

08-02-12

HURRICANE EVACUATION CLEARANCE TIME MEMORANDUM OF UNDERSTANDING

BY AND BETWEEN

**THE FLORIDA DEPARTMENT OF ECONOMIC OPPORTUNITY AND THE COUNTY OF
MONROE, CITY OF KEY WEST, ISLAMORADA, VILLAGE OF ISLANDS, CITY OF LAYTON,
CITY OF KEY COLONY BEACH, CITY OF MARATHON, AND FLORIDA DIVISION OF
EMERGENCY MANAGEMENT**

This Memorandum of Understanding ("MOU") is entered into by and between the State of Florida's Department of Economic Opportunity (the "DEO"), the Florida Division of Emergency Management (the "Division"), and Monroe County, the City of Key West, Islamorada, Village of Islands, the City of Layton, the City of Key Colony Beach, and the City of Marathon (the "Local Governments") (all collectively known as the "Parties") for the purpose of complying with Rules 28-18, 28-19, and 28-20, Florida Administrative Code.

RECITALS:

WHEREAS, the Local Governments of the Florida Keys are within two areas that the Florida Legislature and the Administration Commission have designated as Areas of Critical State Concern (the Florida Keys ACSC and the City of Key West ACSC), pursuant to Sections 380.05 and 380.0552, Florida Statutes, and Florida Administrative Code Chapter 28-36, hereinafter referred to as the "Keys ACSCs"; and

WHEREAS, the Local Governments have adopted state-mandated Comprehensive Plans and Land Development Regulations, which have been approved by the State, as required by law; and

WHEREAS, the State's Legislative Intent in designating the Local Governments as Areas of Critical State Concern includes:

(a) Establish a land use management system that protects the natural environment of the Florida Keys;

(b) Establish a land use management system that conserves and promotes the community character of the Florida Keys;

(c) Establish a land use management system that promotes orderly and balanced growth in accordance with the capacity of available and planned public facilities and services;

(d) Provide affordable housing in close proximity to places of employment in the Florida Keys;

(e) Establish a land use management system that promotes and supports a diverse and sound economic base;

(f) Protect the constitutional rights of property owners to own, use, and dispose of their real property;

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(g) Promote coordination and efficiency among governmental agencies that have permitting jurisdiction over land use activities in the Florida Keys;

(h) Promote an appropriate land acquisition and protection strategy for environmentally sensitive lands within the Florida Keys;

(i) Protect and improve the nearshore water quality of the Florida Keys through the construction and operation of wastewater management facilities that meet the requirements of Sections 381.0065(4)(1) and 403.086(10), Florida Statutes, as applicable; and

(j) Ensure that the population of the Florida Keys can be safely evacuated (Section 380.0552(2) Florida Statutes); and

WHEREAS, the Florida Keys remain one of the most vulnerable areas in the United States to hurricanes; and

WHEREAS, the Florida Legislature and the Administration Commission have mandated that the Local Governments (except the City of Key West) include within the goals, objectives, and policies of their respective Comprehensive Plans measures to protect public safety and welfare in the event of a hurricane by maintaining an evacuation clearance time for permanent residents of no more than 24 hours (Section 380.0552(9)(a)2. Florida Statutes, Rule 28-18.400(5)(a)10., F.A.C., Rule 28-19.310(5)(a)5., F.A.C., and Rule 28-20.140(5)(a)14., F.A.C.); and

WHEREAS, Florida Administrative Code Rule 28-36.003(2)(a)7. requires that the City of Key West prepare and adopt an evacuation plan which is consistent with the regional and County plans; and

WHEREAS, the Florida Legislature further mandated that the hurricane evacuation clearance time for the Florida Keys ACSC shall be determined by a state-approved hurricane evacuation study, conducted in accordance with a professionally accepted methodology; and

