

June 27, 2012

Don Craig, Planning Director City of Key West 3140 Flagler Avenue Key West, FL, 33040

Re: City of Key West Carrying Capacity Study

Dear Mr. Craig,

Calvin, Giordano & Associates, Inc. completed the City of Key West Carrying Capacity Study in December, 2011. The Study evaluated traffic conditions for over 15 corridors and 25 intersections throughout the City. The Four distinct methodologies listed below were utilized to determine how well the studied corridors and intersections were performing:

- 1. FDOT Generalized Level of Service (LOS) Tables
- 2. Highway Capacity Manual (HCM) V/C Ratios
- 3. HCM Average Speed
- 4. VISSIM Micro-Simulation

Each of the methodologies compared traffic operations to industry-standard capacity thresholds and/or Level of Service thresholds identified in the City of Key West Comprehensive Plan. The results of the analysis demonstrated that several roadways and intersections were operating below acceptable standards. The failing roadways and intersections for each of the four methodologies are shown on Table 1.

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1800 Eller Drive, Suite 600 Fort Lauderdale, FL 33316 Phone: 954.921.7781 Fax: 954.921.8807

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Table 1 Failing Roadways and Intersections

| METHODOLOGY  | OVER CAPACITY CORRIDORS                         |
|--|---|
| FDOT Generalized LOS Tables                            | Duval Street                                    |
|  | Eaton Street                                    |
|  | Palm Avenue                                     |
|  | N. Roosevelt Boulevard                          |
|  | Truman Avenue                                   |
| Highway Capacity Manual (HCM)<br>Volume/Capacity Ratio | Duval Street                                    |
|  | N. Roosevelt Boulevard                          |
|  | Truman Avenue                                   |
|  | Whitehead Street                                |
| HCM Average Speed                                      | Duval Street                                    |
|  | Whitehead Street                                |
|  | Truman Avenue                                   |
|  | N. Roosevelt Boulevard                          |
|  | Palm Avenue/1st Street/Bertha Street            |
| METHODOLOGY  | OVER CAPACITY INTERSECTIONS                     |
| VISSIM Micro-Simulation                                | Whitehead Street/Southard Street                |
|  | Whitehead Street/Truman Avenue                  |
|  | Duval Street/Truman Avenue                      |
|  | Simonton Street/Truman Avenue                   |
|  | Palm Avenue (1st Street)/N. Roosevelt Boulevard |
|  | N. Roosevelt Boulevard/Overseas Highway         |

As indicated on Table 1, it was determined that numerous roadway corridors and intersections were operating below acceptable standards, as defined in the study. It is therefore recommended that the introduction of new traffic generators be limited until such time that capacity improvements can be implemented or traffic conditions materially change from those measured at the time of the study.

Sincerely,

CALVIN, GIORDANO & ASSOCIATES, INC.

Jeffery A. Maxwell, P.E., PTOE Associate, Traffic Engineering