

Monroe County Traffic Incident Management (TIM) Team Meeting June 24, 2020



FDOT District Six



Introduction



TMC Update



TIM Team Update



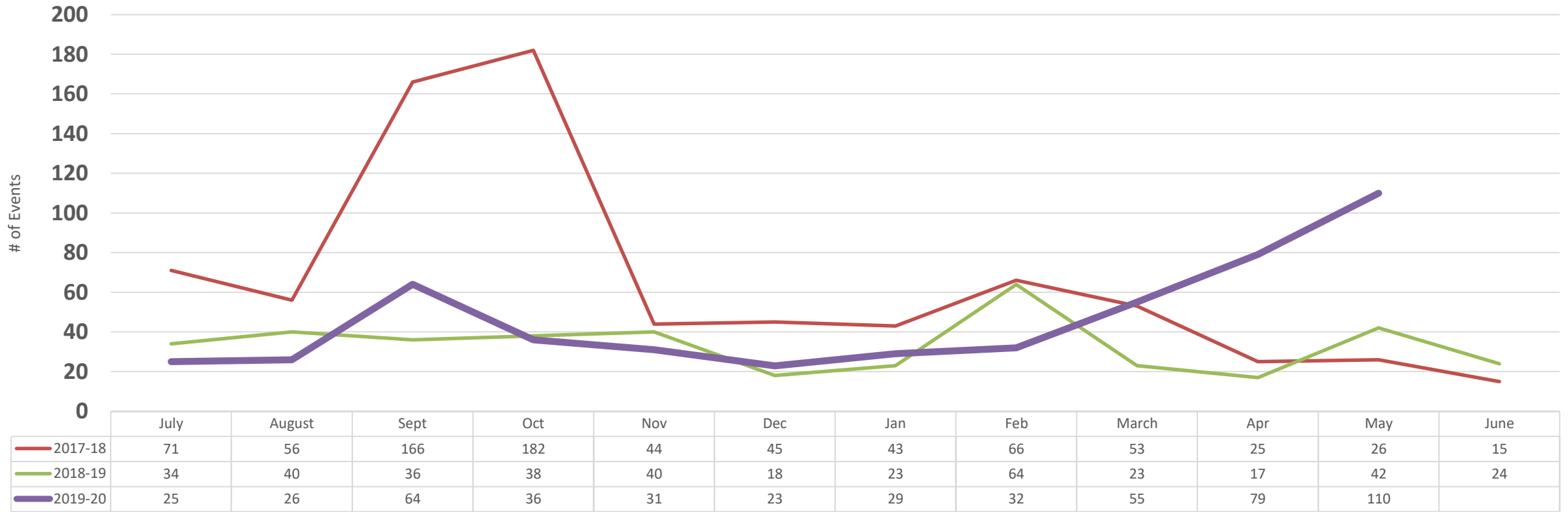
Projects



Open Discussion



MONROE COUNTY EVENTS



Months

— 2017-18 — 2018-19 — 2019-20

ITS Devices in Monroe County

- Dynamic Message Signs
- Cameras
- Card Sound Road Beacons

Resiliency

- Hurricane Response Action Plan
- Pandemic Response Action Plan



Smart Work Zone Device

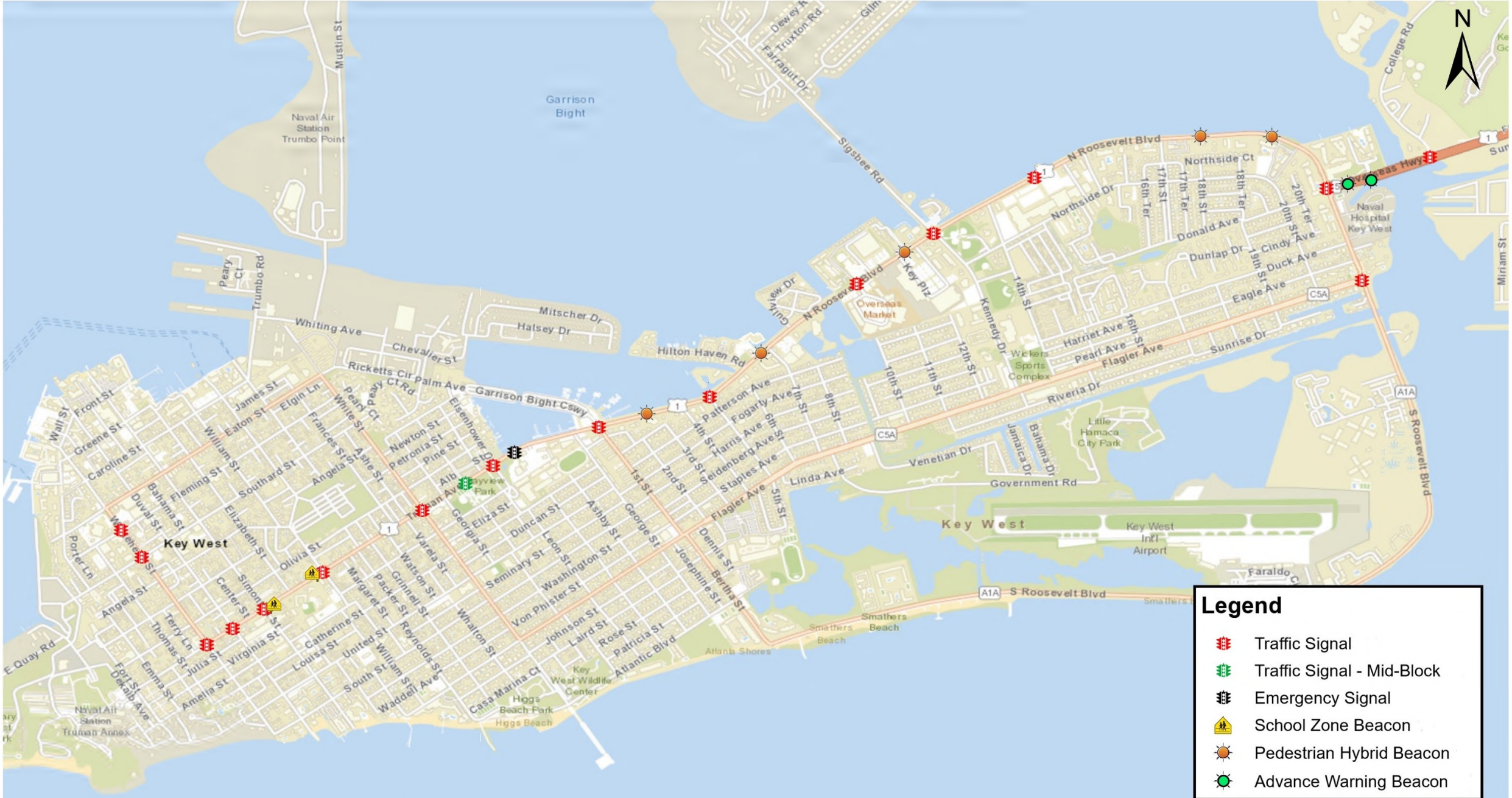
- Monitoring Remote Areas with Limited ITS Coverage
 - Snake Creek Bridge Project
 - Cow Key Bridge Project
 - Coco Plum Drive (Signalized Intersection)
- Portable Trailer with Solar and Electric Power
- Equipped with Camera, Detector, and Wireless Communication





Monroe County Traffic Signal System

- MM 4.4 to MM 106.5
- Operating Since July 1, 2018
- City of Key West Signals - **July 1, 2020**
 - 17 Signalized Intersections
 - 5 Pedestrian Hybrid Beacons (HAWK)
 - 2 School Zone Beacons
 - 2 Advanced Warning Beacons
 - 1 Emergency Signal
- Operate and Maintain
- Coordinating with Key West Police Department





Legend

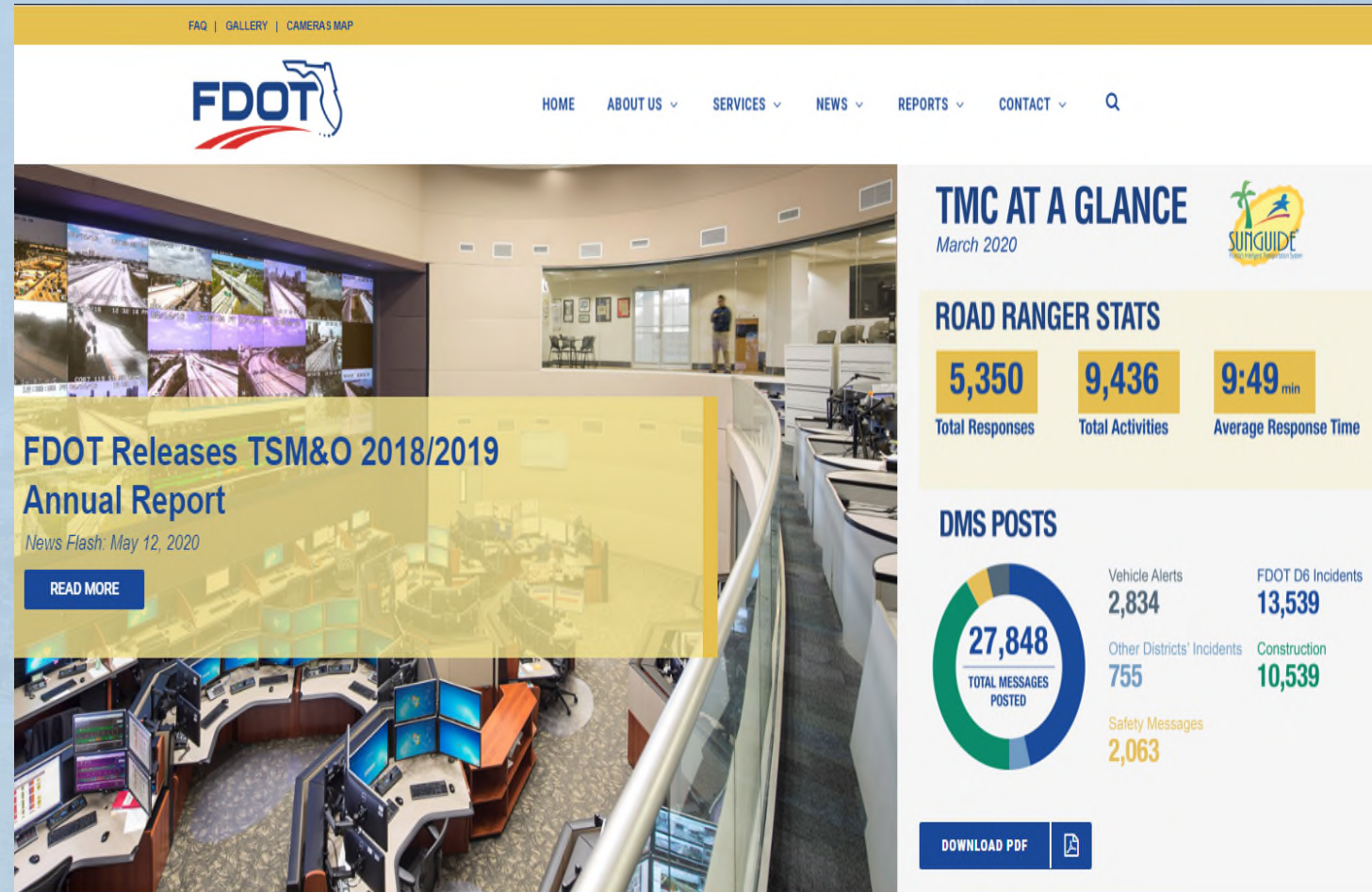
-  Traffic Signal
-  Traffic Signal - Mid-Block
-  Emergency Signal
-  School Zone Beacon
-  Pedestrian Hybrid Beacon
-  Advance Warning Beacon

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, © OpenStreetMap contributors, and the GIS User Community

FDOT District Six - SunGuide.info

Features

- Quarterly TIM Newsletters
- Important News Flashes
- TIM Webpage
 - Responder Training Registration
 - Contact TIM Team
 - Incident Management Dashboard!
 - <https://sunguide.info/incident-management-service/tim-team/>



FAQ | GALLERY | CAMERAS MAP

FDOT

HOME ABOUT US SERVICES NEWS REPORTS CONTACT Q

FDOT Releases TSM&O 2018/2019 Annual Report
News Flash: May 12, 2020
[READ MORE](#)

TMC AT A GLANCE
March 2020

ROAD RANGER STATS

5,350 Total Responses	9,436 Total Activities	9:49_{min} Average Response Time
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DMS POSTS

27,848 TOTAL MESSAGES POSTED	Vehicle Alerts 2,834	FDOT D6 Incidents 13,539
	Other Districts' Incidents 755	Construction 10,539
	Safety Messages 2,063	

[DOWNLOAD PDF](#)

District Six TIM Responder Training

Updates

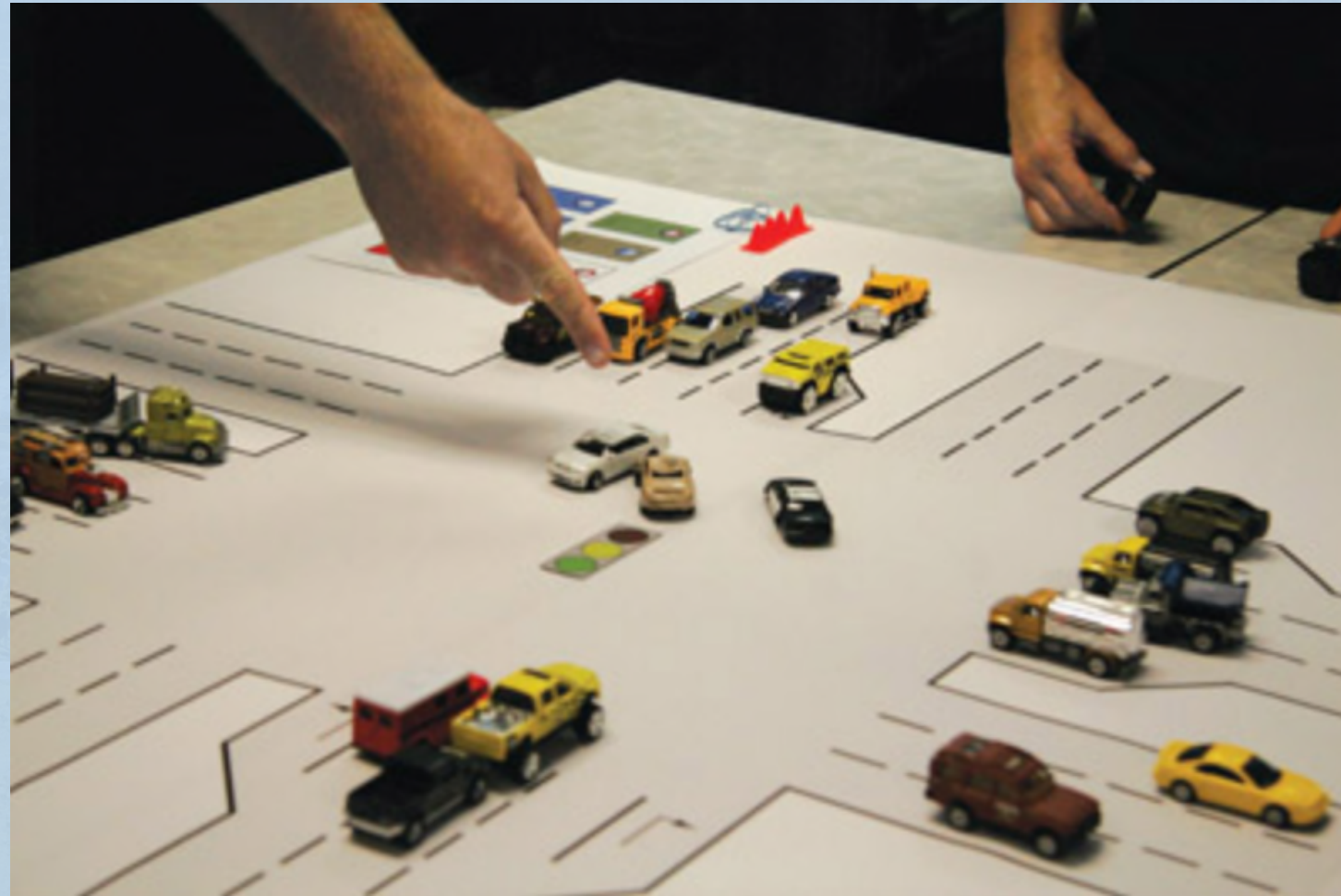
- In-Person Training Postponed
- District Six Webinar Trainings
- Register on SunGuide.info