WHEREAS, the Division of Emergency Management evacuation study, titled "Statewide Regional Evacuation Studies Program" dated November 2010, which includes Regional Behavioral Surveys Volumes 2-11, and was funded by the state Legislature and the Federal Emergency Management Agency ("FEMA"), provided the State's principal source of professionally acceptable data and analysis, augmented by other sources of data and analysis as referenced herein, for determining input variables and assumptions depicting evacuation clearance times for the population of the Florida Keys; and

WHEREAS, the Administration Commission has directed DEO, by July 1, 2012, to apply the derived clearance time to assess and determine the remaining allocations for the Florida Keys ACSC or identify alternative evacuation strategies that support the 24 hour evacuation clearance time; and

WHEREAS, the Administration Commission has directed DEO, the Division, and the Local Governments to enter into this MOU to stipulate to the input variables and assumptions, including regional considerations, for utilizing the Florida Keys Hurricane Evacuation Model or other models

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acceptable to DEO in order to accurately depict evacuation clearance times for the population of the Florida Keys ACSC; and

WHEREAS, DEO has determined that the Florida Division of Emergency Management's Transportation Interface for Modeling Evacuations ("TIME") Model is the model acceptable to DEO to accurately depict evacuation clearance times for the population of the Keys ACSCs; and

WHEREAS, the Local Governments of the Florida Keys, except the City of Key Colony Beach, have regulated the rate and distribution of growth by implementing permit allocation systems to address hurricane evacuation clearance times; and

WHEREAS, DEO and the Local Governments recognize that significant vacant lands remain in the Florida Keys: Monroe County with 8,758 vacant parcels (77% of total vacant lands), Marathon with 1,281 vacant parcels (11%), Islamorada with 1,109 vacant parcels (10%), Key Colony Beach with 92 vacant parcels (0.81%), Key West with 84 vacant parcels (0.74%), and Layton with 13 vacant parcels (0.11%); and

WHEREAS, DEO and the Local Governments recognize the need to balance limiting the maximum number of building permits for new construction of residential units to be issued annually in the Florida Keys with fairness and consideration of private property rights; and

WHEREAS, to address hurricane evacuation modeling for the Florida Keys ACSCs, DEO established a Hurricane Evacuation Clearance Time Work Group ("Work Group") consisting of elected officials from each Local Government and representatives from DEO and DEM; in addition DEO invited representatives of special interests in the Florida Keys to participate, including the Florida Keys Federation of Chambers of Commerce, the Florida Restaurant and Lodging Association, the Lodging Association of the Florida Keys and Key West, the Monroe County Sheriff's Office, Naval Air Station-Key West, the environmental community, and a citizen's advocacy group; and further DEO requested technical advisors from DEO, the Division, and the Local Governments as well as the Northeast Florida Regional Planning Council, the South Florida Regional Planning Council, Monroe County Emergency Management, the National Weather Service, the National Hurricane Center, and the Florida Department of Transportation to participate in meeting discussion; and

WHEREAS, four advertised public workshops were conducted in the Florida Keys where the Work Group reviewed studies and data from DEO and other agencies related to the occupancy, participation, human behavior, response curves, capacity of the evacuation route, and the number of automobiles that will likely be evacuated, and other factors; and

WHEREAS, the Work Group evaluated information, provided input, and ultimately recommended Scenario M5; and

WHEREAS, from among the scenarios provided by DEO at the June 8, 2012, Work Group meeting, Scenario M5 included the 2010 Census site-built units (43,760 units); the maximum number of residential building permits for new construction for all Local Governments per year for 10 years (annually, County 197, Marathon 30, Islamorada 28, Key West 90, Key Colony Beach 6 and Layton 3); 1,248 mobile home units projected to convert to site-built units; the exclusion of 870 dwelling units on

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the Naval Air Station; as well as two (2) functional evacuation lanes from MM 108-126. Further, the Work Group recommended Scenario M5 with the provision that the City of Key West would transfer annually (by July 13th) any remaining or unused (90 allocations) allocations to the other Local Governments based upon the Local Governments' ratio of vacant land; and

