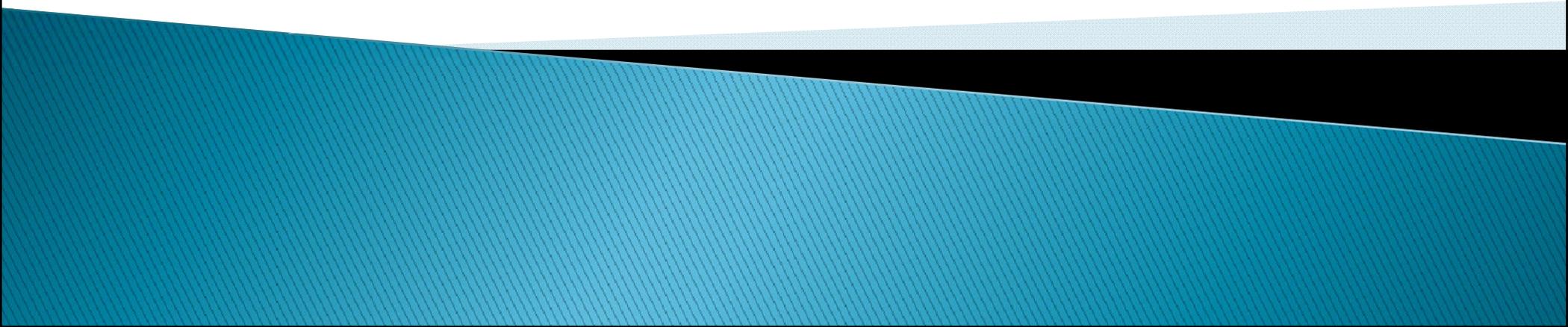


The Trip Characteristics of New Self Sustaining Communities



Trip Generation for Mixed-Use Developments

by Colorado/Wyoming Section Technical Committee

Table 1. Sites Included in the Driveway Count Comparison Study

During the preparation of traffic impact studies for a proposed new development, discussions between transportation engineering consultants representing the developer and traffic engineers representing the local government usually include the applicability of ITE trip generation rates (as reported in *Trip Generation*¹) to the development.

A frequently raised question concerns

Site	Development	Size (sq.ft.)	Jurisdiction	Location
1	Mission Trace I	154,436	City of Lakewood	Northwest Corner of Wadsworth Blvd. and Girton Ave.
2	Mission Trace II	86,381	City of Lakewood	Southwest Corner of Wadsworth Blvd. and Girton Ave.
3	Union Square (East)	731,846	City of Lakewood	East of Union Blvd. between Ellsworth Ave. and 4th Ave.
4	Union Square (West)	500,000	City of Lakewood	West of Union Blvd. between Ellsworth Ave. and 2nd Pl.
5	Parkridge Plaza	61,198	City of Lakewood	Northwest Corner of Wadsworth Blvd. and 20th Ave.
6	Green Mountain Shopping Center	115,000	City of Lakewood	Northwest Corner of Alameda and Union Blvd.
7	Academy Park	1,773,500	City of Lakewood	Southeast Corner of Hampden Ave. and Wadsworth Blvd.
8	Orchard Shopping Shopping Center	177,277	City of Loveland	Northeast Corner of U.S. 287 and 29th St.
9	Pueblo Mall Convenience Center	95,104	City of Pueblo	29th St. and Hart Rd.

1987

FDOT District IV

FDOT Trip Characteristics Study of Multi-Use Developments

Prepared By:

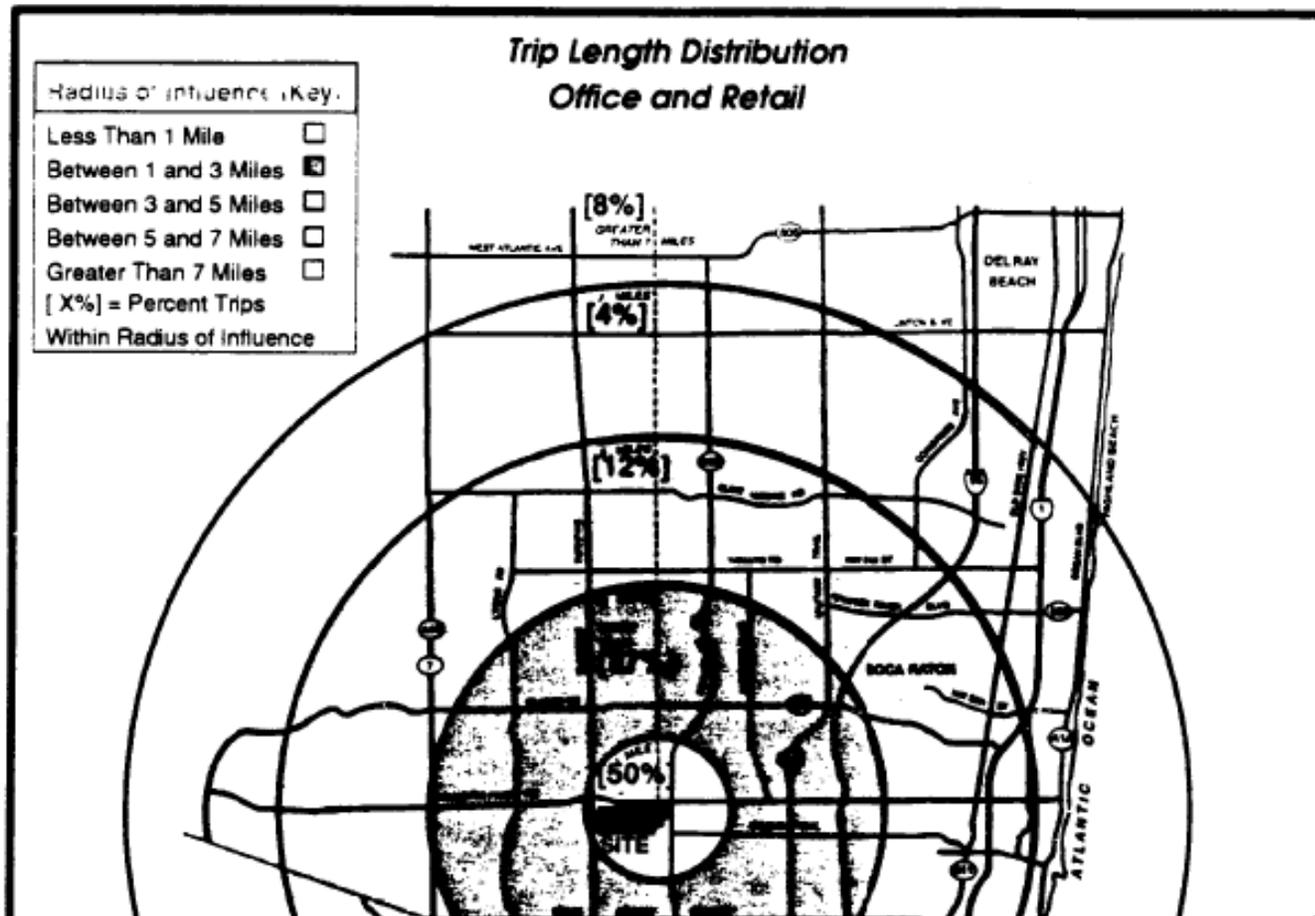
FINAL REPORT

December 1993

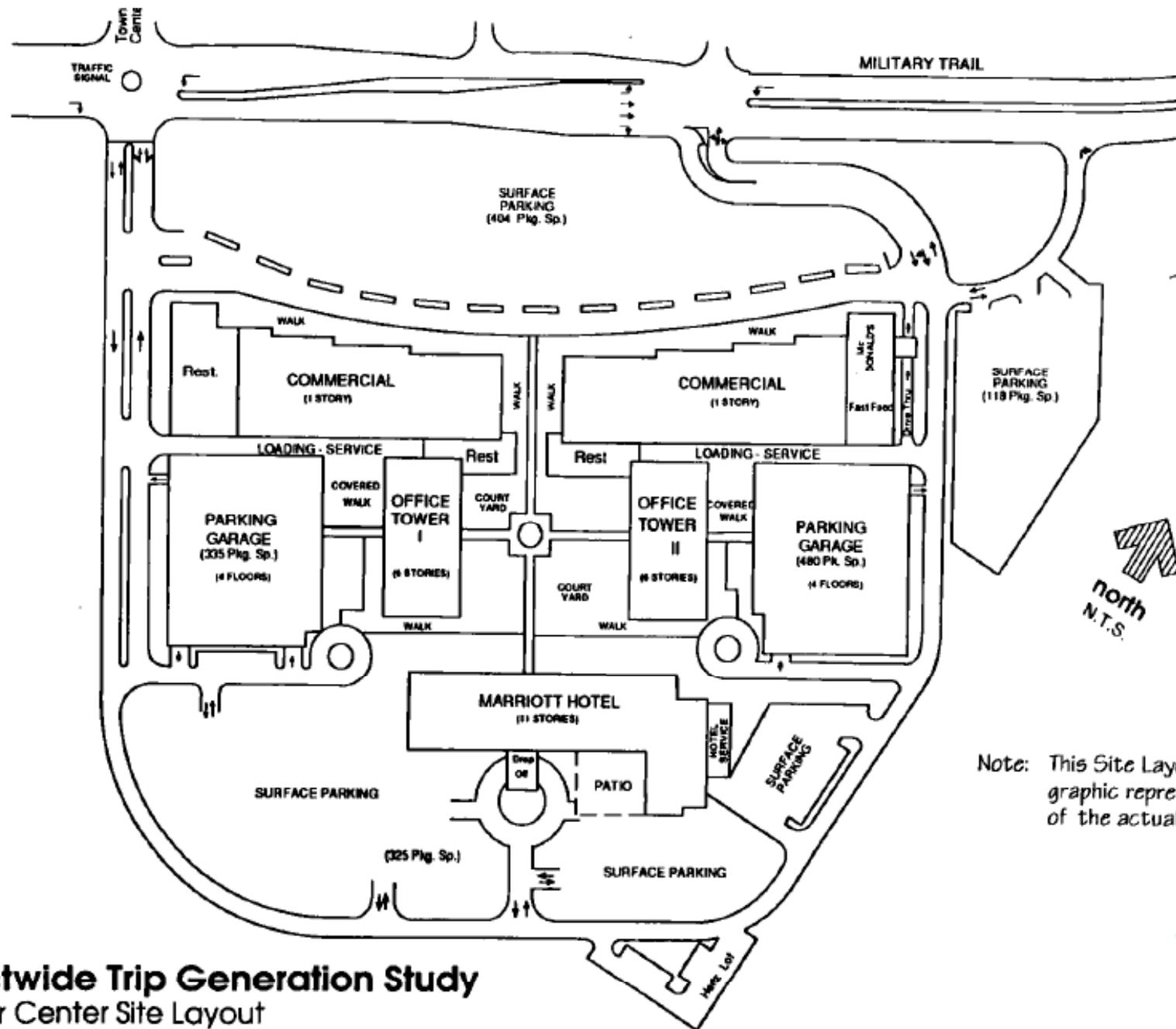
State Project Number: 99004-1623

W.P.I. Number: 4590209

TINDALE
OLIVER and Associates, Inc.



1993



Note: This Site Layout is a graphic representation of the actual Site Plan

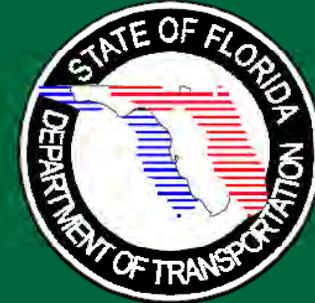
1995

Districtwide Trip Generation Study
Crocker Center Site Layout

Figure 5

The logo features a stylized compass rose with the word 'SITE' written across it in a bold, sans-serif font. The compass rose is white with green and yellow accents.

SITE
IMPACT
HANDBOOK



Florida Department of Transportation
605 Suwannee Street, MS 19
Tallahassee, Florida 32399

Central Office Systems Planning Office
Office of Policy Planning
District Site Impact Coordinators