Previous TIM Training

- January 2020
- March 2020 - cancelled

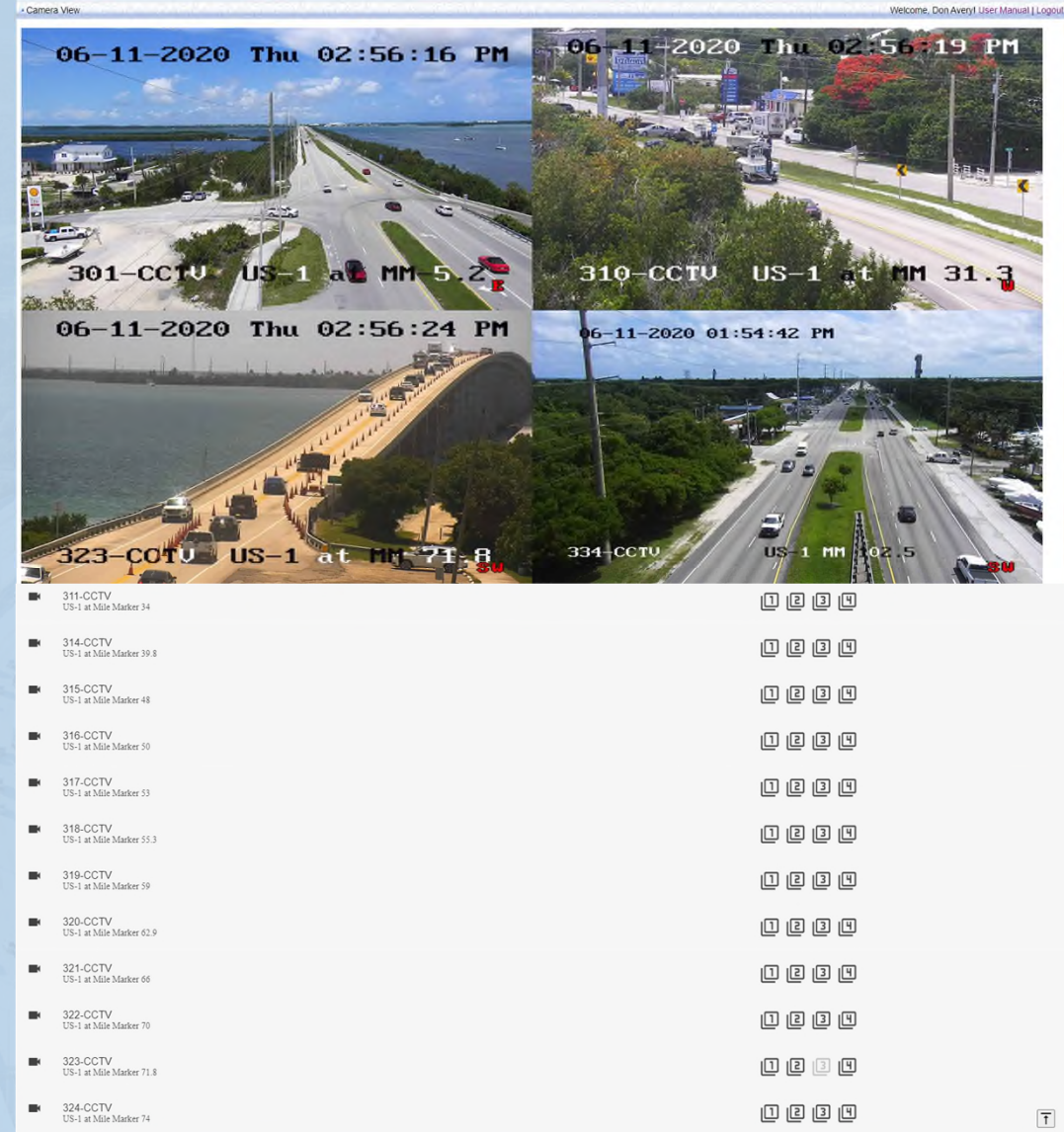
Upcoming TIM Training

- August 2020
- October 2020



Responder's Site

- First Responders and Stakeholders to View Traffic Camera Images
- Provides Up to 4 Camera Images
- Phase 1 Complete
- Phase 2 Enhancements
 - Traffic Events List
 - Improved Camera Interface
- Future Enhancements
 - Improved Graphic User Interface
 - Streaming Video



The screenshot displays the TIM Responder's Site interface. At the top, it shows the date and time: 06-11-2020 Thu 02:56:16 PM. Below this, there are four camera views arranged in a 2x2 grid. Each view shows a different perspective of a highway (US-1) with various vehicles and road conditions. The camera IDs and locations are: 301-CCTV US-1 at MM 5.2, 310-CCTV US-1 at MM 31.3, 323-CCTV US-1 at MM 71.8, and 334-CCTV US-1 MM 02.5. Below the camera views, there is a list of camera locations, each with a corresponding camera ID and location description. To the right of the list, there are navigation icons (1, 2, 3, 4) for each camera view. The interface also includes a 'Welcome, Don Aveni User Manual | Logout' link in the top right corner.

Camera ID	Location	Navigation
311-CCTV	US-1 at Mile Marker 34	1 2 3 4
314-CCTV	US-1 at Mile Marker 39.8	1 2 3 4
315-CCTV	US-1 at Mile Marker 48	1 2 3 4
316-CCTV	US-1 at Mile Marker 50	1 2 3 4
317-CCTV	US-1 at Mile Marker 53	1 2 3 4
318-CCTV	US-1 at Mile Marker 55.3	1 2 3 4
319-CCTV	US-1 at Mile Marker 59	1 2 3 4
320-CCTV	US-1 at Mile Marker 62.9	1 2 3 4
321-CCTV	US-1 at Mile Marker 66	1 2 3 4
322-CCTV	US-1 at Mile Marker 70	1 2 3 4
323-CCTV	US-1 at Mile Marker 71.8	1 2 3 4
324-CCTV	US-1 at Mile Marker 74	1 2 3 4

Cow Key Bridge (MM 4.1)

- Bridge Rehabilitation Project
- Smart Work Zone System
- Temporary Traffic Control Signal
 - College Road North
- 3 Travel Lanes Open at All Times

Snake Creek Bridge (MM 84 – 87)

- Bridge Rehabilitation Project
- Repair to Steel Structures
- Repairs to Components of Bridge
- July 2019 – May 2020
- TMC Coordinated Closures



Irma Repair Projects (MM 59 - 84)

- Embankment Washout/Shoulders Repairs
- December 2019 – April 2021

Roadway and Fencing (MM 8 – 33)

- September 2020

Seven Mile Bridge (MM 40 – 48)

- Bridge Rehabilitation Project
- July 2020

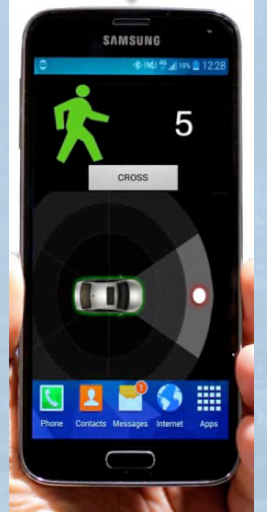
Old Seven Mile Bridge (MM 40 – 47)

- Bridge Repair and Rehabilitation Project
- July 2020



Florida Keys Connecting Overseas to Advance Safe Travel

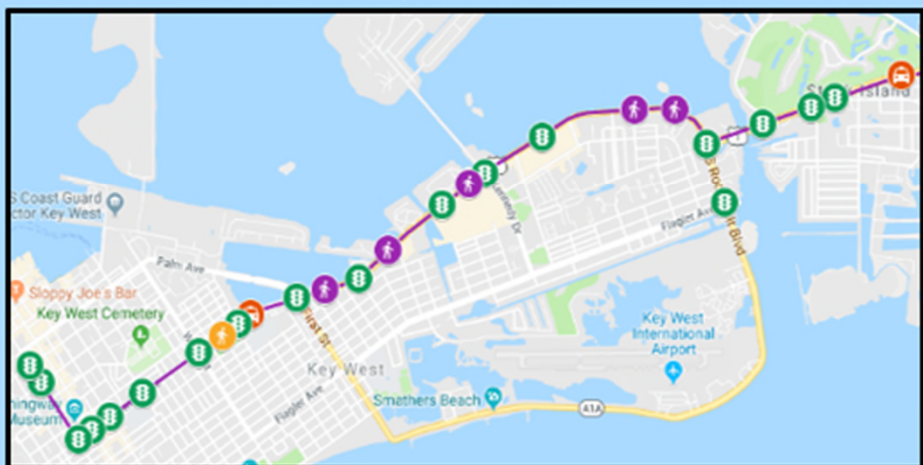
- First Connected Vehicles Project in District Six
- MM 0.0 to MM 112.5 (Key West to Key Largo)
- Connectivity Between Various Transportation Modes (cars, trucks, buses, etc.)
- Connected Vehicle Traffic Signal System
 - Provides data to and from traffic signals and transportation modes
 - High definition data can produce Automated Traffic Signal Performance Measures
- Schedule
 - Procurement Starts August 2020
 - Begin Deployment 2021
 - Project Operations 2023



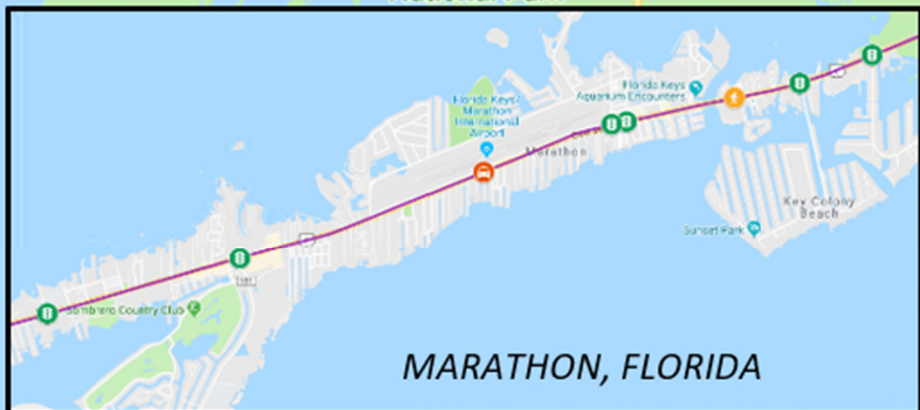
Source: Applied Information



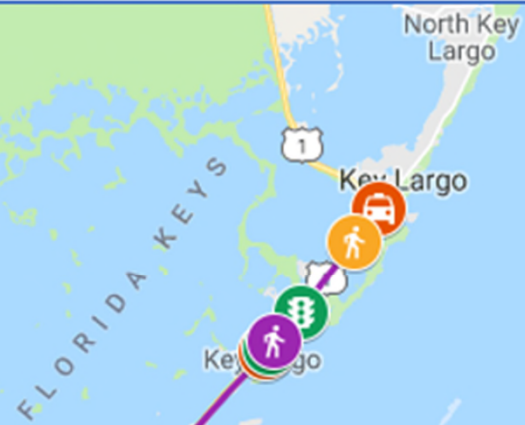
KEY WEST, FLORIDA









National Park



MARATHON, FLORIDA




LEGEND

-  Weigh-in-Motion (1)
-  Pedestrian Hybrid Beacon (6)
-  Pedestrian Mid-Block Crossing (3)
-  Emergency Signal (8)
-  Traffic Signal (31)
-  Drawbridge (1)

Open Discussion

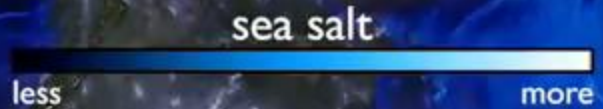


An aerial photograph of a river delta, likely the Mississippi River, showing intricate channel patterns. The image is overlaid with three data layers: smoke (white), sea salt (blue), and dust (tan). The smoke is concentrated in the upper left, sea salt is in the center, and dust is in the lower right. The text 'District Six 2020 Hurricane Season Kick-Off Event' is centered over the image.

District Six 2020 Hurricane Season Kick-Off Event

Crystal Schaefer, M.A.
Florida Department of Transportation
D6- Emergency Management Specialist

2017 Jul 31



Training Objectives

- ❖ Seasonal Overview
- ❖ Personal Responsibilities
- ❖ Emergency Management Overview
- ❖ Organizational Responsibilities
 - ❖ District Emergency Response Teams
 - ❖ Transportation Operations
 - ❖ Debris Management



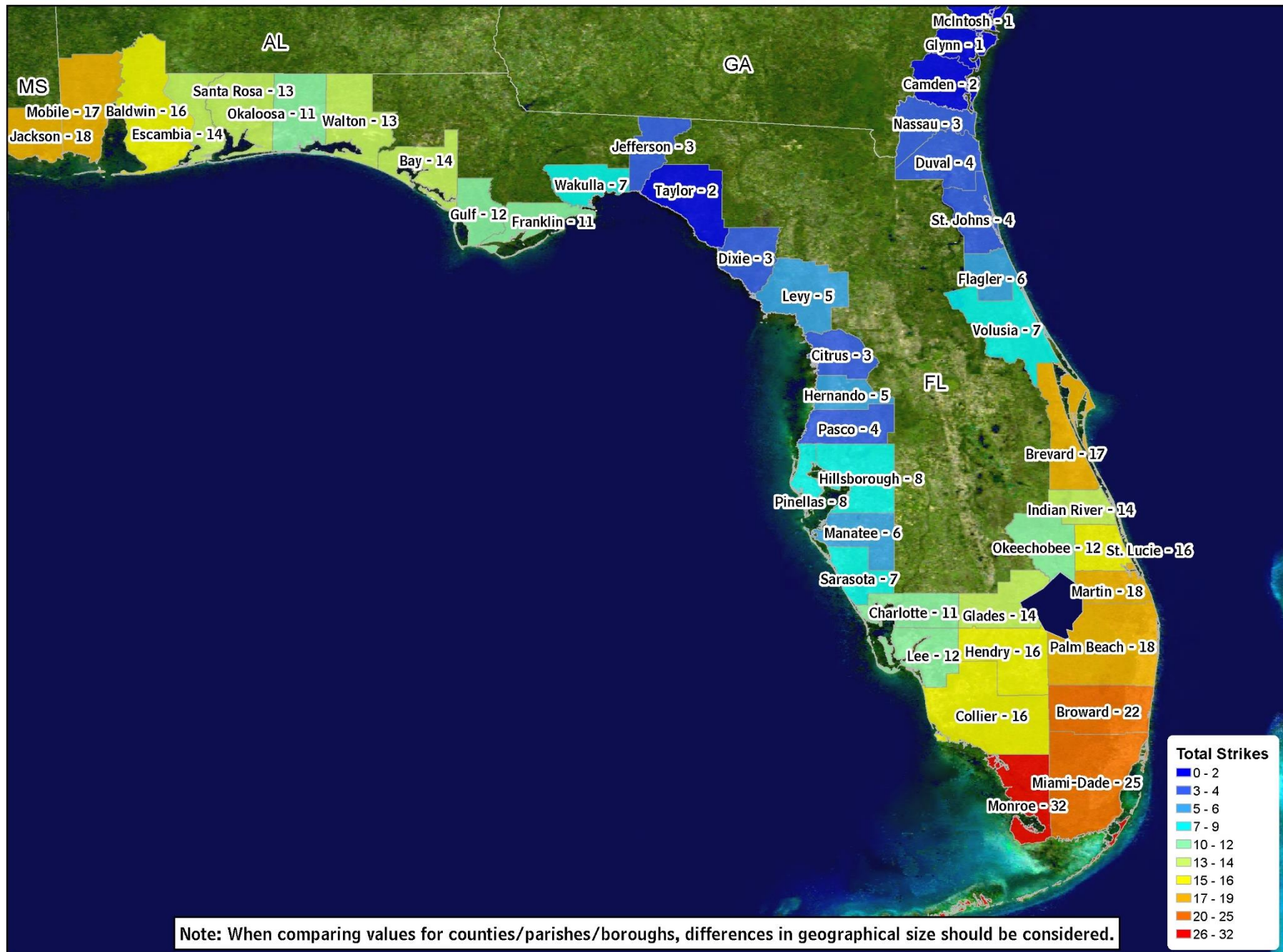
Hurricane History

Data from 1949 in the Pacific, from 1851 in the Atlantic



This map shows the tracks of all known North Atlantic and Eastern North Pacific hurricanes, covering the period from 1851-2007 in the North Atlantic and from 1949-2007 in the Eastern North Pacific.

