	0	0	0
1 2 10 502 4 50 6 11 7 6 7 44 66 6 6 6 1 2 244 319 4 2 796 2 19 79 0	1	1	242	352	л	2	8/18	2	<u>4</u> 0	58	0	11	7	0	7	ΔΛ	80	0	0	0
1 2 244 312 4 175 2 15 75 0 0 0 0 0 87 0 1 2 245 694 7 4 1732 2 40 58 0 16 8 0 2 43 55 0 87 0 1 2 246 606 5 3 1513 2 39 59 36 8 4 90 4 48 48 0 87 0 1 2 247 17 0 0 42 2 27 71 0 0 0 0 0 87 0 1 2 248 17 0 0 42 2 27 71 0 0 0 0 0 87 0 1 2 249 3 0 0 7 2 27 71 0 0 0 0 0 0 0 0 0 0	1	2	243	310		2	796	2	19	79	0	0	,	0	,	0	0	0	87	0
1 2 100 </td <td>1</td> <td>2</td> <td>244</td> <td>69/</td> <td>7</td> <td><u> </u></td> <td>1732</td> <td>2</td> <td>40</td> <td>58</td> <td>0</td> <td>16</td> <td>2 2</td> <td>0</td> <td>2</td> <td>43</td> <td>55</td> <td>0</td> <td>87</td> <td>0</td>	1	2	244	69/	7	<u> </u>	1732	2	40	58	0	16	2 2	0	2	43	55	0	87	0
1 2 247 17 0 0 42 2 27 71 0 </td <td>1</td> <td>2</td> <td>245</td> <td>606</td> <td>5</td> <td>3</td> <td>1513</td> <td>2</td> <td>39</td> <td>59</td> <td>36</td> <td>8</td> <td>4</td> <td>90</td> <td>4</td> <td>48</td> <td>48</td> <td>0</td> <td>87</td> <td>0</td>	1	2	245	606	5	3	1513	2	39	59	36	8	4	90	4	48	48	0	87	0
1 2 248 17 0 0 42 2 27 71 0 </td <td>1</td> <td>2</td> <td>240</td> <td>17</td> <td>0</td> <td>0</td> <td>42</td> <td>2</td> <td>27</td> <td>71</td> <td>0</td> <td>0</td> <td></td> <td>0</td> <td>0</td> <td>-0</td> <td>0</td> <td>0</td> <td>87</td> <td>0</td>	1	2	240	17	0	0	42	2	27	71	0	0		0	0	-0	0	0	87	0
1 2 249 3 0 0 7 2 27 71 0 0 0 0 0 0 0 0 87 0 1 2 250 20 0 0 50 2 27 71 0 0 0 0 0 0 87 0	1	2	2/18	17	0	0	42	2	27	71	0	0	0	0	0	0	0	0	87	0
1 2 250 20 0 50 2 27 71 0 </td <td>1</td> <td>2</td> <td>240</td> <td>3</td> <td>0</td> <td>0</td> <td>7</td> <td>2</td> <td>27</td> <td>71</td> <td>n</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>87</td> <td>0</td>	1	2	240	3	0	0	7	2	27	71	n	0	0	0	0	0	0	0	87	0
	1	2	250	20	0	0	, 50	2	27	71	0	0	0	0	0	0	0	0	87	0

ZDATA NO.	SECTOR NO.	TAZ	SFDU	% VAC NON PERM	% VAC	SFPOP	SFOCAR	SF1CAR	SF2+CAR	MFDU	% VAC NON PERM	% VAC	MFPOP	MF0CAR	MF1CAR	MF2+CAR	HMUNITS	НМРСТОСС	HMPOP
1	2	251	19	0	0	47	2	27	71	2	0	0	5	0	0	0	0	87	0
1	2	252	19	7	5	47	13	54	33	0	0	0	0	13	51	36	0	87	0
1	2	253	14	7	5	35	13	54	33	0	0	0	0	13	51	36	0	87	0
1	2	254	31	4	2	77	2	19	79	0	0	0	0	0	0	0	0	87	0
1	2	255	208	6	6	519	11	33	56	0	0	0	0	15	15	69	0	87	0
1	2	256	39	0	0	97	2	27	71	0	0	0	0	0	0	0	0	87	0
1	2	257	0	0	0	0	0	0	0	0	0	0	0	0	0	80	0	64	0
1	2	258	0	0	0	0	0	0	0	0	0	0	0	0	0	80	0	64	0
1	2	259	0	0	0	0	0	0	0	0	0	0	0	0	0	80	0	64	0
1	2	260	0	0	0	0	0	0	0	0	0	0	0	0	0	80	0	64	0
1	2	261	0	0	0	0	0	0	0	0	0	0	0	0	0	80	0	64	0
1	2	262	0	0	0	0	0	0	0	0	0	0	0	0	0	80	0	64	0
1	2	263	0	0	0	0	0	0	0	0	0	0	0	0	0	80	0	64	0
1	2	264	130	3	3	325	9	34	57	48	8	8	119	8	44	80	0	64	0
1	2	265	645	0	0	1610	1	29	70	0	35	35	0	0	36	80	0	64	0
1	2	266	377	10	7	941	2	52	46	1162	5	4	2891	15	50	80	14	64	29
1	2	267	582	4	4	1453	2	39	59	4	0	0	10	2	31	80	0	64	0
1	2	268	347	5	5	866	3	36	61	2	3	3	5	3	34	80	0	64	0
1	2	269	35	6	6	87	3	36	60	0	0	0	0	3	33	80	0	64	0
1	2	270	1488	4	4	3714	2	28	70	0	0	0	0	2	28	80	0	64	0
1	2	271	93	4	4	232	2	28	70	13	0	0	32	2	28	80	0	64	0
1	2	272	648	16	12	1618	13	31	56	157	0	0	391	28	40	80	0	64	0
1	2	273	35	16	12	87	17	35	47	27	1	1	67	32	34	80	0	64	0
1	2	274	548	11	9	1368	24	38	37	58	7	6	144	38	28	80	23	64	48
1	2	275	654	8	5	1632	16	30	53	0	3	1	0	21	30	80	0	64	0
1	2	276	376	9	3	939	10	41	49	51	20	16	127	15	33	80	0	64	0
1	2	277	772	4	4	1927	2	41	57	2	0	0	5	7	53	80	33	64	69
1	2	278	1294	5	3	3230	2	39	59	546	8	4	1358	4	48	48	0	87	0
1	2	279	598	7	4	1493	2	40	58	0	16	8	0	2	43	55	0	87	0
1	2	280	1508	4	4	3764	0	23	76	0	0	0	0	1	23	80	0	64	0
1	2	281	801	4	4	1999	4	41	55	74	0	0	184	17	51	80	0	64	0
1	2	282	63	3	3	157	10	49	41	40	0	0	100	23	48	80	6	64	13
1	2	283	593	9	9	1480	6	37	57	175	0	0	435	9	45	80	0	64	0
1	2	284	826	0	0	2062	1	19	80	5	0	0	12	0	0	80	0	64	0
1	2	285	1756	3	2	4383	1	19	80	0	0	0	0	0	18	80	0	64	0
1	2	286	1662	4	4	4149	3	24	72	71	7	7	177	4	28	80	116	64	242
1	2	287	958	5	4	2391	2	25	73	0	0	0	0	2	29	80	0	64	0
1	2	288	1089	4	4	2718	2	22	76	0	0	0	0	0	0	80	0	64	0
1	2	289	443	8	7	1106	7	48	46	0	0	0	0	8	52	80	0	64	0
1	2	290	61	4	2	152	2	19	79	0	0	0	0	0	0	80	0	64	0
1	2	291	959	7	5	2394	13	54	33	14	0	0	35	13	51	80	0	64	0
1	2	292	55	0	0	137	2	27	71	2	0	0	5	0	0	0	0	87	0
1	2	293	327	6	6	816	11	33	56	0	0	0	0	15	15	80	0	64	0
1	2	294	359	12	5	896	3	30	68	10	78	18	25	3	53	80	0	64	0
1	2	295	120	15	15	300	6	52	42	0	1	1	0	4	51	80	0	64	0
1	2	296	573	11	11	1430	9	25	66	6	12	12	15	15	42	80	0	64	0
1	2	297	578	9	7	1443	7	49	44	493	7	5	1227	9	49	80	0	64	0
1	2	298	145	10	7	362	8	50	43	35	6	5	87	9	48	80	81	64	169
1	2	299	211	3	2	527	8	34	58	174	17	12	433	5	64	80	0	64	0
1	2	300	465	9	7	1161	6	41	53	208	6	5	518	11	51	80	0	64	0

1 2 30 541 7	ZDATA NO.	SECTOR NO.	TAZ	SFDU	% VAC NON PERM	% VAC	SFPOP	SFOCAR	SF1CAR	SF2+CAR	MFDU	% VAC NON PERM	% VAC	MFPOP	MF0CAR	MF1CAR	MF2+CAR	HMUNITS	НМРСТОСС	HMPOP
1 2 300 100 310 25 74 300 75 74 800 0 744 0 1 2 300 124 90 7 1201 70 120 70 120 70 120 70 120 70 120 70 120 70 120 70 120 70 120 70 120 70 120 <	1	2	301	541	7	7	1350	1	16	82	197	4	4	490	16	60	80	0	64	0
1 2 304 244 7 7 1201 7 7 1201 7 7 1201 7 134 50 13 63 63 10 12 257 37 80 0 64 0 1 2 306 344 6 6 858 8 40 74 8 8 140 12 357 800 0 644 0 1 2 306 344 6 6 754 8 42 51 4 0 0 10 12 35 800 0 644 0 1 2 308 10 1 23 38 80 0 7 7 0 14 80 0 644 0 1 2 313 130 0 1 33 145 14 455 12 14 14 80 0 644	1	2	302	162	3	2	404	8	34	58	8	17	12	20	5	64	80	0	64	0
1 2 307 121 3 3 7 6 7 <td>1</td> <td>2</td> <td>303</td> <td>481</td> <td>7</td> <td>7</td> <td>1201</td> <td>7</td> <td>34</td> <td>59</td> <td>13</td> <td>63</td> <td>60</td> <td>32</td> <td>27</td> <td>37</td> <td>80</td> <td>0</td> <td>64</td> <td>0</td>	1	2	303	481	7	7	1201	7	34	59	13	63	60	32	27	37	80	0	64	0
1 2 306 343 8 8 8 400 741 8 8 184 21 57 80 0 64 0 1 2 306 344 6 55 84 44 53 16 0 0 10 12 35 80 0 64 0 1 2 307 302 66 6 757 8 42 53 44 0 10 12 35 80 0 64 0 1 2 308 10 8 44 50 13 135 12 40 7 7 0 2 33 80 0 64 0 1 2 313 135 3 136 73 44 57 0 7 7 73 10 100 11 20 33 30 100 33 30 100 10	1	2	304	2541	9	7	6343	5	26	70	24	0	0	60	7	29	80	0	64	0
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	1	2	305	435	8	8	1086	22	38	40	74	8	8	184	21	57	80	0	64	0
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	1	2	306	344	6	6	859	8	41	51	16	0	0	40	12	35	80	0	64	0
1 2 38 30 8 8 25 23 38 39 0 7 7 0 21 58 80 0 64 0 1 2 309 362 5 594 60 12 12 12 40 7 7 0 21 33 80 0 64 0 1 2 311 0 3 3 0 1 23 76 0 9 9 0 2 33 80 0 64 0 1 2 313 669 3 3 153 1 24 7 0 8 8 0 64 0 64 0 1 2 315 69 3 3153 1 24 7 1 0 0 0 0 0 0 0 0 0 0 0 0 <td< td=""><td>1</td><td>2</td><td>307</td><td>302</td><td>6</td><td>6</td><td>754</td><td>8</td><td>42</td><td>51</td><td>4</td><td>0</td><td>0</td><td>10</td><td>12</td><td>35</td><td>80</td><td>0</td><td>64</td><td>0</td></td<>	1	2	307	302	6	6	754	8	42	51	4	0	0	10	12	35	80	0	64	0
1 2 300 362 5 5 904 6 44 50 185 12 12 440 7 49 80 0 64 0 1 2 311 0 3 3 0 1 23 76 0 9 0 2 33 80 0 64 0 1 2 312 146 6 2 0 37 63 0 0 0 0 0 37 80 0 64 0 1 2 314 466 3 3 1520 1 24 75 0 0 0 1 1 14 80 0 644 0 1 2 316 64 3 31520 1 22 77 1 0 0 0 0 0 0 0 0 0 0 0 0	1	2	308	10	8	8	25	23	38	39	0	7	7	0	21	58	80	0	64	0
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	1	2	309	362	5	5	904	6	44	50	185	12	12	460	7	49	80	0	64	0
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	1	2	310	0	3	3	0	1	23	76	0	9	9	0	2	33	80	0	64	0
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	1	2	311	0	3	3	0	1	23	76	0	9	9	0	2	33	80	0	64	0
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	1	2	312	1	24	6	2	0	37	63	0	0	0	0	0	37	80	0	64	0
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	1	2	313	1185	3	3	2958	7	34	59	1044	7	7	2597	11	44	80	0	64	0
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	1	2	314	466	3	3	1163	9	34	57	0	8	8	0	8	44	80	0	64	0
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	1	2	315	609	3	3	1520	1	24	75	0	0	0	0	1	21	80	0	64	0
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	1	2	316	703	4	3	1755	1	23	75	402	1	1	1000	8	37	80	0	64	0
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	1	2	317	10	0	0	25	2	27	71	0	0	0	0	0	0	0	0	87	0
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	1	2	318	46	0	0	115	2	27	71	0	0	0	0	0	0	80	0	64	0
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	1	2	319	658	12	5	1642	3	30	68	6	78	18	15	3	53	80	0	64	0
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	1	2	320	37	0	0	92	2	27	71	0	0	0	0	0	0	0	0	87	0
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	1	2	321	13	0	0	32	2	27	71	22	0	0	55	0	0	0	0	87	0
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	1	2	322	2035	2	2	5080	4	22	74	0	0	0	0	4	22	80	0	64	0
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	1	2	323	0	0	0	0	0	0	0	0	0	0	0	0	0	80	0	64	0
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	1	2	324	8	7	5	20	13	54	33	0	0	0	0	13	51	36	0	87	0
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	1	2	325	225	7	5	562	13	54	33	0	0	0	0	13	51	36	0	87	0
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	1	2	326	21	4	2	52	2	19	79	0	0	0	0	0	0	0	0	87	0
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	1	2	327	0	0	0	0	0	0	0	0	0	0	0	0	0	80	0	64	0
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	1	2	328	213	9	7	532	2	15	83	0	4	1	0	2	11	80	0	64	0
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	1	2	329	1494	4	4	3729	3	26	71	409	18	18	1018	4	35	80	0	64	0
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	1	2	330	1082	3	3	2701	2	22	76	9	0	0	22	2	22	80	0	64	0
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	1	2	331	810	4	3	2022	4	38	58	2	5	4	5	10	53	80	0	64	0
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	1	2	332	0	0	0	0	0	0	0	0	0	0	0	0	0	80	0	64	0
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	1	2	333	1584	4	3	3954	8	28	64	736	0	0	1831	16	42	80	0	64	0
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	1	2	334	686	4	3	1712	4	38	58	538	5	4	1339	10	53	80	0	64	0
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	1	2	335	821	7	7	2049	7	47	46	0	0	0	0	14	39	80	0	64	0
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1	2	336	796	1	1	1987	9	38	53	572	11	11	1423	16	55	80	0	64	0
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	1	2	337	480	4	3	1198	7	32	61	542	12	12	1348	13	49	80	0	64	0
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1	2	338	761	5	4	1900	7	40	53	0	9	9	0	21	33	80	0	64	0
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1	2	339	625	3	3	1560	5	28	66	0	10	10	0	4	58	80	0	64	0
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	1	2	340	200	3	3	499	5	28	66	131	10	10	326	4	58	80	0	64	0
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1	2	341	343	5	3	856	5	46	49	40	0	0	100	15	25	80	0	64	0
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1	2	342	5	5	5	12	8	34	58	0	7	7	0	12	56	80	0	64	0
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1	2	343	344	5	5	859	8	34	58	127	7	7	316	12	56	80	0	64	0
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1	2	344	639	5	5	1595	8	41	52	2	8	7	5	16	51	80	0	64	0
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	1	2	345	413	5	5	1031	8	44	48	669	9	7	1664	18	49	80	0	64	0
1 2 347 1133 6 6 2828 11 43 45 228 9 9 567 23 44 80 16 64 33 1 2 348 565 6 6 11 1 39 60 2060 18 17 5125 3 55 80 0 64 0 1 2 349 0 0 0 2 49 50 1172 20 18 2916 2 49 80 0 64 0 1 2 350 551 0 0 1375 10 44 46 237 9 9 590 13 47 80 0 64 0	1	2	346	2	4	4	5	14	34	53	0	9	9	0	24	36	80	0	64	0
1 2 348 565 6 6 1410 1 39 60 2060 18 17 5125 3 55 80 0 64 0 1 2 349 0 0 0 2 49 50 1172 20 18 2916 2 49 80 0 64 0 1 2 350 551 0 0 1375 10 44 46 237 9 9 590 13 47 80 0 64 0	1	2	347	1133	6	6	2828	11	43	45	228		9	567	23	44	80	16	64	33
1 2 349 0 0 0 2 49 50 1172 20 18 2916 2 49 80 0 64 0 1 2 350 551 0 0 1375 10 44 46 237 9 9 590 13 47 80 0 64 0	1	2	348	565	6	6	1410	1	39	60	2060	18	17	5125	3	55	80	0	64	0
	1	2	349	0	0	0	0	2	49	50	1172	20	18	2916	2	49	80	0	64	0
	1	2	350	551	0	0	1375	10	44	46	237	9	9	590	13	47	80	0	64	0

ZDATA NO.	SECTOR NO.	TAZ	SFDU	% VAC NON PERM	% VAC	SFPOP	SFOCAR	SF1CAR	SF2+CAR	MFDU	% VAC NON PERM	% VAC	MFPOP	MF0CAR	MF1CAR	MF2+CAR	HMUNITS	НМРСТОСС	HMPOP
1	2	351	531	2	2	1325	8	43	49	179	1	1	445	6	41	80	0	64	0
1	2	352	582	6	6	1453	1	26	72	695	2	2	1729	4	50	80	49	64	102
1	2	353	424	6	6	1058	1	26	72	328	2	2	816	4	50	80	0	64	0
1	2	354	280	0	0	699	2	37	61	0	0	0	0	16	25	80	0	64	0
1	2	355	128	1	1	320	4	36	60	516	8	7	1284	4	45	80	0	64	0
1	2	356	105	1	1	262	4	36	60	34	8	7	85	4	45	80	0	64	0
1	2	357	2	0	0	5	5	54	40	1067	5	4	2655	7	48	80	0	64	0
1	2	358	249	3	3	622	4	36	60	881	6	6	2192	7	46	80	0	64	0
1	2	359	7	2	2	17	5	36	59	577	6	5	1436	8	47	80	0	64	0
1	2	360	0	0	0	0	8	33	59	410	7	5	1020	13	53	80	0	64	0
1	2	361	356	0	0	889	8	33	59	385	7	5	958	13	53	80	0	64	0
1	2	362	84	0	0	210	8	33	59	388	6	5	965	12	52	80	0	64	0
1	2	363	478	0	0	1193	5	26	68	482	6	5	1199	10	51	80	0	64	0
1	2	364	1222	1	1	3050	0	24	76	0	0	0	0	0	22	80	0	64	0
1	2	365	742	3	3	1852	2	27	71	222	6	4	552	9	34	80	0	64	0
1	2	366	672	4	3	1677	8	35	58	4	0	0	10	30	49	80	0	64	0
1	2	367	62	4	4	155	2	28	70	424	4	4	1055	13	36	80	0	64	0
1	2	368	1481	1	0	3697	2	26	72	113	12	4	281	1	31	80	0	64	0
1	2	369	699	4	3	1745	2	38	60	545	6	5	1356	1	40	80	0	64	0
1	2	370	610	0	0	1523	1	28	71	1046	6	6	2602	5	40	80	192	64	401
1	2	371	133	0	0	332	1	28	71	2347	6	6	5839	5	40	80	225	64	470
1	2	372	1159	3	3	2893	1	39	61	928	6	5	2309	0	46	80	0	64	0
1	2	373	1207	3	2	3013	2	33	65	292	3	3	726	5	34	80	0	64	0
1	2	374	188	3	2	469	2	33	65	902	3	3	2244	5	34	80	408	64	852
1	2	375	0	3	3	0	0	15	84	0	4	4	0	6	34	80	0	64	0
1	2	376	1325	7	7	3307	6	29	65	1034	4	4	2573	6	34	80	122	64	255
1	2	377	1510	5	3	3769	2	38	59	0	19	8	0	14	32	80	0	64	0
1	2	378	2207	8	8	5509	3	33	64	1	0	0	2	4	29	80	0	64	0
1	2	379	164	9	7	409	5	26	70	0	0	0	0	7	29	80	0	64	0
1	2	380	297	6	6	741	4	25	71	3	0	0	7	4	26	80	0	64	0
1	2	381	519	5	5	1296	4	25	72	0	0	0	0	5	26	80	0	64	0
1	2	382	1	8	5	2	2	24	74	0	0	0	0	1	34	80	0	64	0
1	2	383	1049	8	5	2618	2	25	74	348	0	0	866	1	34	80	0	64	0
1	2	384	5396	4	3	13469	2	24	74	379	10	8	943	5	41	80	0	64	0
1	2	385	2601	4	3	6492	2	24	74	2	10	8	5	5	42	80	0	64	0
1	2	386	633	4	3	1580	2	24	74	2729	10	8	6790	5	42	80	46	64	96
1	2	387	2040	1	1	5092	4	23	73	292	12	10	726	9	36	80	0	64	0
1	2	388	496	3	2	1238	2	30	68	80	5	5	199	5	29	80	0	64	0
1	2	389	1811	3	2	4521	2	30	68	3	6	5	7	5	28	80	0	64	0
1	2	390	936	4	3	2336	4	46	50	1377	8	7	3426	8	42	80	57	64	119
1	2	391	949	4	3	2369	4	46	50	488	8	7	1214	8	42	80	0	64	0
1	2	392	996	3	2	2486	3	34	63	469	1	0	1167	7	42	80	0	64	0
1	2	393	1930	1	1	4818	6	27	67	471	12	10	1172	13	38	80	0	64	0
1	2	394	2007	0	0	5010	2	21	76	14	0	0	35	3	22	80	0	64	0
1	2	395	1014	4	4	2531	3	20	77	0	1	1	0	3	22	80	0	64	0
1	2	396	1319	2	1	3292	2	19	79	66	0	0	164	3	20	80	0	64	0
1	2	397	1936	3	2	4833	2	37	61	235	8	7	585	2	36	80	0	64	0
1	2	398	1404	3	3	3505	4	34	61	908	30	27	2259	6	46	80	0	64	0
1	2	399	0	0	0	0	2	33	65	0	28	25	0	4	56	80	1490	64	3110
1	2	400	20	0	0	50	2	35	63	3826	26	23	9519	4	56	80	0	64	0

ZDATA NO.	SECTOR NO.	TAZ	SFDU	% VAC NON PERM	% VAC	SFPOP	SFOCAR	SF1CAR	SF2+CAR	MFDU	% VAC NON PERM	% VAC	MFPOP	MF0CAR	MF1CAR	MF2+CAR	HMUNITS	НМРСТОСС	HMPOP
1	2	401	415	5	5	1036	9	38	53	0	0	0	0	6	39	80	0	64	0
1	2	402	799	6	5	1994	4	51	44	1839	7	5	4575	10	47	80	0	64	0
1	2	403	1	32	12	2	7	66	27	1293	19	7	3217	10	57	80	0	64	0
1	2	404	3	100	88	7	0	0	0	955	3	3	2376	18	58	80	0	64	0
1	2	405	815	16	9	2034	7	53	40	1918	26	14	4772	15	53	80	0	64	0
1	2	406	864	3	3	2157	5	40	55	186	5	5	463	4	61	80	0	64	0
1	2	407	0	2	2	0	7	47	46	875	6	5	2177	9	51	80	0	64	0
1	2	408	462	2	2	1153	7	49	45	207	6	5	515	11	48	80	0	64	0
1	2	409	696	0	0	1737	6	47	47	521	5	5	1296	18	50	80	0	64	0
1	2	410	0	3	3	0	4	37	59	0	22	21	0	9	42	80	616	64	1286
1	2	411	154	4	4	384	4	26	71	0	0	0	0	24	52	80	279	64	582
1	2	412	0	23	6	0	0	37	63	0	2	1	0	0	38	80	0	64	0
1	2	413	0	0	0	0	0	0	0	0	0	0	0	0	0	80	0	64	0
1	2	414	362	6	2	904	2	35	62	0	10	8	0	3	38	80	0	64	0
1	2	415	264	0	0	659	0	27	72	1	10	8	2	8	33	80	0	64	0
1	2	416	779	0	0	1945	2	36	62	0	1	1	0	1	42	80	0	64	0
1	2	417	2612	15	5	6520	3	25	72	826	38	13	2055	4	26	80	0	64	0
1	2	418	1440	13	7	3594	3	24	73	0	25	8	0	7	24	80	0	64	0
1	2	419	1	10	10	2	2	23	76	0	0	0	0	. 12	20	80	0	64	0
1	2	420	161	10	10	402	2	23	76	17	0	0	42	12	20	80	0	64	0
1	2	421	0	9	9	0	2	23	70	0	3	3	0	11	20	80	0	64	0
1	2	422	768	7	5	1917	8	27	70	0	0	0	0	40	20	80	143	64	299
1	2	423	970	7	5	2421	8	21	70	0	0	0	0	40	19	80	0	64	0
1	2	423	74	9	5	185	2	21	76	842	12	7	2095	42	45	80	0	64	0
1	2	425) ,	5	3	0	1	22	76	042	18	6	0	5	40	80	0	64	0
1	2	425	0	3	0	0	1	20	70	523	22	5	1301	6	40	80	4566	64	9531
1	2	420	0	0	0	0	1	20	75	788	22	7	1961	7	43	80	1030	64	4048
1	2	427	2	7	4	5	1	12	56	1000	35	/	2510	,	50	80	11935	64	2/180
1	2	420	1	,	4	2	2 Q	64	28	1005	10	5	2310	10	62	80	255	64	522
1	2	429	1822	5	2	2 1518	0	51	20	0	10	1	0	2	54	80	255	64	0
1	2	430	1762	0	2	4348	4	11	40	0	7	1	0	1	54	80	012	64	1004
1	2	431	2610	2	2	6537	2	27	71	459	5	4	11/12	2	37	80	1654	64	2/52
1	2	432	1/1	2	2	252	2	32	66	679	9	4	1680	2	32	80	1054	64	1035
1	2	433	141	5	5	0	2	50	48	075	9	0	1085	1	16	80	217	64	1033
1	2	434	200	5	2	771	2	20	40 50	12	0 0	0	27	1	10	80	217	64	455
1	2	433	0	5	2		2	20	59	0	0 0	4	52	4	40	00 00	0	64	0
1	2	430	60	0	0	150	2	35	71	0	0	4	0	4	40	80	0	64	0
1	2	437	727	1	2	1815	2	10	70	0	0	0	0	0	0	0	0	94 97	0
1	2	430	00	4	2	225	2	10	70	0	0	0	0	0	0	0 20	0	64	0
1	2	435	32	4		82	2	27	75	0	0	0	0	0	0	0	0	87	0
1	2	440	12	1	2	107	2	10	70	0	0	0	0	0	0	0 20	0	6/	0
1	2	441	45	4	2	107	2	19	79	0	0	0	0	0	0	00 00	0	64	0
1	2	442	42	14	12	103	1	27	/1 E2	0	7	6	0	4	54	80	2460	64	72/1
1	2	445	655	14	0	1625	2	40	55	1227	/	7	2276	4	54	00	5409	64	/241
1	2	444	000	10	ð O	035	2	54	04	1337	o O		3520	3	00	00	0	04 64	0
1	2	445	0	U F	0	0	1	10	0	0	0	0	0	0	10	80	0	64	0
1	2	440	1059	5	3	2641	1	19	80	770	U 10	0	0	1	19	80	0	64	0
	2	447	1058	0	0	2041	1	40	59	//6	81	9	1931	3	44	80	0	04	0
1	2	448	1240	2	2	3095	1	14	85	0	0	0	0	1	14	80	0	64	0
1	2	449	/31	2	2	1825	1	14	85	0	0	0	0		14	80	0	64	0
1	2	450	1128	4	2	2816	0	11	89	0	0	0	0	0	9	80	0	64	0