April 1997

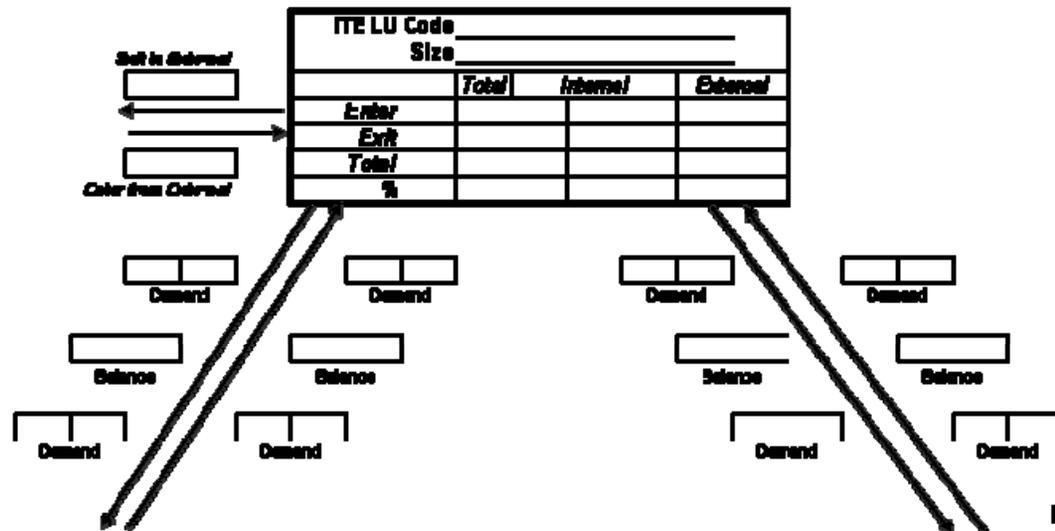
1997

Multi-Use Development Trip Generation and Internal Capture Summary Worksheet

Analyst _____
Date _____

MULTI-USE DEVELOPMENT
TRIP GENERATION
AND INTERNAL CAPTURE SUMMARY
LAND USE A

Name of Dept _____
Time Period _____



LAND USE B

ITE LU Code _____		Size _____	
	<i>Total</i>	<i>Internal</i>	<i>External</i>
Enter			
Exit			
Total			
%			

LAND USE C

ITE LU Code _____		Size _____	
	<i>Total</i>	<i>Internal</i>	<i>External</i>
Enter			
Exit			
Total			
%			

Net External Trips for Multi-Use Development				
	LAND USE A	LAND USE B	LAND USE C	TOTAL
Enter				
Exit				
Total				
Single-Use Trip Generation				

INTERNAL CAPTURE

FDOT TIPS Program

TIPS



Trip Generation, Internal Capture and Pass By Software

Developed by The Florida Department of Transportation, Office of the State Transportation Planner (Systems Planning Office), and District Site Impact Coordinators

The program's internal trip analysis is based on the unconstrained internal capture rates from the ITE Trip Generation Handbook (March 2001).

It is recommended that maximum internal capture rates be negotiated at a methodology meeting.

A column to adjust the total percentage of trips eligible for internal capture is provided on the IC Rate Table.

Window 9x/NT/2000/XP
Version 1.3.6

Continue

Traditional Development Trip Generation Characteristics

I. Introduction

Planned communities today are widely employing a New Urbanism approach in design. These concepts are hailed as one of the remedies to the rapid utilization of resources due to suburban sprawl. Traditional neighborhood developments incorporate a varied mixture of land uses usually within walking distance of one another. The proximity of these easily accessible facilities is intended to promote pedestrian, bicycle, and shorter internal auto trips. A large percentage of internal trips should be the result and lessen the impact of the community on the surrounding roadway network. Internal trips are defined as those that have both trip ends within the development project. Although they often utilize one or more segments of a public roadway, there is no net increase in traffic volume on the external roadway system

B. Traditional Neighborhood Development Trip Generation Study

Traditional Neighborhood Development Trip Generation Study was prepared by Dr. Asad J. Khattak, Dr. John R. Stone, William E. Letchworth, Ben K. Rasmussen and Bastian J. Schroeder in February 2005. The report was completed for the North Carolina Department of Transportation by the Department of City and Regional Planning of the University of North Carolina in Chapel Hill and the Department of Civil, Construction, and Environmental Engineering at North Carolina State. The report uses local traffic impact analysis methods to estimate trip generation rates. These estimated trip generation rates were compared with actual traffic counts produced by the existing developments.