- Extratropical, Remnant Low, Wave
- Tropical Cyclone



Total number of hurricane strikes by counties/parishes/boroughs, 1900-2010

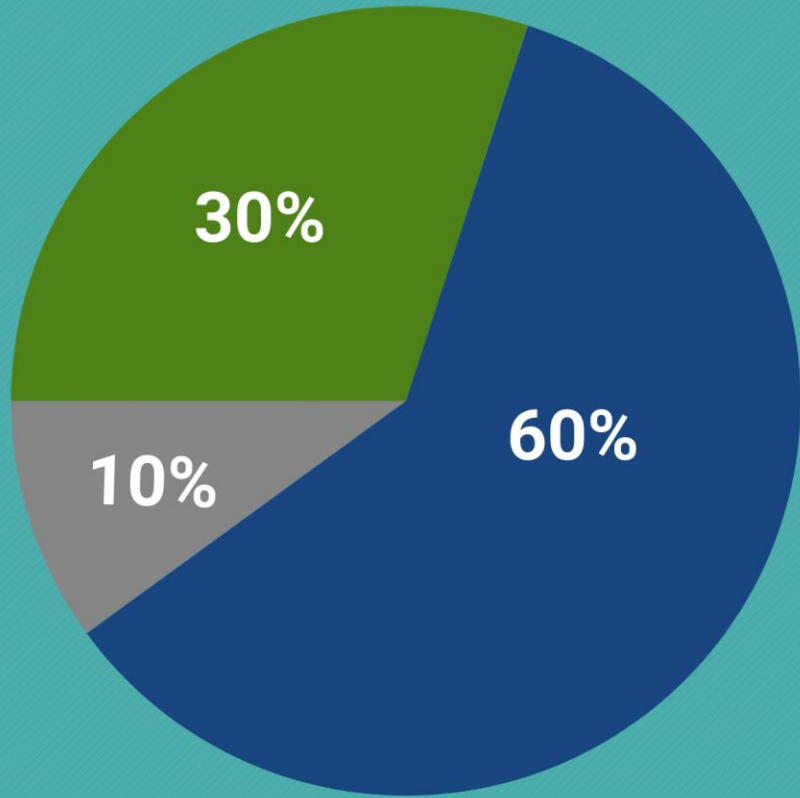
SAFFIR-SIMPSON HURRICANE WIND SCALE

The Saffir-Simpson Hurricane Wind Scale is a 1 to 5 categorization based on the hurricane's intensity at the indicated time. The scale provides examples of the type of damage and impacts in the United States associated with winds of the indicated intensity. The following table shows the scale broken down by winds:

CAT.	WINDS	DAMAGE
1	74-95 MPH	Very dangerous winds will produce some damage
2	96-110 MPH	Extremely dangerous winds will cause extensive damage
3	111-129 MPH	Devastating damage will occur
4	130-156 MPH	Catastrophic damage will occur
5	> 156 MPH	Catastrophic damage will occur



2020 Atlantic Hurricane Season Outlook



■ Above-normal ■ Near-normal ■ Below-normal season

Season probability

Named storms

13-19

Hurricanes

6-10

Major hurricanes

3-6

Tropical Cyclone Names 2020

Atlantic Basin

Arthur	Gonzalo	Marco	Teddy
Bertha	Hanna	Nana	Vicky
Cristobal	Isaias	Omar	Wilfred
Dolly	Josephine	Paulette	
Edouard	Kyle	Rene	
Fay	Laura	Sally	

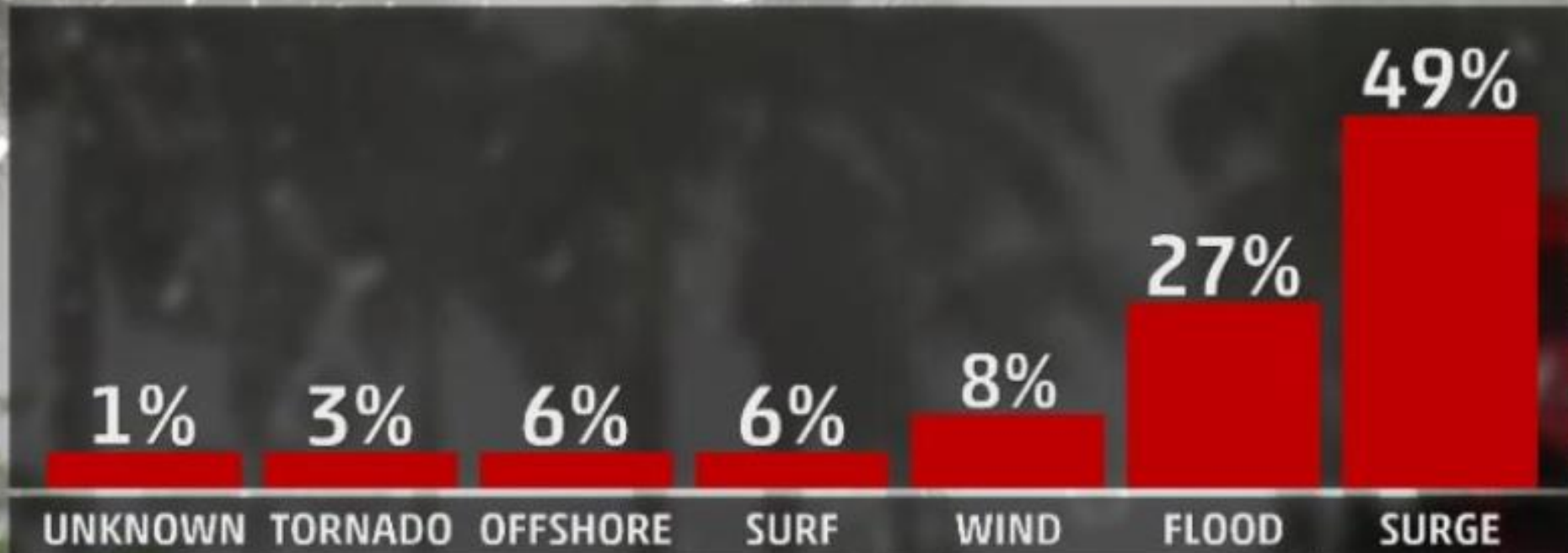
2020 Hurricane Season Forecast Atlantic Basin

	30 Year Average	Last Year	Colorado State University
■ Total Named	12	18	16
■ Hurricanes	6	6	8
■ Category 3 or Higher	3	3	4

U.S. DEATHS-TROPICAL CYCLONES

1963-2012

SOURCE: NATIONAL HURRICANE CENTER



The Weather Channel

Percentage of U.S. deaths from tropical cyclones by cause from 1963 to 2012, based on a 2014 study.
(Data: Ed Rappaport/National Hurricane Center)

Storm Surge Warning

There is a **danger of life-threatening inundation** from rising water moving inland from the shoreline generally **within 36 hours**.

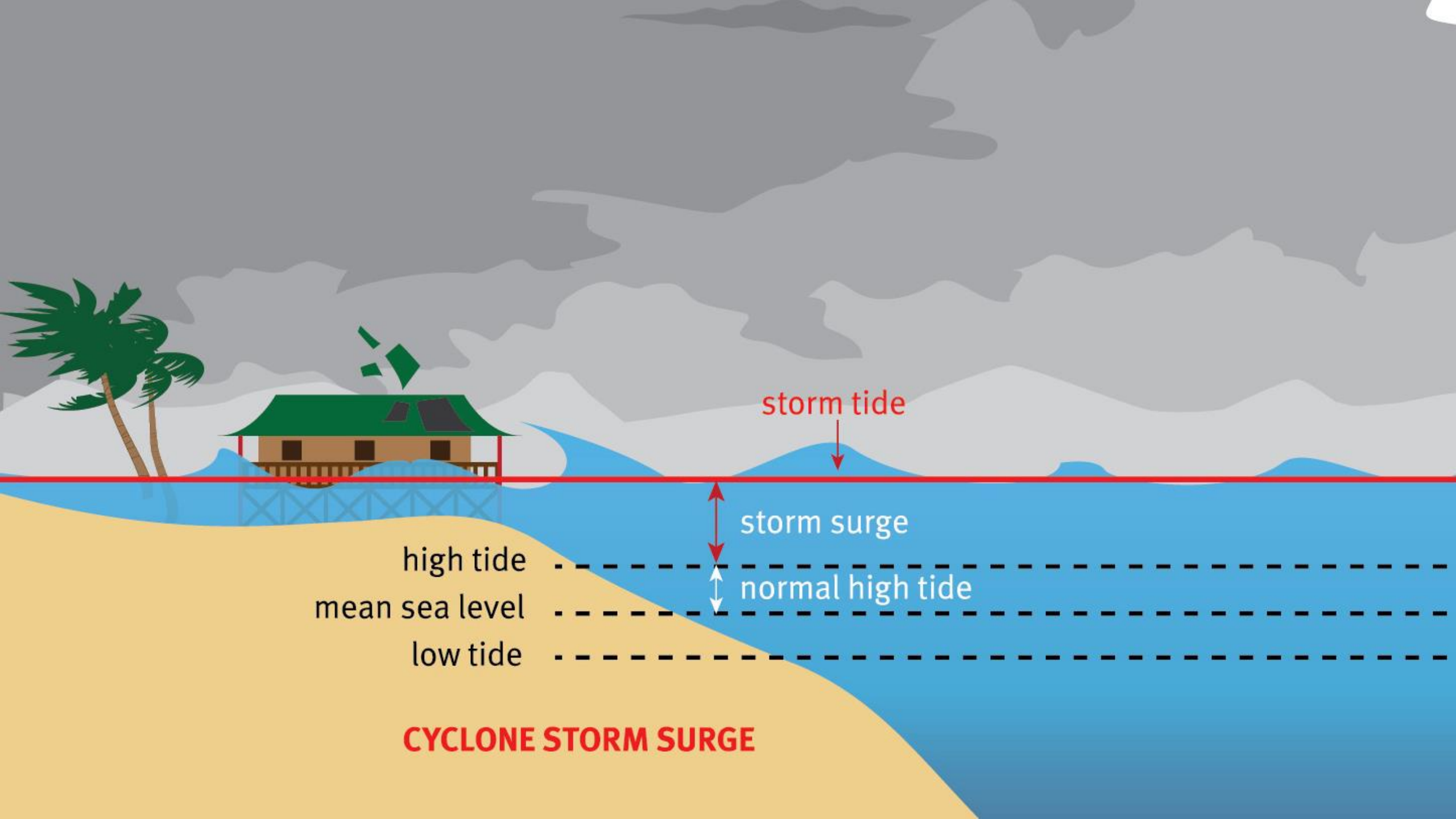
Promptly follow evacuation and other instructions from local officials.

Storm Surge Watch

There is a **possibility of life-threatening inundation** from rising water moving inland from the shoreline generally **within 48 hours**.

Promptly follow evacuation and other instructions from local officials.





storm tide

storm surge

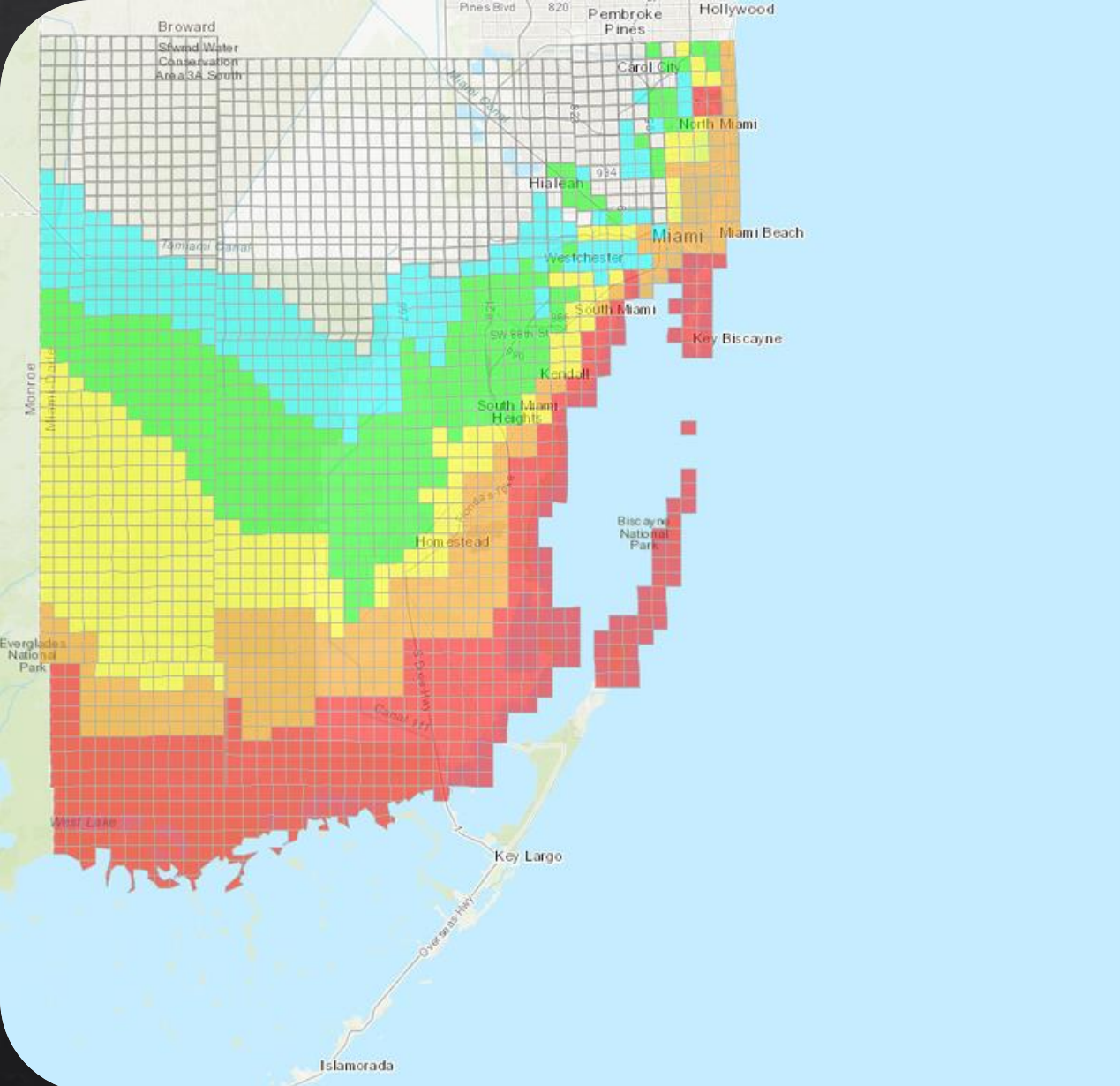
normal high tide

high tide

mean sea level

low tide

CYCLONE STORM SURGE



Storm Surge Planning Zones

-  **Zone A**
At greatest risk for storm surge for Category 1 and higher storms
-  **Zone B**
At greatest risk for storm surge for Category 2 and higher storms
-  **Zone C**
At greatest risk for storm surge for Category 3 and higher storms
-  **Zone D**
At greatest risk for storm surge for Category 4 and higher storms
-  **Zone E**
At greatest risk for storm surge for Category 5 storms
-  **Outside of the Storm Surge Planning Zone**

Know your Zone, Know your Home!

