

The Florida Public Hurricane Loss Model is a catastrophe model commissioned by the State of Florida with the primary purpose of predicting insured losses of residential buildings due to hurricanes.

(Taken from Monroe County Agenda Item L1 2023-1862 discussed on December 13th, 2023)

On November 14 and 16, 2023, FloridaCommerce held two Florida Keys Evacuation Modeling webinars to discuss the 2023 Florida Keys Hurricane Evacuation Modeling process and draft results of the modeling. Hurricane Evacuation Clearance Times are the basis for the FL Keys Area of Critical State Concern's Rate of Growth Ordinance, and updated data may determine whether additional residential units will be authorized by the State of Florida beyond the existing allocation.

At the November webinars, FL Commerce presented multiple scenarios that were modeled, with future allocations ranging from zero (0) additional units to 7,954 additional units. The attached "Clearance Times Summary" table was presented by FL Commerce, and includes columns where evacuation was modeled both with and without of Key West residents; and with mobile home residents evacuated in both Phase 1 and in Phase 2.

Based on Emergency Management acceptable evacuation practices, the only reasonable summary column in the table is the column that includes Key West residents and evacuates mobile home residents in Phase 1 (early phase) of the evacuation. This column represents how evacuations have been modeled in the past - inclusive of Key West residents in the evacuation calculations for the entire Keys but with mobile home residents modeled to evacuate early in Phase 1 with the tourists due to the less substantial construction of mobile homes.

Timeline:

November 20th, 2023: Consolidated meeting with FloridaCommerce and Monroe County, including public input.

December 1, 2023: Mayor and City Manager met with County Administrator to discuss modeling concerns. Mayor Johnston recommended a 'Hurricane Working Group' which was agreed upon by the County Administrator.

December 12, 2023: City of Marathon discussed at their monthly meeting and support Monroe County's recommendations. Marathon has 1026 vacant lots of which several hundred are not buildable. However, Marathon wants to keep their BPAS units for future construction which expire in 2025.

December 13, 2023: Monroe County held a monthly meeting with Hurricane Modeling on the agenda as item L1 2023-1862 as a discussion item. Monroe County Administrator will look at bringing an agenda item to the County Commission in January. During the discussion it was noted that the County is not ready to respond and will research the creation of a working group to ensure all concerns within Monroe County are captured in their response. Mr. Gastesi remarked that their initial conversations with the State eased their initial timeline concerns. He mentioned that the item will not make the 2024 State Legislative Session and will most likely be on the 2025 State Legislative Session.

Monroe County was given two options:

1. Include Key West
2. Not Include Key West

Clearance Times Summary

Deliverable 5: Baseline Modeling			Phases	Florida Keys Including Key West		Florida Keys Excluding Key West	
				Mobile Homes in Phase 2 (hours)	Mobile Homes in Phase 1 (hours)	Mobile Homes in Phase 2 (hours)	Mobile Homes in Phase 1 (hours)
Baseline Modeling	Shows baseline - does not include additional prospective allocations		Phase 2	26.0	24.0	15.5	15.5
			Phase 1	15.5	15.5	15.0	15.0
Deliverable 6: Prospective Modeling for Future Allocations							
S1	3,550 Allocations	Distribute based on county/municipality population size	Phase 2	27.5	25.5	15.5	15.5
			Phase 1	15.5	15.5	15.0	15.0
S2	3,550 Allocations	Distribute based percentage of vacant lands per county/municipality	Phase 2	28.0	26.0	15.5	15.5
			Phase 1	15.5	15.5	15.0	15.0
S3	3,550 Allocations	Distribute based on current allocations: (1,970-Monroe, 300-Marathon, 280-Islamorada, 910-Key West, 30-Layton, 60-Key Colony Beach)	Phase 2	28.0	26.0	15.5	15.5
			Phase 1	15.5	15.5	15.0	15.0
S4	Minimal Allocations (11 allocations/yr)	Distributes Monroe County (5); Marathon (2); Islamorada (2); Key West (2 – affordable only)	Phase 2 (10 Years Growth)	26.5	24.0	15.5	15.5
			Phase 2B (20 Years Growth)	26.5	24.0	15.5	15.5
			Phase 1	15.5	15.5	15.0	15.0
S5	One Unit/Vacant Lot	Distributes 7,954 units	Phase 2	31.0	28.5	17.0	16.5
			Phase 1	15.5	15.5	15.0	15.0

Monroe County is recommending the inclusion of the City of Key West into the Hurricane Model and has chosen the below column as the County's baseline.

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