The Traditional Neighborhood Development surveyed for

Current NCHRP Effort

- ▶ Admittedly smaller uses
- ▶ Looking at some smaller uses near transit

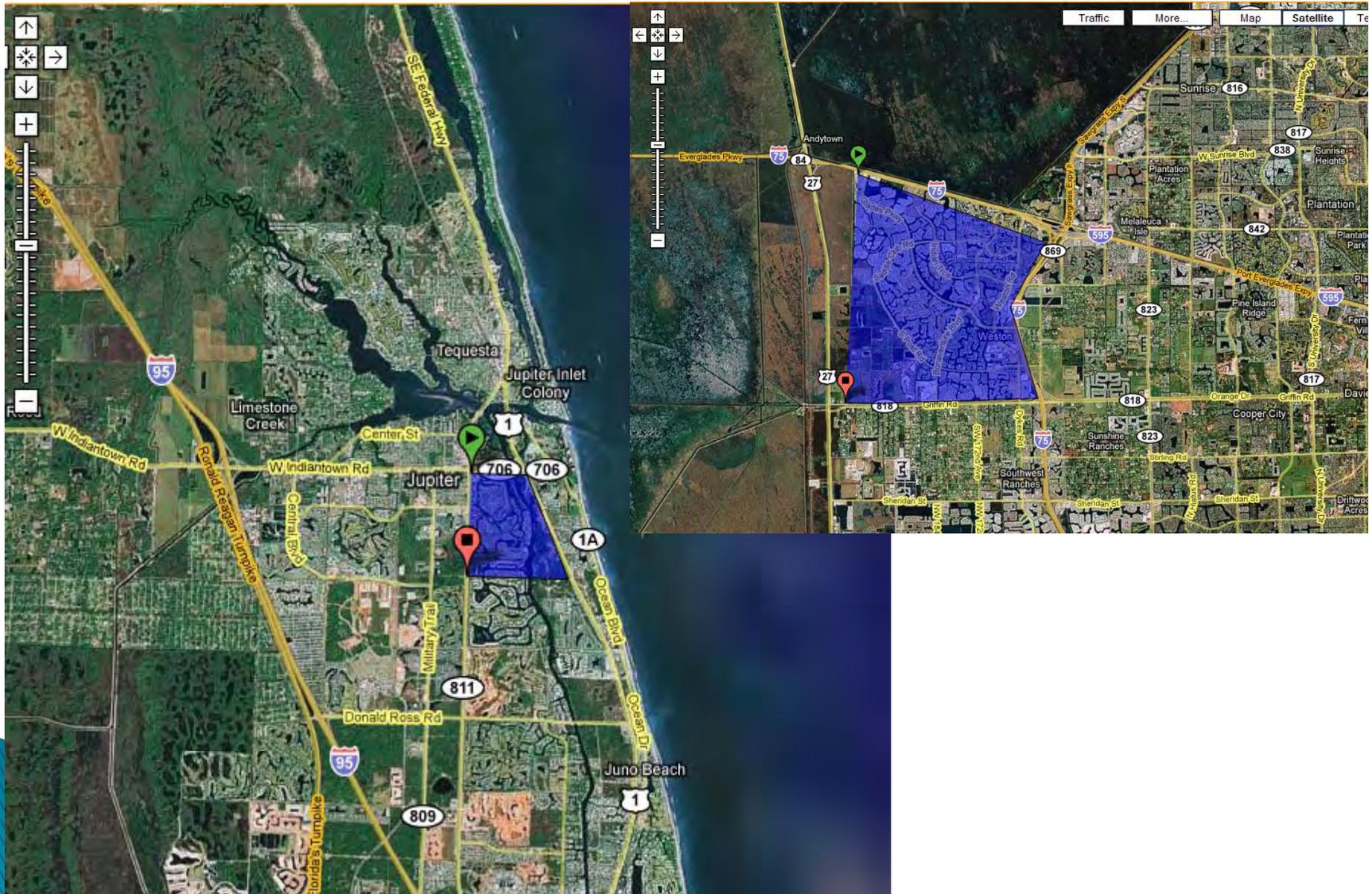
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ADDITIONAL FINDINGS AND ANALYSES
(For Inclusion in NCHRP 8-51 Progress Report 4th Quarter 2007)