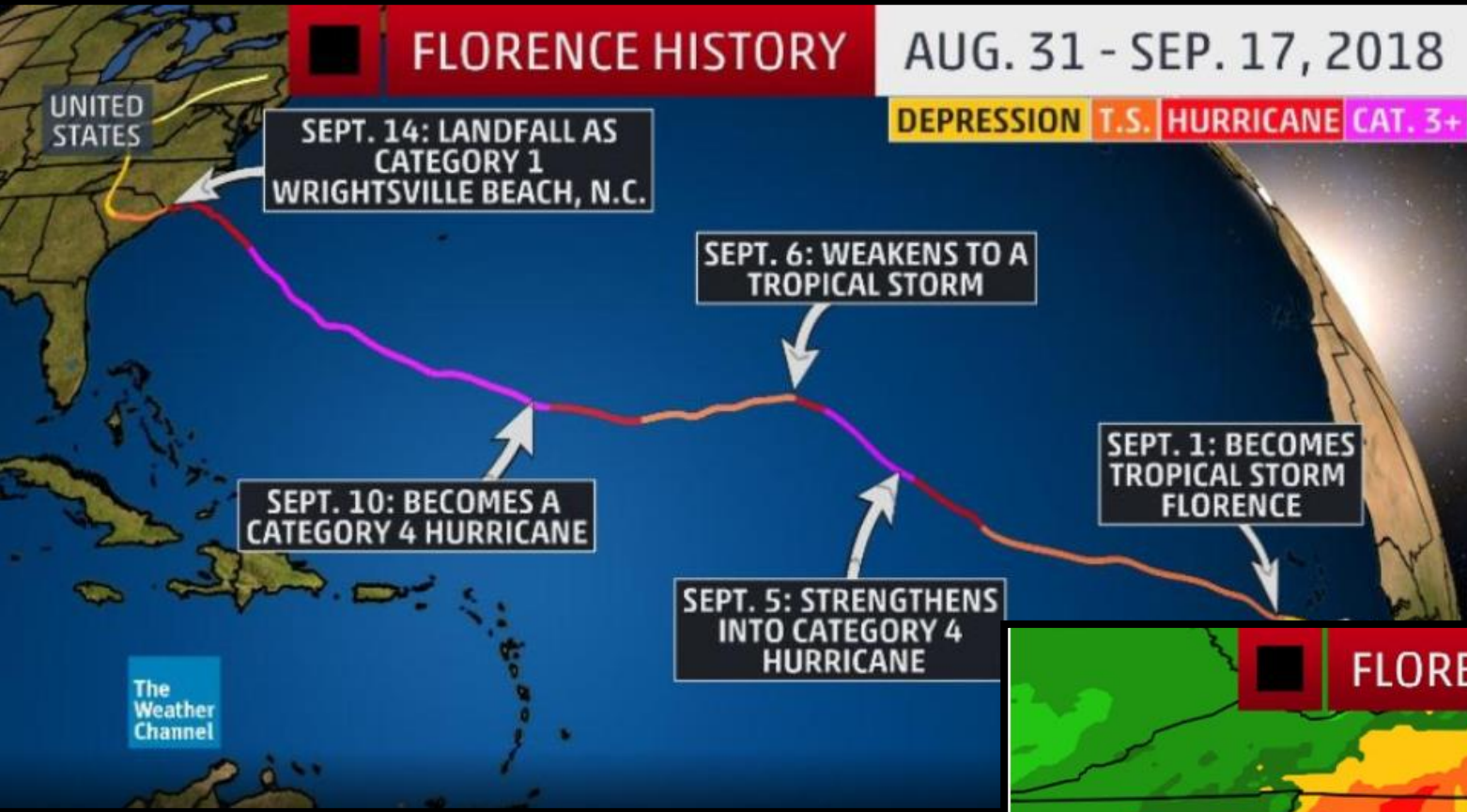


<https://www.monroecounty-fl.gov/897/Evacuation-Information>

FLORENCE HISTORY

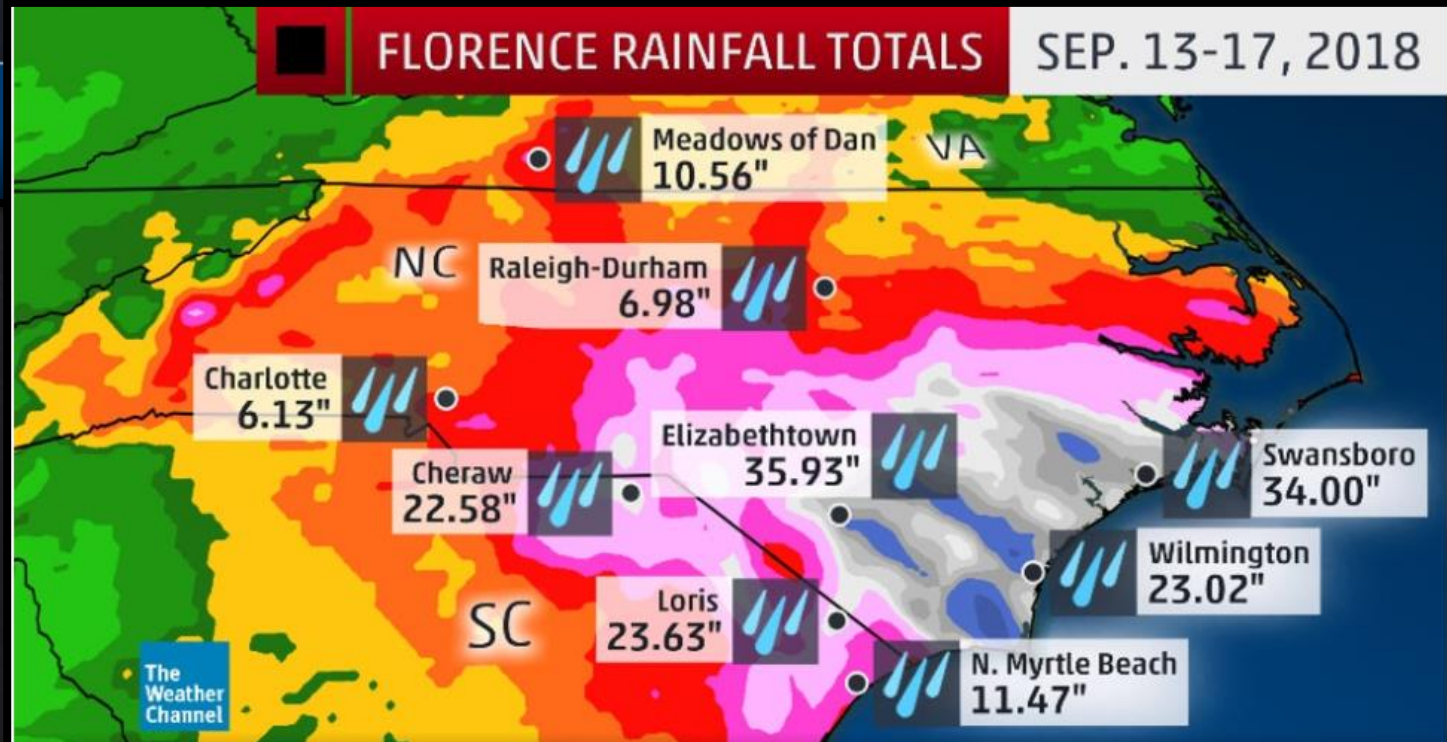
AUG. 31 - SEP. 17, 2018

DEPRESSION T.S. HURRICANE CAT. 3+

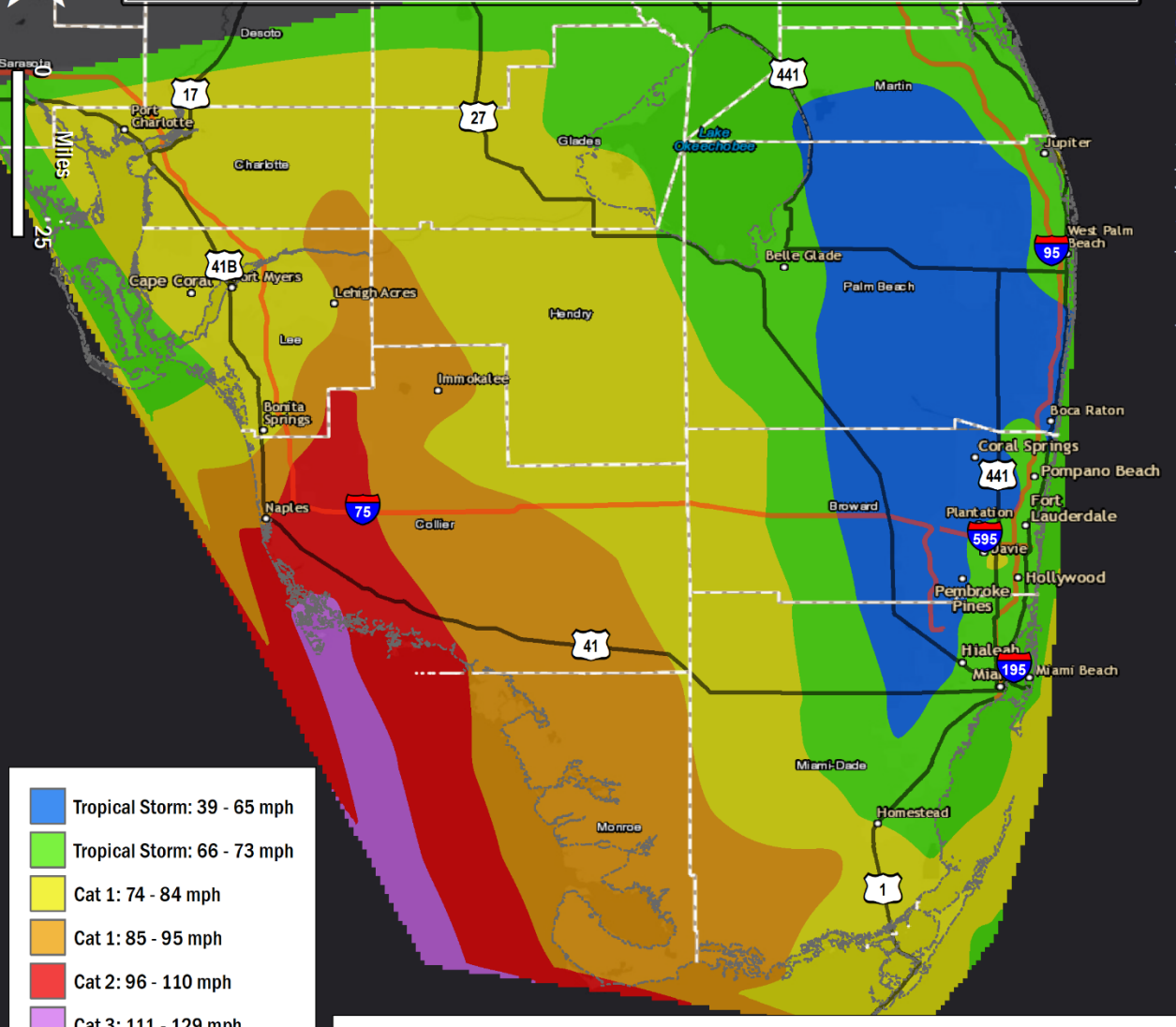


FLORENCE RAINFALL TOTALS

SEP. 13-17, 2018



Hurricane Irma Maximum Sustained Wind Analysis September 9-10, 2017



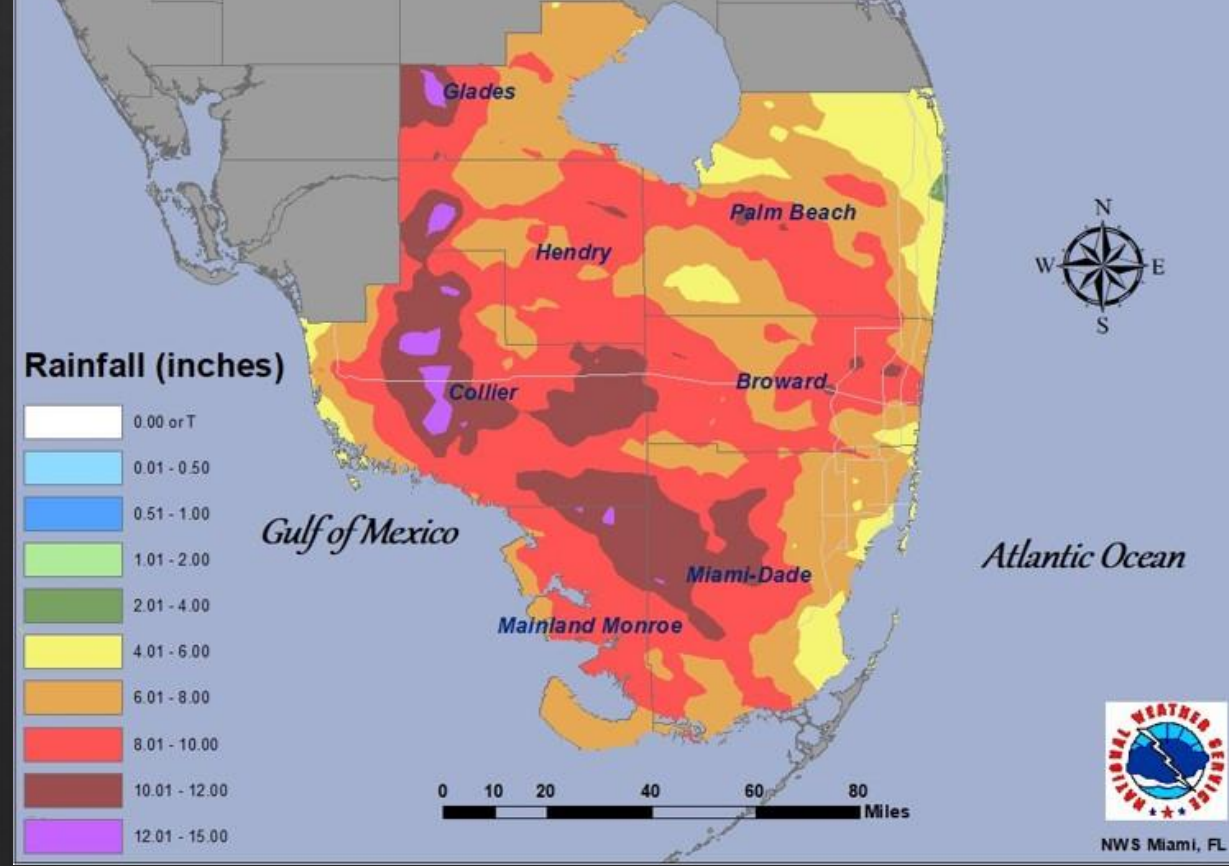
- Tropical Storm: 39 - 65 mph
- Tropical Storm: 66 - 73 mph
- Cat 1: 74 - 84 mph
- Cat 1: 85 - 95 mph
- Cat 2: 96 - 110 mph
- Cat 3: 111 - 129 mph

Analysis created from multi-network surface wind observations, Doppler radar, and NWS storm surveys. Interpolation may not be representative of all sites at all locations.

Service Layer Credits: Esri, HERE, DeLorme, MapmyIndia, © OpenStreetMap contributors, and the GIS user community

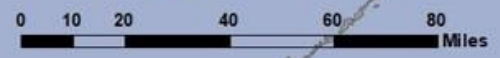
48-Hour Rainfall through 8 AM September 11, 2017

Source: ASOS, AWOS, AWSS, Co-Op observers, CoCoRaHS observers, SFWMD and AHPS data
Values between the observations have been interpolated and enhanced using AHPS data.
This information is not official and should be considered as an estimation.



Rainfall (inches)

- 0.00 or T
- 0.01 - 0.50
- 0.51 - 1.00
- 1.01 - 2.00
- 2.01 - 4.00
- 4.01 - 6.00
- 6.01 - 8.00
- 8.01 - 10.00
- 10.01 - 12.00
- 12.01 - 15.00

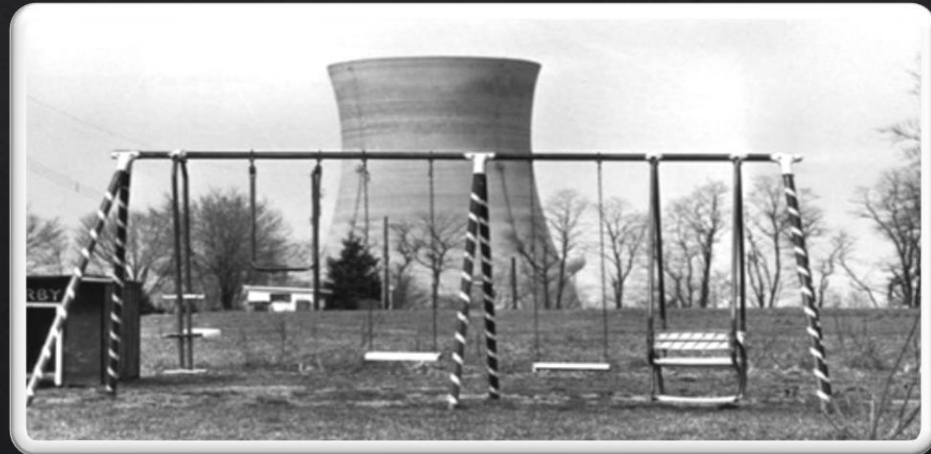


NWS Miami, FL

History of Preparedness

- ◆ Preparedness within the field of emergency management can best be defined as a state of readiness to respond to a disaster, crisis or any other type of emergency situation.