ZDATA NO.	SECTOR NO.	TAZ	SFDU	% VAC NON PERM	% VAC	SFPOP	SFOCAR	SF1CAR	SF2+CAR	MFDU	% VAC NON PERM	% VAC	MFPOP	MF0CAR	MF1CAR	MF2+CAR	HMUNITS	НМРСТОСС	HMPOP
1	2	451	1224	5	3	3055	2	18	80	4	0	0	10	3	30	80	0	64	0
1	2	452	1123	4	2	2803	0	11	89	3	0	0	7	0	10	80	0	64	0
1	2	453	1551	8	7	3872	2	18	80	0	3	3	0	3	16	80	0	64	0
1	2	454	164	6	6	409	9	19	72	12	61	61	30	38	13	80	0	64	0
1	2	455	488	6	6	1218	9	19	72	0	59	59	0	37	13	80	0	64	0
1	2	456	60	4	0	150	4	13	82	0	0	0	0	0	0	80	0	64	0
1	2	457	1621	7	4	4046	0	12	88	0	0	0	0	0	13	80	0	64	0
1	2	458	1129	7	4	2818	0	18	81	687	30	16	1709	1	22	80	0	64	0
1	2	459	1952	7	4	4872	0	19	81	197	31	16	490	1	23	80	0	64	0
1	2	460	812	16	1	2027	1	19	79	637	0	0	1585	5	50	80	0	64	0
1	2	461	816	16	1	2037	1	19	79	0	0	0	0	5	50	80	0	64	0
1	2	462	909	12	3	2269	3	28	70	273	1	0	679	9	57	80	186	64	388
1	2	463	3	32	8	7	6	38	56	3	29	7	7	6	38	80	0	64	0
1	2	464	42	32	8	105	6	38	56	0	29	7	0	6	38	80	0	64	0
1	2	465	42	1	1	105	9	38	53	557	11	11	1386	16	55	80	0	64	0
1	2	466	593	7	6	1480	7	43	50	233	11	9	580	14	54	80	0	64	0
1	2	467	211	3	3	527	4	36	60	635	6	6	1580	7	46	80	0	64	0
1	2	468	0	0	0	0	8	33	59	0	7	5	0	13	53	80	0	64	0
1	2	469	1228	3	3	3065	1	25	74	1162	7	7	2891	7	46	80	0	64	0
1	2	470	2350	3	3	5866	1	24	75	40	10	10	100	2	35	80	0	64	0
1	2	471	516	3	3	1288	1	23	76	589	9	9	1465	2	33	80	0	64	0
1	2	472	1320	4	3	3295	2	24	74	771	10	8	1918	5	42	80	0	64	0
1	2	473	1116	4	3	2786	3	24	73	1459	11	8	3630	6	40	80	0	64	0
1	2	474	7	1	0	17	2	34	64	0	29	26	0	4	55	80	0	64	0
1	2	475	2	31	12	5	7	64	30	1604	18	7	3991	10	57	80	0	64	0
1	2	476	647	2	2	1615	7	49	44	250	6	5	622	10	49	80	0	64	0
1	2	477	0	24	6	0	0	37	63	0	0	0	0	0	37	80	0	64	0
1	2	478	366	3	2	914	2	21	77	287	0	0	714	2	21	80	0	64	0
1	2	479	0	0	0	0	1	22	77	999	33	7	2485	7	42	80	493	64	1029
1	2	480	33	3	2	82	1	31	68	0	23	6	0	4	45	80	683	64	1426
1	2	481	0	0	0	0	7	63	30	296	10	5	736	10	62	80	2880	64	6012
1	2	482	0	23	6	0	0	36	63	0	0	0	0	1	37	80	0	64	0
1	2	483	0	8	5	0	2	24	74	0	1	1	0	1	34	80	0	64	0
1	2	484	0	8	5	0	2	24	74	0	1	1	0	1	34	80	0	64	0
1	2	485	0	1	1	0	8	31	61	0	0	0	0	13	41	80	0	64	0
1	2	486	0	14	12	0	1	46	53	0	7	6	0	4	54	80	170	64	355
1	2	487	874	16	1	2182	1	19	79	123	0	0	306	5	50	80	1110	64	2317
1	2	488	0	0	0	0	0	12	88	0	1	1	0	4	54	80	1374	64	2868
1	2	489	0	16	4	0	3	25	71	0	15	4	0	5	46	80	0	64	0
1	2	490	30	16	1	75	1	19	79	0	0	0	0	5	50	80	705	64	1472
1	2	491	1	16	1	2	1	19	79	0	0	0	0	5	50	80	4019	64	8390
1	2	492	245	0	0	612	4	50	45	4617	14	12	11487	4	51	80	0	64	0
1	2	493	0	0	0	0	5	51	44	818	12	10	2035	5	52	80	0	64	0
1	2	494	0	24	6	0	0	37	63	0	0	0	0	0	37	80	609	64	1271
1	2	495	1	24	6	2	0	37	63	0	0	0	0	0	37	80	0	64	0
1	2	496	300	9	2	749	2	36	62	0	9	7	0	2	37	80	0	64	0
1	2	497	0	8	2	0	2	36	61	0	9	7	0	2	37	80	0	64	0
1	2	498	446	0	0	1113	0	39	61	0	0	0	0	0	0	80	0	64	0
1	2	499	6	0	0	15	2	38	61	0	14	11	0	3	38	80	0	64	0
1	2	500	0	0	0	0	2	33	65	0	28	25	0	4	56	80	0	64	0

ZDATA NO.	SECTOR NO.	TAZ	SFDU	% VAC NON PERM	% VAC	SFPOP	SFOCAR	SF1CAR	SF2+CAR	MFDU	% VAC NON PERM	% VAC	MFPOP	MF0CAR	MF1CAR	MF2+CAR	HMUNITS	НМРСТОСС	HMPOP
1	2	501	75	1	1	187	4	34	62	333	24	21	828	5	53	80	0	64	0
1	2	502	558	17	5	1393	2	28	70	0	27	9	0	3	29	80	0	64	0
1	2	503	4706	15	5	11747	3	25	72	404	38	13	1005	4	26	80	0	64	0
1	2	504	1093	24	6	2728	0	37	63	207	0	0	515	0	37	80	0	64	0
1	2	505	617	24	6	1540	0	37	63	0	0	0	0	0	37	80	0	64	0
1	2	506	718	3	3	1792	5	36	59	0	33	30	0	6	49	80	0	64	0
1	2	507	905	8	5	2259	2	22	75	522	11	7	1299	7	43	80	0	64	0
1	2	508	2673	3	2	6672	2	21	77	834	0	0	2075	2	21	80	0	64	0
1	2	509	1322	8	5	3300	2	22	76	1026	11	7	2553	4	43	80	0	64	0
1	2	510	0	5	5	0	2	52	47	0	0	0	0	0	0	80	0	64	0
1	2	511	0	0	0	0	1	22	77	1536	33	7	3822	7	42	80	7	64	15
1	2	512	7	4	0	17	1	21	78	663	25	5	1650	6	44	80	1230	64	2568
1	2	513	0	9	5	0	2	22	76	0	12	7	0	4	45	80	0	64	0
1	2	514	0	32	8	0	6	38	56	0	29	7	0	6	38	80	1201	64	2507
1	2	515	0	1	0	0	1	13	86	342	2	1	851	4	53	80	3468	64	7239
1	2	516	3	0	0	7	0	12	88	0	1	1	0	4	54	80	2951	64	6160
1	2	517	0	32	8	0	6	38	56	0	29	7	0	6	38	80	0	64	0
1	2	518	0	32	8	0	6	38	56	0	29	7	0	6	38	80	5802	64	12112
1	2	519	0	32	8	0	6	38	56	0	29	7	0	6	38	80	0	64	0
1	2	520	0	32	8	0	6	38	56	0	29	7	0	6	38	80	0	64	0
1	2	521	0	0	0	0	0	0	0	0	0	0	0	0	0	80	0	64	0
1	2	522	700	5	5	1747	4	25	72	0	0	0	0	4	26	80	0	64	0
1	2	523	0	0	0	0	0	0	0	0	0	0	0	0	0	80	0	64	0
1	2	524	0	23	6	0	0	36	63	0	0	0	0	1	37	80	0	64	0
1	2	525	0	24	6	0	0	37	63	0	0	0	0	0	37	80	0	64	0
1	2	526	0	24	6	0	0	37	63	0	0	0	0	0	37	80	0	64	0
1	2	527	0	24	6	0	0	37	63	0	0	0	0	0	37	80	0	64	0
1	2	528	155	8	5	387	2	26	72	362	4	3	901	2	36	80	0	64	0
1	2	529	1074	11	6	2681	2	27	72	553	0	0	1376	1	35	80	0	64	0
1	2	530	0	8	5	0	2	24	74	0	1	1	0	1	34	80	0	64	0
1	2	531	1395	3	3	3482	1	24	75	949	10	10	2361	2	35	80	0	64	0
1	2	532	413	4	2	1031	0	11	89	0	0	0	0	0	9	80	0	64	0
1	2	533	0	0	0	0	0	0	0	0	0	0	0	0	0	80	0	64	0
1	2	534	0	0	0	0	0	0	0	0	0	0	0	0	0	80	0	64	0
1	2	535	284	22	7	709	10	38	52	0	20	7	0	11	38	80	0	64	0
1	2	536	4	15	6	10	8	33	58	0	12	4	0	11	34	80	0	64	0
1	2	537	134	17	6	334	9	35	56	0	15	5	0	11	35	80	0	64	0
1	2	538	228	22	7	569	10	38	52	0	20	7	0	11	38	80	0	64	0
1	2	539	357	5	2	891	8	46	45	0	27	24	0	14	33	80	0	64	0
1	2	540	0	22	7	0	10	38	52	0	20	7	0	11	38	80	0	64	0
1	2	541	0	3	2	0	6	21	73	0	38	27	0	20	51	80	0	64	0
1	2	542	1454	3	2	3629	6	21	73	1	38	27	2	20	51	80	0	64	0
1	2	543	11	6	5	27	6	25	69	0	26	18	0	18	52	80	0	64	0
1	2	544	1	9	9	2	5	30	65	25	10	7	62	15	55	80	0	64	0
1	2	545	1	11	11	2	5	33	62	0	0	0	0	13	56	80	0	64	0
1	2	546	59	11	11	147	5	33	62	0	0	0	0	13	56	80	0	64	0
1	2	547	25	11	11	62	5	33	62	0	0	0	0	13	56	80	0	64	0
1	2	548	110	11	11	275	5	33	62	0	0	0	0	13	56	80	0	64	0
1	2	549	147	9	9	367	5	31	64	0	0	0	0	11	49	80	0	64	0
1	2	550	110	11	11	275	5	33	62	0	0	0	0	13	56	80	0	64	0

ZDATA NO.	SECTOR NO.	TAZ	SFDU	% VAC NON PERM	% VAC	SFPOP	SFOCAR	SF1CAR	SF2+CAR	MFDU	% VAC NON PERM	% VAC	MFPOP	MF0CAR	MF1CAR	MF2+CAR	HMUNITS	HMPCTOCC	HMPOP
1	2	551	8	11	11	20	5	33	62	0	0	0	0	13	56	80	0	64	0
1	2	552	11	11	11	27	5	33	62	0	0	0	0	13	56	80	0	64	0
1	2	553	1	10	7	2	7	31	62	0	5	2	0	11	37	80	0	64	0
1	2	554	47	6	5	117	6	28	67	0	1	0	0	10	28	80	0	64	0
1	2	555	7	4	4	17	4	25	71	0	0	0	0	8	25	80	0	64	0
1	2	556	1157	3	2	2888	1	22	77	0	0	0	0	1	21	80	0	64	0
1	2	557	90	3	2	225	1	22	77	0	0	0	0	1	20	80	0	64	0
1	2	558	311	3	2	776	1	22	77	0	0	0	0	1	20	80	0	64	0
1	2	559	225	3	2	562	1	22	77	0	0	0	0	1	20	80	0	64	0
1	2	560	102	4	4	255	5	27	68	0	0	0	0	10	28	80	0	64	0
1	2	561	289	4	4	721	5	27	68	0	0	0	0	10	28	80	0	64	0
1	2	562	768	4	4	1917	5	27	68	27	0	0	67	10	28	80	0	64	0
1	2	563	286	4	4	714	5	27	68	0	0	0	0	10	28	80	0	64	0
1	2	564	136	4	4	339	5	27	68	3	0	0	7	10	28	80	0	64	0
1	2	565	309	4	4	771	3	26	71	5	0	0	12	6	27	80	0	64	0
1	2	566	452	4	4	1128	3	26	71	0	0	0	0	6	27	80	0	64	0
1	2	567	230	4	4	574	3	26	71	0	0	0	0	6	27	80	0	64	0
1	2	568	482	4	4	1203	3	26	71	0	0	0	0	6	27	80	0	64	0
1	2	569	204	4	4	509	3	26	71	0	0	0	0	6	27	80	0	64	0
1	2	570	420	4	4	1048	3	26	71	0	0	0	0	6	27	80	0	64	0
1	2	571	189	3	2	472	1	22	77	0	0	0	0	1	20	80	0	64	0
1	2	572	105	3	2	262	1	22	77	0	0	0	0	1	20	80	0	64	0
1	2	573	435	3	2	1086	1	22	77	0	0	0	0	1	20	80	0	64	0
1	2	574	269	3	2	671	1	22	77	0	0	0	0	1	20	80	0	64	0
1	2	575	0	3	2	0	1	22	77	0	0	0	0	1	20	80	0	64	0
1	2	576	0	4	4	0	3	26	71	0	0	0	0	6	27	80	0	64	0
1	2	577	165	3	3	412	2	23	75	0	0	0	0	6	37	80	0	64	0
1	2	578	193	3	3	482	2	23	75	0	0	0	0	6	37	80	0	64	0
1	2	579	453	3	3	1131	2	23	75	0	0	0	0	6	37	80	0	64	0
1	2	580	0	4	4	0	4	15	81	0	0	0	0	6	37	80	0	64	0
1	2	581	158	6	6	394	6	7	87	0	0	0	0	0	0	80	0	64	0
1	2	582	0	4	3	0	1	29	70	0	8	6	0	1	33	80	0	64	0
1	2	583	160	4	3	399	1	28	71	50	7	5	124	2	34	80	0	64	0
1	2	584	217	4	3	542	1	29	70	0	8	6	0	1	33	80	0	64	0
1	2	585	311	4	3	776	1	29	70	0	8	6	0	1	33	80	0	64	0
1	2	586	106	2	1	265	7	28	65	58	3	2	144	10	34	80	0	64	0
1	2	587	41	0	0	102	12	29	59	5	0	0	12	17	35	80	0	64	0
1	2	588	36	0	0	90	12	29	59	0	0	0	0	17	35	80	0	64	0
1	2	589	0	0	0	0	12	29	59	0	0	0	0	17	35	80	0	64	0
1	2	590	53	0	0	132	11	29	60	15	0	0	37	17	35	80	0	64	0
1	2	591	0	3	3	0	2	23	75	0	0	0	0	6	37	80	0	64	0
1	2	592	195	3	3	487	2	23	75	4	0	0	10	6	37	80	0	64	0
1	2	593	136	3	3	339	2	23	75	42	0	0	104	6	37	80	0	64	0
1	2	594	5	3	3	12	2	23	75	0	0	0	0	6	37	80	0	64	0
1	2	595	162	3	3	404	2	23	75	0	0	0	0	6	37	80	0	64	0
1	2	596	136	3	3	339	2	23	75	0	0	0	0	6	37	80	0	64	0
1	2	597	6	3	3	15	2	23	75	0	0	0	0	6	37	80	0	64	0
1	2	598	63	3	3	157	2	23	75	0	0	0	0	6	37	80	0	64	0
1	2	599	372	3	3	929	2	23	75	0	0	0	0	6	37	80	0	64	0
1	2	600	20	3	3	50	2	23	75	199	0	0	495	6	37	80	0	64	0

ZDATA NO.	SECTOR NO.	TAZ	SFDU	% VAC NON PERM	% VAC	SFPOP	SFOCAR	SF1CAR	SF2+CAR	MFDU	% VAC NON PERM	% VAC	MFPOP	MF0CAR	MF1CAR	MF2+CAR	HMUNITS	НМРСТОСС	HMPOP
1	2	601	965	2	2	2409	1	26	73	1054	4	4	2622	7	45	80	65	64	136
1	2	602	1416	3	3	3535	1	17	82	0	0	0	0	1	17	80	0	64	0
1	2	603	2035	3	2	5080	3	22	75	655	14	9	1630	5	41	80	0	64	0
1	2	604	257	3	3	642	1	17	82	1	0	0	2	1	17	80	0	64	0
1	2	605	0	2	2	0	1	25	73	353	13	13	878	7	44	80	0	64	0
1	2	606	0	2	2	0	1	25	73	0	13	13	0	7	44	80	0	64	0
1	2	607	0	2	2	0	1	25	73	378	13	13	940	7	44	80	0	64	0
1	2	608	351	2	2	876	1	25	73	230	13	13	572	7	44	80	0	64	0
1	2	609	287	3	2	716	1	24	75	0	12	12	0	6	41	80	0	64	0
1	2	610	1	2	2	2	1	25	73	0	13	13	0	7	44	80	0	64	0
1	2	611	97	2	2	242	1	25	73	0	13	13	0	7	44	80	0	64	0
1	2	612	259	2	2	647	1	25	73	354	13	13	881	7	44	80	0	64	0
1	2	613	209	3	2	522	1	23	76	0	11	11	0	6	39	80	0	64	0
1	2	614	0	2	2	0	1	25	73	0	13	13	0	7	44	80	0	64	0
1	2	615	0	3	3	0	2	23	75	0	0	0	0	6	37	80	0	64	0
1	2	616	98	3	3	245	2	23	75	0	0	0	0	6	37	80	0	64	0
1	2	617	1	3	3	2	2	23	75	0	0	0	0	6	37	80	0	64	0
1	2	618	0	3	3	0	2	23	75	0	0	0	0	6	37	80	113	64	236
1	2	619	1	3	3	2	2	23	75	0	0	0	0	6	37	80	42	64	88
1	2	620	3	3	3	7	2	23	75	0	0	0	0	6	37	80	0	64	0
1	2	621	0	7	7	0	19	35	46	0	6	6	0	18	53	80	0	64	0
1	2	622	0	5	5	0	5	44	51	0	13	13	0	6	49	80	0	64	0
1	2	623	1	2	2	2	1	25	73	293	13	13	729	7	44	80	0	64	0
1	2	624	0	2	2	0	1	25	73	0	13	13	0	7	44	80	0	64	0
1	2	625	0	2	2	0	1	25	73	0	13	13	0	7	44	80	0	64	0
1	2	626	0	7	5	0	1	16	83	0	0	0	0	1	14	80	0	64	0
1	2	627	339	8	7	846	2	18	81	0	0	0	0	1	16	80	0	64	0
1	2	628	48	4	2	120	0	14	86	0	3	3	0	1	16	80	0	64	0
1	2	629	0	8	7	0	2	18	81	0	0	0	0	1	16	80	0	64	0
1	2	630	694	8	7	1732	2	18	81	0	0	0	0	1	16	80	0	64	0
1	2	631	458	4	2	1143	0	11	89	489	0	0	1217	0	9	80	0	64	0
1	2	632	756	8	7	1887	2	18	81	0	0	0	0	1	16	80	0	64	0
1	2	633	655	6	6	1635	4	38	59	13	0	0	32	7	37	80	0	64	0
1	2	634	1868	4	4	4663	2	29	69	364	5	5	906	7	41	80	0	64	0
1	2	635	221	5	5	552	4	29	68	12	9	9	30	11	36	80	51	64	106
1	2	636	1015	2	2	2534	7	33	60	176	27	27	438	15	49	80	0	64	0
1	2	637	608	6	5	1518	5	40	55	1022	13	13	2543	7	51	80	170	64	355
1	2	638	0	6	5	0	5	40	55	386	13	13	960	7	51	80	0	64	0
1	2	639	137	16	11	342	0	33	67	6	20	14	15	0	32	80	110	64	230
1	2	640	170	4	4	424	5	29	66	63	10	10	157	17	66	80	0	64	0
1	2	641	124	5	5	310	7	32	60	490	11	11	1219	22	64	80	0	64	0
1	2	642	81	6	6	202	12	38	50	35	13	13	87	32	60	80	0	64	0
1	2	643	779	4	4	1945	4	36	60	130	3	3	323	7	56	80	0	64	0
1	2	644	257	4	4	642	5	31	65	180	8	7	448	13	63	80	35	64	73
1	2	645	359	5	4	896	4	46	50	123	0	0	306	10	41	80	0	64	0
1	2	646	384	5	5	959	7	30	64	4	0	0	10	8	29	80	350	64	731
1	2	647	347	6	4	866	4	40	56	18	3	2	45	8	46	80	0	64	0
1	2	648	671	8	5	1675	4	45	50	332	11	8	826	4	52	80	0	64	0
1	2	649	0	6	6	0	7	39	54	0	6	6	0	15	51	80	0	64	0
1	2	650	25	6	6	62	8	39	53	16	6	6	40	18	51	80	0	64	0

1 2 65 20 4 4 57 8 38 54 87 100 101 110 15 15 15 16 00 64 0 11 2 65 20 3 3 50 5 180 13 15 15 15 16 00 0 64 13 1 2 654 20 35 66 20 13 60 0 64 0 1 2 654 20 35 95 20 13 40 66 20 13 40 66 40 </th <th>ZDATA NO.</th> <th>SECTOR NO.</th> <th>TAZ</th> <th>SFDU</th> <th>% VAC NON PERM</th> <th>% VAC</th> <th>SFPOP</th> <th>SFOCAR</th> <th>SF1CAR</th> <th>SF2+CAR</th> <th>MFDU</th> <th>% VAC NON PERM</th> <th>% VAC</th> <th>MFPOP</th> <th>MF0CAR</th> <th>MF1CAR</th> <th>MF2+CAR</th> <th>HMUNITS</th> <th>НМРСТОСС</th> <th>HMPOP</th>	ZDATA NO.	SECTOR NO.	TAZ	SFDU	% VAC NON PERM	% VAC	SFPOP	SFOCAR	SF1CAR	SF2+CAR	MFDU	% VAC NON PERM	% VAC	MFPOP	MF0CAR	MF1CAR	MF2+CAR	HMUNITS	НМРСТОСС	HMPOP
1 2 65 20 4 4 57 8 59 67 80 50 50 50 50 60 64 0 1 2 654 105 64 0 54 10 66 106 10 65 106 66 106 66 707 15 48 00 64 0 1 2 656 591 66 5 140 10 3 0 15 49 00 64 0 1 2 650 591 66 5 100 10 47 100 13 12 13 40 0 114 140 10 124 134 40 10 124 134 40 10 124 134 40 10 124 138 40 10 10 10 10 10 10 10 10 100 10 10	1	2	651	27	6	6	67	8	38	54	48	6	6	119	16	51	80	0	64	0
1 2 653 10 3 50 5 38 57 1808 111 112 4438 15 51 180 6. 64 10 1 2 655 1106 6 6 721 8 6 6 720 16 8 80 0 64 0 1 2 657 384 6 5 480 0 3 3 0 15 40 80 0 64 0 1 2 658 157 7 544 15 34 47 50 9 9 12 11 1148 34 45 80 0 64 10 1 2 664 18 6 5 13 13 53 14 49 80 13 80 0 64 10 1 2 664 14 53 53 11	1	2	652	230	4	4	574	6	38	56	473	10	10	1177	15	51	80	0	64	0
1 2 66 106 54 270 8 6 542 11 51 80 0. 64 0 1 2 655 505 66 75 48 75 55 78 2 72 75 38 80 0 66 79 30 15 40 80 0 66 70 1 2 665 157 7 67 38 7 43 50 0 11 9 0 14 50 80 0 66 0 66 10 12 12 13 14 44 70 7 7 13 40 40 10 11 <td< td=""><td>1</td><td>2</td><td>653</td><td>20</td><td>3</td><td>3</td><td>50</td><td>5</td><td>38</td><td>57</td><td>1808</td><td>13</td><td>12</td><td>4498</td><td>15</td><td>51</td><td>80</td><td>6</td><td>64</td><td>13</td></td<>	1	2	653	20	3	3	50	5	38	57	1808	13	12	4498	15	51	80	6	64	13
1 2 665 110 6 6 6 740 16 51 80 0 64 0 1 2 657 394 6 5 488 0 35 55 20 2 2 15 38 80 0 64 0 1 2 658 155 7 6 387 7 43 50 0 11 9 0 14 54 80 0 64 0 1 2 660 126 6 127 7 542 15 38 47 50 9 9 124 31 46 40 7 7 15 40 63 80 0 64 0 0 64 0 0 64 10 0 64 10 0 11 11 11 125 7 38 60 1 0 0	1	2	654	1405	4	3	3507	6	40	54	2179	8	6	5421	11	51	80	0	64	0
1 2 656 583 6 5 983 7 836 801 0 644 0 1 2 657 384 6 5 983 10 36 55 0 3 3 15 40 800 0 644 0 1 2 665 127 7 7 542 15 84 47 10 14 48 800 0 644 0 1 2 666 122 12 10 14 44 477 17 17 338 80 0 644 0 1 2 664 134 5 314 123 129 0 0 121 13 23 80 0 64 0 0 64 0 0 64 0 0 121 40 80 0 64 0 0 0 121	1	2	655	1106	6	6	2761	8	38	54	301	6	6	749	16	51	80	0	64	0
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	1	2	656	593	6	5	1480	10	35	55	29	2	2	72	15	38	80	0	64	0
1 2 68 155 7 6 387 7 437 50 0 11 9 0 14 54 80 99 64 807 1 2 660 128 6 5 320 15 41 44 470 12 1189 34 50 80 0 64 0 1 2 661 0 12 12 10 41 44 470 17 7 515 40 53 80 0 64 0 1 2 663 25 13 13 53 10 41 48 172 7 7 48 40 53 80 0 64 0 0 212 40 80 0 64 0 0 11 2 66 36 11 11 215 44 40 0 0 10 10 75	1	2	657	394	6	5	983	10	36	54	0	3	3	0	15	40	80	0	64	0
1 2 650 127 7 7 542 15 44 478 12 12 183 34 60 80 0 644 0 1 2 661 0 12 12 15 14 48 0 7 7 0 38 53 80 0 644 0 1 2 663 135 13 13 537 10 44 48 172 7 7 428 40 53 80 0 644 0 1 2 666 87 11 11 21 7 33 600 1 0 0 12 40 80 0 644 0 0 10 12 40 40 12 471 49 80 0 644 0 10 10 10 10 10 10 10 10 10 10 <td< td=""><td>1</td><td>2</td><td>658</td><td>155</td><td>7</td><td>6</td><td>387</td><td>7</td><td>43</td><td>50</td><td>0</td><td>11</td><td>9</td><td>0</td><td>14</td><td>54</td><td>80</td><td>99</td><td>64</td><td>207</td></td<>	1	2	658	155	7	6	387	7	43	50	0	11	9	0	14	54	80	99	64	207
1 2 660 128 6 5 300 15 41 44 478 12 12 10 641 64 0 1 2 662 22 12 12 15 11 44 48 207 7 7 515 40 53 80 0 644 0 1 2 663 134 5 53 14 48 172 7 7 428 40 53 80 0 644 0 1 2 665 86 11 11 237 7 33 60 4 0 0 12 40 80 0 644 0 1 2 667 0 0 0 2 51 46 255 11 10 732 5 56 80 0 644 0 1 2 670 0 1 <td>1</td> <td>2</td> <td>659</td> <td>217</td> <td>7</td> <td>7</td> <td>542</td> <td>15</td> <td>38</td> <td>47</td> <td>50</td> <td>9</td> <td>9</td> <td>124</td> <td>33</td> <td>46</td> <td>80</td> <td>0</td> <td>64</td> <td>0</td>	1	2	659	217	7	7	542	15	38	47	50	9	9	124	33	46	80	0	64	0
1 2 661 0 12 12 12 10 44 49 0 7 7 0 38 53 80 0 64 0 1 2 663 235 13 13 537 10 41 48 172 7 7 428 40 53 80 0 644 0 1 2 664 86 11 11 217 7 33 60 4 0 0 12 240 80 0 64 0 1 2 666 66 11 11 12 7 33 60 4 0 0 0 64 0 1 2 667 336 7 5 837 15 21 464 10 10 72 5 56 60 0 64 0 1 2 667 164	1	2	660	128	6	5	320	15	41	44	478	12	12	1189	34	50	80	0	64	0
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	1	2	661	0	12	12	0	10	41	49	0	7	7	0	38	53	80	0	64	0
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	1	2	662	22	12	12	55	11	41	48	207	7	7	515	40	53	80	0	64	0
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	1	2	663	215	13	13	537	10	41	48	172	7	7	428	40	53	80	0	64	0
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	1	2	664	134	5	5	334	23	23	55	129	0	0	321	31	23	80	151	64	315
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	1	2	665	87	11	11	217	7	33	60	1	0	0	2	12	40	80	0	64	0
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	1	2	666	86	11	11	215	7	33	60	4	0	0	10	12	40	80	0	64	0
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	1	2	667	336	7	5	839	15	21	64	10	0	0	25	29	38	80	0	64	0
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	1	2	668	0	0	0	0	2	51	46	2955	11	10	7352	5	56	80	0	64	0
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	1	2	669	0	0	0	0	4	50	46	336	7	5	836	6	49	80	0	64	0
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	1	2	670	0	1	1	0	5	49	46	716	6	4	1781	7	49	80	0	64	0
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	1	2	671	604	4	4	1508	12	40	47	91	6	6	226	14	49	80	0	64	0
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	1	2	672	1497	4	4	3737	12	42	46	26	2	2	65	16	50	80	0	64	0
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	1	2	673	524	4	4	1308	13	34	52	1743	19	19	4337	8	47	80	0	64	0
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	1	2	674	653	8	8	1630	10	38	52	1041	7	7	2590	18	55	80	0	64	0
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	1	2	675	752	9	9	1877	22	40	37	196	7	7	488	28	49	80	0	64	0
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	1	2	676	365	7	7	911	18	43	39	182	27	27	453	31	41	80	0	64	0
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	1	2	677	720	4	4	1797	16	41	44	254	3	3	632	39	37	80	0	64	0
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	1	2	678	181	17	17	452	16	54	30	497	6	6	1237	29	48	80	0	64	0
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	1	2	679	223	6	5	557	12	33	55	132	8	7	328	34	43	80	0	64	0
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	1	2	680	375	6	5	936	12	33	55	150	8	7	373	34	43	80	0	64	0
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	1	2	681	383	2	2	956	7	28	66	219	11	11	545	23	45	80	137	64	286
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	1	2	682	487	3	3	1216	6	28	66	355	9	9	883	22	44	80	0	64	0
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	1	2	683	101	1	1	252	14	62	24	12	3	3	30	20	63	80	21	64	44
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	1	2	684	148	13	13	369	30	41	29	35	40	40	87	37	49	80	0	64	0
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1	2	685	0	10	10	0	17	34	48	0	20	20	0	28	43	80	114	64	238
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1	2	686	39	1	1	97	25	27	48	65	6	6	162	42	34	80	0	64	0
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	1	2	687	59	3	1	147	12	28	60	84	19	11	209	25	26	80	0	64	0
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1	2	688	139	4	2	347	7	29	64	18	24	13	45	19	23	80	56	64	117
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1	2	689	222	3	3	554	17	33	50	67	7	7	167	44	30	80	78	64	163
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1	2	690	143	4	4	357	0	42	58	42	0	0	104	0	40	80	0	64	0
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1	2	691	0	4	4	0	0	42	58	0	0	0	0	0	40	80	0	64	0
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1	2	692	1	4	4	2	0	41	59	0	1	1	0	0	41	80	0	64	0
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1	2	693	47	4	4	117	0	42	58	0	0	0	0	0	40	80	0	64	0
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1	2	694	225	4	4	562	0	42	58	0	0	0	0	0	40	80	0	64	0
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1	2	695	486	4	2	1213	3	32	65	127	7	5	316	9	46	80	77	64	161
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1	2	696	267		6	666	3	41	56	201	4	2	500	3	53	80	0	64	0
1 2 698 529 6 5 1320 2 38 59 17 8 7 42 4 52 80 0 64 0 1 2 699 106 7 7 265 1 36 62 21 14 14 52 0 49 80 0 64 0 1 2 700 679 7 6 1655 5 38 56 93 4 4 231 6 48 80 0 64 0	1	2	697	273	5	4	681	3	41	56	7	4	2	17	5	56	80	0	64	0
1 2 699 106 7 7 265 1 36 62 21 14 14 52 0 49 80 0 64 0 1 2 700 679 7 6 1655 38 56 93 4 4 231 6 48 80 0 64 0	1	2	698	529	6	5	1320	2	38	59	17	8	7	42	4	52	80	0	64	0
	1	2	699	106	7	7	265	1	36	62	21	14	14	52	0	49	80	0	64	0
	1	2	700	679	7	6	1695	5	38	56	93	4	4	231	6	48	80	0	64	0