WHEREAS, following the June 8, 2012, Work Group meeting, technical corrections were made to the Census site built units revising that number to 43,718 and revising the Key West building permit allocation to 91, which corrections do not affect the hurricane evacuation clearance time for the population of the Florida Keys; and

WHEREAS, the Local Governments acknowledge that the safe and timely evacuation of the population of the Florida Keys in the event of a hurricane requires a consistent and cooperative approach and to that end, having participated as members of the Work Group, acknowledge that the input variables and assumptions identified in this MOU are those which DEO finds accurately depict evacuation clearance times for the population of the Florida Keys for a Category 3-5 hurricane event, as required by Administrative Rule; and

WHEREAS, Marathon, Key West, Layton, Monroe County, and Islamorada requested new participation rate studies be conducted, due principally to the low sample rates primarily for mobile homes relied upon by DEO; and,

WHEREAS, the Work Group accepted the participation rates recommended by DEO, including those for mobile homes, and DEO agreed to seek funding to provide education to mobile home occupants regarding the need to evacuate during Phase I due to the vulnerability of mobile homes; and

WHEREAS, the Local Governments recognize that the data, input variables, and assumptions DEO has incorporated into its hurricane evacuation model and this MOU are subject to change when the 2020 Census data becomes available.

NOW THEREFORE, the parties set forth the following understandings:

PART ONE: RECITALS

The above recitals are incorporated into this MOU and made a part hereof.

PART TWO: DATA, INPUT VARIABLES AND ASSUMPTIONS

The Human Behavioral Studies from the 2010 Statewide Regional Evacuation Study, the 2010 Census as supplemented by the 2006-2010 American Community Survey, Smith Travel Research, and data from the Department of Business and Professional Regulation, Division of Hotels and Restaurants, and Statewide Regional Evacuation Study Program for the South Florida Region are the best available and most relevant data and analysis. The following input variables and assumptions provide the basis, when used in the TIME model, to accurately calculate evacuation clearance times for the population of the Florida Keys, and DEO will recommend same to the Administration Commission to determine the remaining development allocations for the Florida Keys:

A. Number and Occupancy of Units by type of Unit:

1. **Tourist Units:** 13,665 tourist units with 11,287 occupied units for the month of July (the month with highest average number of permanent and seasonal residents and tourists). The data source for the number and type of units and vehicular use is the Statewide Regional Evacuation Study Program for the South Florida Region and the Department of Business and Professional Regulation, Division of Hotels and Restaurants, Licensee File Database, District 1 (March 29, 2010). The data source for occupancy of tourist units is the Smith Travel Research 2012: Historic Trend Report for 2011 for the month of July. A listing of the units is within the Statewide Regional Evacuation Study Table of Traffic Evacuation Zone Occupancy Data: Hotel, Motel and other Vacation Rental Units is attached and incorporated herein as **Exhibit 1**.
2. **Mobile Home Units:** 8,134 Mobile Home units with 4,576 occupied units. The data source for the number and type of units, the vehicular use and occupancy of the units is the 2010 Census supplemented by the 2006-2010 American Community Survey for Monroe County and the Statewide Regional Evacuation Study Program for the South Florida Region. A listing of the units is within the Statewide Regional Evacuation Study Table of Traffic Evacuation Zone Occupancy Data for Site-Built and Mobile Homes, is attached and incorporated herein as **Exhibit 2**.
3. **Site-Built Units:** 43,718 Site-built units with 27,320 occupied units. The data source for the number, type, occupancy, and vehicular use is the 2010 Census supplemented by the 2006-2010 American Community Survey and the Statewide Regional Evacuation Study Program for the South Florida Region. See **Exhibit 2**.

B. Response Curve: The assumed Response Curve for model runs is 12 hours for all unit types as utilized in the 2010 Statewide Regional Evacuation Study Program for the South Florida Region.

C. Participation Rates: The assumed Participation Rates are:

- | | |
|-----------------------|----------------------------|
| 1. Tourist units: | 100% |
| 2. Mobile home units: | 100% |
| 3. Site-built units: | 90% for a Category 5 event |

The participation rates are based upon the 2010 Statewide Regional Evacuation Study, Regional Behavioral Analysis Volumes 2-11, prepared for the South Florida Region, which DEO has determined reflect the best available data at this time.