Preparedness needs the involvement of everyone in the community. By working together, we can help keep the nation safe from harm and help keep it resilient when struck by any kind of disaster.



In the 1950's, fall-out shelters were promoted as preparedness for a potential nuclear attack from the Soviet Union



HURRICANE PREPAREDNESS 2020



What is your plan? Shelter in Place? Evacuating?
Click the link below for additional information.

https://www.fema.gov/media-library-data/1440449346150-1ff18127345615d8b7e1effb4752b668/Family_Comm_Plan_508_20150820.pdf

4 Steps to Hurricane Preparedness



1. Develop a Plan



2. Build a Kit



3. Stay Informed



4. Monitor Traffic

1. Develop a Plan

Considered the Following:

- ❖ Develop a communication plan
- ❖ Emergency Meeting Location
- ❖ Evacuation vehicles/funds
- ❖ Prepare your home with hurricane shutters and generators
- ❖ Have important documents accessible such as financial and personnel information
- ❖ Become familiar with your evacuation zone, the evacuation route, and shelter locations.



Guidelines for Sheltering in Place

Bring your family and pets inside.

Lock doors, close windows, air vents and fireplace dampers.

Turn off fans, air conditioning and forced air heating systems.

Take your emergency supply kit unless you have reason to believe it has been contaminated.

Go into an interior room with few windows, if possible.





STRENGTHEN YOUR HOME



Elevate the outlets, utilities, or even entire structure



Evaluate flood insurance coverage



Install hurricane shutters



Prune the yard & create defensible space around the house



Seal the roof & install tie downs



Reinforce the garage door



Weatherize openings, like windows & doors



Replace single pane windows with impact resistant ones



Elevate the HVAC system or install in the attic

www.ready.gov/shelter

<https://flash.org/hurricanestrong/>

<https://www.emergency.cdc.gov/shelterinplace.asp>



Evacuation Centers/Shelters

2. Build a Hurricane Supply Kit



DISASTER SUPPLY KIT CHECKLIST



General

- Flashlight
Do not use candles and be sure to have enough batteries
- Radio
Battery operated or hand cranked radio, a NOAA weather radio
- Cash
Banks and ATMs may not be available after a storm

Pet Care Items

- Pet food and water
- Proper identification
- Medical records
- Water and food bowls

First Aid

- First Aid Manual
- Sterile adhesive bandages of different sizes
- Sterile gauze pads
- Soap
- Latex gloves
- Scissors
- Aspirin or other pain reliever
- Antiseptic
- Thermometer

Important Documents

- Insurance cards
 - Medical records
 - Bank numbers
 - Copy of social security card
 - Copies of birth and/or marriage certificates
- *Items should be kept in a water proof container*

Food and Water

- Food
Enough for at least up to seven (7) days, nonperishable packaged or canned food and beverages, snack foods, juices, baby food, and any special dietary needs.
- Non-electric can opener
- Paper plates
- Plastic cups
- Utensils
- Water (1 gallon per person)

COVID-19 Supplies

- Face masks
- Cleaning wipes
- Hand sanitizer

Maintaining Your Kit

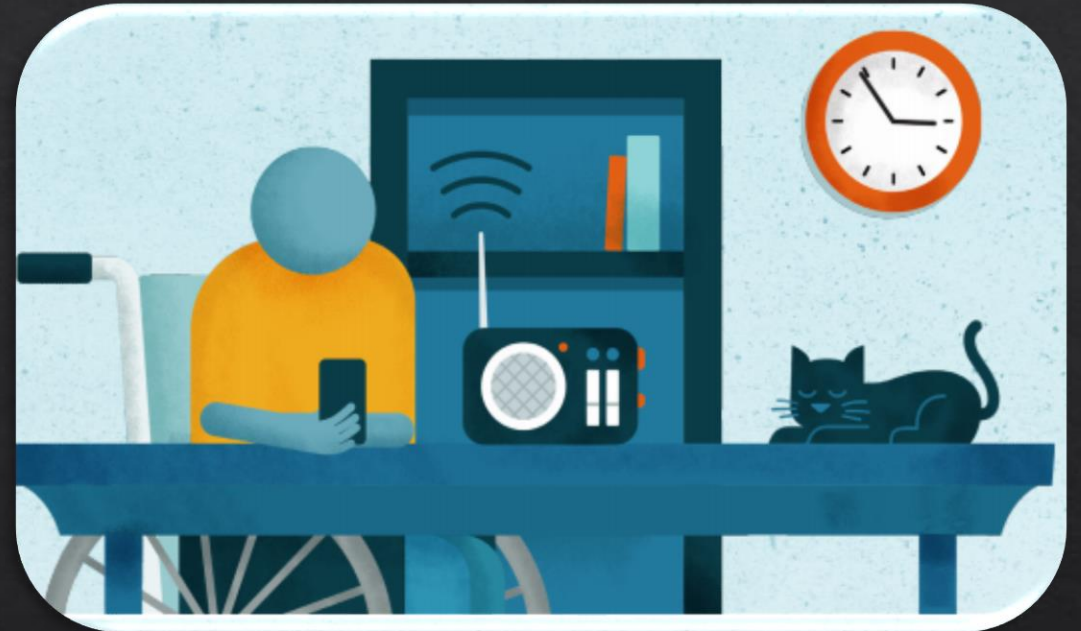
After assembling your kit remember to maintain it so it's ready when needed:

- ◇ Keep canned food in a cool, dry place
- ◇ Store boxed food in tightly closed plastic or metal containers
- ◇ Replace expired items as needed
- ◇ Re-think your needs every year and update your kit as your family's needs change
- ◇ Practice using the items in your kit to ensure readiness and competency!



3. Stay Informed

- ❖ Turn on your TV/radio, or check your city/county websites in order to get the latest weather updates and emergency instructions.
- ❖ Listen to instructions from local Emergency Management professionals. If advised to evacuate, grab your “go bag” and leave immediately.
- ❖ Sign up to received alerts from the Emergency Alert System (EAS) and National Oceanic and Atmospheric Administration (NOAA) Weather Radio.



- <https://www.monroecounty-fl.gov/>
- https://www.youtube.com/channel/UCIj64W_JmH4delKfXApH6aw
- <https://www.facebook.com/MonroeCountyBOCC/>
- <https://twitter.com/monroecounty>
- <http://readysouthflorida.org/stayinformed/>

4. Monitor Traffic

Florida 511 (FL511) Advanced Traveler Information System (ATIS) is a service of the Florida Department of Transportation (FDOT).

It provides the following important information to promote safety throughout the transportation system:

- ❖ Road and Bridge closures
- ❖ Flooding
- ❖ Road and travel conditions
- ❖ Congestion and incidents
- ❖ Traffic conditions on major evacuation routes
- ❖ Toll suspensions
- ❖ Other travel alerts in affected counties, cities, roadways and agencies
- ❖ 511 also provides AMBER, Silver and Blue Alerts (formerly known as Law Enforcement Officer or LEO Alerts).

<https://fl511.com/>



Emergency Management Overview

Organizational Responsibilities



FDOT's ROLE

My Surveys



Damage
Assessment Leve...



Detailed Damage
Inspection Report



☉ 103°E (T) ☉ 24°51'24"N, 80°43'41"W ±16.4ft ▲ -23ft



Location 1 MM 75 - Wash out 140ft full road

IRMA
11 Sep 2017, 10:04



District Emergency Teams

- Contract Management Team
- County EOC Liaisons
- Cut & Toss Team (Lane Clearing)
- Damage Assessment Teams
- Emergency Operations Center Team
- Emergency Roadside Assistance Support (Road Rangers)
- Field Operations Teams
- NIMS Teams
- Public Assistance Team
- Transportation Emergency Management Team

Florida Division

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[Transportation Performance Management \(TPM\)](#)

[Emergency Relief](#)

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[Traffic & Road Closure Information](#)

[Hurricane Michael Emergency Relief Information](#)

Welcome to the FHWA Florida Division

The Federal Highway Administration (FHWA) Division Offices are local field offices that provide leadership, guidance, and direction to State Departments of Transportation in the project development and delivery of transportation projects. Working collaboratively with State partners, FHWA Division Offices ensure that the nation's roads, bridges and tunnels are safe and continue to support economic growth and environmental sustainability.

Additionally, to ensure accountability, the FHWA Division Offices work with the State to develop, track and analyze activities and recommend innovative techniques and strategies to improve the performance of the transportation system.

FHWA and its Division Offices are responsible for working with State Departments of Transportation to ensure that the nation's strategic investments preserve and modernize the U.S. highway system - and ultimately to save lives.

Highlights

- [Emergency Relief](#)
- [Transportation Performance Management](#)
- [Florida NEPA Assignment for Highway Projects](#)
- [Fixing America's Surface Transportation \(FAST\) Act](#)
- [Every Day Counts](#)
- [Disadvantaged Business Enterprise \(DBE\)](#)
- [Florida Federal-Aid Partnership Agreement \(.pdf, 558 kb\)](#)

OPERATIONS



COPYRIGHT Aerial Innovations, Inc.





FDOT INCIDENT RESPONSE



*FHP (347)



SERVICE OPERATED BY
FLORIDA DEPARTMENT OF TRANSPORTATION

Road Rangers

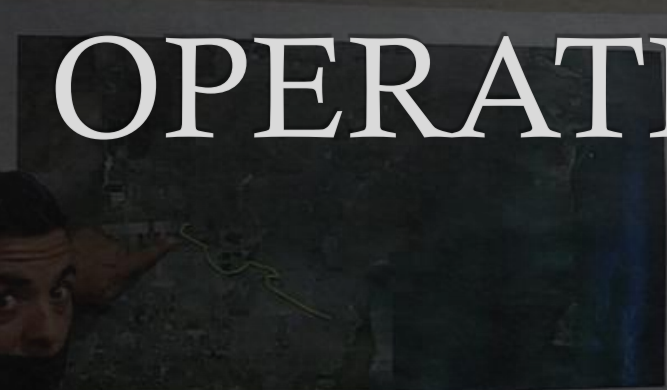


FREE
SERVICE



FLEET MAINTENANCE & READINESS

DISTRICT EMERGENCY OPERATIONS TEAM





Crystal L. Schaefer, M.A.

Florida Department of Transportation

D6 – District Emergency Management Specialist

Crystal.Schaefer@dot.state.fl.us

FTE

2020 Evacuation Plans

Pre-Landfall Plan

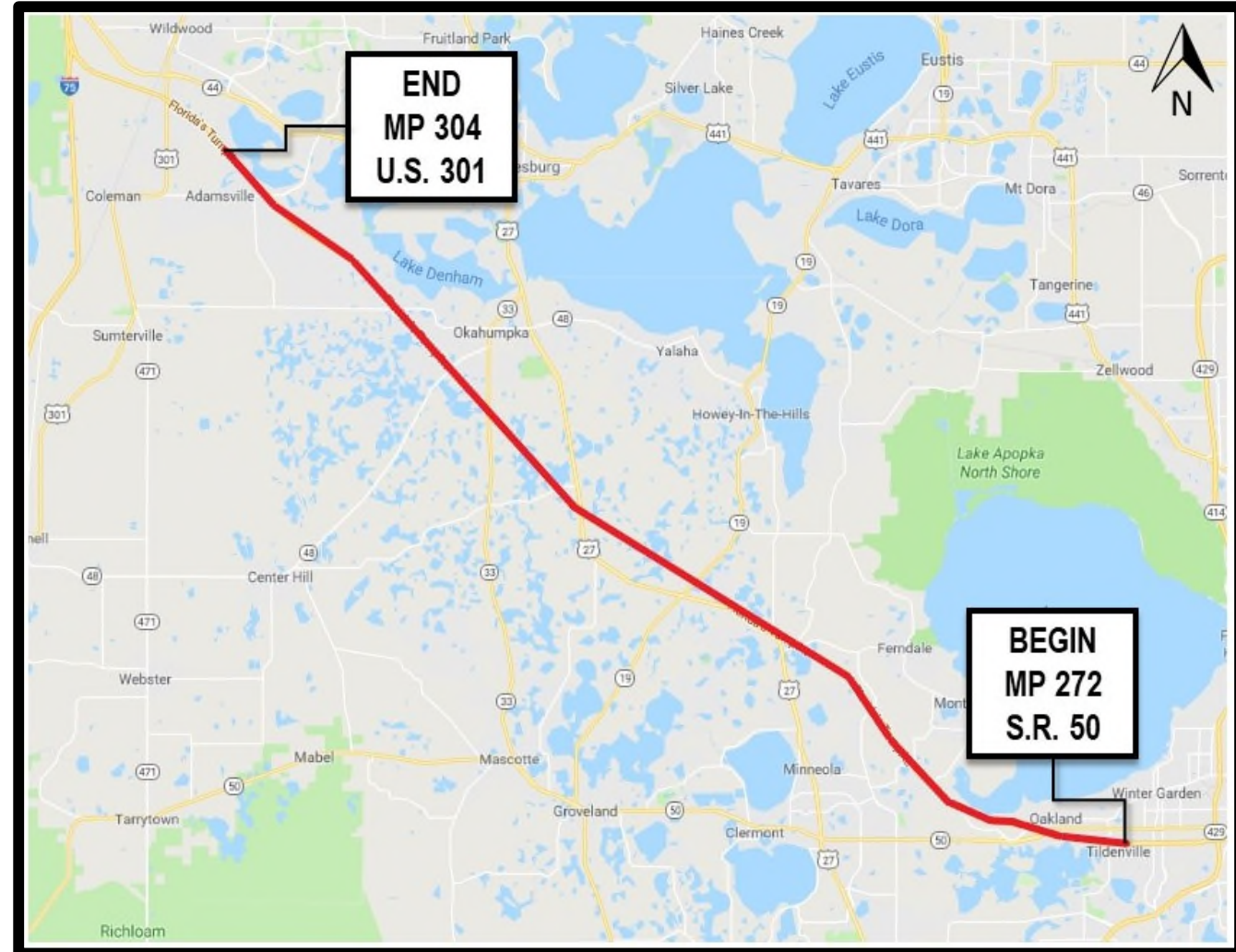
- Use Existing Alignment
- Stop All Non-Emergency Operations
- Alpha-Bravo Shifts
- STARR
- Toll Suspensions
- Strike Teams / Plazas and Choke Points
- **ESU Plans**



Turnpike Northern ESU Plan

Orlando to US 301 (Exit 272 – Exit 304)

- Total Miles – 32
- Staff – 12
- FHP – 12
- Toll Barrier / Interchanges – 7
- Service Plazas – 1



ESU Termination



Post-Storm Plan

- Safety Inspection
- Cut and Toss
- RR / STARR/ RISC
- Toll Suspensions / Responder Toll Plan
- Strike Teams



Infectious Disease Control

- TIM Guidelines
- PPE
- Stranded Motorists



- › Practice proper hand hygiene by promptly washing your hands or using hand sanitizer after physically interacting with others.
- › When washing your hands, do so for at least 20 seconds with soap and warm water.
- › Avoid touching your face (eyes, nose, and mouth).
- › Cover your mouth and nose with your bent elbow or tissue when you cough or sneeze. Make sure to dispose of the tissue immediately.
- › Avoid close physical contact with others, including shaking hands and hugging.
- › Maintain at least six (6) feet distance between yourself and anyone who is coughing or sneezing, when possible.
- › Promptly disinfect your gear after physical contact with any individual.
- › Keep an adequate supply of disinfectant wipes and hand sanitizer in an easily accessible place while on-duty.
- › Wear a mask when assisting motorists and properly dispose after use.
- › Educate yourself and participate in training on the use of personal protective equipment (PPE) for respiratory protection, if available.
- › Ensure only trained personnel wearing appropriate PPE have contact with individuals who have or may have COVID-19.
- › Seek medical care if you have a fever, cough, or difficulty breathing.

Interaction with Motorists

- Wear masks as recommended by the Centers for Disease Control (CDC) guidance, for all interactions during a shift to limit the amount of exposure with motorists.
- Approach motorists only from the passenger side window, unless a non-traffic side approach is warranted.
- Insist motorists stay in their vehicles.
- Instead of allowing a motorist to use the cell phone, make the call for them or allow the motorist to speak via speaker phone while maintaining a safe distance of at least six (6) feet.