ZDATA NO.	SECTOR NO.	TAZ	SFDU	% VAC NON PERM	% VAC	SFPOP	SFOCAR	SF1CAR	SF2+CAR	MFDU	% VAC NON PERM	% VAC	MFPOP	MF0CAR	MF1CAR	MF2+CAR	HMUNITS	НМРСТОСС	HMPOP
1	2	701	830	5	3	2072	5	42	53	230	8	6	572	8	48	80	0	64	0
1	2	702	379	5	5	946	6	49	45	363	2	2	903	6	61	80	0	64	0
1	2	703	488	5	4	1218	5	50	45	86	3	3	214	5	64	80	0	64	0
1	2	704	37	5	5	92	13	32	55	137	8	8	341	6	65	80	0	64	0
1	2	705	16	5	5	40	13	32	55	31	8	8	77	6	65	80	69	64	144
1	2	706	179	0	0	447	3	44	53	0	0	0	0	35	0	80	0	64	0
1	2	707	0	1	1	0	3	44	53	0	1	1	0	31	8	80	0	64	0
1	2	708	473	3	3	1181	2	23	75	0	2	1	0	1	31	80	0	64	0
1	2	709	990	6	6	2471	0	32	68	30	0	0	75	0	12	80	0	64	0
1	2	710	714	6	6	1782	6	43	51	166	3	3	413	6	46	80	0	64	0
1	2	711	263	6	6	656	7	45	48	96	6	6	239	6	49	80	0	64	0
1	2	712	249	6	6	622	7	45	48	131	9	9	326	5	48	80	0	64	0
1	2	713	148	9	9	369	4	34	63	68	5	5	169	9	57	80	0	64	0
1	2	714	154	5	5	384	0	39	61	34	0	0	85	0	30	80	0	64	0
1	2	715	151	14	14	377	3	42	55	73	9	9	182	7	56	80	0	64	0
1	2	716	2	14	14	5	3	42	55	246	9	9	612	7	56	80	249	64	520
1	2	717	3	14	14	7	3	42	55	341	9	9	848	7	56	80	147	64	307
1	2	718	4	0	0	10	28	20	52	12	5	5	30	56	41	80	324	64	676
1	2	719	57	19	19	142	12	45	42	47	8	8	117	26	59	80	0	64	0
1	2	720	155	12	12	387	34	51	15	199	7	7	495	44	49	80	0	64	0
1	2	721	5	0	0	12	28	23	49	55	5	5	137	55	41	80	254	64	530
1	2	722	11	0	0	27	47	38	15	18	2	2	45	53	32	80	0	64	0
1	2	723	0	0	0	0	46	40	14	331	2	2	824	53	33	80	0	64	0
1	2	724	29	0	0	72	44	16	40	34	0	0	85	50	44	80	0	64	0
1	2	725	137	6	6	342	32	45	23	160	5	5	398	38	50	80	0	64	0
1	2	726	39	0	0	97	50	42	8	125	15	15	311	51	42	80	0	64	0
1	2	727	129	10	10	322	38	42	20	314	10	10	781	46	44	80	11	64	23
1	2	728	396	16	16	988	29	39	32	120	9	9	299	38	39	80	0	64	0
1	2	729	80	16	16	200	29	39	32	27	9	9	67	38	39	80	19	64	40
1	2	730	224	17	17	559	21	56	24	70	0	0	174	26	55	80	0	64	0
1	2	731	0	19	19	0	32	40	28	0	12	12	0	29	49	80	0	64	0
1	2	732	52	19	19	130	32	40	28	363	12	12	903	29	49	80	0	64	0
1	2	733	1	0	0	2	0	80	20	7	0	0	17	0	80	80	0	64	0
1	2	734	0	0	0	0	0	80	20	9	0	0	22	0	80	80	0	64	0
1	2	735	4	0	0	10	0	80	20	0	0	0	0	0	80	80	0	64	0
1	2	/36	0	0	0	0	0	80	20	2	0	0	5	0	80	80	0	64	0
1	2	/3/	164	2	2	409	2	40	58	143	23	23	356	8 12	50	80	0	64	0
1	2	/38	210	5	5	539	4	42	54	92	11	11	229	13	48	80	0	04	0
1	2	739	455	1/	1/	1136	0	40	53	100	<u> </u>	2 11	249	10	52	80	0	64	0
	2	740	01Z	0	0	2027		34	50 ۲4	79	11	11	197	4	43	80	0	04 64	0
	2	741	228	3	3	569	b 14	40	54	325	2	211	809 2412	10	47	80	0	04 64	0
1	2	742	227	9	9	507	25	38	48	970	5	2	2413	3/	4/ 50	80	2/	04 64	0
1	2	743	2	0	0	5	35	40	10	240	5	3	597	59	52	00	0	64	0
1	2	744	0	<u> </u>	<u> </u>	0	28	/1	0	0	8 7	8 7	006	21	45	80	0	04 64	0
1	2	745	0	2	2	0	20	71	ð 1	304 252	/ 0	/	900	45 E1	49	80	155	04 64	224
1	2	740	0	0	0	0	28	71	1	253	ð o	ð o	029	51	45	80	122	64	524
1	2	747	0	0	0	0	20	71	1	204	0	0	756	51	45	00	0	04 64	
1	2	740	0	0	0	0	28	71	1	504 621	٥ ٥	ð o	1545	51	45	00	201	04 64	545
1	2	749	0	0	0	0	28	71		021	ð o	ŏ	1545	51	45	80	0	64	0
1	2	130	U	0	U	U	28	/1	1	U	ð	ð	U	51	45	δU	U	04	U

ZDATA NO.	SECTOR NO.	TAZ	SFDU	% VAC NON PERM	% VAC	SFPOP	SFOCAR	SF1CAR	SF2+CAR	MFDU	% VAC NON PERM	% VAC	MFPOP	MF0CAR	MF1CAR	MF2+CAR	HMUNITS	НМРСТОСС	HMPOP
1	2	751	0	0	0	0	28	71	1	0	8	8	0	51	45	80	0	64	0
1	2	752	0	0	0	0	28	71	1	504	8	8	1254	51	45	80	0	64	0
1	2	753	0	0	0	0	28	71	1	0	8	8	0	51	45	80	0	64	0
1	2	754	0	0	0	0	28	64	8	386	8	8	960	52	44	80	0	64	0
1	2	755	96	3	3	240	9	44	47	155	5	5	386	6	68	80	0	64	0
1	2	756	117	6	5	292	6	41	53	109	8	7	271	3	72	80	0	64	0
1	2	757	90	0	0	225	0	40	60	63	7	7	157	0	53	80	0	64	0
1	2	758	142	11	11	354	4	53	42	1279	5	5	3182	12	63	80	0	64	0
1	2	759	304	4	4	759	4	44	52	124	13	13	309	10	49	80	0	64	0
1	2	760	205	4	4	512	5	46	49	46	12	12	114	12	48	80	0	64	0
1	2	761	0	3	3	0	10	56	34	0	6	6	0	23	47	80	0	64	0
1	2	762	501	3	2	1251	9	42	49	341	8	8	848	21	47	80	0	64	0
1	2	763	137	5	5	342	13	46	41	276	5	5	687	20	45	80	0	64	0
1	2	764	144	5	5	359	13	45	41	101	5	5	251	20	46	80	0	64	0
1	2	765	1	0	0	2	14	36	50	0	0	0	0	21	44	80	0	64	0
1	2	766	0	0	0	0	14	36	50	0	0	0	0	21	44	80	0	64	0
1	2	767	57	0	0	142	14	36	50	0	0	0	0	21	44	80	0	64	0
1	2	768	35	1	1	87	12	39	49	0	6	5	0	20	47	80	0	64	0
1	2	769	200	0	0	499	13	37	50	0	0	0	0	20	44	80	0	64	0
1	2	770	208	0	0	519	4	39	57	587	9	7	1460	14	48	80	0	64	0
1	2	771	150	3	3	374	11	39	50	180	9	8	448	20	48	80	0	64	0
1	2	772	292	3	2	729	10	37	53	57	9	8	142	20	48	80	0	64	0
1	2	773	64	3	3	160	11	39	50	86	9	8	214	20	48	80	0	64	0
1	2	774	0	5	4	0	13	53	34	194	8	7	483	8	55	80	0	64	0
1	2	775	0	5	4	0	13	53	34	0	8	7	0	8	55	80	0	64	0
1	2	776	0	2	2	0	6	42	51	0	8	7	0	8	55	80	0	64	0
1	2	777	19	5	4	47	13	53	34	27	8	7	67	8	55	80	90	64	188
1	2	778	174	5	4	434	13	53	34	0	8	7	0	8	55	80	0	64	0
1	2	779	497	3	3	1241	4	32	65	181	0	0	450	0	28	80	0	64	0
1	2	780	403	1	1	1006	3	33	64	1	0	0	2	0	0	80	0	64	0
1	2	781	1614	1	1	4029	5	26	68	1427	9	7	3550	17	47	80	0	64	0
1	2	782	508	3	3	1268	3	41	56	53	6	6	132	30	53	80	0	64	0
1	2	783	545	2	1	1360	1	36	63	0	3	2	0	7	52	80	0	64	0
1	2	784	387	8	5	966	4	47	49	404	11	6	1005	5	55	80	0	64	0
1	2	785	275	8	8	686	9	38	53	94	9	9	234	16	42	80	0	64	0
1	2	786	64	33	33	160	20	48	32	161	7	7	401	35	42	80	4	64	8
1	2	787	39	31	31	97	19	48	33	246	6	6	612	35	42	80	0	64	0
1	2	788	221	13	3	552	10	41	49	135	1	1	336	25	44	80	0	64	0
1	2	789	214	5	4	534	6	34	59	97	16	4	241	9	41	80	0	64	0
1	2	790	25	15	15	62	11	43	46	12	0	0	30	39	38	80	0	64	0
1	2	791	306	2	2	764	10	36	54	516	6	6	1284	14	62	80	0	64	0
1	2	792	158	12	12	394	13	40	47	60	27	27	149	16	47	80	0	64	0
1	2	793	142	11	11	354	13	46	41	33	17	17	82	18	52	80	11	64	23
1	2	794	85	3	3	212	4	37	60	701	5	4	1744	10	52	80	0	64	0
1	2	795	243	4	3	607	3	36	61	806	4	4	2005	8	51	80	0	64	0
1	2	796	0	4	4	0	2	33	66	0	2	2	0	5	49	80	0	64	0
1	2	797	136	4	4	339	0	29	71	0	1	1	0	4	46	80	0	64	0
1	2	798	275	0	0	686	4	30	66	0	11	11	0	33	33	80	0	64	0
1	2	799	100	1	1	250	3	30	67	87	9	9	216	27	36	80	0	64	0
1	2	800	215	2	2	537	1	19	80	0	3	3	0	10	20	80	0	64	0

ZDATA NO.	SECTOR NO.	TAZ	SFDU	% VAC NON PERM	% VAC	SFPOP	SFOCAR	SF1CAR	SF2+CAR	MFDU	% VAC NON PERM	% VAC	MFPOP	MF0CAR	MF1CAR	MF2+CAR	HMUNITS	НМРСТОСС	HMPOP
1	2	801	550	2	1	1373	4	18	78	0	0	0	0	0	94	80	0	64	0
1	2	802	223	3	2	557	2	50	48	733	11	8	1824	3	60	80	0	64	0
1	2	803	349	1	1	871	0	29	70	0	2	1	0	0	31	80	0	64	0
1	2	804	437	3	3	1091	2	20	78	4	0	0	10	0	0	80	0	64	0
1	2	805	404	1	1	1008	2	14	84	0	5	5	0	8	46	80	0	64	0
1	2	806	195	5	4	487	3	26	71	79	1	1	197	1	33	80	0	64	0
1	2	807	459	5	4	1146	2	27	71	3	1	1	7	1	33	80	0	64	0
1	2	808	1014	5	5	2531	1	25	74	22	24	19	55	0	18	80	0	64	0
1	2	809	683	3	3	1705	2	26	72	0	17	17	0	0	46	80	0	64	0
1	2	810	58	12	10	145	18	47	35	4	4	1	10	21	52	80	0	64	0
1	2	811	0	17	17	0	14	57	28	0	2	2	0	10	60	80	0	64	0
1	2	812	0	17	17	0	14	57	28	0	2	2	0	10	60	80	74	64	154
1	2	813	82	11	11	205	12	59	28	111	1	1	276	12	57	80	0	64	0
1	2	814	157	1	0	392	11	60	29	237	1	0	590	17	51	80	0	64	0
1	2	815	246	6	1	614	28	39	33	201	7	2	500	38	41	80	0	64	0
1	2	816	7	0	0	17	10	60	30	147	13	7	366	20	64	80	0	64	0
1	2	817	11	0	0	27	10	60	30	64	13	7	159	20	64	80	0	64	0
1	2	818	0	0	0	0	10	60	30	43	13	7	107	20	64	80	0	64	0
1	2	819	0	0	0	0	10	60	30	0	13	7	0	20	64	80	0	64	0
1	2	820	10	13	7	25	15	56	29	197	16	9	490	20	58	80	0	64	0
1	2	821	56	20	11	140	17	54	29	227	17	9	565	21	55	80	0	64	0
1	2	822	594	6	5	1483	1	26	73	2	1	1	5	0	50	80	0	64	0
1	2	823	440	9	6	1098	4	27	69	10	0	0	25	0	59	80	0	64	0
1	2	824	75	6	5	187	8	51	40	7	5	4	17	15	57	80	0	64	0
1	2	825	273	6	5	681	8	51	40	60	5	4	149	15	57	80	0	64	0
1	2	826	283	6	5	706	8	51	40	274	5	4	682	15	57	80	0	64	0
1	2	827	198	6	5	494	8	51	40	666	5	4	1657	15	57	80	0	64	0
1	2	828	23	6	5	57	8	51	40	426	5	4	1060	15	57	80	0	64	0
1	2	829	506	3	3	1263	6	33	61	371	8	7	923	14	55	80	0	64	0
1	2	830	653	0	0	1630	2	32	66	0	5	4	0	15	57	80	0	64	0
1	2	831	344	2	2	859	5	29	66	133	9	8	331	13	55	80	0	64	0
1	2	832	507	2	2	1266	5	30	65	585	9	8	1455	13	55	80	0	64	0
1	2	833	563	0	0	1405	10	37	53	121	7	7	301	31	48	80	0	64	0
1	2	834	748	5	5	1867	4	31	65	498	3	3	1239	16	49	80	0	64	0
1	2	835	590	5	5	1473	6	40	54	230	5	5	572	14	48	80	0	64	0
1	2	836	765	0	0	1910	5	44	50	709	3	1	1764	7	51	80	0	64	0
1	2	837	453	4	4	1131	3	47	50	28	0	0	70	8	63	80	0	64	0
1	2	838	403	3	3	1006	5	37	58	2	9	9	5	10	50	80	0	64	0
1	2	839	691	5	5	1725	7	27	66	40	10	10	100	12	35	80	0	64	0
1	2	840	557	10	10	1390	9	38	53	168	3	3	418	17	51	80	0	64	0
1	2	841	804	5	5	2007	6	37	57	297	5	5	739	14	53	80	0	64	0
1	2	842	440	1	1	1098	6	32	62	1834	7	7	4563	14	52	80	0	64	0
1	2	843	482	0	0	1203	4	49	47	727	8	8	1809	8	50	80	0	64	0
1	2	844	242	0	0	604	4	49	47	574	8	8	1428	8	50	80	0	64	0
1	2	845	889	3	2	2219	4	47	49	1508	7	5	3752	9	49	80	0	64	0
1	2	846	1	3	2	2	4	37	59	1490	9	6	3707	10	51	80	0	64	0
1	2	847	594	3	2	1483	4	26	70	448	10	7	1115	10	51	80	0	64	0
1	2	848	961	2	2	2399	3	36	62	283	11	9	704	6	42	80	0	64	0
1	2	849	770	2	2	1922	3	37	61	10	11	9	25	6	41	80	0	64	0
1	2	850	22	7	7	55	17	40	42	377	0	0	938	14	36	80	0	64	0

ZDATA NO.	SECTOR NO.	TAZ	SFDU	% VAC NON PERM	% VAC	SFPOP	SFOCAR	SF1CAR	SF2+CAR	MFDU	% VAC NON PERM	% VAC	MFPOP	MF0CAR	MF1CAR	MF2+CAR	HMUNITS	НМРСТОСС	HMPOP
1	2	851	450	4	4	1123	6	26	69	163	5	5	406	13	43	80	595	64	1242
1	2	852	236	5	5	589	6	29	65	1	0	0	2	27	25	80	48	64	100
1	2	853	0	4	4	0	5	28	67	0	0	0	0	27	25	80	224	64	468
1	2	854	653	3	3	1630	3	44	53	70	0	0	174	15	46	80	101	64	211
1	2	855	872	6	6	2177	3	19	77	0	0	0	0	13	44	80	0	64	0
1	2	856	454	9	9	1133	4	21	75	118	0	0	294	11	43	80	0	64	0
1	2	857	509	1	1	1271	0	19	81	0	0	0	0	0	18	80	0	64	0
1	2	858	485	4	2	1211	2	21	77	5	5	2	12	2	33	80	0	64	0
1	2	859	1171	3	2	2923	2	30	69	168	5	2	418	3	35	80	0	64	0
1	2	860	893	6	3	2229	1	28	71	207	0	0	515	3	31	80	0	64	0
1	2	861	1076	1	1	2686	3	32	66	65	0	0	162	1	48	80	0	64	0
1	2	862	639	3	3	1595	6	36	58	303	3	2	754	14	48	80	0	64	0
1	2	863	598	1	1	1493	4	45	51	682	8	8	1697	5	53	80	0	64	0
1	2	864	325	15	14	811	34	20	46	185	3	3	460	41	33	80	0	64	0
1	2	865	566	3	3	1413	3	27	69	52	4	4	129	15	36	80	0	64	0
1	2	866	196	5	5	489	7	43	51	24	12	12	60	18	56	80	0	64	0
1	2	867	333	6	5	831	13	43	44	372	48	40	926	23	41	80	137	64	286
1	2	868	193	6	5	482	13	43	44	138	48	40	343	23	41	80	19	64	40
1	2	869	749	2	2	1870	4	33	62	6	5	4	15	3	33	80	0	64	0
1	2	870	275	4	4	686	13	45	42	755	9	8	1878	14	54	80	0	64	0
1	2	871	329	1	1	821	20	37	43	160	5	4	398	26	34	80	11	64	23
1	2	872	615	0	0	1535	5	36	59	119	3	3	296	31	30	80	142	64	296
1	2	873	615	3	3	1535	4	37	59	370	22	21	921	9	42	80	0	64	0
1	2	874	456	3	3	1138	4	37	59	26	22	21	65	9	42	80	0	64	0
1	2	875	471	3	3	1176	4	37	59	859	22	21	2137	9	42	80	0	64	0
1	2	876	45	0	0	112	3	41	56	16	4	4	40	18	55	80	0	64	0
1	2	877	0	0	0	0	3	41	57	243	4	4	605	18	55	80	131	64	273
1	2	878	185	3	3	462	8	38	54	284	0	0	707	19	57	80	0	64	0
1	2	879	568	5	5	1418	8	41	52	0	0	0	0	12	50	80	0	64	0
1	2	880	439	6	6	1096	3	40	58	3505	0	0	8720	9	58	80	0	64	0
1	2	881	868	1	0	2167	5	28	67	1029	11	11	2560	14	53	80	0	64	0
1	2	882	202	5	5	504	12	46	43	424	6	5	1055	22	54	80	18	64	38
1	2	883	106	0	0	265	18	51	31	2761	11	10	6869	16	57	80	42	64	88
1	2	884	0	11	10	0	9	57	34	0	6	5	0	23	51	80	0	64	0
1	2	885	262	11	10	654	9	57	34	38	6	5	95	23	51	80	81	64	169
1	2	886	13	15	11	32	6	49	45	1397	11	8	3476	9	55	80	80	64	167
1	2	887	3	17	13	7	6	54	40	2756	7	5	6857	12	53	80	0	64	0
1	2	888	0	21	14	0	5	52	44	0	8	5	0	5	54	80	0	64	0
1	2	889	287	0	0	716	0	12	88	1298	1	1	3229	4	54	80	0	64	0
1	2	890	0	32	8	0	6	38	56	0	29	7	0	6	38	80	6328	64	13210
1	2	891	0	32	8	0	6	38	56	0	29	7	0	6	38	80	1959	64	4089
1	2	892	0	30	7	0	6	36	58	0	27	7	0	5	39	80	4405	64	9195
1	2	893	371	0	0	926	0	12	88	0	1	1	0	4	54	80	0	64	0
1	2	894	488	2	2	1218	7	33	60	240	27	27	597	15	49	80	0	64	0
1	2	895	156	6	5	389	5	40	55	1292	13	13	3214	7	51	80	75	64	157
1	2	896	0	10	7	0	1	32	67	0	17	13	0	11	32	80	0	64	0
1	2	897	0	5	5	0	7	38	55	0	7	7	0	16	51	80	0	64	0
1	2	898	97	13	13	242	10	41	48	2	7	7	5	40	53	80	0	64	0
1	2	899	0	0	0	0	2	51	46	0	11	10	0	5	56	80	0	64	0
1	2	900	0	0	0	0	4	50	46	1831	7	5	4555	6	49	80	0	64	0