D. Vehicle Usage by Units by type of Unit: A listing of the vehicle count and usage by Traffic Evacuation Zone quantifies the number of vehicles owned (**Exhibit 3**) and the percent of vehicles owned that will be evacuated (**Exhibit 4**). Exhibits 3 and 4 are based upon the 2010 Statewide Regional Evacuation Study and are attached and incorporated herein.

E. Vehicle Usage by the Special Population: **Exhibit 5** represents the number of vehicles that will be contributed by Naval Air Station – Key West and the Florida Keys Community College and is

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based upon correspondence from Naval Air Station – Key West and the assumption that each of the 100 dorm beds from the Florida Keys Community College will contribute one evacuating vehicle per bed.

F. Evacuation Stream. The evacuation stream from Monroe County is the only assumed traffic demand considered.

G. Roadway Capacity. The Roadway Capacity, dated July 18, 2010, established by the Florida Department of Transportation is attached and incorporated herein as **Exhibit 6**.

H. Evacuation Procedures. The following evacuation procedures have been adopted or substantially adopted by the Local Governments (except the City of Key West) into their comprehensive plans, and by the City of Key West in Resolution No. 06-244:

1. Approximately 48 hours in advance of tropical storm winds, a mandatory evacuation of non-residents, visitors, recreational vehicles (RV's), travel trailers, live-aboards (transient and non-transient), and military personnel from the Keys shall be initiated. State parks and campgrounds should be closed at this time or sooner and entry into the Florida Keys by non-residents should be strictly limited.
2. Approximately 36 hours in advance of tropical storm winds, a mandatory evacuation of mobile home residents, special needs residents, and hospital and nursing home patients from the Keys shall be initiated.
3. Approximately 30 hours in advance of tropical storm winds, a mandatory phased evacuation of permanent residents by evacuation zone (described below) shall be initiated. Existing evacuation zones are as follows:
 - a) Zone 1 –Key West, Stock Island and Key Haven to Boca Chica Bridge (MM 1-6)
 - b) Zone 2 –Boca Chica Bridge to West end of 7-mile Bridge (MM 6-40)
 - c) Zone 3 –West end of 7-Mile Bridge to West end of Long Key Bridge (MM 40-63)
 - d) Zone 4 –West end of Long Boat Key Bridge to CR 905 and CR 905A intersection (MM 63-106.5)
 - e) Zone 5 –905A to, and including Ocean Reef (MM 106.5–126.5)

The actual sequence of the evacuation by zones will vary depending on the individual storm. The concepts embodied in this staged evacuation procedures should be embodied in the appropriate operational Emergency Management Plans. The evacuation plan shall be monitored and updated on an annual basis to reflect increases, decreases and or shifts in population; particularly the resident and non-resident populations.

PART THREE: MISCELLANEOUS

A. Liability. As this MOU represents only the Parties' acknowledgement of the data, input variables, and assumptions DEO has utilized in its hurricane evacuation model, nothing in this MOU shall be construed to impose any liability on the State of Florida, DEO, the Division, or the Local Governments. Nothing in this MOU may be interpreted as a waiver of sovereign immunity by any

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Party. Any provision of this MOU that is inconsistent with the State's sovereign immunity statute shall be considered null and void.

B. **Modification.** Modifications to the Memorandum of Understanding shall be valid only when reduced to writing and duly signed by all parties.

C. **Severability.** If any term or provision of this Memorandum of Understanding shall be invalid or unenforceable to any extent, the Parties agree to comply with remaining terms and provisions, unless compliance with the remaining terms and provisions would prevent the accomplishment of the original intent of the agreement between the Parties.

D. **Termination.** Any Party may terminate this Memorandum of Understanding at any time, with or without cause. Termination shall take effect upon receipt of written notification by a Party to all other Parties.