Transporting Motorists

- Call EMS/EMTs if the motorist has any medical emergency. Symptomatic and asymptomatic COVID-19 is in itself not a medical emergency.
- Do not transport motorists except in emergency cases.
- Should you need to provide transport, wear a mask at all times and do not use recirculating (max) air conditioning until the passenger has exited the vehicle and a full wipe-down has been completed.
- Where the motorist vehicle is in a safe position, have drivers and passengers wait in vehicles for rides, particularly in inclement weather.
- Provide a protective block and traffic control while motorists wait for a ride.

Equipment/Cleaning

- Always use personal protective equipment (PPE), if available.
- Conduct intensive vehicle cleanings before, during, and after every shift.
- Wear masks as recommended by the CDC guidance and ensure proper training for wearing masks.
- Clean SLERS communications equipment in accordance with Technical Services Memorandum(s) 42-05B & 42-07A.
- Each Road Ranger should have cleaning materials and hand sanitizer with them at all times.
- Sanitize any equipment that is frequently touched.
- Crack windows during downtime to air vehicles.
- Use fresh air circulation instead of recirculating A/C setting.
- Use the FDOT procedures on how best to clean/disinfect SLERS radios.

Shift Practices

- Some patrol shifts have decreased or modified due to staffing or traffic demands.
- Some dispatch employees may work remotely.
- Patrol drivers may hold meetings over the phone or radio rather than in person.
- The requirement to disseminate brochures, Move It cards, etc. have been suspended until further notice.

Work-Home Practices

- Change out of uniform at the end of a shift immediately after returning home prior to interacting with family members.
- Practice good hygiene upon entering the home to include washing hands, changing clothes, etc.
- Keep field uniform and shoes away at an isolated space before entering the main living space.



Incident Management Program

COVID-19 Timeframe Statistics

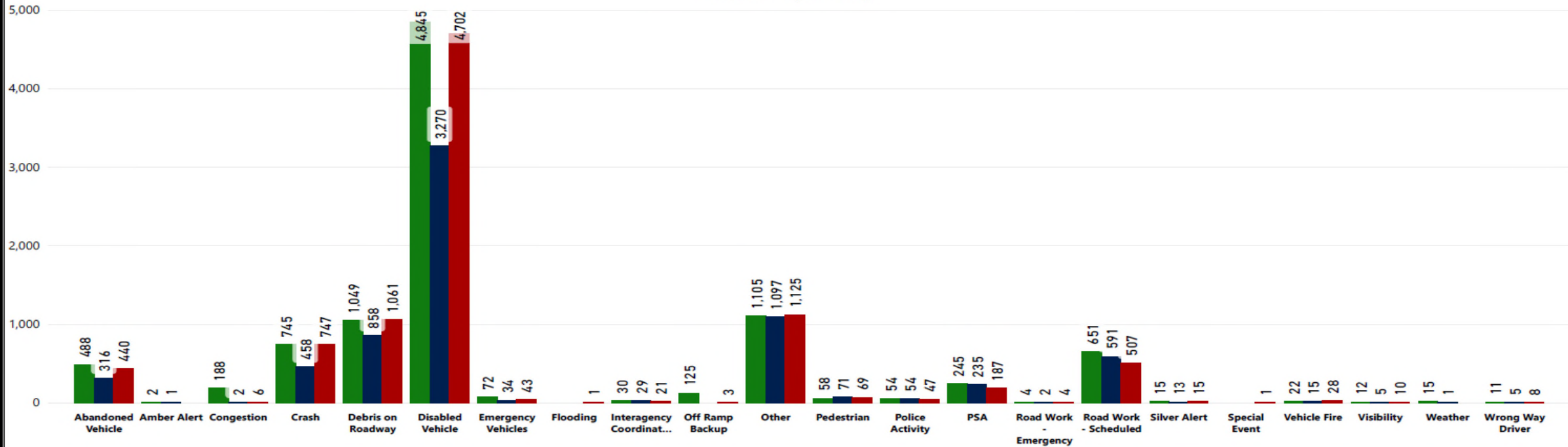
Statistics For March, April & May 2020



March		April		May	
Total Events	9,736	Total Events	7,057	Total Events	9,025
RISC Events	13	RISC Events	13	RISC Events	14
Events with Injuries	95	Events with Injuries	58	Events with Injuries	87
Fatal Events	2	Fatal Events	3	Fatal Events	2