ZDATA NO.	SECTOR NO.	TAZ	SFDU	% VAC NON PERM	% VAC	SFPOP	SFOCAR	SF1CAR	SF2+CAR	MFDU	% VAC NON PERM	% VAC	MFPOP	MF0CAR	MF1CAR	MF2+CAR	HMUNITS	HMPCTOCC	HMPOP	
1	2	901	2	0	0	5	4	50	46	0	7	5	0	6	49	80	0	64	0	
1	2	902	0	4	4	0	13	34	52	817	19	19	2033	8	47	80	0	64	0	
1	2	903	0	4	4	0	0	42	58	0	0	0	0	0	40	80	0	64	0	
1	2	904	69	6	5	172	13	33	54	76	8	8	189	8	62	80	0	64	0	
1	2	905	80	0	0	200	13	46	41	327	6	6	814	18	44	80	0	64	0	
1	2	906	52	7	6	130	4	37	59	143	13	11	356	8	60	80	35	64	73	
1	2	907	3	7	6	7	4	37	59	234	13	11	582	8	60	80	16	64	33	
1	2	908	144	6	3	359	3	23	74	243	9	3	605	4	47	80	0	64	0	
1	2	909	307	3	3	766	4	41	55	69	12	12	172	12	50	80	30	64	63	
1	2	910	0	1	1	0	5	40	55	0	2	2	0	19	57	80	0	64	0	
1	2	911	0	2	2	0	7	39	54	0	1	1	0	19	58	80	0	64	0	
1	2	912	290	1	1	724	9	29	62	301	3	2	749	17	41	80	24	64	50	
1	2	913	469	1	1	1171	9	29	62	281	3	2	699	17	41	80	0	64	0	
1	2	914	144	11	8	359	7	47	46	48	14	10	119	12	55	80	0	64	0	
1	2	915	0	11	10	0	9	57	34	1016	6	5	2528	23	51	80	0	64	0	
1	2	916	47	16	11	117	0	33	67	68	20	14	169	0	32	80	0	64	0	
1	2	917	0	10	7	0	1	32	67	0	17	13	0	11	32	80	310	64	647	
1	2	918	175	3	3	437	1	29	70	0	3	3	0	10	43	80	0	64	0	
1	2	919	240	4	4	599	1	29	71	9	2	2	22	6	45	80	0	64	0	
1	2	920	18	0	0	45	4	30	66	102	11	11	254	33	33	80	0	64	0	
1	2	921	104	0	0	260	4	30	66	0	11	11	0	33	33	80	0	64	0	
1	2	922	421	9	6	1051	7	40	53	38	4	1	95	14	42	80	0	64	0	
1	2	923	403	7	4	1006	4	38	58	61	6	3	152	7	51	80	0	64	0	
1	2	924	155	21	14	387	5	52	44	759	8	5	1888	5	54	80	0	64	0	
1	2	925	0	5	5	0	7	27	67	0	5	5	0	13	42	80	839	64	1751	
1	2	926	0	3	3	0	1	24	75	0	10	10	0	2	35	80	0	64	0	
1	2	927	2536	3	3	6330	5	36	59	284	33	30	707	6	49	80	0	64	0	
1	2	928	6	9	3	15	10	41	49	0	20	16	0	15	33	80	0	64	0	
1	2	929	62	11	11	155	9	25	66	380	12	12	945	15	42	80	0	64	0	
1	2	930	14	8	5	35	2	24	74	0	0	0	0	1	34	80	0	64	0	
1	2	931	284	8	5	709	2	25	74	0	0	0	0	1	34	80	0	64	0	
1	2	932	602	8	5	1503	2	25	74	0	0	0	0	1	34	80	0	64	0	
1	2	933	487	8	5	1216	2	25	74	62	0	0	154	1	34	80	0	64	0	
1	2	934	597	8	5	1490	2	25	74	0	0	0	0	1	34	80	0	64	0	
1	2	935	0	8	5	0	2	25	74	0	0	0	0	1	34	80	0	64	0	
1	2	936	13	8	5	32	2	25	74	0	0	0	0	1	34	80	0	64	0	
1	2	937	0	8	5	0	2	25	74	0	0	0	0	1	34	80	0	64	0	
1	2	938	2710	4	3	6765	2	24	74	192	10	8	478	5	41	80	0	64	0	
1	2	939	274	13	7	684	3	24	73	556	25	8	1383	7	24	80	0	64	0	
1	2	940	1592	5	3	3974	1	23	76	0	18	6	0	5	40	80	0	64	0	
1	2	941	13	8	7	32	2	18	80	0	3	3	0	3	16	80	0	64	0	
1	2	942	835	8	7	2084	2	18	80	0	3	3	0	3	16	80	0	64	0	
1	2	943	560	6	6	1398	9	19	72	280	61	61	697	38	13	80	0	64	0	
1	2	944	1975	6	6	4930	9	19	72	0	61	61	0	38	13	80	0	64	0	
1	2	945	362	6	6	904	9	19	72	0	61	61	0	38	13	80	0	64	0	
1	2	946	29	6	6	72	9	19	72	0	59	59	0	37	13	80	0	64	0	
1	2	947	135	6	6	337	9	19	72	0	59	59	0	37	13	80	0	64	0	
1	2	948	20	6	6	50	9	19	72	2	59	59	5	37	13	80	0	64	0	
1	2	949	4	4	0	10	4	13	82	0	0	0	0	0	0	80	0	64	0	
1	2	950	1704	4	0	4253	4	13	82	0	0	0	0	0	0	80	0	64	0	
1 2 951 24 4 0 60 44 13 82 0 0 0 0 <th>ZDATA NO.</th> <th>SECTOR NO.</th> <th>TAZ</th> <th>SFDU</th> <th>% VAC NON PERM</th> <th>% VAC</th> <th>SFPOP</th> <th>SFOCAR</th> <th>SF1CAR</th> <th>SF2+CAR</th> <th>MFDU</th> <th>% VAC NON PERM</th> <th>% VAC</th> <th>MFPOP</th> <th>MF0CAR</th> <th>MF1CAR</th> <th>MF2+CAR</th> <th>HMUNITS</th> <th>HMPCTOCC</th> <th>HMPOP</th>	ZDATA NO.	SECTOR NO.	TAZ	SFDU	% VAC NON PERM	% VAC	SFPOP	SFOCAR	SF1CAR	SF2+CAR	MFDU	% VAC NON PERM	% VAC	MFPOP	MF0CAR	MF1CAR	MF2+CAR	HMUNITS	HMPCTOCC	HMPOP
---	-----------	------------	------	------	----------------	-------	-------	--------	--------	---------	------	----------------	-------	-------	--------	--------	---------	---------	----------	-------
1 2 952 77 4 0 1940 4 13 82 0.0 0 10.0 0 0.0 0	1	2	951	24	4	0	60	4	13	82	0	0	0	0	0	0	80	0	64	0
1 2 98 3 38 17 6 38 56 0 29 7 50 6 38 50 122 1 2 956 13 4 0 42 56 17 4 0 122 1 1 1 2 956 13 4 0 42 0 <td>1</td> <td>2</td> <td>952</td> <td>777</td> <td>4</td> <td>0</td> <td>1940</td> <td>4</td> <td>13</td> <td>82</td> <td>403</td> <td>0</td> <td>0</td> <td>1003</td> <td>0</td> <td>0</td> <td>80</td> <td>0</td> <td>64</td> <td>0</td>	1	2	952	777	4	0	1940	4	13	82	403	0	0	1003	0	0	80	0	64	0
1 2 954 15 36 37 6 38 50 74 79 70 62 6 38 80 01 0 64 17 1 2 957 18 24 6 37 63 0	1	2	953	7	32	8	17	6	38	56	0	29	7	0	6	38	80	0	64	0
1 2 958 86 24 6 215 0 37 63 0 0 0 0 37 880 0 644 0 1 2 955 2 2 44 6 5 0 37 63 0 0 0 0 0 0 37 80 0 644 0 1 2 958 0 244 6 0 37 63 0 0 0 0 0 0 64 90 64 0 64 0 64 0 64 0 64 0 64 0 64 0 64 0 64 0 64 0 64 0 64 0 64 0 64 0 64 0 64 0 64 0 0 64 0 64 0 0 11 14 3 80	1	2	954	55	32	8	137	6	38	56	274	29	7	682	6	38	80	6190	64	12921
1 2 956 173 4 0 42 4 13 82 0<	1	2	955	86	24	6	215	0	37	63	0	0	0	0	0	37	80	0	64	0
1 2 957 2 24 6 5 0 37 63 0 0 0 0 37 80 0 64 0 1 2 959 220 3 3 572 5 36 50 0 33 30 0 6 49 80 0 64 0 1 2 950 136 8 5 42 72 0 4 3 0 2 36 80 0 64 0 1 2 951 0 8 50 2 24 74 0 1 1 0 1 34 80 0 64 0 1 2 956 16 5 2 103 8 56 0 277 24 0 14 33 80 0 64 0 1 2 956 16	1	2	956	173	4	0	432	4	13	82	0	0	0	0	0	0	80	0	64	0
1 2 958 0 24 6 0 0 0 0 0 0 37 80 0 64 0 1 2 950 1356 8 5 38 50 0 13 30 0 6 49 80 0 644 0 1 2 951 108 8 5 402 2 24 74 0 1 1 0 1 344 80 0 644 0 1 2 963 185 8 56 0 27 24 0 1 1 0 1 34 80 0 644 0 1 2 965 0 5 2 0 8 65 0 27 24 0 14 33 80 0 644 0 1 2 967 3 22 0	1	2	957	2	24	6	5	0	37	63	0	0	0	0	0	37	80	0	64	0
1 2 950 220 3 3 572 5 36 59 0 33 30 0 6 49 80 0 644 0 1 2 961 0 8 5 0 2 26 77 0 4 3 00 2 36 80 0 644 0 1 2 962 185 8 5 0 2 74 0 1 1 0 1 34 80 0 644 0 1 2 956 145 5 2 103 8 46 45 0 27 74 0 14 33 80 0 644 0 1 2 956 33 222 7 7 10 38 52 0 20 71 13 38 80 0 644 0 0 11 </td <td>1</td> <td>2</td> <td>958</td> <td>0</td> <td>24</td> <td>6</td> <td>0</td> <td>0</td> <td>37</td> <td>63</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>37</td> <td>80</td> <td>0</td> <td>64</td> <td>0</td>	1	2	958	0	24	6	0	0	37	63	0	0	0	0	0	37	80	0	64	0
1 2 990 1396 8 5 4485 2 22 76 1524 11 7 3792 4 43 80 0 64 0 1 2 961 185 8 5 462 2 2 74 0 1 1 0 1 34 80 0 64 0 1 2 954 0 8 56 0 29 7 0 6 38 80 0 64 0 1 2 956 0 5 2 0 8 66 45 0 277 7 0 14 33 80 0 64 0 1 2 966 0 5 0 2 7 7 10 38 27 0 10 14 33 80 0 64 0 1 2 970	1	2	959	229	3	3	572	5	36	59	0	33	30	0	6	49	80	0	64	0
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	1	2	960	1396	8	5	3485	2	22	76	1524	11	7	3792	4	43	80	0	64	0
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	1	2	961	0	8	5	0	2	26	72	0	4	3	0	2	36	80	0	64	0
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	1	2	962	185	8	5	462	2	24	74	0	1	1	0	1	34	80	0	64	0
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	1	2	963	882	32	8	2202	6	38	56	0	29	7	0	6	38	80	0	64	0
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	1	2	964	0	8	5	0	2	24	74	0	1	1	0	1	34	80	0	64	0
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	1	2	965	416	5	2	1038	8	46	45	0	27	24	0	14	33	80	0	64	0
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	1	2	966	0	5	2	0	8	46	45	0	27	24	0	14	33	80	0	64	0
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	1	2	967	3	22	7	7	10	38	52	0	20	7	0	11	38	80	0	64	0
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	1	2	968	0	3	2	0	6	21	73	0	38	27	0	20	51	80	0	64	0
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	1	2	969	19	4	0	47	4	13	82	0	0	0	0	0	0	80	0	64	0
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	1	2	970	0	5	5	0	2	52	47	0	0	0	0	0	0	80	0	64	0
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	1	2	971	0	5	5	0	2	52	47	0	0	0	0	0	0	80	0	64	0
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1	2	972	0	5	5	0	2	52	47	1016	0	0	2528	0	0	80	0	64	0
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	1	2	973	0	5	5	0	2	52	47	0	0	0	0	0	0	80	1894	64	3954
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	1	2	974	0	5	5	0	2	52	47	0	0	0	0	0	0	80	0	64	0
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	1	2	975	0	5	5	0	2	52	47	0	0	0	0	0	0	80	0	64	0
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	1	2	976	0	5	5	0	2	52	47	0	0	0	0	0	0	80	1823	64	3805
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	1	2	977	0	5	5	0	2	52	47	0	0	0	0	0	0	80	0	64	0
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	1	2	978	0	5	5	0	2	52	47	0	0	0	0	0	0	80	1759	64	3672
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	1	2	979	0	5	5	0	2	52	47	0	0	0	0	0	0	80	1616	64	3373
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1	2	980	0	5	5	0	2	52	47	0	0	0	0	0	0	80	969	64	2023
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1	2	981	0	5	5	0	2	52	47	0	0	0	0	0	0	80	3466	64	7235
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1	2	982	0	5	5	0	2	52	47	0	0	0	0	0	0	80	713	64	1488
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1	2	983	0	5	5	0	2	52	47	0	0	0	0	0	0	80	0	64	0
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1	2	984	806	2	2	2012	5	38	57	0	0	0	0	10	32	80	0	64	0
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1	2	985	0	1	1	0	8	33	59	0	0	0	0	14	46	80	0	64	0
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1	2	986	0	0	0	0	8	27	65	0	0	0	0	10	32	80	0	64	0
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	1	2	987	0	0	0	0	8	27	65	0	0	0	0	10	32	80	147	64	307
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	1	2	988	0	14	12	0	1	46	53	0	7	6	0	4	54	80	0	64	0
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	1	2	989	0	14	12	0	1	46	53	0	7	6	0	4	54	80	0	64	0
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1	2	990	0	14	12	0	1	46	53	0	7	6	0	4	54	80	2476	64	5169
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1	2	991	0	5	5	0	2	52	47	0	0	0	0	0	0	80	0	64	0
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1	2	992	0	4	4	0	3	55	42	0	10	5	0	10	62	80	4604	64	9611
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1	2	993	0	5	5	0	2	52	47	0	0	0	0	0	0	80	1476	64	3081
1 2 995 0 5 5 0 2 52 47 0 <td>1</td> <td>2</td> <td>994</td> <td>0</td> <td>5</td> <td>5</td> <td>0</td> <td>2</td> <td>52</td> <td>47</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>80</td> <td>621</td> <td>64</td> <td>1296</td>	1	2	994	0	5	5	0	2	52	47	0	0	0	0	0	0	80	621	64	1296
1 2 996 0 5 5 0 2 52 47 0 <td>1</td> <td>2</td> <td>995</td> <td>0</td> <td>5</td> <td>5</td> <td>0</td> <td>2</td> <td>52</td> <td>47</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>80</td> <td>1850</td> <td>64</td> <td>3862</td>	1	2	995	0	5	5	0	2	52	47	0	0	0	0	0	0	80	1850	64	3862
1 2 997 191 32 8 477 6 38 56 72 29 7 179 6 38 80 0 64 0 1 2 998 1033 32 8 2579 6 38 56 72 29 7 179 6 38 80 0 64 0 1 2 998 1033 32 8 2579 6 38 56 296 29 7 736 6 38 80 0 64 0 1 2 998 1033 32 8 2579 6 38 56 296 29 7 736 6 38 80 0 64 0 1 2 998 1033 32 6 38 56 296 29 7 736 6 38 80 0 64 0	1	2	996	0	5	5	0	2	52	47	0	0	0	0	0	0	80	1712	64	3574
1 2 998 1033 32 8 2579 6 38 56 296 29 7 736 6 38 80 0 64 0 1 2 998 1033 32 8 2579 6 38 56 296 29 7 736 6 38 80 0 64 0	1	2	997	191	32	8	477	6	38	56	72	29	7	179	6	38	80	0	64	0
	1	2	998	1033	32	8	2579	6	38	56	296	29	7	736	6	38	80	0	64	0
1 1 2 1999110341 / 1/125811612916518321 4 14120/01613418011281641267	1	2	999	1034	7	7	2581	6	29	65	832	4	4	2070	6	34	80	128	64	267
1 2 1000 1340 5 3 3345 2 38 59 0 19 8 0 14 32 80 0 64 0	1	2	1000	1340	5	3	3345	2	38	59	0	19	8	0	14	32	80	0	64	0

ZDATA NO.	SECTOR NO.	TAZ	SFDU	% VAC NON PERM	% VAC	SFPOP	SFOCAR	SF1CAR	SF2+CAR	MFDU	% VAC NON PERM	% VAC	MFPOP	MF0CAR	MF1CAR	MF2+CAR	HMUNITS	НМРСТОСС	HMPOP
1	2	1001	2835	5	3	7077	2	38	59	9	19	8	22	14	32	80	0	64	0
1	2	1002	44	8	8	110	3	33	64	0	0	0	0	4	29	80	0	64	0
1	2	1003	503	9	7	1256	5	26	70	0	0	0	0	7	29	80	0	64	0
1	2	1004	1508	4	3	3764	2	24	74	900	10	8	2239	5	42	80	0	64	0
1	2	1005	1807	4	3	4511	2	24	74	154	10	8	383	5	42	80	0	64	0
1	2	1006	571	3	3	1425	1	24	75	0	10	10	0	2	35	80	0	64	0
1	2	1007	702	4	3	1752	2	24	74	0	10	8	0	5	42	80	0	64	0
1	2	1008	548	4	3	1368	3	24	73	951	11	8	2366	6	40	80	0	64	0
1	2	1009	1	15	5	2	3	25	72	0	38	13	0	4	26	80	0	64	0
1	2	1010	14	15	5	35	3	25	72	0	38	13	0	4	26	80	0	64	0
1	2	1011	34	32	8	85	6	38	56	0	29	7	0	6	38	80	0	64	0
1	2	1012	562	4	4	1403	3	26	71	0	18	18	0	4	35	80	0	64	0
1	2	1013	34	4	4	85	2	28	70	0	0	0	0	2	28	80	0	64	0
1	2	1014	61	8	5	152	16	30	53	0	3	1	0	21	30	80	0	64	0
1	2	1015	0	0	0	0	1	22	77	0	33	7	0	7	42	80	493	64	1029
1	2	1016	103	9	3	257	10	41	49	0	20	16	0	15	33	80	0	64	0
1	2	1017	99	7	5	247	13	54	33	0	0	0	0	13	51	80	0	64	0
1	2	1018	536	4	2	1338	2	19	79	0	0	0	0	0	0	80	0	64	0
1	2	1019	233	4	2	582	2	19	79	0	0	0	0	0	0	80	0	64	0
1	2	1020	45	0	0	112	2	27	71	0	0	0	0	0	0	80	0	64	0
1	2	1021	238	6	6	594	11	33	56	0	0	0	0	15	15	69	0	87	0
1	2	1022	1	5	3	2	1	23	76	0	18	6	0	5	40	80	1441	64	3008
1	2	1023	0	5	3	0	1	23	76	0	18	6	0	5	40	80	1686	64	3519
1	2	1024	606	5	3	1513	2	39	59	140	8	4	348	4	48	80	0	64	0
1	4	1201	16	30	24	33	1	42	57	0	36	29	0	2	42	80	0	0	0
1	4	1202	317	30	24	656	1	42	57	451	36	29	936	2	42	80	0	0	0
1	4	1203	11	30	24	23	1	42	57	4	36	29	8	2	42	80	0	0	0
1	4	1204	61	30	24	126	1	42	57	49	36	29	102	2	42	80	0	0	0
1	4	1205	112	30	24	232	1	42	57	199	36	29	413	2	42	80	0	0	0
1	4	1206	28	30	24	58	1	42	57	1/	36	29	35	2	42	80	0	0	0
1	4	1207	2	30	24	4	1	42	57	1	36	29	2	2	42	80	0	0	0
1	4	1208	90	30	24	186	1	42	57	42	36	29	8/	2	42	80	0	0	0
1	4	1209	54	30	24	112	1	42	57	1/8	36	29	369	2	42	80	0	0	0
1	4	1210	94	30	24	195	1	42	57	92	36	29	191	2	42	80	0	0	0
1	4	1211	101	8	5	209	5	33	62	/6	19	11	158	5	33	80	0	0	0
1	4	1212	214	ŏ	5	443	5	33	62	187	19		388	5	33	80	0	0	0
1	4	1213	40	ŏ	3	95	5	29	60	50	17	b E	1160	5	29	80	0	0	0
1	4	1214	504 71	0	2	1044	5	29	66	202	17	e e	1109	5 F	29	00	0	0	0
1	4	1215	170	0	2 2	260	5	29	60	1/1	17	6	202	5	29	00 00	0	0	0
1	4	1210	222	0	2 2	492	5	29	66	360	17	6	295	5	29	00 00	0	0	0
1	4	121/	233 278	0 8	5	402 576	5	29	62	22	10	11	68	5	29	80	0	0	0
1	4 /	1210	270	o Q	5	610	5	22	62	60	19	11	1/12	5	22	00 20	0	0	0
1	4	1219	42	0	2	Q7	5	20	66	200	17	6	143 50	5	20	00 00	0	0	0
1	4	1220	42	0 8	3	327	5	29	66	20 138	17	6	286	5	29	80	0	0	0
1	4 /	1221	200	o Q	2	184	5	29	66	150	17	6	200	5	29	00 20	0	0	0
1	4 A	1222	28/	8	5	588	5	23	62	<u>⊥</u> 0 <u>⊿</u> 1	19	11	85	5	23	80	0	0	0
1	4	1223	504	2 2	2	1054	5	20	66	2/10	17	6	517	5	20	20 20	0	0	0
1	- - Д	1224	79	8	2	164	5	29	66	19	17	6	30	5	29	80	0	0	0
1	4	1225	268	8	3	555	5	29	66	47	17	6	98	5	29	80	0	0	0
-	-	1220	200	5	,	555	,		00		±,	~				00	v	, v	, v

ZDATA NO.	SECTOR NO.	TAZ	SFDU	% VAC NON PERM	% VAC	SFPOP	SFOCAR	SF1CAR	SF2+CAR	MFDU	% VAC NON PERM	% VAC	MFPOP	MF0CAR	MF1CAR	MF2+CAR	HMUNITS	HMPCTOCC	HMPOP
1	4	1227	224	16	6	464	5	29	66	118	34	12	245	5	29	80	0	0	0
1	4	1228	27	5	2	56	2	26	72	2	9	4	4	2	26	72	0	0	0
1	4	1229	371	5	2	768	2	26	72	20	9	4	41	2	26	72	0	0	0
1	4	1230	51	10	4	106	2	26	72	82	18	8	170	2	26	80	0	0	0
1	4	1231	56	5	2	116	2	26	72	4	9	4	8	2	26	80	0	0	0
1	4	1232	39	5	2	81	2	26	72	3	9	4	6	2	26	80	0	0	0
1	4	1233	169	5	2	350	2	26	72	99	9	4	205	2	26	80	0	0	0
1	4	1234	221	5	2	458	2	26	72	82	9	4	170	2	26	80	0	0	0
1	4	1235	100	5	2	207	2	26	72	3	9	4	6	2	26	72	0	0	0
1	4	1236	703	5	2	1456	2	26	72	424	9	4	880	2	26	80	0	0	0
1	4	1237	18	5	2	37	2	26	72	1	9	4	2	2	26	80	0	0	0
1	4	1238	99	5	2	205	2	26	72	93	9	4	193	2	26	80	0	0	0
1	4	1239	544	12	7	1127	5	74	21	3192	12	6	6623	5	74	80	83	54.9	138
1	4	1240	200	8	5	414	4	49	47	630	23	14	1307	4	49	80	0	0	0
1	4	1241	509	8	5	1054	4	49	47	70	23	14	145	4	49	80	0	0	0
1	4	1242	157	5	4	325	6	54	40	246	29	21	510	6	54	80	0	0	0
1	4	1243	157	5	4	325	6	54	40	688	29	21	1427	6	54	80	0	0	0
1	4	1244	54	8	5	112	5	33	62	48	19	11	100	5	33	80	0	0	0
1	4	1245	310	8	5	642	5	33	62	12	19	11	25	5	33	80	0	0	0
1	4	1246	1914	12	7	3963	5	74	21	1150	12	6	2386	5	74	80	370	54.9	616
1	4	1247	360	8	5	745	4	49	47	1006	23	14	2087	4	49	80	15	54.9	25
1	4	1248	545	12	7	1129	5	74	21	417	12	6	865	5	74	80	64	54.9	107
1	4	1249	333	8	5	690	4	49	47	428	23	14	888	4	49	80	67	54.9	112
1	4	1250	914	8	5	1893	4	49	47	41	23	14	85	4	49	80	0	0	0
1	4	1251	476	5	4	986	6	54	40	44	29	21	91	6	54	80	0	0	0
1	4	1252	23	5	3	48	6	46	48	0	32	18	0	6	46	80	0	0	0
1	4	1253	592	5	3	1226	6	46	48	3	32	18	6	6	46	80	0	0	0
1	4	1254	360	20	12	745	6	46	48	1419	128	72	2944	6	46	80	0	0	0
1	4	1255	154	8	5	319	5	33	62	121	19	11	251	5	33	80	0	0	0
1	4	1256	52	8	5	108	5	33	62	1	19	11	2	5	33	80	0	0	0
1	4	1257	195	8	5	404	5	33	62	111	19	11	230	5	33	80	14	54.9	23
1	4	1258	276	8	5	572	5	33	62	25	19	11	52	5	33	80	14	54.9	23
1	4	1259	388	8	5	803	5	33	62	88	19	11	183	5	33	80	14	54.9	23
1	4	1260	298	8	5	617	5	33	62	64	19	11	133	5	33	80	0	0	0
1	4	1261	71	8	5	147	5	33	62	47	19	11	98	5	33	80	0	0	0
1	4	1262	294	8	5	609	5	33	62	32	19	11	66	5	33	80	0	0	0
1	4	1263	214	8	5	443	5	33	62	13	19	11	27	5	33	80	0	0	0
1	4	1264	189	6	2	391	1	29	70	1	26	11	2	1	29	80	0	0	0
1	4	1265	537	7	4	1112	5	40	55	208	21	11	432	5	40	80	0	0	0
1	4	1266	383	7	4	793	5	40	55	87	21	11	181	5	40	80	0	0	0
1	4	1267	270	7	4	559	5	40	55	604	21	11	1253	5	40	80	0	0	0
1	4	1268	885	7	4	1833	5	40	55	308	21	11	639	5	40	80	0	0	0
1	4	1269	104	9	5	215	6	52	42	73	22	12	151	6	52	80	0	0	0
1	4	1270	97	9	5	201	6	52	42	984	22	12	2042	6	52	80	0	0	0
1	4	1271	188	9	5	389	6	52	42	8	22	12	17	6	52	80	0	0	0
1	4	1272	521	9	5	1079	6	52	42	108	22	12	224	6	52	80	112	54.9	186
1	4	1273	252	8	3	522	4	51	45	741	20	8	1537	4	51	80	0	0	0
1	4	1274	642	8	3	1329	4	51	45	1006	20	8	2087	4	51	80	0	0	0
1	4	1275	486	8	3	1006	4	51	45	464	20	8	963	4	51	80	0	0	0
1	4	1276	2	5	4	4	6	54	40	1174	29	21	2436	6	54	80	0	0	0