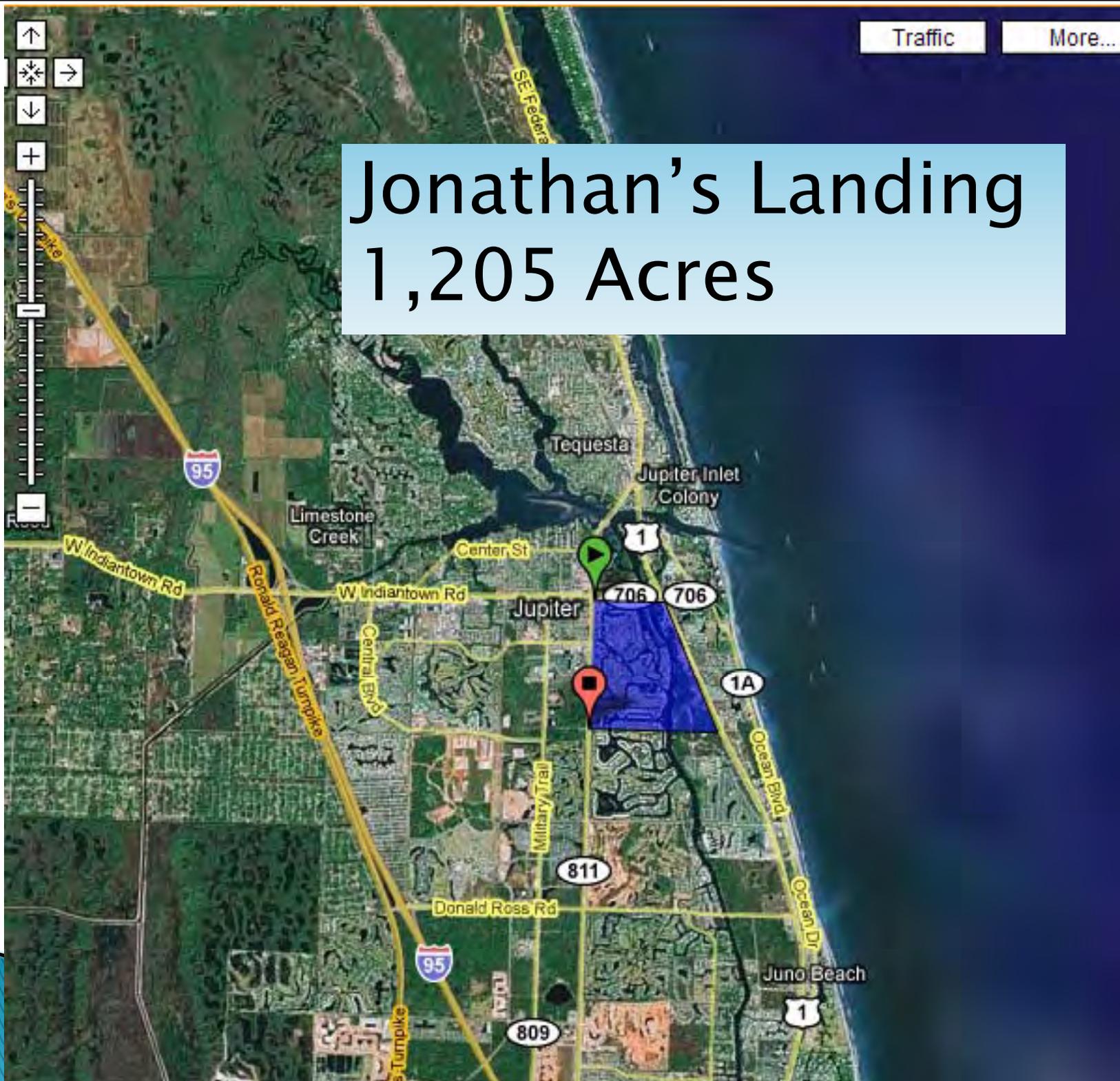
ADDITIONAL ANALYSES

Some additional analysis was completed subsequent to the 3rd quarter 2007 progress report. These analyses were to complete the validation of the estimation procedure and to examine a small amount of data to see if transit mode of access has a significant effect on the tendency to make internal trips.