E. **Notification.** Notifications under this MOU shall be made by hand delivery, U. S. certified mail, return receipt requested, or an express mail service that provides proof of delivery. Notification by a Party to the DEO shall be directed to the Areas of Critical State Concern Administrator, Department of Economic Opportunity, 107 East Madison Street, Tallahassee, FL 32399-4128. Notification to the other parties to this Memorandum of Understanding shall be directed as follows:

1. **Monroe County.** Mayor, Monroe County, 2798 Overseas Hwy. Marathon, FL 33050 with a copy to the Growth Management Division Director, 2798 Overseas Hwy. Marathon, FL 33050.
2. **City of Key West.** Mayor, City of Key West, 3126 Flagler Avenue Key West, FL 33040, with a copy to the Planning Director, 3126 Flagler Avenue Key West, FL 33040.
3. **City of Marathon.** Mayor, City of Marathon, 9805 Overseas Highway Marathon, FL 33050, with a copy to the Planning Director, 9805 Overseas Highway Marathon, FL 33050.
4. **City of Layton.** Mayor, City of Layton, 68260 Overseas Highway, P.O. Box 778 Long Key, FL 33001.
5. **City of Key Colony Beach.** Mayor, City of Key Colony Beach, P.O. Box 510141, Key Colony Beach, FL 33051-0141 with a copy to the City Clerk at P.O. Box 510141, Key Colony Beach, FL 33051-0141.
6. **Islamorada, Village of Islands.** Mayor, Islamorada, Village of Islands, 86800 Overseas Highway Islamorada, FL 33036, with a copy to the Director of Planning and Development Services, 86800 Overseas Highway Islamorada, FL 33036.
7. **Division of Emergency Management.** Director, Florida Division of Emergency Management, 2555 Shumard Oaks Boulevard, Tallahassee, FL 32399-2100, with a copy to the Division's Hurricane Program Manager at the same address.

F. **Effective Date.** This Memorandum of Understanding is effective upon execution by all parties and approval by the Florida Administration Commission and ends upon the termination of the Florida

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Keys Area of Critical State Concern designations, unless terminated earlier according to Part 4(D) above.

IN WITNESS WHEREOF, the parties have executed this Memorandum of Understanding on the dates below written.

CITY OF KEY WEST, FLORIDA

August 24, 2012
Date

[Signature]
Cates, Mayor



ATTEST [Signature]
Cheryl Smith, City Clerk

Approved as to form and legal sufficiency.
[Signature]
Shawn Smith, City Attorney

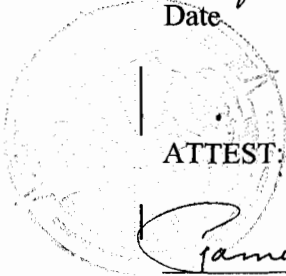
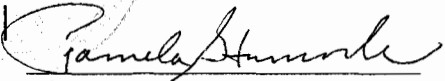
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BOARD OF COUNTY COMMISSIONERS
OF MONROE COUNTY, FLORIDA

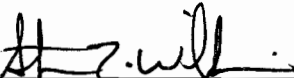
| September 21, 2012
Date


David Rice, Mayor

| ATTEST: **DANNY L. KOLHAGE**, Clerk



Clerk

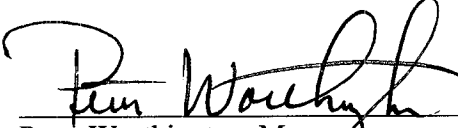
| Approved as to form and legal sufficiency:


Steven T. Williams, County Attorney


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CITY OF MARATHON, FLORIDA

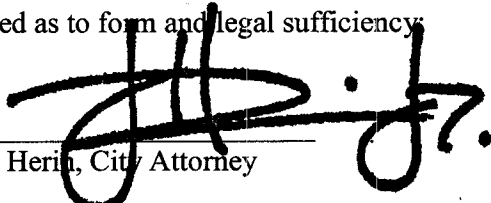
10/4/2012, 2012
Date


Peter Worthington, Mayor

ATTEST:


Diane Clavie, City Clerk

Approved as to form and legal sufficiency:


John R. Herin, City Attorney

08-02-12

CITY OF LAYTON, FLORIDA

Sept. 18, 2012
Date

Norman S. Anderson
Norman S. Anderson, Mayor

ATTEST:

Mimi Young
Mimi Young, City Clerk

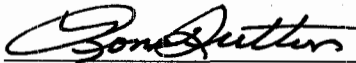
Approved as to form and legal sufficiency:

[Signature]
City Attorney

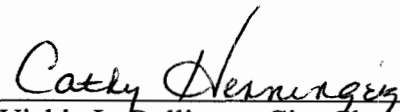
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CITY OF KEY COLONY BEACH, FLORIDA

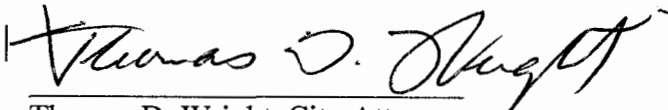
8/27, 2012
Date


Ron Sutton, Mayor

ATTEST:


~~Vickie L. Bollinger, City Clerk~~
Cathy Henninger

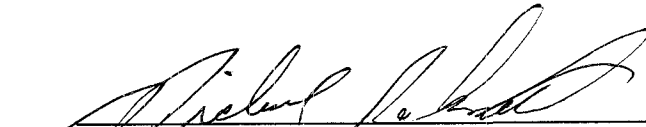
Approved as to form and legal sufficiency:


Thomas D. Wright, City Attorney

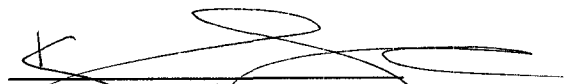
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ISLAMORADA, VILLAGE OF ISLANDS, FLORIDA

September 27th, 2012
Date


Michael Reckwerdt, Mayor

ATTEST:


Deputy, Village Clerk

Approved as to form and legal sufficiency:


Nina Boniske, Village Attorney

08-02-12

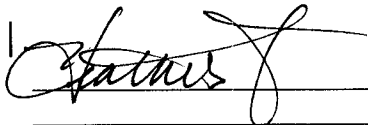
STATE OF FLORIDA
DIVISION OF EMERGENCY MANAGEMENT

September 27, 2012
Date



Bryan W. Koon, Director

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Approved as to form and legal sufficiency:

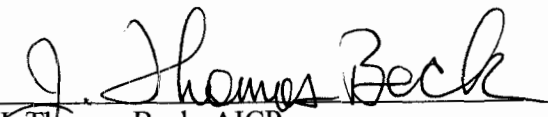


Assistant General Counsel

08-02-12


STATE OF FLORIDA DEPARTMENT
OF ECONOMIC OPPORTUNITY

November 5, 2012


J. Thomas Beck, AICP
Director, Division of Community
Development

Approved as to form and legal
sufficiency, subject only to full and
proper execution by the parties

Office of the General Counsel
Department of Economic Opportunity

By: 
Assistant General Counsel
Approved Date: 11-5-12

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Exhibits to
Hurricane Evacuation Clearance Time Memorandum of Understanding

- Exhibit 1 Statewide Regional Evacuation Study Table of Traffic Evacuation Zone Occupancy Data: Hotel, Motel and other Vacation Rental Units
- Exhibit 2 Statewide Regional Evacuation Study Table of Traffic Evacuation Zone Occupancy Data for Site-Built and Mobile Homes
- Exhibit 3 Listing of the vehicle count and usage by Traffic Evacuation Zone (based on the 2010 Statewide Regional Evacuation Study)
- Exhibit 4 Percent of vehicles owned that will be evacuated (based on the 2010 Statewide Regional Evacuation Study)
- Exhibit 5 Identification of contributing vehicles from Naval Air Station–Key West and Florida Keys Community College.
- Exhibit 6 Roadway Capacity, dated July 18, 2010, established by the Florida Department of Transportation