ZDATA NO.	SECTOR NO.	TAZ	SFDU	% VAC NON PERM	% VAC	SFPOP	SFOCAR	SF1CAR	SF2+CAR	MFDU	% VAC NON PERM	% VAC	MFPOP	MF0CAR	MF1CAR	MF2+CAR	HMUNITS	НМРСТОСС	HMPOP
1	4	1277	132	5	4	273	6	54	40	219	29	21	454	6	54	80	0	0	0
1	4	1278	240	5	4	497	6	54	40	22	29	21	46	6	54	80	0	0	0
1	4	1279	674	5	3	1396	6	45	49	37	32	18	77	6	46	80	0	0	0
1	4	1280	398	8	3	824	4	51	45	198	20	8	411	4	51	80	0	0	0
1	4	1281	459	8	4	950	12	43	45	191	5	2	396	12	42	80	94	54.9	157
1	4	1282	12	7	1	25	1	46	53	2	37	6	4	1	46	80	0	0	0
1	4	1283	31	7	1	64	1	46	53	28	37	6	58	1	46	80	0	0	0
1	4	1284	67	7	1	139	1	46	53	0	37	6	0	1	46	80	12	54.9	20
1	4	1285	93	7	1	193	1	46	53	41	37	6	85	1	46	80	0	0	0
1	4	1286	79	8	4	164	12	43	45	208	5	2	432	12	42	80	0	0	0
1	4	1287	20	5	3	41	6	46	48	25	32	18	52	6	46	80	8	54.9	13
1	4	1288	103	5	3	213	6	46	48	236	32	18	490	6	46	80	8	54.9	13
1	4	1289	282	5	3	584	6	46	48	155	32	18	322	6	46	80	0	0	0
1	4	1290	112	7	1	232	1	47	52	159	37	6	330	1	46	80	0	0	0
1	4	1291	482	7	1	998	1	47	52	102	37	6	212	1	46	80	0	0	0
1	4	1292	131	7	1	271	1	47	52	90	37	6	187	1	46	80	12	54.9	20
1	4	1293	114	7	1	236	1	47	52	60	37	6	124	1	46	80	12	54.9	20
1	4	1294	459	7	1	950	1	47	52	57	37	6	118	1	46	80	11	54.9	18
1	4	1295	537	8	4	1112	12	43	45	8	5	2	17	12	42	80	30	54.9	50
1	4	1296	867	8	4	1795	12	43	45	36	5	2	75	12	42	80	0	0	0
1	4	1297	1065	6	2	2205	1	29	70	17	26	11	35	1	29	80	0	0	0
1	4	1298	577	6	2	1195	1	29	70	174	26	11	361	1	29	70	0	0	0
1	4	1299	1131	9	1	2342	11	53	36	230	16	2	477	11	53	80	0	0	0
1	4	1300	48	7	4	99	5	40	55	1	21	11	2	5	40	80	0	0	0
1	4	1301	259	7	4	536	5	40	55	33	21	11	68	5	40	80	0	0	0
1	4	1302	421	7	4	872	5	40	55	134	21	11	278	5	40	80	0	0	0
1	4	1303	121	9	4	251	7	56	37	38	22	8	79	7	56	80	48	54.9	80
1	4	1304	332	9	4	687	7	56	37	366	22	8	759	7	56	80	0	0	0
1	4	1305	410	9	4	849	7	56	37	13	22	8	27	7	56	80	331	54.9	551
1	4	1306	373	9	4	772	7	56	37	785	22	8	1629	7	56	80	0	0	0
1	4	1307	395	9	1	818	11	53	36	167	16	2	346	11	53	80	0	0	0
1	4	1308	0	9	1	0	11	53	36	54	16	2	112	11	53	80	0	0	0
1	4	1309	67	9	1	139	11	53	36	367	16	2	761	11	53	80	146	54.9	243
1	4	1310	295	9	1	611	11	53	36	296	16	2	614	11	53	80	0	0	0
1	4	1311	234	9	1	485	11	53	36	143	16	2	297	11	53	80	20	54.9	33
1	4	1312	159	15	2	329	19	49	32	298	16	2	618	19	49	80	95	54.9	158
1	4	1313	34	15	2	70	19	49	32	72	16	2	149	19	49	80	6	54.9	10
1	4	1314	241	15	2	499	19	49	32	124	16	2	257	19	49	80	0	0	0
1	4	1315	843	10	6	1746	3	38	59	135	31	19	280	3	38	80	0	0	0
1	4	1316	33	10	6	68	3	38	59	107	31	19	222	3	38	80	0	0	0
1	4	1317	266	10	6	551	3	38	59	141	31	19	293	3	38	80	185	54.9	308
1	4	1318	304	8	3	630	4	51	45	78	20	8	162	4	51	80	73	54.9	122
1	4	1319	644	14	8	1334	4	55	41	664	28	16	1378	4	54	80	0	0	0
1	4	1320	267	10	7	553	7	54	39	443	26	18	919	7	53	80	12	54.9	20
1	4	1321	289	10	7	598	7	54	39	0	26	18	0	7	53	80	2	54.9	3
1	4	1322	0	10	7	0	7	54	39	1	26	18	2	7	53	80	0	0	0
1	4	1323	66	10	7	137	7	54	39	139	26	18	288	7	53	80	0	0	0
1	4	1324	198	10	7	410	7	54	39	259	26	18	537	7	53	80	46	54.9	77
1	4	1325	84	10	7	174	7	54	39	544	26	18	1129	7	53	80	69	54.9	115
1	4	1326	1012	10	7	2096	7	54	39	700	26	18	1452	7	53	80	71	54.9	118

ZDATA NO.	SECTOR NO.	TAZ	SFDU	% VAC NON PERM	% VAC	SFPOP	SFOCAR	SF1CAR	SF2+CAR	MFDU	% VAC NON PERM	% VAC	MFPOP	MF0CAR	MF1CAR	MF2+CAR	HMUNITS	НМРСТОСС	HMPOP
1	4	1327	156	7	2	323	9	43	48	16	17	4	33	9	43	80	0	0	0
1	4	1328	369	10	7	764	7	54	39	69	26	18	143	7	54	80	0	0	0
1	4	1329	698	7	2	1445	9	43	48	0	17	4	0	9	43	80	0	0	0
1	4	1330	203	7	2	420	9	43	48	80	17	4	166	9	43	80	62	54.9	103
1	4	1331	372	7	2	770	9	43	48	47	17	4	98	9	43	80	0	0	0
1	4	1332	155	7	2	321	9	43	48	106	17	4	220	9	43	80	0	0	0
1	4	1333	335	10	3	694	9	42	49	9	17	5	19	9	42	80	35	54.9	58
1	4	1334	372	10	3	770	9	42	49	211	17	5	438	9	42	80	0	0	0
1	4	1335	280	10	3	580	9	42	49	61	17	5	127	9	42	80	59	54.9	98
1	4	1336	222	10	3	460	9	42	49	197	17	5	409	9	42	80	0	0	0
1	4	1337	526	10	3	1089	9	42	49	200	17	5	415	9	42	80	0	0	0
1	4	1338	28	5	2	58	2	26	72	36	9	4	75	2	26	72	0	0	0
1	4	1339	323	5	2	669	2	26	72	0	9	4	0	2	26	72	0	0	0
1	4	1340	446	10	3	924	9	42	49	289	17	5	600	9	42	80	0	0	0
1	4	1341	224	10	3	464	9	42	49	159	17	5	330	9	42	80	0	0	0
1	4	1342	162	10	3	335	9	42	49	180	17	5	373	9	42	80	90	54.9	150
1	4	1343	159	7	2	329	9	43	48	17	17	4	35	9	43	80	0	0	0
1	4	1344	537	8	3	1112	7	51	42	604	16	7	1253	7	51	80	0	0	0
1	4	1345	270	8	3	559	7	51	42	271	16	7	562	7	51	80	0	0	0
1	4	1346	398	8	3	824	7	51	42	173	16	7	359	7	51	80	0	0	0
1	4	1347	227	15	2	470	19	49	32	269	16	2	558	19	49	80	31	54.9	52
1	4	1348	336	8	3	696	7	51	42	64	16	7	133	7	51	80	0	0	0
1	4	1349	549	9	0	1137	11	48	41	104	14	1	216	11	48	80	31	54.9	52
1	4	1350	229	9	0	474	11	48	41	102	14	1	212	11	48	80	0	0	0
1	4	1351	141	9	4	292	3	61	36	1382	18	9	2867	2	62	80	0	0	0
1	4	1352	0	9	4	0	3	61	36	0	18	9	0	2	62	80	0	0	0
1	4	1353	3	9	4	6	3	61	36	453	18	9	940	2	62	80	0	0	0
1	4	1354	53	9	4	110	3	61	36	74	18	9	154	2	62	80	0	0	0
1	4	1355	6	9	4	12	3	61	36	4	18	9	8	2	62	80	0	0	0
1	4	1356	61	9	4	126	3	61	36	93	18	9	193	2	62	80	0	0	0
1	4	1357	2823	9	4	5846	3	61	36	1028	18	9	2133	2	62	80	0	0	0
1	4	1358	8	9	4	17	3	61	36	11	18	9	23	2	62	80	0	0	0
1	4	1359	24	9	4	50	3	61	36	645	18	9	1338	2	62	80	0	0	0
1	4	1360	13	9	4	27	3	61	36	626	18	9	1299	2	62	80	0	0	0
1	4	1361	975	9	4	2019	3	61	36	112	18	9	232	2	62	80	19	54.9	32
1	4	1362	556	9	4	1151	3	61	36	112	18	9	232	2	62	80	0	0	0
1	4	1363	742	14	8	1537	4	55	41	722	28	16	1498	4	55	80	0	0	0
1	4	1364	170	14	8	352	4	55	41	363	28	16	753	4	55	80	0	0	0
1	4	1365	693	10	5	1435	3	29	68	40	15	7	83	3	29	80	0	0	0
1	4	1366	87	10	5	180	3	29	68	139	15	7	288	3	29	80	0	0	0
1	4	1367	71	10	5	147	3	29	68	14	15	7	29	3	29	80	0	0	0
1	4	1368	1054	10	5	2183	3	29	68	56	15	7	116	3	29	80	0	0	0
1	4	1369	252	10	5	522	3	29	68	350	15	7	726	3	29	80	0	0	0
1	4	1370	135	10	5	280	3	29	68	128	15	7	266	3	29	80	0	0	0
1	4	1371	42	6	2	87	3	25	72	28	10	4	58	3	25	80	0	0	0
1	4	1372	1937	9	4	4011	3	61	36	41	18	9	85	2	62	80	3	54.9	5
1	4	1373	88	9	4	182	3	61	36	80	18	9	166	2	62	80	0	0	0
1	4	1374	31	9	4	64	3	61	36	8	18	9	17	2	62	80	0	0	0
1	4	1375	12	12	8	25	4	40	56	4	39	26	8	4	40	80	0	0	0
1	4	1376	308	6	2	638	3	25	72	87	10	4	181	3	25	80	0	0	0

ZDATA NO.	SECTOR NO.	TAZ	SFDU	% VAC NON PERM	% VAC	SFPOP	SFOCAR	SF1CAR	SF2+CAR	MFDU	% VAC NON PERM	% VAC	MFPOP	MF0CAR	MF1CAR	MF2+CAR	HMUNITS	НМРСТОСС	HMPOP
1	4	1377	201	6	2	416	3	25	72	26	10	4	54	3	25	80	0	0	0
1	4	1378	713	6	2	1476	3	25	72	64	10	4	133	3	25	80	0	0	0
1	4	1379	47	6	2	97	3	25	72	16	10	4	33	3	25	80	0	0	0
1	4	1380	293	6	2	607	3	25	72	132	10	4	274	3	25	80	0	0	0
1	4	1381	152	6	2	315	3	25	72	284	10	4	589	3	25	80	0	0	0
1	4	1382	733	12	8	1518	4	40	56	107	39	26	222	4	40	80	0	0	0
1	4	1383	111	12	8	230	4	40	56	61	39	26	127	4	40	80	0	0	0
1	4	1384	1606	12	8	3326	4	40	56	51	39	26	106	4	40	80	0	0	0
1	4	1385	62	12	8	128	4	40	56	5	39	26	10	4	40	80	0	0	0
1	4	1386	723	12	8	1497	4	40	56	1543	39	26	3201	4	40	80	219	54.9	365
1	4	1387	1215	4	1	2516	2	29	69	253	11	4	525	2	29	80	0	0	0
1	4	1388	294	4	1	609	2	29	69	4	11	4	8	2	29	80	0	0	0
1	4	1389	22	4	1	46	2	29	69	6	11	4	12	2	29	80	0	0	0
1	4	1390	517	12	8	1071	4	40	56	46	39	26	95	4	40	80	5	54.9	8
1	4	1391	683	12	8	1414	4	40	56	27	39	26	56	4	40	80	0	0	0
1	4	1392	1682	12	8	3483	4	40	56	112	39	26	232	4	40	80	0	0	0
1	4	1393	525	12	8	1087	4	40	56	8	39	26	17	4	40	80	0	0	0
1	4	1394	329	8	2	681	10	35	55	225	8	2	467	10	35	80	8	54.9	13
1	4	1395	917	8	2	1899	2	29	69	165	22	8	342	2	29	80	27	54.9	45
1	4	1396	1292	4	1	2675	2	29	69	99	11	4	205	2	29	80	3	54.9	5
1	4	1397	585	16	4	1211	10	35	55	189	16	4	392	10	35	80	0	0	0
1	4	1398	255	16	4	528	10	35	55	192	16	4	398	10	35	80	33	54.9	55
1	4	1399	2275	8	2	4711	2	29	69	14	22	8	29	2	29	80	242	54.9	403
1	4	1400	1669	4	1	3456	2	29	69	5	11	4	10	2	29	80	57	54.9	95
1	4	1401	82	9	2	170	5	34	61	61	16	3	127	5	34	80	0	0	0
1	4	1402	574	12	8	1189	4	40	56	304	39	26	631	4	40	80	5	54.9	8
1	4	1403	173	9	2	358	5	34	61	120	16	3	249	5	34	80	0	0	0
1	4	1404	102	9	2	211	5	34	61	71	16	3	147	5	34	80	0	0	0
1	4	1405	695	9	2	1439	5	34	61	140	16	3	290	5	34	80	14	54.9	23
1	4	1406	120	9	2	248	5	34	61	109	16	3	226	5	34	80	0	0	0
1	4	1407	363	9	2	752	5	34	61	23	16	3	48	5	34	80	0	0	0
1	4	1408	345	11	6	714	3	32	65	119	20	12	247	3	32	80	0	0	0
1	4	1409	167	11	6	346	3	32	65	1458	22	12	3025	3	32	80	0	0	0
1	4	1410	1215	11	6	2516	3	32	65	74	22	12	154	9	96	80	0	0	0
1	4	1411	1388	11	6	2874	3	32	65	9	22	12	19	3	32	80	0	0	0
1	4	1412	0	11	6	0	3	32	65	0	22	12	0	3	32	80	0	0	0
1	4	1413	363	11	6	752	3	32	65	3	22	12	6	3	32	80	0	0	0
1	4	1414	2409	11	6	4989	3	32	65	2132	22	12	4424	3	32	80	73	54.9	122
1	4	1415	1727	8	4	3576	2	29	69	62	22	8	129	3	32	80	0	0	0
1	4	1416	1431	11	6	2963	3	32	65	0	22	12	0	3	32	80	0	0	0
1	4	1417	787	8	2	1630	10	35	55	365	8	2	757	10	35	80	0	0	0
1	4	1418	448	8	2	928	10	35	55	131	8	2	272	10	35	80	0	0	0
1	4	1419	613	8	2	1269	2	29	69	48	22	8	100	3	32	80	63	54.9	105
1	4	1420	2880	11	6	5964	3	32	65	192	22	12	398	3	32	80	0	0	0
1	4	1421	1336	11	6	2767	3	32	65	12	22	12	25	3	32	80	0	0	0
1	4	1422	1277	11	6	2644	3	32	65	2	22	12	4	3	32	80	0	0	0
1	4	1423	1942	11	6	4021	3	32	65	- 90	22	12	187	3	32	80	0	0	0
1	4	1474	281	5	3	582	6	45	49	346	19	9	718	6	46	80	0	0	0
1	4	1425	454	6	2	940	1	29	70	5	26	11	10	1	29	80	0	0	0
1	4	1426	506	5	3	1048	6	45	49	53	32	18	110	6	46	80	0	0	0
				-										-			-		-

ZDATA NO.	SECTOR NO.	TAZ	SFDU	% VAC NON PERM	% VAC	SFPOP	SFOCAR	SF1CAR	SF2+CAR	MFDU	% VAC NON PERM	% VAC	MFPOP	MF0CAR	MF1CAR	MF2+CAR	HMUNITS	HMPCTOCC	HMPOP
1	4	1427	216	10	3	447	9	42	49	8	17	5	17	9	42	80	0	0	0
1	4	1428	318	8	3	659	5	29	66	276	17	6	573	5	29	80	0	0	0
1	4	1429	0	0	0	0	0	0	0	0	0	0	0	0	0	80	0	0	0
1	4	1430	135	10	4	280	2	26	72	4	18	8	8	2	26	72	0	0	0
1	4	1431	34	10	4	70	2	26	72	2	18	8	4	2	26	80	0	0	0
1	4	1432	32	10	4	66	2	26	72	2	18	8	4	2	26	80	0	0	0
1	4	1433	29	5	2	60	2	26	72	37	9	4	77	2	26	80	0	0	0
1	4	1434	13	5	2	27	2	26	72	2	9	4	4	2	26	72	0	0	0
1	4	1435	0	0	0	0	0	0	0	0	0	0	0	0	0	80	0	0	0
1	4	1436	0	0	0	0	0	0	0	0	0	0	0	0	0	80	0	0	0
1	4	1437	0	0	0	0	0	0	0	0	0	0	0	0	0	80	0	0	0
1	4	1438	0	0	0	0	0	0	0	0	0	0	0	0	0	80	0	0	0
1	4	1439	0	0	0	0	0	0	0	0	0	0	0	0	0	80	0	0	0
1	4	1440	0	0	0	0	0	0	0	0	0	0	0	0	0	80	0	0	0
1	4	1441	0	0	0	0	0	0	0	0	0	0	0	0	0	80	0	0	0
1	4	1442	0	0	0	0	0	0	0	0	0	0	0	0	0	80	0	0	0
1	4	1443	0	0	0	0	0	0	0	0	0	0	0	0	0	80	0	0	0
1	4	1444	0	0	0	0	0	0	0	0	0	0	0	0	0	80	0	0	0
1	4	1445	0	0	0	0	0	0	0	0	0	0	0	0	0	80	0	0	0
1	4	1446	0	0	0	0	0	0	0	0	0	0	0	0	0	80	0	0	0
1	4	1447	0	0	0	0	0	0	0	0	0	0	0	0	0	80	0	0	0
1	4	1448	0	0	0	0	0	0	0	0	0	0	0	0	0	80	0	0	0
1	4	1449	0	0	0	0	0	0	0	0	0	0	0	0	0	80	0	0	0
1	4	1450	0	0	0	0	0	0	0	0	0	0	0	0	0	80	0	0	0
1	4	1451	0	0	0	0	0	0	0	0	0	0	0	0	0	80	0	0	0
1	4	1452	0	0	0	0	0	0	0	0	0	0	0	0	0	80	0	0	0
1	4	1453	0	0	0	0	0	0	0	0	0	0	0	0	0	80	0	0	0
1	4	1454	0	0	0	0	0	0	0	0	0	0	0	0	0	80	0	0	0
1	4	1455	0	0	0	0	0	0	0	0	0	0	0	0	0	80	0	0	0
1	4	1456	0	0	0	0	0	0	0	0	0	0	0	0	0	80	0	0	0
1	4	1457	0	0	0	0	0	0	0	0	0	0	0	0	0	80	0	0	0
1	4	1458	0	0	0	0	0	0	0	0	0	0	0	0	0	80	0	0	0
1	4	1459	0	0	0	0	0	0	0	0	0	0	0	0	0	80	0	0	0
1	4	1460	0	0	0	0	0	0	0	0	0	0	0	0	0	80	0	0	0
1	4	1461	0	0	0	0	0	0	0	0	0	0	0	0	0	80	0	0	0
1	4	1402	0	0	0	0	0	0	0	0	0	0	0	0	0	80	0	0	0
1	4	1/6/	0	0	0	0	0	0	0	0	0	0	0	0	0	80	0	0	0
1	4	1/65	0	0	0	0	0	0	0	0	0	0	0	0	0	80	0	0	0
1	4	1/66	0	0	0	0	0	0	0	0	0	0	0	0	0	20 20	0	0	0
1	4	1/167	0	0	0	0	0	0	0	0	0	0	0	0	0	80	0	0	0
1	4	1462	0	0	0	0	0	0	0	0	0	0	0	0	0	80	0	0	0
1	4	1/160	0	0	0	0	0	0	0	0	0	0	0	0	0	80	0	0	0
1	4	1/170	0	0	0	0	0	0	0	0	0	0	0	0	0	80	0	0	0
1	4	1470	0	0	0	0	0	0	0	0	0	0	0	0	0	80	0	0	0
1	4	1472	0	0	0	0	0	0	0	0	0	0	0	0	0	80	0	0	0
1	4	1472	0	0	0	0	0	0	0	0	0	0	0	0	0	80	0	0	0
1	4	147/	0	0	0	0	0	0	0	0	0	0	0	0	0	80	0	0	0
1	4	1475	0	0	0	0	0	0	0	0	0	0	0	0	0	80	0	0	0
1	4	1476	0	0	0	0	0	0	0	0	0	0	0	0	0	80	0	0	0
			-	-		-		i			-	-	-	-	-			-	

ZDATA NO.	SECTOR NO.	TAZ	SFDU	% VAC NON PERM	% VAC	SFPOP	SFOCAR	SF1CAR	SF2+CAR	MFDU	% VAC NON PERM	% VAC	MFPOP	MF0CAR	MF1CAR	MF2+CAR	HMUNITS	НМРСТОСС	HMPOP
1	4	1477	0	0	0	0	0	0	0	0	0	0	0	0	0	80	0	0	0
1	4	1478	0	0	0	0	0	0	0	0	0	0	0	0	0	80	0	0	0
1	4	1479	0	0	0	0	0	0	0	0	0	0	0	0	0	80	0	0	0
1	4	1480	0	0	0	0	0	0	0	0	0	0	0	0	0	80	0	0	0
1	4	1481	0	0	0	0	0	0	0	0	0	0	0	0	0	80	0	0	0
1	4	1482	632	5	2	1309	2	26	72	6	9	4	12	2	26	72	0	0	0
1	4	1483	0	0	0	0	0	0	0	0	0	0	0	0	0	80	0	0	0
1	4	1484	61	6	2	126	1	29	70	32	26	11	66	1	29	70	0	0	0
1	4	1485	78	5	2	162	2	26	72	8	9	4	17	2	26	72	0	0	0
1	4	1486	84	5	2	174	2	26	72	37	9	4	77	2	26	72	0	0	0
1	4	1487	483	5	2	1000	2	26	72	28	9	4	58	2	26	72	0	0	0
1	4	1488	0	0	0	0	0	0	0	0	0	0	0	0	0	80	0	0	0
1	4	1489	40	5	2	83	2	26	72	11	9	4	23	2	26	72	0	0	0
1	4	1490	0	0	0	0	0	0	0	0	0	0	0	0	0	80	0	0	0
1	4	1491	660	5	2	1367	2	26	72	20	9	4	41	2	26	72	0	0	0
1	4	1492	0	0	0	0	0	0	0	0	0	0	0	0	0	80	0	0	0
1	4	1493	163	10	4	338	2	26	72	71	18	8	147	2	26	72	0	0	0

ZDATA NO.	SECTOR NO.	TAZ	EMPIND	EMPCOM	EMPSVC	EMPTOT	SCHENR	STPKCST	LTPKCST
2	1	1	1,335	129	148	1,612	0	0	0
2	1	2	0	221	95	316	143	0	0
2	1	3	0	0	0	0	0	0	0
2	1	4	0	65	31	96	0	0	0
2	1	5	0	158	5,905	6,063	1,986	0	0
2	1	6	0	24	0	24	0	0	0
2	1	7	0	48	0	48	0	0	0
2	1	8	0	106	757	863	311	0	0
2	1	9	156	261	4,185	4,602	138	0	0
2	1	10	0	0	130	130	769	0	0
2	1	11	804	156	287	1,247	12	0	0
2	1	12	138	1,133	772	2,043	0	0	0
2	1	13	0	64	458	522	1,026	0	0
2	1	14	1,454	98	376	1,928	31	0	0
2	1	15	0	0	0	0	0	0	0
2	1	16	0	295	2,400	2,695	14,049	0	0
2	1	17	9	565	493	1,067	0	0	0
2	1	18	0	13	284	297	72	0	0
2	1	19	23	102	33	158	102	0	0
2	1	20	0	103	953	1,056	1,674	0	0
2	1	21	542	47	3,061	3,650	0	0	0
2	1	22	0	144	496	640	528	0	0
2	1	23	15	146	17	178	0	0	0
2	1	24	0	7	971	978	5,729	0	0
2	1	25	14	73	113	200	0	0	0
2	1	26	3	208	139	350	0	0	0
2	1	27	164	173	490	827	2,833	0	0
2	1	28	1,179	43	106	1,328	0	0	0
2	1	29	473	13	177	663	1,045	0	0
2	1	30	0	966	197	1,163	1,003	0	0
2	1	31	0	388	0	388	0	0	0
2	1	32	7,712	153	777	8,642	80	0	0
2	1	33	2,323	25	40	2,388	0	0	0
2	1	34	0	8	28	36	23	0	0
2	1	35	174	115	775	1,064	19	0	0
2	1	36	264	116	174	554	82	0	0
2	1	37	46	194	44	284	25	0	0
2	1	38	39	38	18	95	10	0	0
2	1	39	28	/0	5	103	0	0	0
2	1	40	42	4/2	4/0	984	0	0	0
2	1	41	151	196	310	657	0	0	0
2	1	42	116	88	521	725	0	0	0
2	1	43	0	10	103	385	1 5 2 7	0	0
2	1	44	34	18	574	626	1,527	0	0
2	1	45	0	13	0	13	0	0	0
2	1	40	0	5	122	5	0	0	0
2	1	47	302	20	123	554 127	645	0	0
2	1	48	- 0	20	11/	157	26	0	0
2	1	49 50	, 141	88	132	361	0	0	0
<u> </u>		50	1+1	00	132	301			

ZDATA NO.	SECTOR NO.	TAZ	EMPIND	EMPCOM	EMPSVC	EMPTOT	SCHENR	STPKCST	LTPKCST
2	1	51	163	354	147	664	66	0	0
2	1	52	144	453	51	648	0	0	0
2	1	53	121	61	126	308	742	0	0
2	1	54	1,562	12	0	1,574	0	0	0
2	1	55	2	39	0	41	0	0	0
2	1	56	294	971	173	1,438	0	0	0
2	1	57	267	151	98	516	0	0	0
2	1	58	1,084	143	44	1,271	0	0	0
2	1	59	374	11	34	419	0	0	0
2	1	60	861	22	91	974	48	0	0
2	1	61	1,158	0	180	1,338	0	0	0
2	1	62	2,067	917	352	3,336	429	0	0
2	1	63	7	0	7	14	0	0	0
2	1	64	0	9	0	9	0	0	0
2	1	65	6	3	0	9	0	0	0
2	1	66	0	4	11	15	0	0	0
2	1	67	0	0	0	0	0	0	0
2	1	68	0	0	326	326	1,482	0	0
2	1	69	370	175	425	970	13	0	0
2	1	70	6	71	59	136	45	0	0
2	1	71	73	11	13	97	0	0	0
2	1	72	0	7	237	244	0	0	0
2	1	73	8	149	570	727	2,270	0	0
2	1	74	50	1,396	125	1,571	0	0	0
2	1	75	780	508	1,789	3,077	942	0	0
2	1	76	135	467	748	1,350	1,516	0	0
2	1	77	72	270	951	1,293	1,756	0	0
2	1	78	170	281	621	1,072	2,967	0	0
2	1	79	0	8	209	217	0	0	0
2	1	80	356	391	509	1,256	1,139	0	0
2	1	81	0	3,539	1,023	4,562	1,200	0	0
2	1	82	8	41	0	49	0	0	0
2	1	83	8	49	52	109	53	0	0
2	1	84	0	8	299	307	1,764	0	0
2	1	85	0	6	0	6	0	0	0
2	1	86	1	142	394	537	2,032	0	0
2	1	87	1	148	395	544	0	0	0
2	1	88	0	0	0	0	0	0	0
2	1	89	0	0	0	0	0	0	0
2	1	90	0	40	75	115	0	0	0
2	1	91	309	44	297	650	434	0	0
2	1	92	115	143	175	433	74	0	0
2	1	93	457	31	172	660	536	0	0
2	1	94	377	48	95	520	464	0	0
2	1	95	463	342	66	871	38	0	0
2	1	96	605	392	322	1,319	28	0	0
2	1	97	248	52	171	471	0	0	0
2	1	98	11	442	50	503	48	0	0
2	1	99	0	64	58	122	48	0	0
2	1	100	43	472	0	515	0	0	0

ZDATA NO.	SECTOR NO.	TAZ	EMPIND	EMPCOM	EMPSVC	EMPTOT	SCHENR	STPKCST	LTPKCST
2	1	101	89	204	29	322	0	0	0
2	1	102	0	0	538	538	1,873	0	0
2	1	103	135	41	121	297	0	0	0
2	1	104	19	0	0	19	0	0	0
2	1	105	0	15	8	23	45	0	0
2	1	106	0	10	0	10	0	0	0
2	1	107	0	161	309	470	900	0	0
2	1	108	0	0	0	0	0	0	0
2	1	109	0	107	73	180	18	0	0
2	1	110	0	30	175	205	848	0	0
2	1	111	0	0	15	15	31	0	0
2	1	112	0	31	36	67	50	0	0
2	1	113	0	310	72	382	0	0	0
2	1	114	0	101	168	269	0	0	0
2	1	115	81	369	313	763	25	0	0
2	1	116	356	182	393	931	381	0	0
2	1	117	6	170	0	176	0	0	0
2	1	118	315	502	955	1,772	0	0	0
2	1	119	5	273	108	386	82	0	0
2	1	120	0	703	760	1,463	0	0	0
2	1	121	0	0	138	138	812	0	0
2	1	122	73	147	208	428	0	0	0
2	1	123	20	377	82	479	0	0	0
2	1	124	0	389	52	441	0	0	0
2	1	125	139	591	401	1,131	0	0	0
2	1	126	782	339	452	1,573	0	0	0
2	1	127	10	41	732	783	28	0	0
2	1	128	0	224	1,802	2,026	0	0	0
2	1	129	0	203	571	774	24	0	0
2	1	130	0	130	653	783	0	0	0
2	1	131	0	128	82	210	0	0	0
2	1	132	0	3	326	329	611	0	0
2	1	133	0	3	78	81	0	0	0
2	1	134	0	0	53	53	0	0	0
2	1	135	0	278	710	988	0	0	0
2	1	136	0	570	222	792	0	0	0
2	1	137	0	1,470	407	1,877	0	0	0
2	1	138	0	12	1,434	1,446	70	0	0
2	1	139	0	0	125	125	0	0	0
2	1	140	0	0	299	299	766	0	0
2	1	141	0	319	1,390	1,709	0	0	0
2	1	142	1,853	30	231	2,114	108	0	0
2	1	143	1,325	211	84	1,620	0	0	0
2	1	144	933	428	697	2,058	22	0	0
2	1	145	1,302	351	460	2,113	1,149	0	0
2	1	146	1,477	224	697	2,398	2,315	0	0
2	1	147	1,186	145	409	1,740	0	0	0
2	1	148	374	366	868	1,608	1,107	0	0
2	1	149	1,164	296	120	1,580	25	0	0
2	1	150	393	118	44	555	34	0	0