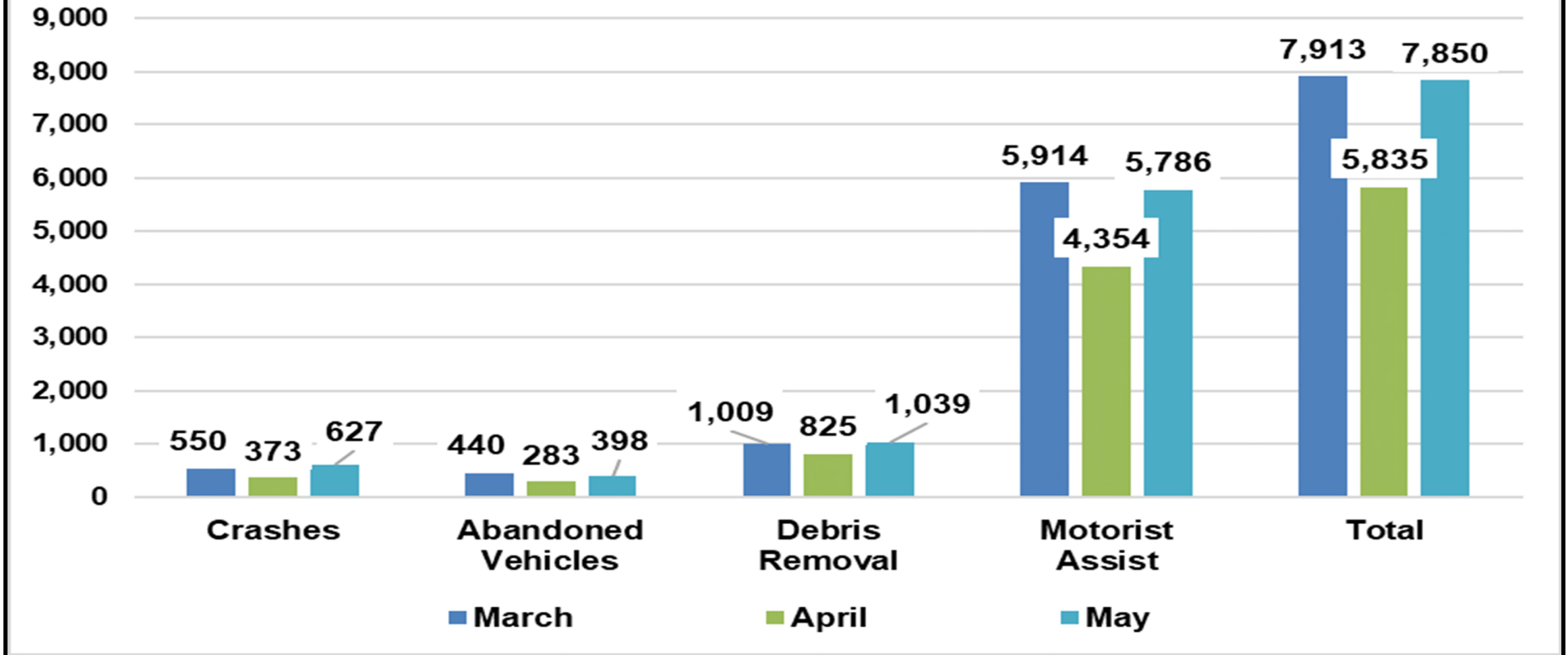
Total Events by Type

● March ● April ● May



COVID-19 Timeframe Statistics

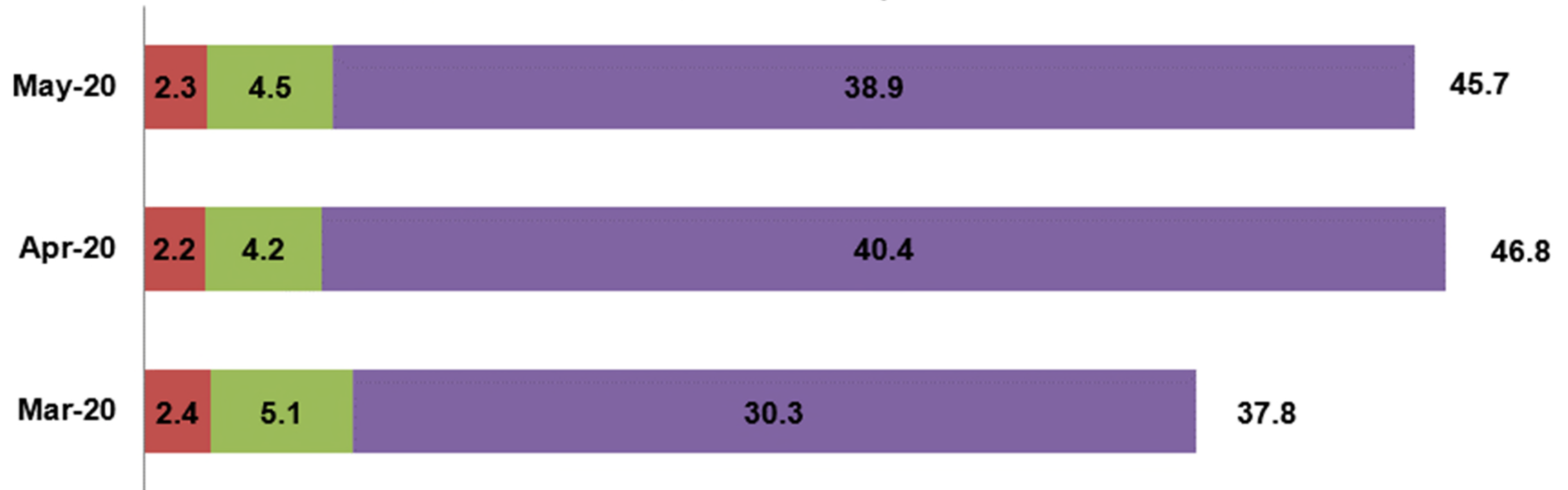
March - May Road Ranger Events



COVID-19 Timeframe Statistics

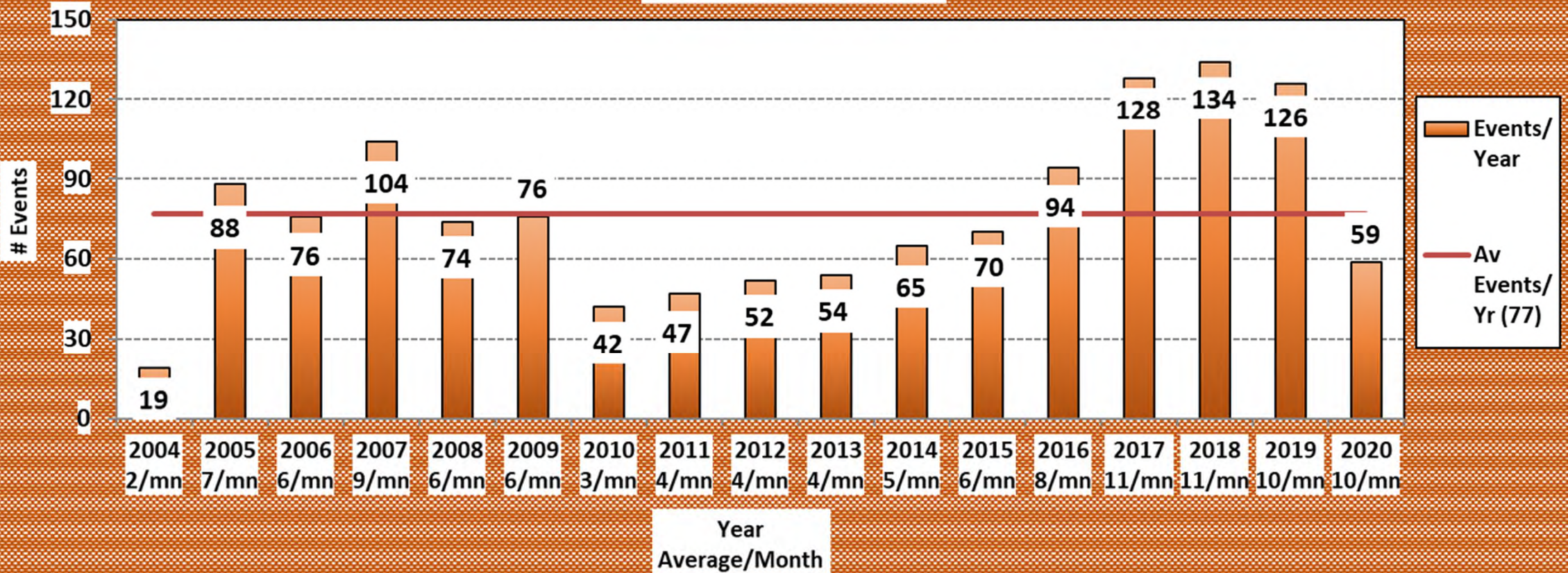
Monthly Roadway Clearance Duration

■ Notification ■ Verification ■ Response ■ Clearance

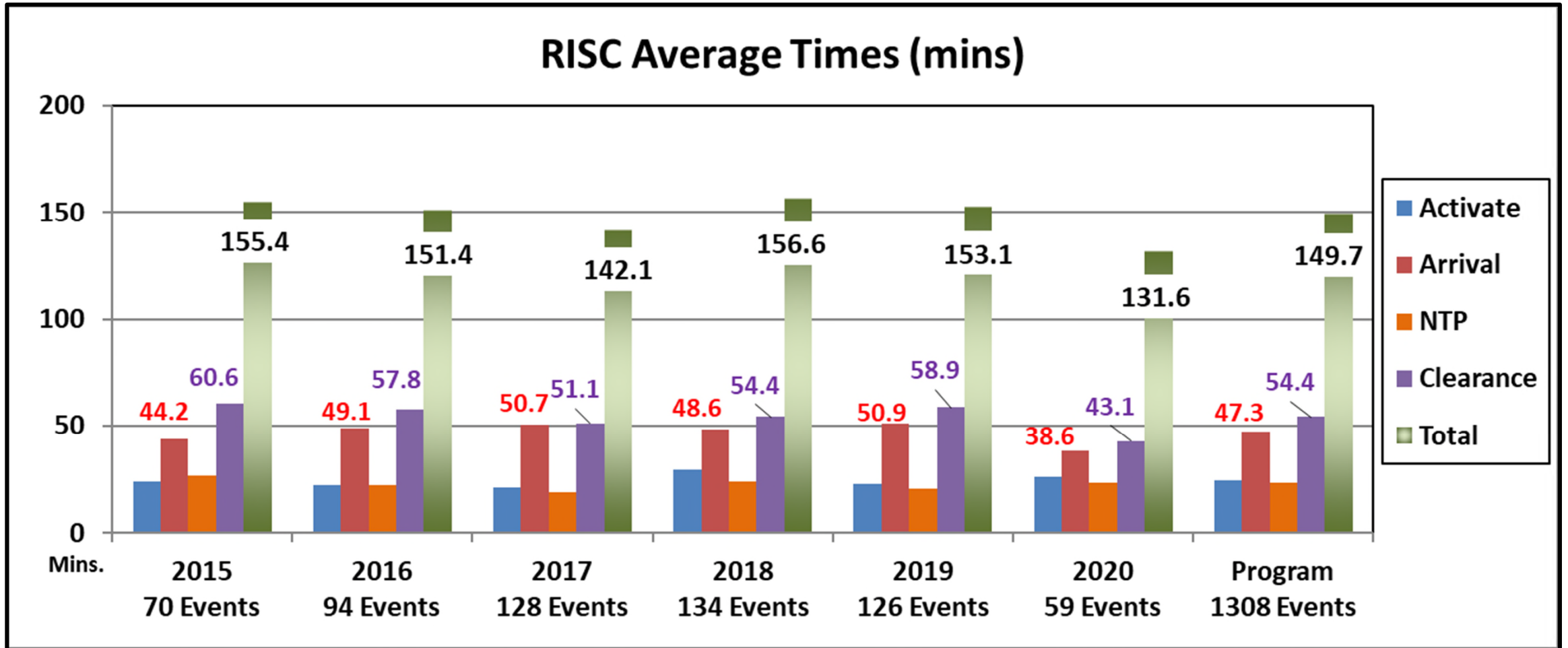


RISC Program

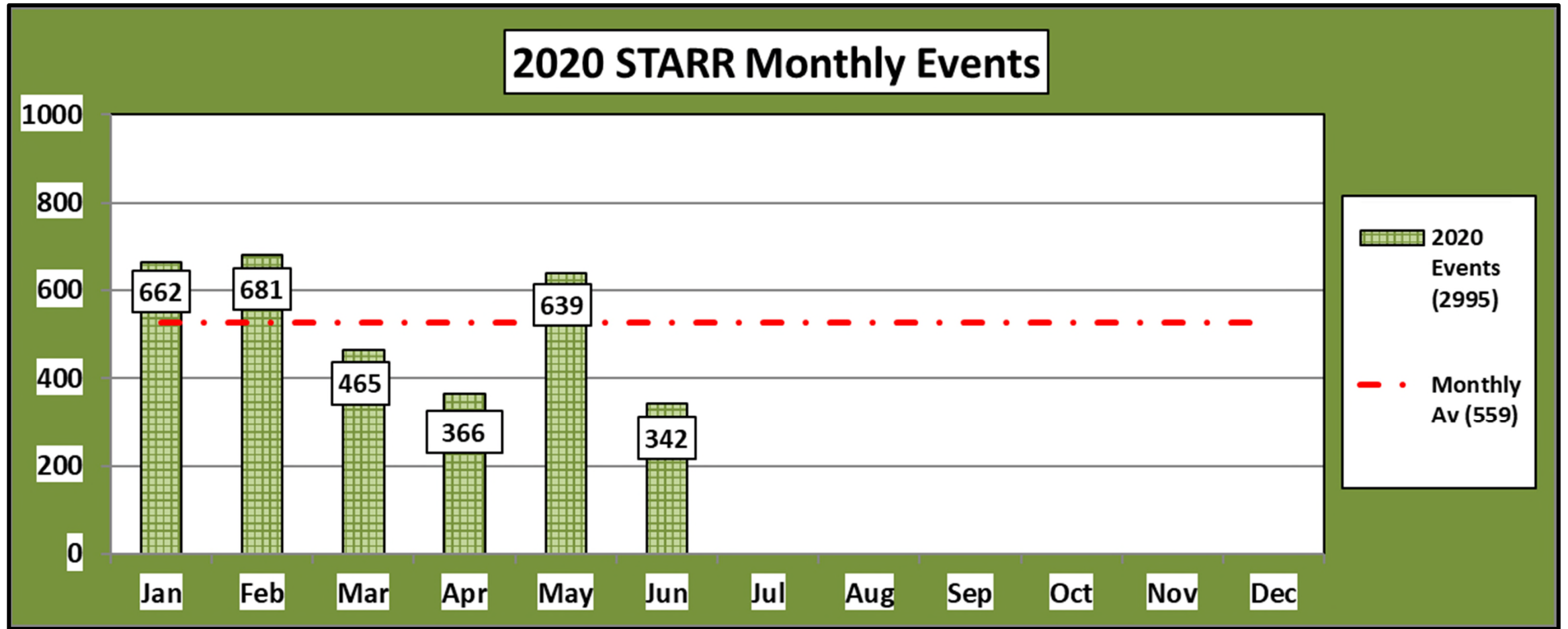
RISC Events/Year
1308 Total Events



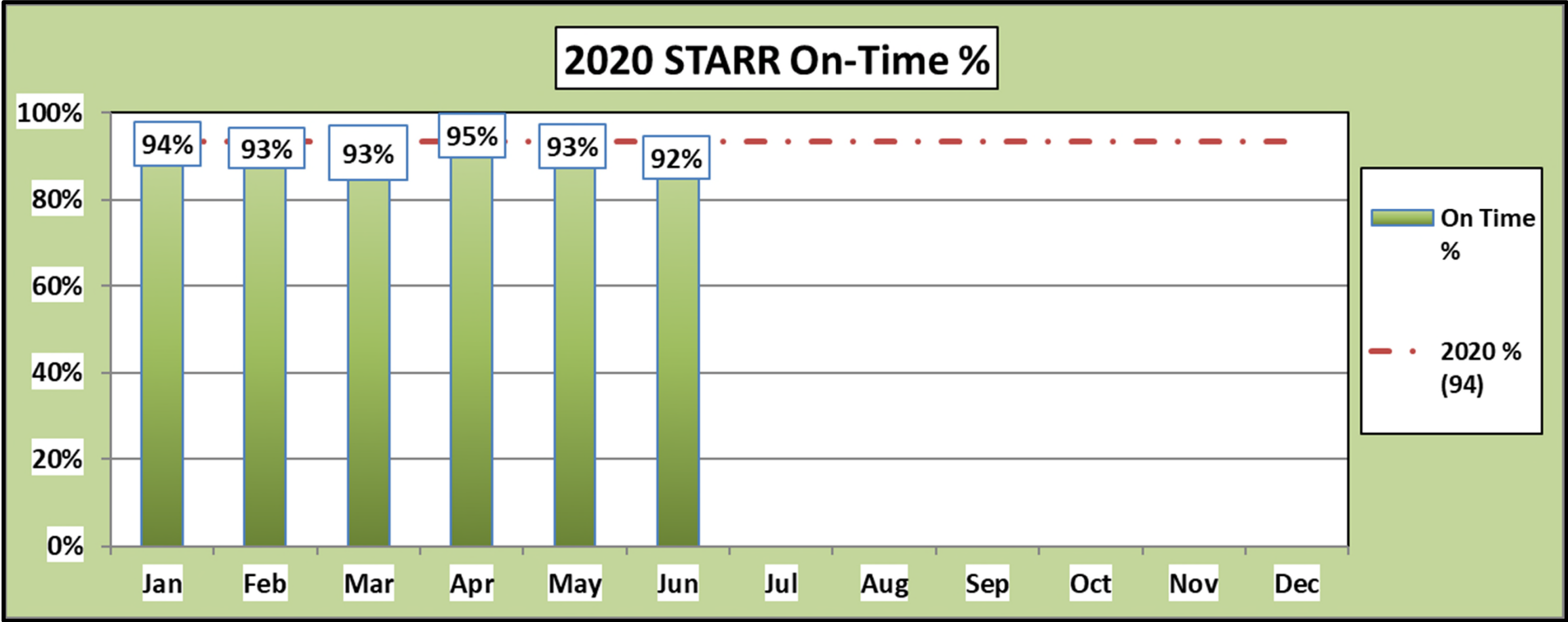
RISC Program



STARR Program



STARR Program





Emergency Management Program

Douglas Prager
954-934-1216

Douglas.Prager@dot.state.fl.us

Incident Management Program

Michael Washburn
954-934-1621

Michael.Washburn@dot.state.fl.us



TRAFFIC MANAGEMENT PLAN (TMP)

OPERATIONAL PLAN

FOR US 1 AT PALM DRIVE

Presented by: Saud Khan
LAST UPDATE: 06/03/2020





OPERATIONAL PLAN

The FHP, FDOT District 6 , FDOT T/Pike and Miami Dade County have developed a TMP to maximize the northbound traffic flow on US 1 thru the Palm Drive (SW 344th Street) intersection. This choke point if left unattended during a Keys evacuation could result in unsafe backups for evacuees. If this plan is implemented before the backup takes place it has a strong chance of preventing unnecessary delays. The plan is attached for reference. A contact list with the Names, Email, and Phone numbers of all staff for the current hurricane season is included in this plan.

The operational plan will define triggers, assign responsibility, identify team members and provide a sequence order of implementation.



- **TRIGGER (S)**

- **NOTIFICATIONS**

- **MANAGEMENT**

- **PHASES 1-3 only for this Presentation**

- **MONITORING MOT DEVICES**

- **DURATION**

- **EMERGENCY COORDINATING OFFICERS (ECO)**

1. Mandatory Evacuation of any group or section of the Florida Keys.

2. State, County, or Traffic Operations Request.



NOTIFICATON

- **FDOT DISTRICT 6 MONROE COUNTY EOC LIAISON** will normally be the first person to become aware of an ordered or planed evacuation. The liaison will notify the Palm Drive TMP Management Team via email (or by phone if internet is unavailable). An Outlook Email user group (TBD) has been set up for this propose and can be found in the appendix.
- Upon receiving the request the members will first respond back to the liaison (as well as all others copied in on the original email) or other requestors that:
 - A) Have received the request
 - B) That they will relay the decision of the team as well as start time of the implementation of the TMP as soon as possible.
- If the requestor does not receive any receipt email within 15 minutes they shall contact members via phone until they reach a management team member.



The management team is responsible for the decision to implement Phase 1 of the TMP. They will take into consideration all available information (staff, time of day, special events, timing, and equipment availability) and make the decision to initiate Phase 1.

COMMAND STAFF:

- FHP Troop E Miami-Dade County Commander
- FDOT District 6 Maintenance Engineer
- FDOT Turnpike Maintenance Engineer
- In addition to making the decision to implement the plan they will be responsible for notifying all other stakeholders under their area of responsibility of the activation.
- Also included in the Management Team Email group are members of FHP, Miami-Dade County and FDOT who will provide information and critical support in the event of a request.

SUPPORT STAFF:

- Miami-Dade Miami-County Traffic Engineer
- FHP Troop E Miami-Dade County
- FHP Troop K Miami-Dade County Alternate
- FDOT District 6 South Dade Maintenance Engineer
- FDOT District 6 South Dade Operations Manager
- FDOT District 6 Emergency Coordinating Officer
- FDOT District 6 TMC Manager
- FDOT District 6 Monroe County EOC rep.
- FDOT District 6 Maintenance of Traffic Specialist
- FDOT Turnpike Emergency Coordinating Officer
- FDOT Turnpike TMC Manager

An aerial photograph of a road intersection. A large red semi-transparent box is overlaid on the center of the image, containing white text. In the top right corner, there is a blue rectangular box with white text. The background shows a multi-lane road, a parking lot with several cars, a building with a flat roof, and a large green field in the upper left. The text in the red box lists four bullet points regarding traffic engineering and staff deployment for a project. The text in the blue box reads 'PHASE 1 (ACTIVATION)'.

PHASE 1 (ACTIVATION)

- The Miami- Dade County Traffic Engineer will have staff implement special signal timing and provide estimated time that this will begin.

- FHP will assign and deploy staff to the site. They will notify the team of the name and contact information of the Officer in Charge (OIC) as well as estimated time of arrival.

- FDOT D-6 Maintenance Staff will stage all needed MOT devices supplied by T/Pike to pre-determined locations as direct by the FHP OIC and close the North leg pedestrian crossing.

- FHP will monitor and evaluate the need to close the northbound left turn lane to Krome Avenue as per the plan.



PHASE 1



PHASE 2-6 (ACTIVATION)

- Activation of all additional phases is at the direction of the FHP OIC with Traffic Control Devices installed by FDOT staff.



Monitor the northbound left-turn lane at US 1 and Krome Avenue, If left turning vehicles spill onto the through lane affecting evacuation traffic flow, the north US 1 to north Krome Avenue left-turn lane shall be closed to traffic.

REQUIRED MOT TO CLOSE TURN LANE

Approximately 15 to 20
Traffic Cones

Portable “No Left-Turn” Signs
(R3-2) to be Placed in the
Median (2 or 3 signs)





SW 167 Ave

SW 344 St

ROAD CLOSED

US-1



ELIMINATE TRAFFIC FROM EAST APPROACH AT THE US-1/PALM DRIVE INTERSECTION



NOTE: See Figure 3b for U-turn plan on Palm Drive just east of US 1

- **The FHP Troop E on site constantly monitor traffic conditions.**

- **Miami Dade County, FDOT D6 TMC Manager and Florida Turnpike Manager will remotely monitor the Palm Drive intersection as well as the US-1 corridor. They will relay traffic conditions to the OIC as well as other management staff. FHP Troop E will also monitor on site.**

MOT DEVICES



- Supply and placement of Traffic Control Devices by the FDOT D-6 South Dade Maintenance Engineer (or designee).
- Additional support, if required, will be supplied by the Turnpike. The South Dade ME will provide the contact information of district field staff to the OIC as soon as it is known.



DURATION



- The duration shall be decided by the command staff based on field observations as well as other factors. They will inform the entire Team of their decision. The signalization component of Phase 1 can run unattended and will be monitored remotely. OIC may also dispatch officers to monitor off-site.



EMERGENCY COORDINATING OFFICERS

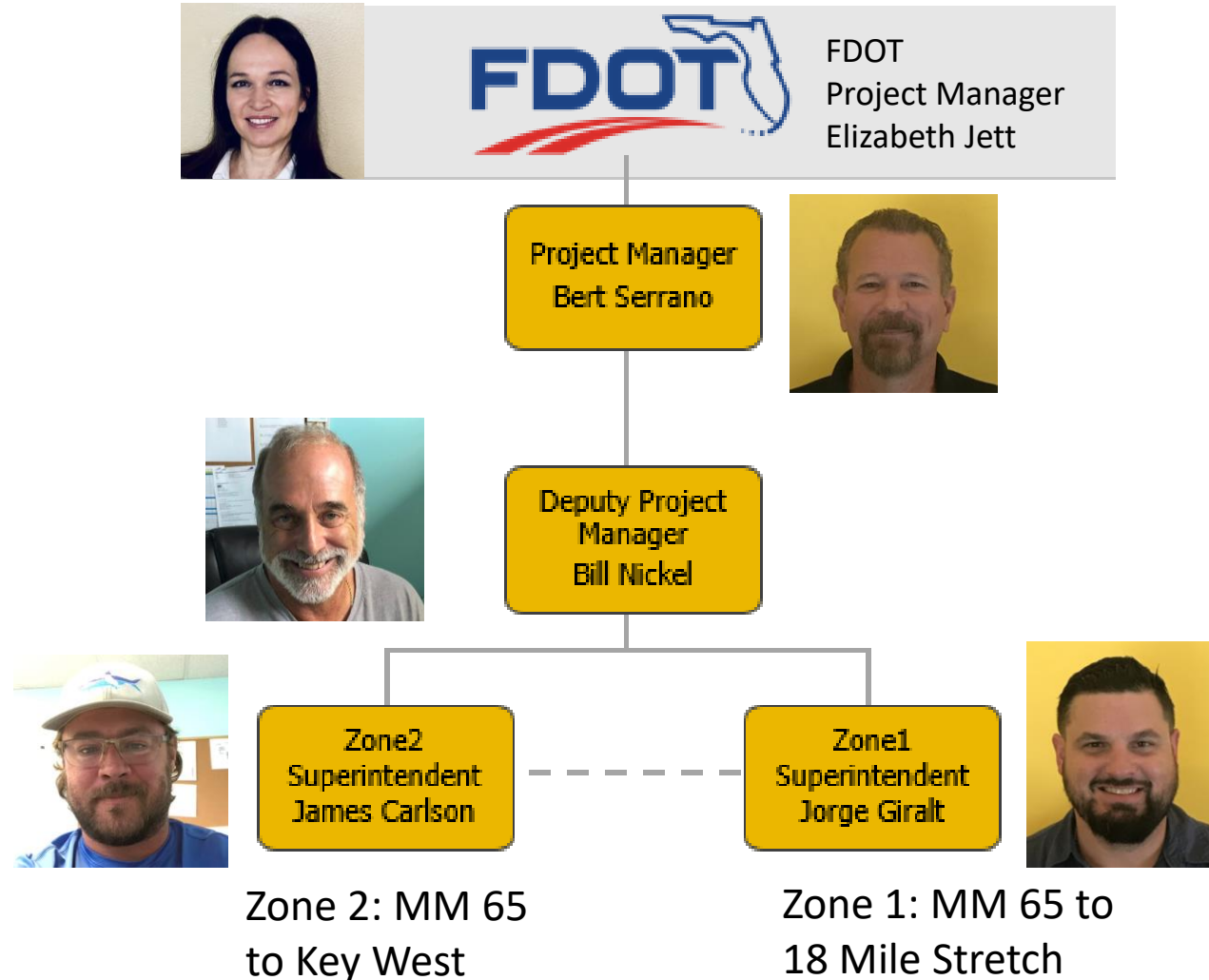
- The individual Emergency Coordinating Officers (ECO) will track the progress and report the status to State and outside agencies as needed. As well provide support as requested by the command staff.