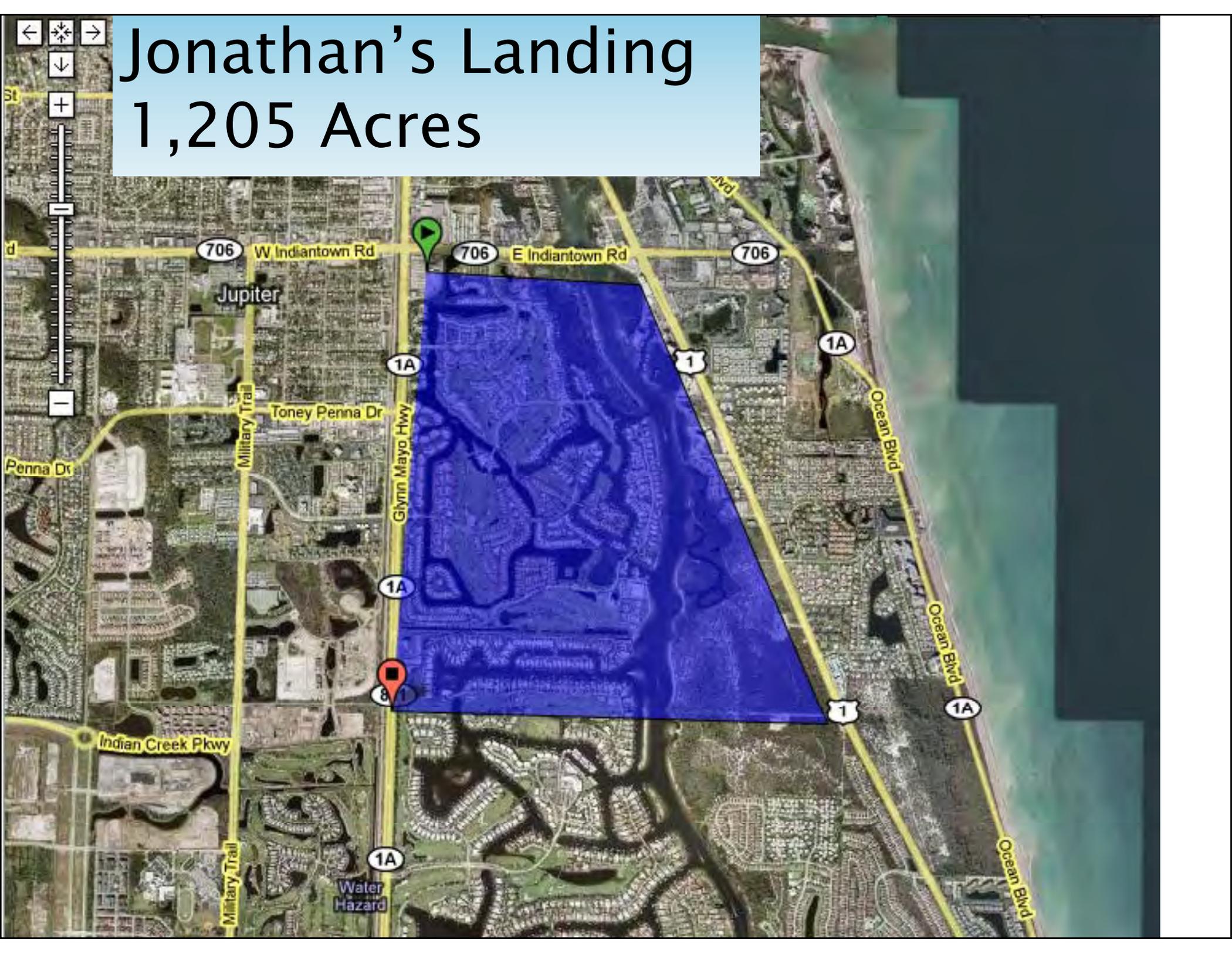
Some New Towns Studied by Reid Ewing



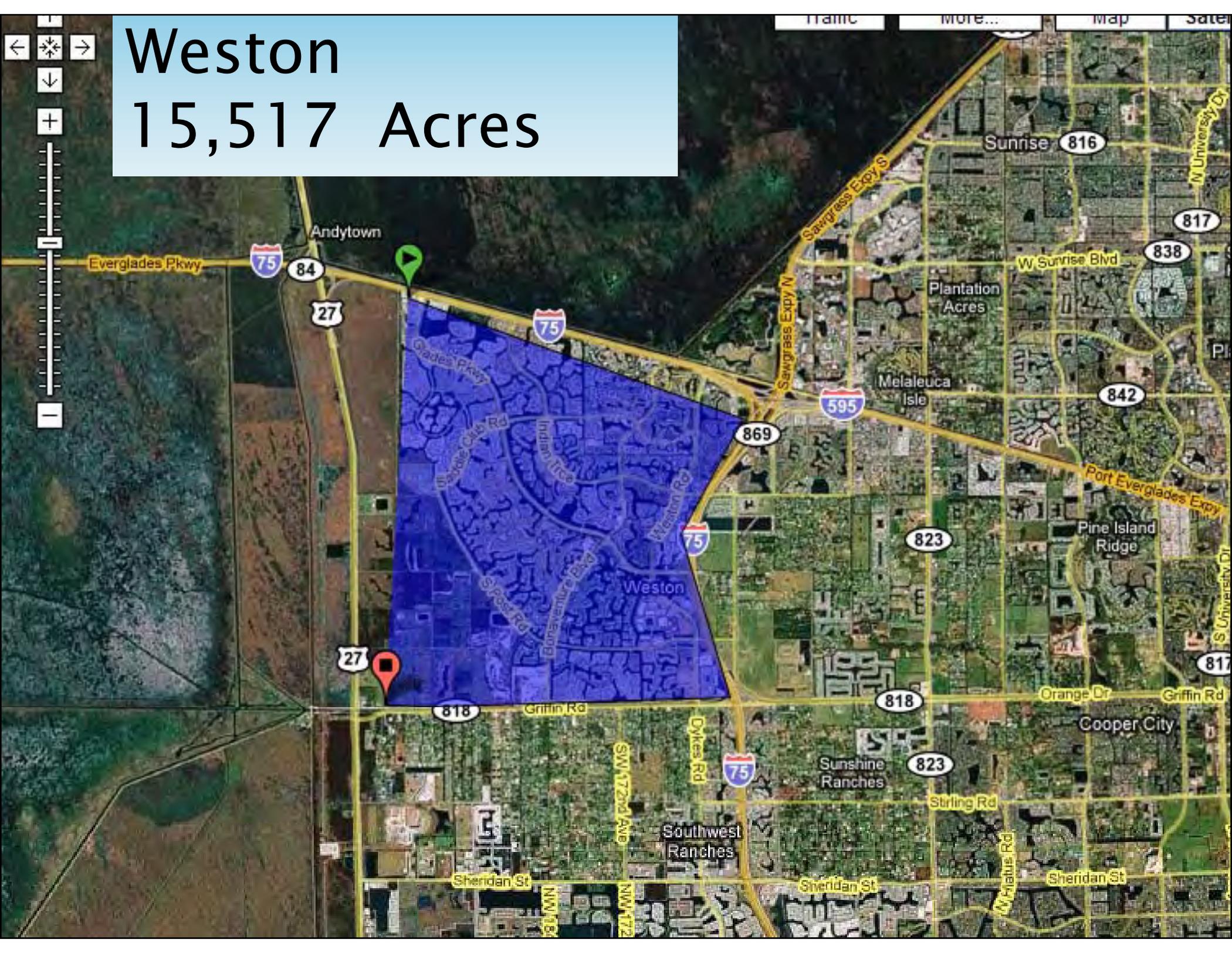
Jonathan's Landing 1,205 Acres



Jonathan's Landing 1,205 Acres



Weston
15,517 Acres



Community	County or City	State	Acres	Population	Employment
Villages, The	Sumter, Lake, Marion	FL	26,000	68,000	
Babcock Ranch	Charlotte	FL	17,806		
Weston	Broward	FL	15,517	65,739	9,206
Reston		VA	11,136	60,353	
Wellington	Palm Beach	FL	10,727	34,267	5,220
Ave Maria	Collier	FL	5,000		
Mission Bay	Palm Beach	FL	3,851	10,598	7,869
Greenbelt		MD	3,840	21,456	
Big Cypress	Collier	FL	3,600		
Silver Lakes	Broward	FL	3,210	11,329	1,593
Miami Lakes	Miami-Dade	FL	2,541	12,918	17,862
PGA National	Palm Beach	FL	2,421	9,178	2,324
Pembroke Meadows	Broward	FL	1,687	5,638	1,032
Village of Palm Beach Lakes	Palm Beach	FL	1,475	8,215	1,818
Winston Park	Broward	FL	1,464	8,017	440
California Club	Miami-Dade	FL	1,234	13,649	1,869
Jonathan's Landing	Palm Beach	FL	1,205	4,211	3,127
Kendale Lakes	Miami-Dade	FL	985	12,207	2,588
Century Village	Broward	FL	934	12,781	534
Hamocks, The	Miami-Dade	FL	863	13,801	1,338
Kings Point	Palm Beach	FL	845	12,523	771
Century Village North	Palm Beach	FL	716	10,246	331
Township, the	Broward	FL	715	4,267	556
Crossings, The					
Sabel Chase					
Boca del Mar					
Mockingbird Station					
Atlantic Station					
Galleria	Broward	FL	135		
Village Commons	Palm Beach	FL	72		

New Towns Are Not All That New

Many Things to Consider

- ▶ Is this really classic “Internal Capture”?
 - Or maybe just less trip generation for well laid out communities
 - ▶ Are **external impacts** really more important than “Internal Capture”?
 - ▶ What should the role of **Monitoring and Modeling** be?
- 