ZDATA NO.	SECTOR NO.	TAZ	EMPIND	EMPCOM	EMPSVC	EMPTOT	SCHENR	STPKCST	LTPKCST
2	1	151	165	40	35	240	0	0	0
2	1	152	84	84	217	385	0	0	0
2	1	153	155	229	1,164	1,548	104	0	0
2	1	154	0	105	238	343	1,004	0	0
2	1	155	0	149	257	406	0	0	0
2	1	156	5,476	190	1,277	6,943	0	0	0
2	1	157	986	349	396	1,731	0	0	0
2	1	158	0	31	690	721	0	0	0
2	1	159	31	76	393	500	0	0	0
2	1	160	0	291	1,446	1,737	0	0	0
2	1	161	0	85	286	371	770	0	0
2	1	162	0	107	1,547	1,654	2,991	0	0
2	1	163	0	62	170	232	716	0	0
2	1	164	0	0	37	37	0	0	0
2	1	165	75	37	163	275	394	0	0
2	1	166	61	409	1,000	1,470	863	0	0
2	1	167	0	398	53	451	0	0	0
2	1	168	0	202	10	212	57	0	0
2	1	169	100	272	208	580	47	0	0
2	1	170	253	254	1,807	2,314	0	0	0
2	1	171	140	453	2,694	3,287	19	0	0
2	1	172	0	167	936	1,103	0	0	0
2	1	173	0	0	714	714	0	0	0
2	1	174	0	5	793	798	0	0	0
2	1	175	133	102	80	315	0	0	0
2	1	176	456	1,426	305	2,187	750	0	0
2	1	177	0	777	41	818	0	0	0
2	1	178	0	26	0	26	0	0	0
2	1	179	0	46	249	295	1,467	0	0
2	1	180	0	159	340	499	1,087	0	0
2	1	181	471	44	8	523	0	0	0
2	1	182	0	0	0	0	0	0	0
2	1	183	0	54	916	970	5,069	0	0
2	1	184	146	349	469	964	6	0	0
2	1	185	0	160	189	349	0	0	0
2	1	186	0	15	125	140	735	0	0
2	1	187	0	0	0	0	0	0	0
2	1	188	169	246	1,272	1,687	2,603	0	0
2	1	189	0	0	235	235	0	0	0
2	1	190	0	5	267	272	0	0	0
2	1	191	0	409	457	866	589	0	0
2	1	192	0	0	94	94	0	0	0
2	1	193	0	0	0	0	0	0	0
2	1	194	35	150	224	409	0	0	0
2	1	195	0	86	153	239	15	0	0
2	1	196	0	58	1,722	1,780	0	0	0
2	1	197	0	0	0	0	0	0	0
2	1	198	143	93	139	375	0	0	0
2	1	199	0	0	167	167	986	0	0
2	1	200	0	244	6,561	6,805	122	0	0

ZDATA NO.	SECTOR NO.	TAZ	EMPIND	EMPCOM	EMPSVC	EMPTOT	SCHENR	STPKCST	LTPKCST
2	1	201	0	168	13,057	13,225	113	0	0
2	1	202	0	0	53	53	311	0	0
2	1	203	31	33	28	92	0	0	0
2	1	204	3,811	0	2,701	6,512	0	0	0
2	1	205	0	54	447	501	0	0	0
2	1	206	0	58	622	680	3,668	0	0
2	1	207	354	471	6,356	7,181	145	0	0
2	1	208	0	4	0	4	0	0	0
2	1	209	0	494	22	516	0	0	0
2	1	210	357	70	162	589	0	0	0
2	1	211	8	331	180	519	750	0	0
2	1	212	0	18	0	18	0	0	0
2	1	213	718	242	0	960	0	0	0
2	1	214	0	20	0	20	0	0	0
2	1	215	17	14	96	127	510	0	0
2	1	216	0	34	145	179	832	0	0
2	1	217	0	73	158	231	798	0	0
2	1	218	0	151	361	512	857	0	0
2	1	219	1,158	164	176	1,498	0	0	0
2	1	220	0	122	19	141	0	0	0
2	1	221	0	0	0	0	0	0	0
2	1	222	0	22	0	22	0	0	0
2	1	223	17	132	0	149	0	0	0
2	1	224	0	12	0	12	0	0	0
2	1	225	0	5	12	17	0	0	0
2	1	226	0	6	0	6	0	0	0
2	1	227	0	0	29	29	0	0	0
2	1	228	0	8	20	28	118	0	0
2	1	229	0	0	0	0	0	0	0
2	1	230	0	0	0	0	0	0	0
2	1	231	0	0	0	0	0	0	0
2	1	232	0	6	0	6	0	0	0
2	1	233	749	156	62	967	0	0	0
2	1	234	2,251	403	199	2,853	0	0	0
2	1	235	0	0	0	0	0	0	0
2	1	236	0	1,134	0	1,134	0	0	0
2	1	237	0	0	232	232	122	0	0
2	2	238	0	0	0	0	0	0	0
2	2	239	0	0	0	0	0	0	0
2	1	240	0	2,665	81	2,746	0	0	0
2	1	241	0	183	0	183	0	0	0
2	1	242	0	121	0	121	0	0	0
2	1	243	0	576	283	859	0	0	0
2	2	244	2	19	0	21	0	0	0
2	2	245	24	0	0	24	0	0	0
2	2	246	28	1	0	29	0	0	0
2	2	247	0	0	0	0	0	0	0
2	2	248	0	4	0	4	0	0	0
2	2	249	0	0	0	0	0	0	0
2	2	250	0	0	16	16	0	0	0

ZDATA NO.	SECTOR NO.	TAZ	EMPIND	EMPCOM	EMPSVC	EMPTOT	SCHENR	STPKCST	LTPKCST
2	2	251	0	0	0	0	0	0	0
2	2	252	20	0	0	20	0	0	0
2	2	253	21	5	8	34	0	0	0
2	2	254	2	0	0	2	0	0	0
2	2	255	0	129	0	129	0	0	0
2	2	256	0	0	0	0	0	0	0
2	2	257	0	0	0	0	0	0	0
2	2	258	0	0	0	0	0	0	0
2	2	259	0	0	0	0	0	0	0
2	2	260	0	0	0	0	0	0	0
2	2	261	0	0	0	0	0	0	0
2	2	262	0	0	0	0	0	0	0
2	2	263	0	0	0	0	0	0	0
2	2	264	0	39	25	64	155	0	0
2	2	265	577	380	1,230	2,187	0	0	0
2	2	266	60	891	264	1,215	687	0	0
2	2	267	8	75	205	288	1,236	0	0
2	2	268	1,802	454	506	2,762	0	0	0
2	2	269	241	5	715	961	4,438	0	0
2	2	270	0	0	0	0	0	0	0
2	2	271	0	0	4	4	0	0	0
2	2	272	770	217	10	997	0	0	0
2	2	273	113	334	135	582	0	0	0
2	2	274	388	134	148	670	380	0	0
2	2	275	145	0	0	145	0	0	0
2	2	276	616	25	0	641	0	0	0
2	2	277	2,445	432	53	2,930	0	0	0
2	2	278	7	290	115	412	667	0	0
2	2	279	12	1	0	13	0	0	0
2	2	280	51	207	540	798	3,356	0	0
2	2	281	65	159	167	391	0	0	0
2	2	282	22	239	374	635	0	0	0
2	2	283	0	257	72	329	0	0	0
2	2	284	176	59	202	437	944	0	0
2	2	285	21	0	0	21	0	0	0
2	2	286	617	785	228	1,630	0	0	0
2	2	287	0	56	132	188	819	0	0
2	2	288	35	192	115	342	0	0	0
2	2	289	0	22	215	237	948	0	0
2	2	290	0	0	351	351	2,179	0	0
2	2	291	31	18	0	49	0	0	0
2	2	292	0	0	23	23	0	0	0
2	2	293	440	80	153	673	800	0	0
2	2	294	0	120	7	127	0	0	0
2	2	295	2,451	74	43	2,568	0	0	0
2	2	296	152	107	69	328	0	0	0
2	2	297	273	514	57	844	0	0	0
2	2	298	33	293	149	475	0	0	0
2	2	299	39	231	489	759	0	0	0
2	2	300	16	443	19	478	0	0	0

ZDATA NO.	SECTOR NO.	TAZ	EMPIND	EMPCOM	EMPSVC	EMPTOT	SCHENR	STPKCST	LTPKCST
2	2	301	148	22	333	503	1,846	0	0
2	2	302	33	202	22	257	0	0	0
2	2	303	0	76	191	267	753	0	0
2	2	304	63	208	72	343	0	0	0
2	2	305	1,455	168	166	1,789	297	0	0
2	2	306	468	71	258	797	0	0	0
2	2	307	0	1,540	103	1,643	0	0	0
2	2	308	739	263	14	1,016	0	0	0
2	2	309	830	219	313	1,362	0	0	0
2	2	310	706	0	0	706	0	0	0
2	2	311	0	0	0	0	0	0	0
2	2	312	0	0	0	0	0	0	0
2	2	313	178	1,515	92	1,785	573	0	0
2	2	314	0	16	20	36	0	0	0
2	2	315	0	0	0	0	0	0	0
2	2	316	0	144	0	144	0	0	0
2	2	317	0	0	0	0	0	0	0
2	2	318	0	0	0	0	0	0	0
2	2	319	468	46	27	541	0	0	0
2	2	320	0	0	0	0	0	0	0
2	2	321	0	0	0	0	0	0	0
2	2	322	1	11	143	155	889	0	0
2	2	323	0	0	0	0	0	0	0
2	2	324	10	0	0	10	0	0	0
2	2	325	21	6	0	27	0	0	0
2	2	326	0	0	11	11	0	0	0
2	2	327	0	0	0	0	0	0	0
2	2	328	8	10	17	35	0	0	0
2	2	329	9	236	0	245	0	0	0
2	2	330	79	19	15	113	0	0	0
2	2	331	0	28	0	28	0	0	0
2	2	332	0	0	0	0	0	0	0
2	2	333	280	429	115	824	646	0	0
2	2	334	132	332	15	479	0	0	0
2	2	335	0	16	229	245	1,421	0	0
2	2	336	9	130	204	343	771	0	0
2	2	337	197	185	342	724	912	0	0
2	2	338	0	0	0	0	0	0	0
2	2	339	0	0	321	321	1,994	0	0
2	2	340	0	337	14	351	0	0	0
2	2	341	0	139	121	260	0	0	0
2	2	342	13	571	106	690	0	0	0
2	2	343	0	78	85	163	0	0	0
2	2	344	0	84	126	210	700	0	0
2	2	345	0	371	74	445	0	0	0
2	2	346	98	702	50	850	0	0	0
2	2	347	94	523	581	1,198	1,042	0	0
2	2	348	324	406	325	1,055	0	0	0
2	2	349	0	756	5,264	6,020	16,267	0	0
2	2	350	11	619	615	1,245	3,409	0	0

ZDATA NO.	SECTOR NO.	TAZ	EMPIND	EMPCOM	EMPSVC	EMPTOT	SCHENR	STPKCST	LTPKCST
2	2	351	0	123	0	123	0	0	0
2	2	352	364	12	78	454	0	0	0
2	2	353	998	337	136	1,471	0	0	0
2	2	354	153	178	32	363	0	0	0
2	2	355	397	470	490	1,357	2,427	0	0
2	2	356	0	433	296	729	0	0	0
2	2	357	3,248	735	3,281	7,264	6,297	0	0
2	2	358	180	372	169	721	681	0	0
2	2	359	2,092	736	824	3,652	0	0	0
2	2	360	331	306	460	1,097	0	0	0
2	2	361	0	0	0	0	0	0	0
2	2	362	198	257	269	724	0	0	0
2	2	363	0	62	20	82	0	0	0
2	2	364	0	0	273	273	927	0	0
2	2	365	0	8	0	8	0	0	0
2	2	366	39	380	40	459	0	0	0
2	2	367	11	432	106	549	0	0	0
2	2	368	0	136	406	542	1,751	0	0
2	2	369	26	716	118	860	436	0	0
2	2	370	4	42	1,432	1,478	2,698	0	0
2	2	371	0	292	419	711	607	0	0
2	2	372	3	71	78	152	487	0	0
2	2	373	0	186	16	202	0	0	0
2	2	374	2,323	636	2,458	5,417	0	0	0
2	2	375	0	0	7,472	7,472	46,400	0	0
2	2	376	281	1/1	11,248	11,700	0	0	0
2	2	377	0	2	112	114	697	0	0
2	2	378	1/2	145	192	509	1,195	0	0
2	2	379	0	0	0	0	0	0	0
2	2	380	0	32	0	32	0	0	0
2	2	381	/3	43	23	139	0	0	0
2	2	202	0	21	159	170	084	0	0
2	2	303	0	21	136	727	1 072	0	0
2	2	385	10	231	756	08/	1,372	0	0
2	2	386	146	2 162	730	3 029	4,387	0	0
2	2	387	200	2,102	218	633	716	0	0
2	2	388	0	97	2.403	2.500	14.865	0	0
2	2	389	103	136	,100	239	0	0	0
2	2	390	16	442	610	1.068	463	0	0
2	2	391	385	224	155	764	371	0	0
2	2	392	41	57	3.045	3.143	3.990	0	0
2	2	393	0	305	376	681	0	0	0
2	2	394	0	403	117	520	529	0	0
2	2	395	18	4	17	39	0	0	0
2	2	396	0	28	188	216	1,165	0	0
2	2	397	0	239	107	346	522	0	0
2	2	398	0	147	106	253	559	0	0
2	2	399	52	1,137	3,719	4,908	126	0	0
2	2	400	407	416	483	1,306	0	0	0

ZDATA NO.	SECTOR NO.	TAZ	EMPIND	EMPCOM	EMPSVC	EMPTOT	SCHENR	STPKCST	LTPKCST
2	2	401	15	56	41	112	0	0	0
2	2	402	329	447	1,087	1,863	647	0	0
2	2	403	14	0	11	25	0	0	0
2	2	404	68	246	83	397	0	0	0
2	2	405	235	52	188	475	756	0	0
2	2	406	6	319	147	472	0	0	0
2	2	407	0	3	0	3	0	0	0
2	2	408	276	47	283	606	1,760	0	0
2	2	409	0	255	94	349	0	0	0
2	2	410	1,128	6,562	633	8,323	0	0	0
2	2	411	151	1,304	1,522	2,977	0	0	0
2	2	412	0	6	0	6	0	0	0
2	2	413	0	0	0	0	0	0	0
2	2	414	88	49	135	272	836	0	0
2	2	415	4,456	1,373	125	5,954	0	0	0
2	2	416	680	301	790	1,771	386	0	0
2	2	417	164	39	401	604	1,980	0	0
2	2	418	2,142	44	766	2,952	3,907	0	0
2	2	419	960	422	551	1,933	0	0	0
2	2	420	2,990	602	170	3,762	0	0	0
2	2	421	7,137	47	117	7,301	0	0	0
2	2	422	1,852	2,134	3,630	7,616	0	0	0
2	2	423	0	913	28	941	0	0	0
2	2	424	175	549	109	833	0	0	0
2	2	425	0	0	158	158	0	0	0
2	2	426	4	219	9,898	10,121	0	0	0
2	2	427	0	544	1,058	1,602	0	0	0
2	2	428	5	391	852	1,248	0	0	0
2	2	429	0	4	6,478	6,482	0	0	0
2	2	430	0	59	0	59	0	0	0
2	2	431	4	284	449	737	0	0	0
2	2	432	25	934	1,002	1,961	943	0	0
2	2	433	333	895	1,870	3,098	3,884	0	0
2	2	434	2,913	1,503	11,523	15,939	13,687	0	0
2	2	435	45	14	28	87	0	0	0
2	2	436	0	0	0	0	0	0	0
2	2	437	8	0	34	42	0	0	0
2	2	438	0	30	0	30	0	0	0
2	2	439	15	23	0	38	0	0	0
2	2	440	1	0	0	1	0	0	0
2	2	441	30	0	11	41	0	0	0
2	2	442	4	0	0	4	0	0	0
2	2	443	0	235	2,842	3,077	0	0	0
2	2	444	0	210	384	594	0	0	0
2	2	445	0	0	0	0	0	0	0
2	2	446	0	263	1,146	1,409	4,229	0	0
2	2	447	100	1,853	8/9	2,898	U 1 202	0	U
2	2	448	0	0	208	208	1,293	0	0
2	2	449	0	188	1 490	855	1,883	0	0
2	2	450	U	200	1,489	1,749	4,088	U	U

ZDATA NO.	SECTOR NO.	TAZ	EMPIND	EMPCOM	EMPSVC	EMPTOT	SCHENR	STPKCST	LTPKCST
2	2	451	61	1,764	229	2,054	0	0	0
2	2	452	2	21	0	23	0	0	0
2	2	453	49	20	482	551	3,257	0	0
2	2	454	0	8	0	8	0	0	0
2	2	455	238	349	33	620	0	0	0
2	2	456	15	0	144	159	893	0	0
2	2	457	16	59	379	454	2,352	0	0
2	2	458	0	424	134	558	831	0	0
2	2	459	0	674	121	795	0	0	0
2	2	460	0	1,298	739	2,037	0	0	0
2	2	461	0	0	0	0	0	0	0
2	2	462	0	575	175	750	564	0	0
2	2	463	0	0	0	0	0	0	0
2	2	464	0	0	0	0	0	0	0
2	2	465	0	248	70	318	0	0	0
2	2	466	0	6	0	6	0	0	0
2	2	467	1,248	154	112	1,514	0	0	0
2	2	468	66	610	160	836	0	0	0
2	2	469	0	205	120	325	0	0	0
2	2	470	0	2	138	140	751	0	0
2	2	471	4	11	175	190	0	0	0
2	2	472	0	57	176	233	955	0	0
2	2	473	159	2,203	454	2,816	0	0	0
2	2	474	894	323	11	1,228	0	0	0
2	2	475	0	36	26	62	0	0	0
2	2	476	0	203	144	347	807	0	0
2	2	477	0	0	0	0	0	0	0
2	2	478	147	283	28	458	0	0	0
2	2	479	0	0	248	248	0	0	0
2	2	480	28	0	513	541	0	0	0
2	2	481	1,190	483	2,725	4,398	0	0	0
2	2	482	0	0	0	0	0	0	0
2	2	483	0	0	0	0	0	0	0
2	2	484	0	0	0	0	0	0	0
2	2	485	0	2,097	0	2,097	0	0	0
2	2	486	0	85	659	744	0	0	0
2	2	487	19	535	2,933	3,487	0	0	0
2	2	488	9	1,331	4,270	5,610	0	0	0
2	2	489	0	0	0	0	0	0	0
2	2	490	0	0	424	424	658	0	0
2	2	491	0	762	1,847	2,609	0	0	0
2	2	492	0	610	662	1,272	0	0	0
2	2	493	0	416	22	438	0	0	0
2	2	494	9	117	8,842	8,968	0	0	0
2	2	495	0	0	0	0	0	0	0
2	2	496	0	0	0	0	0	0	0
2	2	497	90	9	3,863	3,962	0	0	0
2	2	498	1,643	357	420	2,420	0	0	0
2	2	499	1,817	53	190	2,060	977	0	0
2	2	500	271	513	126	910	0	0	0

ZDATA NO.	SECTOR NO.	TAZ	EMPIND	EMPCOM	EMPSVC	EMPTOT	SCHENR	STPKCST	LTPKCST
2	2	501	35	617	612	1,264	862	0	0
2	2	502	29	5	0	34	0	0	0
2	2	503	0	224	352	576	1,815	0	0
2	2	504	0	392	366	758	1,027	0	0
2	2	505	0	41	0	41	0	0	0
2	2	506	63	524	318	905	863	0	0
2	2	507	168	89	124	381	767	0	0
2	2	508	221	183	429	833	1,888	0	0
2	2	509	0	767	399	1,166	755	0	0
2	2	510	0	0	11	11	0	0	0
2	2	511	0	2,238	117	2,355	0	0	0
2	2	512	0	195	641	836	0	0	0
2	2	513	0	0	0	0	0	0	0
2	2	514	0	109	585	694	0	0	0
2	2	515	1,886	3,379	2,084	7,349	0	0	0
2	2	516	429	297	1,562	2,288	0	0	0
2	2	517	0	0	0	0	0	0	0
2	2	518	0	37	2,621	2,658	0	0	0
2	2	519	0	2,723	0	2,723	0	0	0
2	2	520	209	3,041	0	3,250	0	0	0
2	2	521	0	0	0	0	0	0	0
2	2	522	55	158	203	416	1,260	0	0
2	2	523	0	19	0	19	0	0	0
2	2	524	1	137	1,769	1,907	0	0	0
2	2	525	0	0	0	0	0	0	0
2	2	526	0	0	0	0	0	0	0
2	2	527	0	0	0	0	0	0	0
2	2	528	0	0	359	359	0	0	0
2	2	529	0	365	216	581	0	0	0
2	2	530	0	0	0	0	0	0	0
2	2	531	0	378	137	515	621	0	0
2	2	532	0	94	237	331	741	0	0
2	2	533	0	0	0	0	0	0	0
2	2	534	0	0	0	0	0	0	0
2	2	535	0	0	0	0	0	0	0
2	2	536	6	0	0	6	0	0	0
2	2	537	0	0	0	0	0	0	0
2	2	538	0	5	0	5	0	0	0
2	2	539	0	7	0	7	0	0	0
2	2	540	0	117	37	154	0	0	0
2	2	541	0	0	0	0	0	0	0
2	2	542	873	135	329	1,337	522	0	0
2	2	543	0	0	0	0	0	0	0
2	2	544	0	0	0	0	0	0	0
2	2	545	0	0	0	0	0	0	0
2	2	546	0	0	0	0	0	0	0
2	2	547	0	0	0	0	0	0	0
2	2	548	47	131	35	213	0	0	0
2	2	549	0	12	5	17	0	0	0
2	2	550	91	0	0	91	0	0	0

ZDATA NO.	SECTOR NO.	TAZ	EMPIND	EMPCOM	EMPSVC	EMPTOT	SCHENR	STPKCST	LTPKCST
2	2	551	0	0	0	0	0	0	0
2	2	552	0	0	0	0	0	0	0
2	2	553	0	0	0	0	0	0	0
2	2	554	0	50	0	50	0	0	0
2	2	555	0	0	0	0	0	0	0
2	2	556	12	13	0	25	0	0	0
2	2	557	0	0	0	0	0	0	0
2	2	558	0	0	0	0	0	0	0
2	2	559	0	0	0	0	0	0	0
2	2	560	0	0	0	0	0	0	0
2	2	561	0	22	82	104	511	0	0
2	2	562	0	0	0	0	0	0	0
2	2	563	0	3	0	3	0	0	0
2	2	564	0	0	0	0	0	0	0
2	2	565	0	8	0	8	0	0	0
2	2	566	0	0	0	0	0	0	0
2	2	567	0	0	0	0	0	0	0
2	2	568	0	12	13	25	0	0	0
2	2	569	0	0	0	0	0	0	0
2	2	570	0	137	0	137	0	0	0
2	2	571	0	0	0	0	0	0	0
2	2	572	0	0	0	0	0	0	0
2	2	573	0	0	0	0	0	0	0
2	2	574	0	0	0	0	0	0	0
2	2	575	0	124	16	140	0	0	0
2	2	576	0	145	0	145	0	0	0
2	2	577	0	0	0	0	0	0	0
2	2	578	0	0	0	0	0	0	0
2	2	579	0	0	0	0	0	0	0
2	2	580	0	94	144	238	768	0	0
2	2	581	0	0	0	0	0	0	0
2	2	582	0	182	22	204	0	0	0
2	2	583	0	0	0	0	0	0	0
2	2	584	0	178	8	186	0	0	0
2	2	585	0	0	0	0	0	0	0
2	2	586	0	17	433	450	2,462	0	0
2	2	587	25	151	0	176	0	0	0
2	2	588	237	22	22	281	0	0	0
2	2	589	1,660	242	3	1,905	0	0	0
2	2	590	34	52	33	119	0	0	0
2	2	591	129	21	36	186	0	0	0
2	2	592	30	20	16	66	0	0	0
2	2	593	0	0	0	0	0	0	0
2	2	594	30	0	16	46	0	0	0
2	2	595	0	0	0	0	0	0	0
2	2	596	0	0	0	0	0	0	0
2	2	597	0	0	15	15	0	0	0
2	2	598	0	2,641	51	2,692	0	0	0
2	2	599	0	314	8	322	0	0	0
2	2	600	0	316	14	330	0	0	0

ZDATA NO.	SECTOR NO.	TAZ	EMPIND	EMPCOM	EMPSVC	EMPTOT	SCHENR	STPKCST	LTPKCST
2	2	601	182	1,430	305	1,917	640	0	0
2	2	602	0	0	0	0	0	0	0
2	2	603	48	33	995	1,076	1,448	0	0
2	2	604	6	2	14	22	0	0	0
2	2	605	0	0	0	0	0	0	0
2	2	606	0	0	0	0	0	0	0
2	2	607	0	0	0	0	0	0	0
2	2	608	0	39	74	113	0	0	0
2	2	609	21	9	193	223	1,197	0	0
2	2	610	0	6	1,824	1,830	0	0	0
2	2	611	0	0	0	0	0	0	0
2	2	612	0	2	25	27	0	0	0
2	2	613	0	0	0	0	0	0	0
2	2	614	0	435	118	553	0	0	0
2	2	615	0	110	49	159	0	0	0
2	2	616	0	79	132	211	0	0	0
2	2	617	0	42	70	112	0	0	0
2	2	618	0	66	87	153	0	0	0
2	2	619	213	268	34	515	0	0	0
2	2	620	57	12	59	128	0	0	0
2	2	621	148	248	0	396	0	0	0
2	2	622	0	0	0	0	0	0	0
2	2	623	190	65	0	255	0	0	0
2	2	624	33	485	321	839	0	0	0
2	2	625	0	0	0	0	0	0	0
2	2	626	0	0	0	0	0	0	0
2	2	627	0	0	0	0	0	0	0
2	2	628	0	0	98	98	608	0	0
2	2	629	0	0	0	0	0	0	0
2	2	630	158	8	23	189	0	0	0
2	2	631	0	226	52	278	0	0	0
2	2	632	0	54	103	157	642	0	0
2	2	633	1,564	222	264	2,050	451	0	0
2	2	634	895	113	684	1,692	0	0	0
2	2	635	757	572	243	1,572	492	0	0
2	2	636	0	10	114	124	591	0	0
2	2	637	305	218	3,258	3,781	0	0	0
2	2	638	87	804	4,242	5,133	0	0	0
2	2	639	0	36	10,252	10,288	0	0	0
2	2	640	546	372	164	1,082	0	0	0
2	2	641	18	304	89	411	551	0	0
2	2	642	2,012	408	210	2,630	0	0	0
2	2	643	19	279	196	494	0	0	0
2	2	644	209	335	611	1,155	0	0	0
2	2	645	19	545	438	1,002	604	0	0
2	2	646	13	369	3,907	4,289	0	0	0
2	2	647	0	57	118	175	0	0	0
2	2	648	303	308	471	1,082	936	0	0
2	2	649	2,735	234	61	3,030	0	0	0
2	2	650	4,385	487	334	5,206	0	0	0

ZDATA NO.	SECTOR NO.	TAZ	EMPIND	EMPCOM	EMPSVC	EMPTOT	SCHENR	STPKCST	LTPKCST
2	2	651	5,526	90	167	5,783	0	0	0
2	2	652	257	16	246	519	0	0	0
2	2	653	573	687	198	1,458	0	0	0
2	2	654	148	633	198	979	839	0	0
2	2	655	14	116	495	625	2,519	0	0
2	2	656	0	139	99	238	521	0	0
2	2	657	0	56	0	56	0	0	0
2	2	658	92	196	90	378	0	0	0
2	2	659	236	104	8	348	0	0	0
2	2	660	364	8	0	372	0	0	0
2	2	661	3,314	99	29	3,442	0	0	0
2	2	662	947	0	237	1,184	0	0	0
2	2	663	163	634	0	797	0	0	0
2	2	664	1,388	694	277	2,359	0	0	0
2	2	665	564	407	254	1,225	375	0	0
2	2	666	298	103	0	401	0	0	0
2	2	667	100	102	240	442	0	0	0
2	2	668	0	75	259	334	828	0	0
2	2	669	334	0	0	334	0	0	0
2	2	670	5,229	642	70	5,941	0	0	0
2	2	671	949	341	54	1,344	334	0	0
2	2	672	0	128	390	518	1,302	0	0
2	2	673	301	43	110	454	597	0	0
2	2	674	413	370	347	1,130	0	0	0
2	2	675	266	116	191	573	289	0	0
2	2	676	304	49	30	383	0	0	0
2	2	677	30	45	119	194	506	0	0
2	2	678	10	67	131	208	299	0	0
2	2	679	0	85	0	85	0	0	0
2	2	680	9	39	0	48	0	0	0
2	2	681	0	0	62	62	0	0	0
2	2	682	367	163	230	760	1,290	0	0
2	2	683	236	183	86	505	0	0	0
2	2	684	206	268	18	492	0	0	0
2	2	685	61	26	455	542	970	0	0
2	2	686	466	495	1,839	2,800	0	0	0
2	2	687	537	240	117	894	0	0	0
2	2	688	485	330	118	933	262	0	0
2	2	689	153	87	575	815	0	0	0
2	2	690	0	593	516	1,109	0	0	0
2	2	691	0	0	0	0	0	0	0
2	2	692	1,442	317	277	2,036	0	0	0
2	2	693	840	175	4	1,019	0	0	0
2	2	694	0	164	310	474	0	0	0
2	2	695	0	130	133	263	0	0	0
2	2	696	0	35	494	529	0	0	0
2	2	697	0	79	158	237	0	0	0
2	2	698	445	35	8	488	0	0	0
2	2	699	839	42	91	972	0	0	0
2	2	700	16	212	678	906	2,321	0	0

ZDATA NO.	SECTOR NO.	TAZ	EMPIND	EMPCOM	EMPSVC	EMPTOT	SCHENR	STPKCST	LTPKCST
2	2	701	0	94	275	369	550	0	0
2	2	702	0	128	125	253	428	0	0
2	2	703	0	59	53	112	0	0	0
2	2	704	27	379	380	786	0	0	0
2	2	705	21	75	2,737	2,833	0	0	0
2	2	706	0	3	14,755	14,758	0	0	0
2	2	707	0	1,135	362	1,497	0	0	0
2	2	708	0	8	594	602	0	0	0
2	2	709	0	76	58	134	38	0	0
2	2	710	0	0	59	59	318	0	0
2	2	711	7	297	560	864	720	0	0
2	2	712	145	172	234	551	0	0	0
2	2	713	454	72	520	1,046	0	0	0
2	2	714	455	262	811	1,528	3,207	0	0
2	2	715	7	193	555	755	0	0	0
2	2	716	7	109	2,611	2,727	0	0	0
2	2	717	0	158	4,983	5,141	0	0	0
2	2	718	2	7	1,994	2,003	0	0	0
2	2	719	508	276	122	906	0	0	0
2	2	720	758	154	75	987	0	0	0
2	2	721	144	24	795	963	3,780	0	0
2	2	722	114	17	22	153	0	0	0
2	2	723	92	0	796	888	0	0	0
2	2	724	1,000	190	91	1,281	0	0	0
2	2	725	197	143	24	364	0	0	0
2	2	/26	19	131	55	205	0	0	0
2	2	/2/	40	31	36	107	0	0	0
2	2	728	76	23	96	195	229	0	0
2	2	729	267	135	25	427	0	0	0
2	2	730	230	220	52	502	0	0	0
2	2	731	1,828	62	260	2,150	0	0	0
2	2	732	200	1,601	383	2,184	0	0	0
2	2	735	2	20	9,425	9,450	0	0	0
2	2	734	1 001	20	242	1 262	0	0	0
2	2	735	272	20	243 1 80/	2 3 5 6	0	0	0
2	2	730	0	378	479	2,330	0	0	0
2	2	738	0	172	45	217	0	0	0
2	2	739	4	99	719	872	3 830	0	0
2	2	740	0	8	19	27	0	0	0
2	2	741	0	0	0	0	0	0	0
2	2	742	0	55	63	118	0	0	0
2	2	743	339	31	499	869	0	0	0
2	2	744	0	2.645	2.521	5,166	0	0	0
2	2	745	0	9	340	349	0	0	0
2	2	746	0	896	2,567	3,463	0	0	0
2	2	747	0	27	1,329	1,356	0	0	0
2	2	748	0	380	3,303	3,683	355	0	0
2	2	749	45	380	3,377	3,802	800	0	0
2	2	750	67	1,192	3,113	4,372	0	0	0

ZDATA NO.	SECTOR NO.	TAZ	EMPIND	EMPCOM	EMPSVC	EMPTOT	SCHENR	STPKCST	LTPKCST
2	2	751	0	108	1,936	2,044	0	0	0
2	2	752	0	197	1,707	1,904	0	0	0
2	2	753	81	358	2,731	3,170	0	0	0
2	2	754	98	60	2,036	2,194	0	0	0
2	2	755	0	165	272	437	458	0	0
2	2	756	0	38	535	573	0	0	0
2	2	757	0	118	208	326	604	0	0
2	2	758	0	97	304	401	0	0	0
2	2	759	0	135	392	527	0	0	0
2	2	760	12	583	1.095	1.690	0	0	0
2	2	761	293	1.358	87	1.738	0	0	0
2	2	762	0	131	180	311	0	0	0
2	2	763	7	217	242	466	0	0	0
2	2	764	23	62	96	181	0	0	0
2	2	765	148	91	143	382	0	0	0
2	2	766	134	80	0	214	0	0	0
2	2	767	14	118	0	132	0	0	0
2	2	768	24	138	543	705	0	0	0
2	2	769	0	188	155	3/13	960	0	0
2	2	770	0	51	249	300	0	0	0
2	2	771	69	190	5	264	0	0	0
2	2	772	0	73	0	73	0	0	0
2	2	772	163	/23	107	603	0	0	0
2	2	77/	105	423	800	967	/05	0	0
2	2	775	10	2 005	37	3 032	495	0	0
2	2	776	1/17	2,555	2.840	2 987	0	0	0
2	2	770	147	527	2,040	725	0	0	0
2	2	777	147	102	10	123	0	0	0
2	2	770	1/17	112	627	886	0	0	0
2	2	780	147	0	/58	458	0	0	0
2	2	700	0	0	2 196	450	2 /02	0	0
2	2	701	21	0	3,460	3,307	2,495	0	0
2	2	702	21	0	0	21	0	0	0
2	2	703	0	0	570	570	2 005	0	0
2	2	704	24	209	1 71/	2 1 2 6	2,355	0	0
2	2	705	24	116	260	2,130	0	0	0
2	2	787	0	678	1/2	40J 820	0	0	0
2	2	789	720	221	6/0	1 650	2/2	0	0
2	2	790	,20	<u>701</u>	1 22/	1 274	0	0	0
2	2	700	6	40	1,234	1,274	0	0	0
2	2	790	0	262	44	2 1 2 2	0	0	0
2	2	791	4	302	70	2,125	246	0	0
2	2	792	20	35	70	105	240	0	0
2	2	707	10/	40	156	123	0	0	0
2	2	794	184	149	120	469	0	0	0
2	2	795	0	147	258	259	0	0	0
2	2	790	0	147	391	258	0	0	0
2	2	797	0	0	302	302	0	0	0
2	2	798	0	0	/8	/8	0	0	0
2	2	799	92	113	1,054	1,259	209	0	0
2	2	800	U	218	441	659	48	0	0

ZDATA NO.	SECTOR NO.	TAZ	EMPIND	EMPCOM	EMPSVC	EMPTOT	SCHENR	STPKCST	LTPKCST
2	2	801	0	0	258	258	1,604	0	0
2	2	802	18	89	917	1,024	488	0	0
2	2	803	0	0	0	0	0	0	0
2	2	804	0	0	0	0	0	0	0
2	2	805	0	0	0	0	0	0	0
2	2	806	2	37	226	265	0	0	0
2	2	807	0	20	29	49	0	0	0
2	2	808	0	0	4	4	25	0	0
2	2	809	28	7	541	576	25	0	0
2	2	810	382	308	349	1,039	0	0	0
2	2	811	0	907	3	910	0	0	0
2	2	812	0	193	877	1,070	0	0	0
2	2	813	154	378	1,295	1,827	39	0	0
2	2	814	27	311	1,034	1,372	837	0	0
2	2	815	87	17	1,095	1,199	0	0	0
2	2	816	0	147	342	489	1,141	0	0
2	2	817	0	572	327	899	0	0	0
2	2	818	0	568	523	1,091	0	0	0
2	2	819	4	855	971	1,830	44	0	0
2	2	820	0	58	629	687	3,138	0	0
2	2	821	0	0	2	2	12	0	0
2	2	822	0	0	136	136	757	0	0
2	2	823	21	18	341	380	0	0	0
2	2	824	9	176	3,654	3,839	0	0	0
2	2	825	40	816	1,374	2,230	0	0	0
2	2	826	0	27	142	169	0	0	0
2	2	827	0	86	115	201	0	0	0
2	2	828	0	110	0	110	0	0	0
2	2	829	0	68	78	146	487	0	0
2	2	830	0	0	80	80	499	0	0
2	2	831	0	10	529	539	3,286	0	0
2	2	832	0	56	0	56	0	0	0
2	2	833	0	90	131	221	602	0	0
2	2	834	0	05	147	212	140	0	0
2	2	835	0	15	321	336	595	0	0
2	2	030	0	134 27	102	120	0	0	0
2	2	03/	4	57	68	135	255	0	0
2	2	020	4	20	72	102	235	0	0
2	2	039 040	20	129	75 216	201	254	0	0
2	2	8/11	30 171	277	60	504	234	0	0
2	2	8/17	179	87	37	303	0	0	0
2	2	8/13	0	335	87		0	0	0
2	2	8//	0	462	82	544	0	0	0
2	2	8/15	0	263	36	200	0	0	0
2	2	846	0	923	203	1 1 2 5	0	0	0
2	2	847	6	26	445	477	1.713	0	0
2	2	848	0	323	153	476	0	0	0
2	2	849	0	154	168	322	536	0	0
2	2	850	242	141	1,162	1,545	79	0	0

ZDATA NO.	SECTOR NO.	TAZ	EMPIND	EMPCOM	EMPSVC	EMPTOT	SCHENR	STPKCST	LTPKCST
2	2	851	383	250	279	912	0	0	0
2	2	852	0	67	93	160	0	0	0
2	2	853	644	747	195	1,586	0	0	0
2	2	854	622	138	274	1,034	0	0	0
2	2	855	0	119	0	119	0	0	0
2	2	856	180	313	404	897	1,666	0	0
2	2	857	171	189	406	766	0	0	0
2	2	858	0	0	72	72	369	0	0
2	2	859	0	183	19	202	0	0	0
2	2	860	0	62	219	281	984	0	0
2	2	861	0	8	91	99	0	0	0
2	2	862	0	0	0	0	0	0	0
2	2	863	0	122	160	282	0	0	0
2	2	864	1,096	1,397	340	2,833	0	0	0
2	2	865	291	141	226	658	0	0	0
2	2	866	150	37	113	300	699	0	0
2	2	867	268	154	71	493	0	0	0
2	2	868	40	195	118	353	107	0	0
2	2	869	1,620	80	14	1,714	0	0	0
2	2	870	845	262	60	1,167	0	0	0
2	2	871	178	529	401	1,108	1,849	0	0
2	2	872	31	333	115	479	0	0	0
2	2	873	25	1,359	5	1,389	0	0	0
2	2	874	496	50	395	941	1,653	0	0
2	2	875	3	5	198	206	660	0	0
2	2	876	594	1,895	1,756	4,245	0	0	0
2	2	877	808	1,427	4,360	6,595	2,891	0	0
2	2	878	366	700	1,020	2,086	1,782	0	0
2	2	879	0	3	0	3	0	0	0
2	2	880	0	9	2,159	2,168	1,078	0	0
2	2	881	0	3,524	62	3,586	0	0	0
2	2	882	1,054	147	74	1,275	180	0	0
2	2	883	18	451	238	707	1,137	0	0
2	2	884	0	355	22	377	0	0	0
2	2	885	125	64	41	230	0	0	0
2	2	886	0	28	36	64	0	0	0
2	2	887	0	134	0	134	0	0	0
2	2	888	230	860	76	1,166	0	0	0
2	2	889	0	0	0	0	0	0	0
2	2	890	0	22,377	2,917	25,294	0	0	0
2	2	891	98	2,766	928	3,792	0	0	0
2	2	892	1,358	3,235	2,030	6,623	0	0	0
2	2	893	0	2	0	2	0	0	0
2	2	894	1,200	187	509	1,896	827	0	0
2	2	895	0	46	2,859	2,905	0	0	0
2	2	896	0	0	3,395	3,395	0	0	0
2	2	897	1,696	386	5	2,087	0	0	0
2	2	898	124	364	0	488	0	0	0
2	2	899	0	5	1,099	1,104	0	0	0
2	2	900	196	138	50	384	0	0	0

ZDATA NO.	SECTOR NO.	TAZ	EMPIND	EMPCOM	EMPSVC	EMPTOT	SCHENR	STPKCST	LTPKCST
2	2	901	642	2,919	1,643	5,204	0	0	0
2	2	902	877	6	0	883	0	0	0
2	2	903	1,149	99	37	1,285	0	0	0
2	2	904	0	1	594	595	0	0	0
2	2	905	0	53	776	829	0	0	0
2	2	906	0	961	2,182	3,143	671	0	0
2	2	907	0	379	1,296	1,675	0	0	0
2	2	908	280	325	437	1,042	0	0	0
2	2	909	99	300	118	517	0	0	0
2	2	910	2,435	0	393	2,828	0	0	0
2	2	911	1,215	296	37	1,548	0	0	0
2	2	912	0	46	35	81	0	0	0
2	2	913	0	0	0	0	0	0	0
2	2	914	110	108	333	551	0	0	0
2	2	915	0	0	0	0	0	0	0
2	2	916	300	286	4,329	4,915	0	0	0
2	2	917	0	0	3,474	3,474	0	0	0
2	2	918	0	0	919	919	597	0	0
2	2	919	0	24	291	315	0	0	0
2	2	920	0	0	28	28	0	0	0
2	2	921	0	0	0	0	0	0	0
2	2	922	0	166	388	554	479	0	0
2	2	923	48	47	41	136	0	0	0
2	2	924	0	2,049	944	2,993	0	0	0
2	2	925	0	369	549	918	0	0	0
2	2	926	6	0	0	6	0	0	0
2	2	927	614	273	302	1,189	1,686	0	0
2	2	928	0	0	0	0	0	0	0
2	2	929	0	8	3	11	0	0	0
2	2	930	0	0	0	0	0	0	0
2	2	931	0	64	0	64	0	0	0
2	2	932	0	26	0	26	0	0	0
2	2	933	17	0	717	734	0	0	0
2	2	934	14	2	0	16	0	0	0
2	2	935	0	0	0	0	0	0	0
2	2	936	0	0	0	0	0	0	0
2	2	937	0	0	0	0	0	0	0
2	2	938	6	194	1,094	1,294	1,957	0	0
2	2	939	0	0	0	0	0	0	0
2	2	940	0	0	156	156	729	0	0
2	2	941	0	1,930	71	2,001	0	0	0
2	2	942	0	29	0	29	0	0	0
2	2	943	19	0	109	128	0	0	0
2	2	944	16	408	237	661	1,371	0	0
2	2	945	0	0	0	0	0	0	0
2	2	946	0	0	0	0	0	0	0
2	2	947	104	70	0	174	0	0	0
2	2	948	0	0	0	0	0	0	0
2	2	949	0	34	228	262	1,417	0	0
2	2	950	0	274	287	561	704	0	0

ZDATA NO.	SECTOR NO.	TAZ	EMPIND	EMPCOM	EMPSVC	EMPTOT	SCHENR	STPKCST	LTPKCST
2	2	951	0	0	0	0	0	0	0
2	2	952	0	0	0	0	0	0	0
2	2	953	10	155	38	203	0	0	0
2	2	954	105	522	3,145	3,772	0	0	0
2	2	955	4	5	0	9	0	0	0
2	2	956	0	0	0	0	0	0	0
2	2	957	0	179	0	179	0	0	0
2	2	958	0	0	378	378	2,349	0	0
2	2	959	0	7	0	7	0	0	0
2	2	960	0	273	294	567	0	0	0
2	2	961	0	0	0	0	0	0	0
2	2	962	0	0	0	0	0	0	0
2	2	963	0	9	0	9	0	0	0
2	2	964	0	0	0	0	0	0	0
2	2	965	11	0	0	11	0	0	0
2	2	966	6	0	0	6	0	0	0
2	2	967	0	36	0	36	0	0	0
2	2	968	0	0	458	458	2,844	0	0
2	2	969	0	0	0	0	0	0	0
2	2	970	7	10	33	50	0	0	0
2	2	971	0	0	34	34	0	0	0
2	2	972	0	194	0	194	0	0	0
2	2	973	0	0	1,117	1,117	1,629	0	0
2	2	974	0	0	8,530	8,530	0	0	0
2	2	975	0	0	11	11	0	0	0
2	2	976	0	91	823	914	0	0	0
2	2	977	9	0	1,767	1,776	0	0	0
2	2	978	0	161	4,554	4,715	0	0	0
2	2	979	0	225	730	955	0	0	0
2	2	980	0	212	438	650	0	0	0
2	2	981	0	211	1,686	1,897	0	0	0
2	2	982	0	167	416	583	0	0	0
2	2	983	611	772	1,568	2,951	0	0	0
2	2	984	351	35	349	735	359	0	0
2	2	985	180	383	442	1,005	0	0	0
2	2	986	4	1,568	0	1,572	0	0	0
2	2	987	0	1,645	253	1,898	0	0	0
2	2	988	491	3,801	755	5,047	0	0	0
2	2	989	0	1,595	0	1,595	0	0	0
2	2	990	5	343	2,029	2,377	0	0	0
2	2	991	0	2,369	0	2,369	0	0	0
2	2	992	0	6	2,080	2,086	0	0	0
2	2	993	0	294	667	961	0	0	0
2	2	994	0	151	280	431	0	0	0
2	2	995	121	421	879	1,421	0	0	0
2	2	996	362	744	1,490	2,596	0	0	0
2	2	997	0	5	0	5	0	0	0
2	2	998	0	0	0	0	0	0	0
2	2	999	220	507	2,005	2,732	50	0	0
2	2	1000	0	0	17	17	0	0	0

ZDATA NO.	SECTOR NO.	TAZ	EMPIND	EMPCOM	EMPSVC	EMPTOT	SCHENR	STPKCST	LTPKCST
2	2	1001	65	707	56	828	0	0	0
2	2	1002	19	0	0	19	0	0	0
2	2	1003	27	263	343	633	1,964	0	0
2	2	1004	159	81	8	248	0	0	0
2	2	1005	0	288	317	605	739	0	0
2	2	1006	1,879	929	199	3,007	889	0	0
2	2	1007	0	218	0	218	0	0	0
2	2	1008	127	404	211	742	44	0	0
2	2	1009	0	0	0	0	0	0	0
2	2	1010	0	0	0	0	0	0	0
2	2	1011	6	0	0	6	0	0	0
2	2	1012	1,099	43	68	1,210	0	0	0
2	2	1013	145	0	90	235	0	0	0
2	2	1014	25	12	155	192	960	0	0
2	2	1015	0	0	223	223	0	0	0
2	2	1016	0	0	0	0	0	0	0
2	2	1017	0	0	19	19	116	0	0
2	2	1018	73	0	0	73	0	0	0
2	2	1019	21	5	11	37	0	0	0
2	2	1020	0	0	0	0	0	0	0
2	2	1021	0	0	0	0	0	0	0
2	2	1022	0	526	677	1,203	0	0	0
2	2	1023	0	0	762	762	0	0	0
2	2	1024	1	390	25	416	0	0	0
2	4	1201	0	0	0	0	0	0	0
2	4	1202	25	65	55	145	0	0	0
2	4	1203	0	11	12	23	0	0	0
2	4	1204	0	9	12	21	0	0	0
2	4	1205	34	50	21	105	0	0	0
2	4	1206	0	0	0	0	0	0	0
2	4	1207	0	0	0	0	0	0	0
2	4	1208	0	0	0	0	0	0	0
2	4	1209	7	16	0	23	0	0	0
2	4	1210	0	12	118	130	568	0	0
2	4	1211	62	7	207	276	0	0	0
2	4	1212	50	21	200	271	272	0	0
2	4	1213	14	16	29	59	60	0	0
2	4	1214	0	16	43	59	0	0	0
2	4	1215	0	9	0	9	0	0	0
2	4	1216	0	0	0	0	0	0	0
2	4	1217	0	31	43	74	0	0	0
2	4	1218	2	25	33	60	0	0	0
2	4	1219	2	0	0	2	0	0	0
2	4	1220	0	0	0	0	0	0	0
2	4	1221	0	3	0	3	0	0	0
2	4	1222	0	0	42	42	0	0	0
2	4	1223	10	3	0	13	0	0	0
2	4	1224	100	1	12	113	0	0	0
2	4	1225	10	12	0	22	0	0	0
2	4	1226	39	26	26	91	126	0	0

ZDATA NO.	SECTOR NO.	TAZ	EMPIND	EMPCOM	EMPSVC	EMPTOT	SCHENR	STPKCST	LTPKCST
2	4	1227	0	30	137	167	663	0	0
2	4	1228	0	0	0	0	0	0	0
2	4	1229	11	127	102	240	0	0	0
2	4	1230	222	1	468	691	687	0	0
2	4	1231	0	0	0	0	0	0	0
2	4	1232	37	3	0	40	0	0	0
2	4	1233	177	96	69	342	0	0	0
2	4	1234	0	0	0	0	0	0	0
2	4	1235	7	6	79	92	0	0	0
2	4	1236	0	20	10	30	0	0	0
2	4	1237	0	0	0	0	0	0	0
2	4	1238	0	5	0	5	0	0	0
2	4	1239	0	996	542	1,538	0	0	0
2	4	1240	0	16	16	32	0	0	0
2	4	1241	383	53	188	624	0	0	0
2	4	1242	0	9	0	9	0	0	0
2	4	1243	10	9	0	19	0	0	0
2	4	1244	10	9	0	19	0	0	0
2	4	1245	22	15	33	70	0	0	0
2	4	1246	397	1,098	3,509	5,004	758	0	0
2	4	1247	48	122	45	215	0	0	0
2	4	1248	51	222	246	519	0	0	0
2	4	1249	62	241	199	502	0	0	0
2	4	1250	0	4	0	4	0	0	0
2	4	1251	374	8	16	398	0	0	0
2	4	1252	0	0	0	0	0	0	0
2	4	1253	29	24	0	53	0	0	0
2	4	1254	147	135	31	313	0	0	0
2	4	1255	575	37	19	631	0	0	0
2	4	1256	13	0	0	13	0	0	0
2	4	1257	77	95	85	257	0	0	0
2	4	1258	4	73	63	140	89	0	0
2	4	1259	41	172	375	588	1,522	0	0
2	4	1260	67	87	199	353	715	0	0
2	4	1261	106	176	129	411	0	0	0
2	4	1262	288	90	88	466	0	0	0
2	4	1263	281	18	0	299	0	0	0
2	4	1264	0	10	45	55	217	0	0
2	4	1265	37	109	48	194	111	0	0
2	4	1266	125	114	82	321	0	0	0
2	4	1267	235	402	201	838	0	0	0
2	4	1268	0	15	0	15	0	0	0
2	4	1269	0	6	27	33	0	0	0
2	4	1270	258	265	481	1,004	0	0	0
2	4	1271	0	1	80	81	384	0	0
2	4	1272	45	450	1,410	1,905	4,112	0	0
2	4	1273	0	7	284	291	1,305	0	0
2	4	1274	15	1,484	309	1,808	192	0	0
2	4	1275	9	9	11	29	0	0	0
2	4	1276	0	8	16	24	0	0	0

ZDATA NO.	SECTOR NO.	TAZ	EMPIND	EMPCOM	EMPSVC	EMPTOT	SCHENR	STPKCST	LTPKCST
2	4	1277	0	5	0	5	0	0	0
2	4	1278	25	5	0	30	0	0	0
2	4	1279	0	29	17	46	0	0	0
2	4	1280	33	16	0	49	0	0	0
2	4	1281	208	356	779	1,343	680	0	0
2	4	1282	0	36	58	94	0	0	0
2	4	1283	138	47	123	308	0	0	0
2	4	1284	57	34	129	220	0	0	0
2	4	1285	0	50	598	648	2,386	0	0
2	4	1286	0	610	353	963	0	0	0
2	4	1287	0	56	257	313	0	0	0
2	4	1288	68	234	2,110	2,412	0	0	0
2	4	1289	0	29	69	98	79	0	0
2	4	1290	39	128	126	293	0	0	0
2	4	1291	0	4	333	337	1,385	0	0
2	4	1292	12	72	137	221	0	0	0
2	4	1293	0	38	90	128	0	0	0
2	4	1294	0	114	345	459	0	0	0
2	4	1295	33	106	98	237	0	0	0
2	4	1296	0	125	22	147	79	0	0
2	4	1297	0	339	100	439	0	0	0
2	4	1298	59	292	26	377	0	0	0
2	4	1299	1,226	93	224	1,543	345	0	0
2	4	1300	0	0	0	0	0	0	0
2	4	1301	30	100	158	288	601	0	0
2	4	1302	16	103	115	234	0	0	0
2	4	1303	0	801	274	1,075	0	0	0
2	4	1304	0	460	25	485	0	0	0
2	4	1305	0	345	515	860	602	0	0
2	4	1306	150	260	2,778	3,188	0	0	0
2	4	1307	352	56	172	580	47	0	0
2	4	1308	387	19	0	406	0	0	0
2	4	1309	114	1,433	991	2,538	79	0	0
2	4	1310	486	132	519	1,137	870	0	0
2	4	1311	226	94	234	554	0	0	0
2	4	1312	149	1,086	2,797	4,032	431	0	0
2	4	1313	586	209	526	1,321	122	0	0
2	4	1314	12	251	249	512	0	0	0
2	4	1315	180	220	82	482	0	0	0
2	4	1316	2	413	112	527	0	0	0
2	4	1317	18	479	249	746	0	0	0
2	4	1318	33	144	163	340	0	0	0
2	4	1319	0	19	0	19	0	0	0
2	4	1320	0	119	360	479	0	0	0
2	4	1321	0	102	198	300	0	0	0
2	4	1322	32	15	18	65	0	0	0
2	4	1323	101	29	38	168	0	0	0
2	4	1324	13	125	1,046	1,184	1,319	0	0
2	4	1325	95	148	996	1,239	791	0	0
2	4	1370	238	4//	1,328	2,043	U	U	U

ZDATA NO.	SECTOR NO.	TAZ	EMPIND	EMPCOM	EMPSVC	EMPTOT	SCHENR	STPKCST	LTPKCST
2	4	1327	87	111	140	338	0	0	0
2	4	1328	133	79	163	375	0	0	0
2	4	1329	22	15	0	37	0	0	0
2	4	1330	53	559	1,043	1,655	633	0	0
2	4	1331	0	967	155	1,122	0	0	0
2	4	1332	77	348	226	651	189	0	0
2	4	1333	0	205	445	650	0	0	0
2	4	1334	0	109	393	502	650	0	0
2	4	1335	0	121	180	301	0	0	0
2	4	1336	0	99	312	411	32	0	0
2	4	1337	69	95	501	665	1,822	0	0
2	4	1338	0	0	0	0	0	0	0
2	4	1339	133	11	156	300	0	0	0
2	4	1340	601	174	201	976	0	0	0
2	4	1341	49	81	59	189	0	0	0
2	4	1342	16	222	206	444	0	0	0
2	4	1343	0	56	64	120	0	0	0
2	4	1344	393	280	1,009	1,682	1,981	0	0
2	4	1345	392	179	133	704	0	0	0
2	4	1346	145	80	518	743	1,845	0	0
2	4	1347	162	224	627	1,013	0	0	0
2	4	1348	255	219	149	623	0	0	0
2	4	1349	67	355	399	821	0	0	0
2	4	1350	8	29	1,053	1,090	0	0	0
2	4	1351	52	206	109	367	0	0	0
2	4	1352	0	0	9	9	0	0	0
2	4	1353	0	0	9	9	0	0	0
2	4	1354	25	6	0	31	0	0	0
2	4	1355	0	0	0	0	0	0	0
2	4	1356	46	//	247	370	0	0	0
2	4	1357	223	93	78	394	0	0	0
2	4	1358	0	0	0	0	0	0	0
2	4	1359	0	262	131	393	0	0	0
2	4	1360	0	23	28	51	0	0	0
2	4	1361	89	49	18	156	0	0	0
2	4	1362	7	48	91	146	82	0	0
2	4	1303	رم 201	20 150	253	385 725	0	0	0
2	4	1265	291	152	282	1 051	120	0	0
2	4	1265	1 0/5	109	220	1,051	438	0	0
2	4	1267	1,945	10/	220	2,500	000	0	0
2	4	1369	130	12	1/13	50/	1 685	0	0
2	4	1260	139	12	12	394 40	1,085	0	0
2	4	1270	260	1/	23	260	0	0	0
2	4	1271	209	0	0	209	0	0	0
2	4	1272	0	03	306	300	0	0	0
2	4	1372	7	93 0	17	24	0	0	0
2	4	1373	25	0	1/	24	0	0	0
2	4	1375	118	61	0	179	0	0	0
2	4	1376	79	17	2	98	0	0	0

ZDATA NO.	SECTOR NO.	TAZ	EMPIND	EMPCOM	EMPSVC	EMPTOT	SCHENR	STPKCST	LTPKCST
2	4	1377	16	50	159	225	0	0	0
2	4	1378	4	25	117	146	226	0	0
2	4	1379	5	23	339	367	0	0	0
2	4	1380	9	32	61	102	0	0	0
2	4	1381	4	15	64	83	0	0	0
2	4	1382	24	54	21	99	0	0	0
2	4	1383	21	24	0	45	0	0	0
2	4	1384	8	19	24	51	0	0	0
2	4	1385	6,486	98	27	6,611	0	0	0
2	4	1386	158	95	140	393	0	0	0
2	4	1387	125	184	459	768	1,965	0	0
2	4	1388	9	0	0	9	0	0	0
2	4	1389	34	934	413	1,381	0	0	0
2	4	1390	99	87	86	272	0	0	0
2	4	1391	51	77	86	214	0	0	0
2	4	1392	784	226	601	1,611	2,131	0	0
2	4	1393	186	149	0	335	0	0	0
2	4	1394	593	292	1,419	2,304	850	0	0
2	4	1395	30	161	406	597	0	0	0
2	4	1396	133	125	124	382	0	0	0
2	4	1397	0	100	970	1,070	660	0	0
2	4	1398	0	495	680	1,175	676	0	0
2	4	1399	277	875	879	2,031	0	0	0
2	4	1400	88	485	371	944	0	0	0
2	4	1401	0	2	0	2	0	0	0
2	4	1402	97	68	248	413	800	0	0
2	4	1403	32	7	0	39	0	0	0
2	4	1404	0	8	64	72	0	0	0
2	4	1405	183	64	486	733	1,979	0	0
2	4	1406	0	1	0	1	0	0	0
2	4	1407	61	41	52	154	143	0	0
2	4	1408	0	0	172	172	829	0	0
2	4	1409	0	107	28	135	0	0	0
2	4	1410	474	31	441	946	0	0	0
2	4	1411	5	0	418	423	2,018	0	0
2	4	1412	30	0	0	30	0	0	0
2	4	1413	0	0	234	234	1,130	0	0
2	4	1414	69	1,189	417	1,675	0	0	0
2	4	1415	35	213	1,627	1,875	5,219	0	0
2	4	1416	139	269	193	601	0	0	0
2	4	1417	29	103	87	219	0	0	0
2	4	1418	0	74	219	293	0	0	0
2	4	1419	87	334	217	638	0	0	0
2	4	1420	0	87	0	87	0	0	0
2	4	1421	73	63	85	221	0	0	0
2	4	1422	140	32	83	255	0	0	0
2	4	1423	114	31	96	241	0	0	0
2	4	1424	0	263	63	326	0	0	0
2	4	1425	12	0	228	240	990	0	0
2	4	1426	44	20	99	163	357	0	0

ZDATA NO.	SECTOR NO.	TAZ	EMPIND	EMPCOM	EMPSVC	EMPTOT	SCHENR	STPKCST	LTPKCST
2	4	1427	0	0	0	0	0	0	0
2	4	1428	0	13	0	13	0	0	0
2	4	1429	0	0	0	0	0	0	0
2	4	1430	0	5	0	5	0	0	0
2	4	1431	2	24	81	107	0	0	0
2	4	1432	0	6	0	6	0	0	0
2	4	1433	12	0	0	12	0	0	0
2	4	1434	103	15	207	325	788	0	0
2	4	1435	0	0	0	0	0	0	0
2	4	1436	0	0	0	0	0	0	0
2	4	1437	0	0	0	0	0	0	0
2	4	1438	0	0	0	0	0	0	0
2	4	1439	0	0	0	0	0	0	0
2	4	1440	0	0	0	0	0	0	0
2	4	1441	0	0	0	0	0	0	0
2	4	1442	0	0	0	0	0	0	0
2	4	1443	0	0	0	0	0	0	0
2	4	1444	0	0	0	0	0	0	0
2	4	1445	0	0	0	0	0	0	0
2	4	1446	0	0	0	0	0	0	0
2	4	1447	0	0	0	0	0	0	0
2	4	1448	0	0	0	0	0	0	0
2	4	1449	0	0	0	0	0	0	0
2	4	1450	0	0	0	0	0	0	0
2	4	1451	0	0	0	0	0	0	0
2	4	1452	0	0	0	0	0	0	0
2	4	1453	0	0	0	0	0	0	0
2	4	1454	0	0	0	0	0	0	0
2	4	1455	0	0	0	0	0	0	0
2	4	1456	0	0	0	0	0	0	0
2	4	1457	0	0	0	0	0	0	0
2	4	1458	0	0	0	0	0	0	0
2	4	1459	0	0	0	0	0	0	0
2	4	1460	0	0	0	0	0	0	0
2	4	1461	0	0	0	0	0	0	0
2	4	1462	0	0	0	0	0	0	0
2	4	1463	0	0	0	0	0	0	0
2	4	1464	0	0	0	0	0	0	0
2	4	1465	0	0	0	0	0	0	0
2	4	1466	0	0	0	0	0	0	0
2	4	1467	0	0	0	0	0	0	0
2	4	1468	0	0	0	0	0	0	0
2	4	1469	0	0	0	0	0	0	0
2	4	1470	0	0	0	0	0	0	0
2	4	1471	0	0	0	0	0	0	0
2	4	1472	0	0	0	0	0	0	0
2	4	1473	0	0	0	0	0	0	0
2	4	1474	0	0	0	0	0	0	0
2	4	1475	0	0	0	0	0	0	0
2	4	1476	0	0	0	0	0	0	0

ZDATA NO.	SECTOR NO.	TAZ	EMPIND	EMPCOM	EMPSVC	EMPTOT	SCHENR	STPKCST	LTPKCST
2	4	1477	0	0	0	0	0	0	0
2	4	1478	0	0	0	0	0	0	0
2	4	1479	0	0	0	0	0	0	0
2	4	1480	0	0	0	0	0	0	0
2	4	1481	0	0	0	0	0	0	0
2	4	1482	48	38	0	86	0	0	0
2	4	1483	0	0	0	0	0	0	0
2	4	1484	106	0	0	106	0	0	0
2	4	1485	0	150	0	150	0	0	0
2	4	1486	4	4	0	8	0	0	0
2	4	1487	0	30	0	30	0	0	0
2	4	1488	0	0	0	0	0	0	0
2	4	1489	102	8	0	110	0	0	0
2	4	1490	0	0	0	0	0	0	0
2	4	1491	0	18	16	34	0	0	0
2	4	1492	0	0	0	0	0	0	0
2	4	1493	0	34	0	34	0	0	0



APPENDIX B
MEMORANDUM

То

Randy Fox, FTE Barbara Davis, FTE Bill Nelsen, URS Bill Olsen, URS Jack Klodzinski, URS Dave Wood, URS

From

Josiah Banet, HNTB George Gilhooley, HNTB Luis Diaz, HNTB Gerald Nielsten, Stantec Fleur Hartmann, Stantec

Cc

Nita Crowder, OOCEA Suzanne Phillips, FDOT Jim Harrison, Orange County Fred Winterkamp, Orange County

Subject

Wekiva Parkway Investment Grade Study - Value of Time Assumption

Date

8/3/2011

This memo explains the methodology used in developing the value of time assumption for the Wekiva Parkway Investment Grade Study model. The announcement of a partnership between OOCEA, FDOT D5 and Florida's Turnpike Enterprise (FTE) occurred in late May 2011. Since then, significant coordination has occurred between OOCEA, FTE, FDOT D5, URS and HNTB/Stantec on the project assumptions and methodology for the Wekiva Parkway traffic and revenue forecasts. The goal since that time has been to develop a traffic and revenue report that can be utilized by OOCEA, FTE and FDOT D5 and thus accommodates the varying business practices, toll policies and preferences of all agencies.

As part of the SR 429/Wekiva Parkway partnership, several key assumptions have been discussed about the model inputs and project operations. One of these key assumptions is the value of time assumption used in the decision to make a trip on a toll road or not. This is a key assumption as it impacts traffic loadings on the model's transportation network in the existing and future conditions. This memo outlines the calculation of the value of time and the resulting recommended value to use in the Wekiva Parkway Investment Grade Study Model.

The Orlando area is unique in that the majority of the area's limited access expressways are tolled. Local toll roads include the Florida's Turnpike, SR 408, SR 414, SR 417, SR 429 and SR 528. In fact, the only non-tolled limited access facility within the Orlando metropolitan area is I-4, which experiences severe peak hour congestion as well as significant off-peak congestion. Many times, the quickest way to complete a trip around the Orlando area is via a tolled facility. As such the region has a higher tolerance for toll facilities than other areas of the state and

HNTB

nation where no toll facilities exist or where more toll-free limited access alternatives are available.

<u>CTOLL</u>

In the Wekiva Parkway model, the value of time is represented by the CTOLL value. The CTOLL is the constant time value of a toll. In its most general form the CTOLL calculation is:

CTOLL = 1 / Value of Time

It can also be calculated using the average income from a metropolitan area or county. The CTOLL calculation from the average income value of an area is useful when the general value of time is not known and no other information is available. The current Florida Standard Urban Transportation Model Structure (FSUTMS) CTOLL equation is:

CTOLL = 1 / [Wage Rate * A]

Where:

Wage Rate = average wage rate for a metropolitan area or county

A = proportion relative to route choice (30-40 percent)

The CTOLL value is in units of time/cost, which can be in hours/dollar or minutes/cent. The Wekiva Parkway model utilizes a CTOLL value in hours/dollar. A time impedance is added to a network link representing a toll plaza to account for the presence of the toll. The time impedance would be calculated as:

Time_{toll} = CTOLL * Toll rate

This additional time impendence is taken into account when the travel demand model calculates a travel time for users of the toll facility. All other things being equal, the toll facilities will appear to be less attractive compared to a "free" route because of this additional time impedance.

For example, consider the situation if the average wage rate in a region was 15.00 per hour, the value of A is 40 percent and there was a facility with a 1.00 toll on it. The CTOLL value and time impedance would be:

CTOLL = 1 / [\$15.00/hour * 0.4] = 0.167 hours/dollar

 $Time_{toll} = 0.167 hours/$ * $1.00 * 60 minutes/hour = 10 minutes$

This base CTOLL equation can be used to develop a CTOLL value estimate for the Orlando area using the average wage rate of the Orlando area if no other information is available. Based on the U.S. Census Bureau American Community Survey (2005-2009), the average

household income in the Orlando-Kissimmee Metropolitan area is \$67,029 a year (mean household income) and the per capita income is \$25,799 a year. If the wage rate value in the CTOLL calculation is assumed to be the wage rate per household, the CTOLL estimate for the Orlando area would be:

CTOLL = 1 / [\$67,029/year * 1 year/2,080 hours * 0.4] = 0.078 hours/dollar

However, if the wage rate value in the CTOLL equation is assumed to be average wage rate per worker, the resulting CTOLL value would be different. Using data from the U.S. Census Bureau American Community Survey (2005-2009), including the Orlando area per capita income, number of workers and total population, the average wage rate/worker for the Orlando area is calculated to be \$15.80/hour. Using the FSUTMS CTOLL equation, this average wage rate/worker and assuming a 40 percent value for A, the CTOLL estimate is:

CTOLL = 1 / [\$15.80/hour * 0.4] = 0.158 hours/dollar

Stated Preference

A stated preference survey conducted in 2008 for the central Florida region was provided by the Florida's Turnpike Enterprise. This stated preference survey was conducted to analyze the trip making decisions of citizens in the nine-county central Florida region. The nine counties included in the survey were Brevard, Flagler, Lake, Marion, Orange, Osceola, Seminole, Sumter and Volusia Counties. A total of 1,417 respondents provided input on their travel choices when presented with several scenarios with and without tolls. The breakout of the survey respondents by county are shown below in Table 1.

Table 1 - 2008 Stated Preference Survey Respondent Breakout

County	Survey Respondents	Percent
Volusia	302	21%
Brevard	266	19%
Orange	172	12%
Flagler	159	11%
Osceola	151	11%
Seminole	100	7%
Marion	95	7%
Lake	78	6%
Sumter	40	3%
Other	54	4%
Total	1417	100%

This survey resulted in an average value of time of the residents of the nine central Florida counties of \$13.41/hour. This equates to a CTOLL value of:

CTOLL = 1 / \$13.41/hr = 0.075 hours/dollar

As part of the study, values of time were also computed for various types of trips and time periods. The following values of time for trip purposes were developed from the study for the nine-county central Florida area:

- Home Based Work Trips \$22.06/hour
- Home Based Other Trips \$8.57/hour
- Non-Home Based Trips \$19.64/hour

The peak period for the 2008 Central Florida Stated Preference Survey was 6-9 a.m. and 4-6 p.m. The following values of time for time periods were developed from the study for the nine-county central Florida area:

- Peak Trips \$17.73/hour
- Midday Trips \$12.83/hour
- Nights/Weekends Trips \$9.05/hour

It should be noted that stated preference surveys have typically been used in areas where there has been little or no use of tolling, and thus this serves as a technique that provides some insight into user economic choices where there is otherwise little or no information. In the case of the 2008 Central Florida Stated Preference Survey, results would be useful for analyzing a new toll facility in an area without toll roads today such as Brevard, Flagler, Volusia or Marion Counties.

The results of the Central Florida Stated Preference Survey are not directly applicable to the Orlando area (Lake, Orange, Osceola and Seminole Counties) due to the study's large coverage area and Orlando's prevalence of toll facilities. The Central Florida Stated Preference Survey had relatively low participation from the Lake, Orange, Osceola and Seminole Counties. The responses from these counties represented only 36 percent of the total survey responses. The two counties with the highest participation in the survey, Volusia and Brevard Counties, do not currently have any toll facilities in them. In addition, the transponder ownership from the central Florida Stated Preference Study was only 30 percent, compared to the surveyed 74 percent transponder ownership within the Wekiva Parkway study area (as reported in the Wekiva Parkway Origin-Destination Study). This significant difference in the ownership/use of a transponder would likely result in different views on the perceived value for a toll road. As such, the overall results of this study are not directly applicable for use in the Wekiva Parkway study, however some of the information contained within it is appropriate in determining the study value of time.

Revealed Preference

In regions with existing toll facilities, such as the Orlando area, it is usually preferred to use a form of revealed preference based on the actual economic choices expressed everyday as people choose whether to use the toll facilities. The revealed preferences shown in actual driver behavior include the evaluations of other choice factors used when deciding to use the toll road such as:

- travel time reliability (particularly during the peak hours)
- higher safety standards of the toll road
- convenience of using the toll road (includes such variables as the availability of easy payment options and the accessibility of the toll road)

In order to analyze the revealed preference of Orlando area drivers as it pertains to the use of toll roads, existing local conditions and driver behavior were analyzed. The east-west corridor through Orlando was chosen for analysis because of the presence of a tolled expressway (SR 408) and nearby competing parallel alternatives (SR 50, Lake Underhill Road and Old Winter Garden Road). It should be noted that the Orlando area does not contain a tolled and non-tolled expressway competing directly with each other within the same narrow corridor, or that corridor would have been chosen for this analysis.

The corridor of analysis is shown in Figure 1 below. SR 408 is a tolled expressway running generally south of and parallel to SR 50 in central Orange County. It connects areas of east and west Orange County with downtown Orlando. SR 408 connects to SR 50 via the Clarke Road interchange on the west side of Orange County and connects to SR 50 directly in east Orange County. Comparing the travel times and traffic patterns along these corridors was used to understand how local drivers actually view their value of time.



Figure 1 - Corridor Comparison Study Area

Four cutline locations, shown in Figure 2, were compared along this east-west corridor, two west of downtown Orlando and two east of downtown Orlando. Traffic profiles by time of day were collected from the synopsis reports from the FDOT 2010 counts at several locations along SR 50, SR 408, Lake Underhill Road and Old Winter Garden Road as shown in Figure 3. The count locations chosen for the east-west cutlines were limited to those with available synopsis time of day count data for 2010. These traffic profiles were compared for each of the four cutlines (west, west central, east central and east) and are shown in Figures 4 - 7, respectively, which are attached at the end of this memo. These figures show the traffic data for both eastbound and westbound directions at each cutline location. Subfigure "A" refers to

the actual traffic distribution by time of day on each facility, while subfigure "B" shows the percentage of the total corridor traffic on each facility by time of day.

The traffic profiles at the four cutlines reveal the actual traffic patterns by Orlando drivers and their choice preference when dealing with toll road options. Even during the off-peak condition (overnight) the SR 408's market share of the corridor traffic remains stable. There is not a considerable drop off in the off-peak conditions. This occurs in spite of the fact that all facilities operate at free-flow conditions in the overnight period so the travel time savings along the toll facility is at a minimum. In addition, the overnight trips are not as influenced by more time-sensitive work trips. This off-peak condition can be considered a base condition for the driver choice equilibrium state for Orlando area drivers.



Figure 2 - East-West Corridor Cutlines

Figure 3 - FDOT Cutline Count Locations



The value of time for the overnight condition was calculated utilizing the travel time difference between SR 408 and SR 50 and the applicable toll rates on SR 408. Travel times were derived from the continuous travel time readings from FDOT's Regional Transportation Management Center (RTMC) and OOCEA's travel time statistics. Table 2 shows the observed free-flow travel times during the overnight period between SR 408 and SR 50 for the eastbound and westbound directions. Figures 8 and 9 are attached at the end of this memo and show the SR 50 travel times from the RTMC by time of day. The SR 408 travel time summaries for three sections of SR 408 for the month of June 2011 are also included at the end of this memo. The three SR 408 sections were:

- Section 1 SR 408 between West System Boundary and I-4
- Section 2 SR 408 between I-4 and SR 417
- Section 3 SR 408 between SR 417 and East SR 50

It should be noted that to determine the travel time for SR 408 Section 1, the travel time along the Clarke Road/SR 50W ramps was included. This segment is approximately 1 mile long and a time of 1.2 minutes was assumed. This was added to the SR 408 Section 1 travel time to determine the west side travel time along SR 408 between SR 50W and I-4.

Table 2 - Obcerver	Eact-Wact	Corridor	Fron-Flow	Traval Timor
		COLLING	FIEE-FIOW	I aver Times

Wast Sida	Travel Ti	ne (min)
west slue	EB	WB
SR 50 (SR 408W to I-4)	14	14
SR 408 (SR 50W to I-4)	9.2	10.2
Difference	4.8	3.8

East Side	Travel Ti	me (min)
Last Slue	EB	WB
SR 50 (I-4 to SR 408E)	18	17
SR 408 (I-4 to SR 50E)	13.5	12
Difference	4.5	5

Based on the data in Table 2, the travel time savings along the east side and west side corridors between the free and tolled options is between 3.8 and 5 minutes, or an average of 4.5 minutes. The toll rate for travel on both the east and west side trip is \$1.75, which includes two mainline tolls of \$1.00 and \$0.75, respectively. Using the travel time savings compared to the paid toll cost, a value of time can be estimated for the east-west corridor trips in the overnight condition. The observed overnight value of time along this east-west corridor is:

Value of Time_{overnight} = 1.75 / 4.5 minutes * (60 minutes/hour) = 23.33/hr

To account for the variability of the travel time savings along this corridor, the largest travel time savings (5 minutes) was increased by 20% to be conservative, yielding an average travel time savings of 6 minutes. When we compare the 6 minutes in travel time savings to the toll

rate paid for that savings in the overnight condition (\$1.75), the value of time can be calculated. The revised observed overnight value of time along this east-west corridor is:

```
Value of Time<sub>overnight</sub> = 1.75 / 6 minutes * (60 minutes/hour) = 17.50/hr
```

Using the value of time relationship data obtained from the 2008 Central Florida Stated Preference Survey, the peak value of time can be calculated. If the overnight value of time from the east-west corridor is assumed to be Orlando area equivalent the nine-county overnight/weekend value of time, then the peak value of time can be calculated as follows:

Value of Time_{peak} = 17.50/hr * (17.73/hr / 9.05/hr) = 34.28/hr

Where:

- Overnight Trips \$17.50/hour (from revealed preference survey)
- Peak Trips \$17.73/hour (from the Central Florida Stated Preference Survey)
- Nights/Weekends Trips \$9.05/hour (from the Central Florida Stated Preference Survey)

A more conservative assumption would be that the overnight value of time from the east-west corridor is assumed to be Orlando area equivalent of the nine-county midday/weekend value of time. The midday value of time for the nine-county region is almost 42% higher than the night/weekend value of time, or \$12.83/hr versus \$9.05/hr. The Orlando peak value of time can be calculated as follows assuming the Orlando area overnight value of time is equivalent to the nine-county midday value of time.

Value of Time_{peak} = 17.50/hr * (17.73/hr / 12.83/hr) = 24.18/hr

Where:

- Overnight trips \$17.50/hour (from revealed preference survey)
- Peak trips \$17.73/hour (from the Central Florida Stated Preference Survey)
- Midday Trips \$12.83/hour (from the Central Florida Stated Preference Survey)

To determine the appropriate composite value of time for the Orlando area, a percentage of peak trips versus off-peak trips can be established using the cutline corridor traffic data. Using the corridor traffic distributions by time of day, the peak hour traffic percentage of the total daily traffic can be determined. The peak hours for the Orlando area are assumed to be 6-9am and 4-7pm. Based on this assumption the percentage of total corridor traffic occurring during these peak periods is shown in Table 3.

Cutling	Peak Tr	affic %		
Cutime	EB	WB		
West	42.0%	39.8%		
West Central	41.6%	39.5%		
East Central	37.5%	40.4%		
East	37.3%	39.0%		
Directional Average	39.6%	39.7%		
Average	39.	6%		

Table 3 - Peak Period Percentage of Daily Traffic

The average percentage of the daily traffic occurring in the peak periods in the east-west corridor is 39.6 percent. Under a conservative assumption of only 30 percent of the daily traffic occurring in the peak periods, the calculation for the composite value of time would be:

Value of Time_{composite} = (Value of Time_{peak} * 30%) + (Value of Time_{offpeak} * 70%)

Value of Time Recommendation

To maintain a conservative analysis, the overnight value of time for the Orlando area, calculated using the east-west corridor, will be assumed to be the off-peak value of time. Typically, the overnight value of time would be less than other off-peak periods of the day such as during the midday period. This was confirmed in the 2008 Central Florida Stated Preference Study. In addition, the peak value of time for the Orlando area will be assumed to be that calculated using the midday/peak value of time relationship from the 2008 Central Florida Stated Proference Survey. Finally, a 30 percent/70 percent peak to off-peak split will be used to calculate a composite value of time.

Using these assumptions the composite value of time for the Orlando area is calculated as:

Value of $Time_{composite} = ($24.18/hr * 30\%) + ($17.50/hr * 70\%) = $19.50/hr$

The recommended value of the value of time for the Wekiva Parkway study is \$19.50/hr, which results in a CTOLL value of 0.051 as follows:

CTOLL = 1 / Value of Time_{composite} = 1 / 19.50 = 0.051

This value of time and CTOLL values take into account the unique nature of the Orlando transportation system and the travel choices drivers actually make. It also reflects the higher toll sensitivity in the Orlando area due to the prevalence of the toll road system and the high transponder ownership and usage compared to other central Florida counties that currently do not have toll facilities in them. This CTOLL value is consistent with the Orlando MPO adopted model. The current adopted METROPLAN ORLANDO model uses a CTOLL of 0.05 for the 2004 base year.

























































Reporting Link 1: SR 408 between West System Boundary and I-4

Current Month -- June 2011



Historical Trends Over Fiscal Year

Average Duration of Peak Period Congestion (hour:min)

22	2010							2011					
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	
AM Peak (EB)	00:00	00:00	00:00	00:00	00:00	00:00	00:00	00:00	00:00	00:00	00:00	00:00	
PM Peak (WB)	00:00	00:00	00:00	00:00	00:00	00:00	00:00	00:00	00:00	00:00	00:00	00:00	

		Pe	eak Perio	od Planni	ing Time	s over Pa	st Year	(Minutes)			
_			201	0					201	1		
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
AM Peak (EB)	8.1	8.3	8.6	10.0	8.3	8.1	8.2	8.1	8.3	8.8	10.7	8.0
PM Peak (WB)	9.6	9.6	9.7	11.8	15.5	9.3	9.4	9.4	9.2	9.3	9.5	9.4



Reporting Link 2: SR 408 between I-4 and SR 417

Current Month -- June 2011



Historical Trends Over Fiscal Year

	2011											
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
AM Peak (WB)	00:00	00:46	01:35	01:35	01:01	00:19	01:54	01:37	01:40	01:33	01:32	01:26
PM Peak (EB)	00:00	00:34	01:00	00:32	00:00	00:00	00:00	00:38	00:09	00:00	00:00	00:09

-	2011											
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
AM Peak (WB)	12.2	22.2	17.1	20.0	18.0	13.8	18.6	16.2	20.4	15.9	19.2	20.4
PM Peak (EB)	13.5	18.1	26.1	20.0	16.3	12.7	14.4	17.5	14.2	16.8	12.3	15.4



Peak Period Travel Time Indices



Reporting Link 3: SR 408 between SR 417 and East SR 50

Current Month -- June 2011



Historical Trends Over Fiscal Year

Average Duration of Peak Period Congestion (hour:min)

	2010								2011					
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun		
AM Peak (WB)	00:00	00:00	00:33	00:28	01:00	00:04	00:44	01:26	01:27	01:28	01:07	00:00		
PM Peak (EB)	00:00	00:31	00:48	00:18	00:51	00:00	00:39	00:50	01:05	00:03	00:38	00:30		

274			2010	2011								
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
AM Peak (WB)	4.7	8.1	10.0	9.4	10.0	7.3	12.0	14.5	15.0	11.7	15.8	8.3
PM Peak (EB)	7.8	7.9	8.6	8.3	9.9	7.7	9.1	9.0	10.3	8.1	8.7	10.0