QUESTIONS?



Monroe County Traffic Incident Management (TIM)



Asset Maintenance Contractor
Monroe County
Contract No. E6M77

Main Office: Marathon 3100
Overseas Highway

Satellite Office: Key Largo

EMERGENCY CALL LIST

STARTING July 1



Marathon Office Number- 305 289-4360

Emergency Call List order:

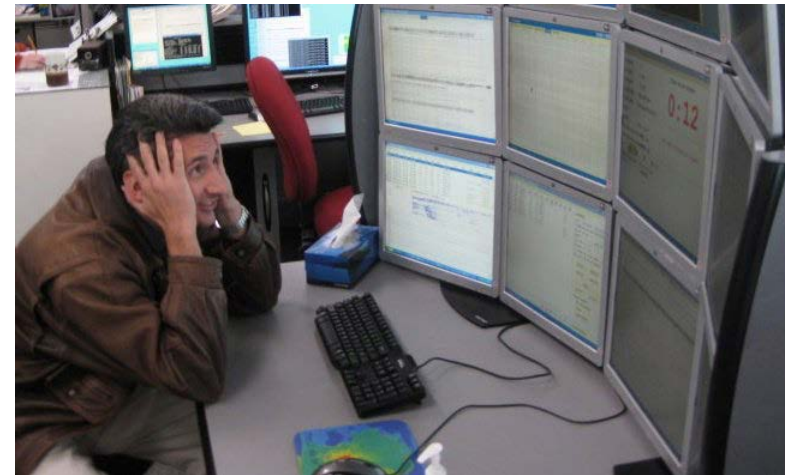
1. **Marathon Office Number- 305 289-4360**
2. James Carlson – 305 432-6276 – james.carlson@ferrovialservices.com
3. Jorge Giralt – 305 433-1563 – jorge.giralt@ferrovialservices.com
4. Bill Nickel – 305 340-8230 – william.nickel@ferrovialservices.com
5. Bert Serrano – 786 843-1532 – humberto.serrano@ferrovialservices.com



Hurricane Season 2020

Program Updates

Jon Rizzo
Warning Coordination Meteorologist
National Weather Service Forecast Office
Florida Keys

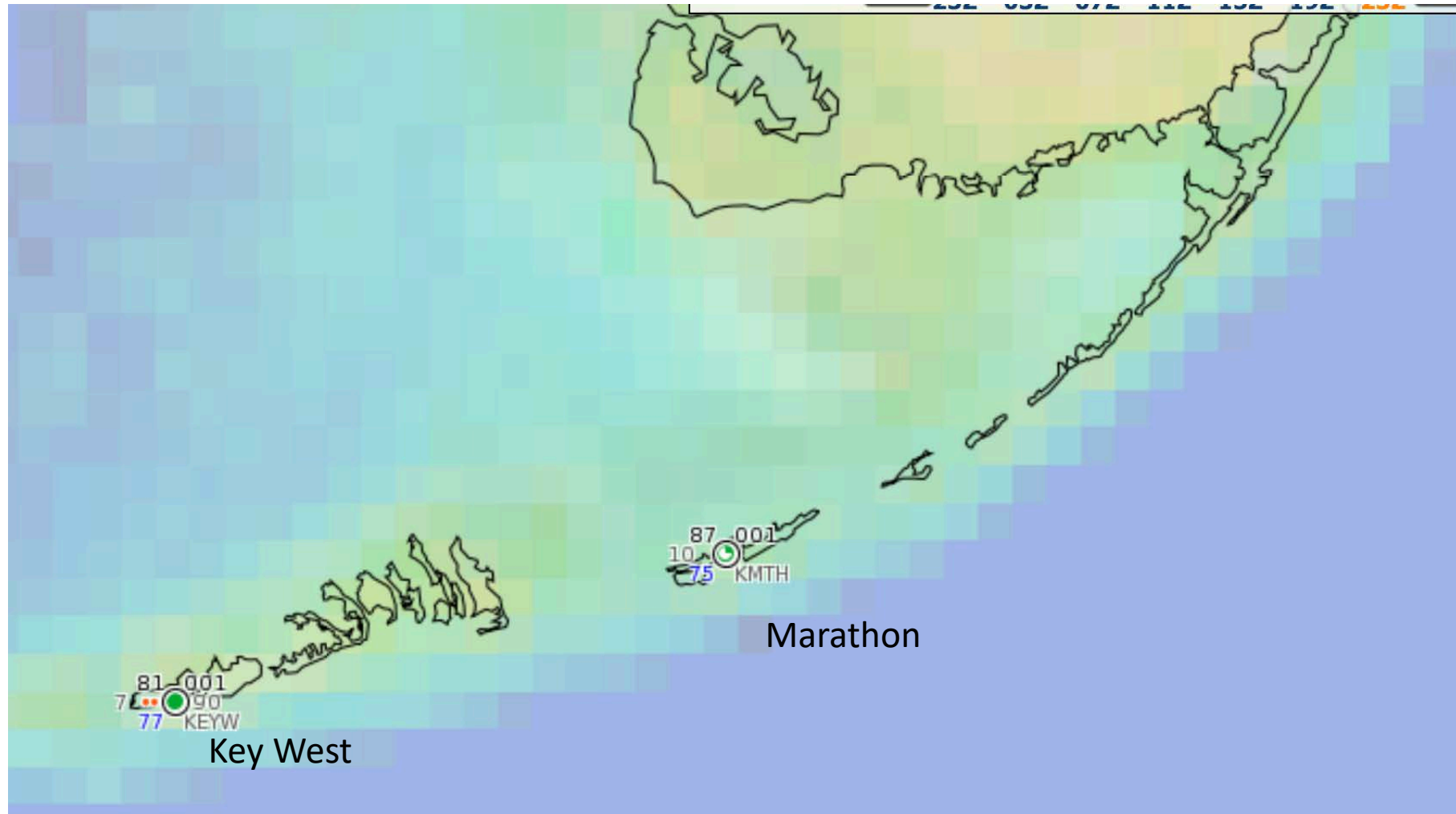




Florida Keys

Status of Observation Network

NOAA / National Weather Service & FAA Sites Active

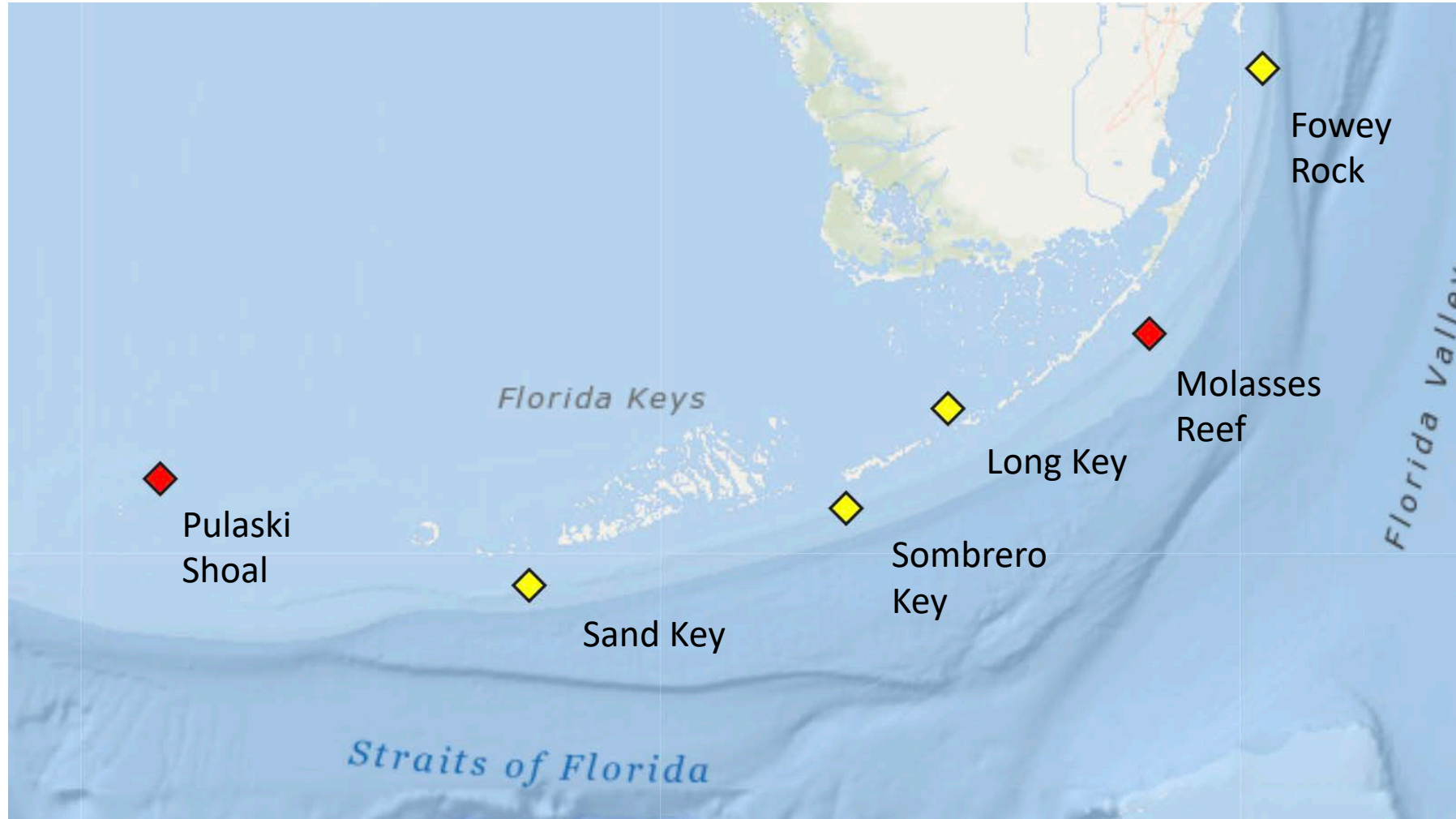




Florida Keys

Status of Observation Network

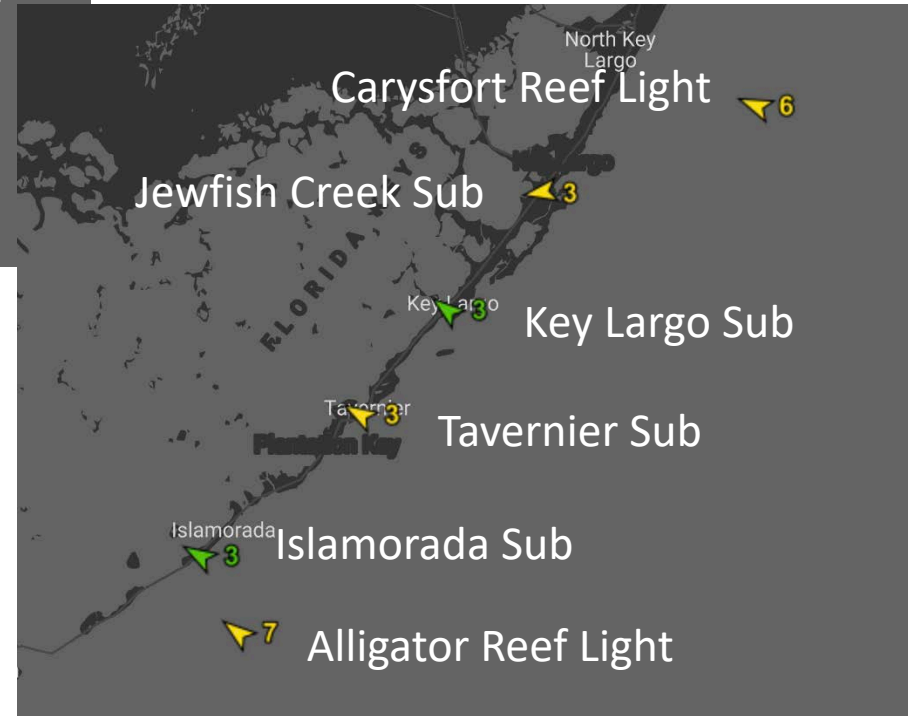
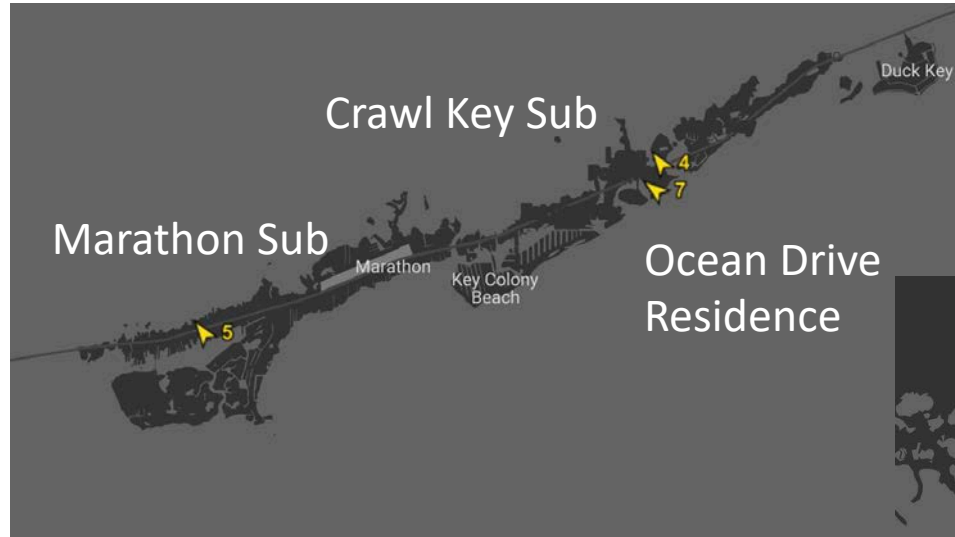
NOAA / National Ocean Service Platforms Restored (somewhat...)





Status of Observation Network

WeatherFlow





Florida Keys

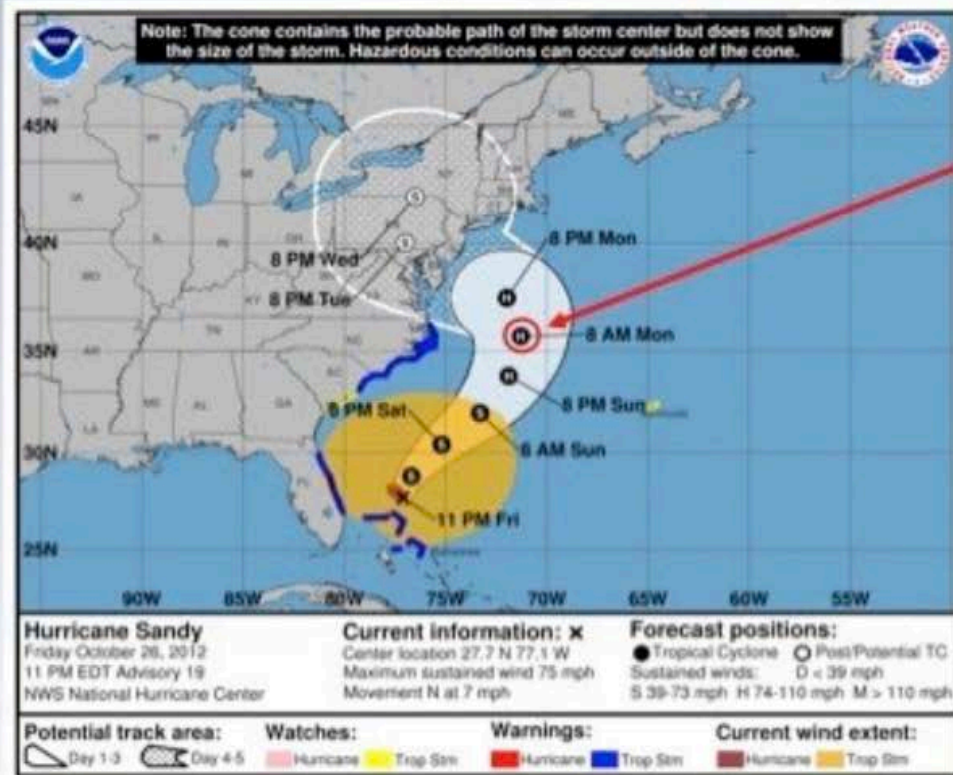
Hurricane Season 2020

Consolidated Storm Surge Inundation





60-hour Forecast Information on the Cone Graphic



60-h Forecast Information on Cone Graphic

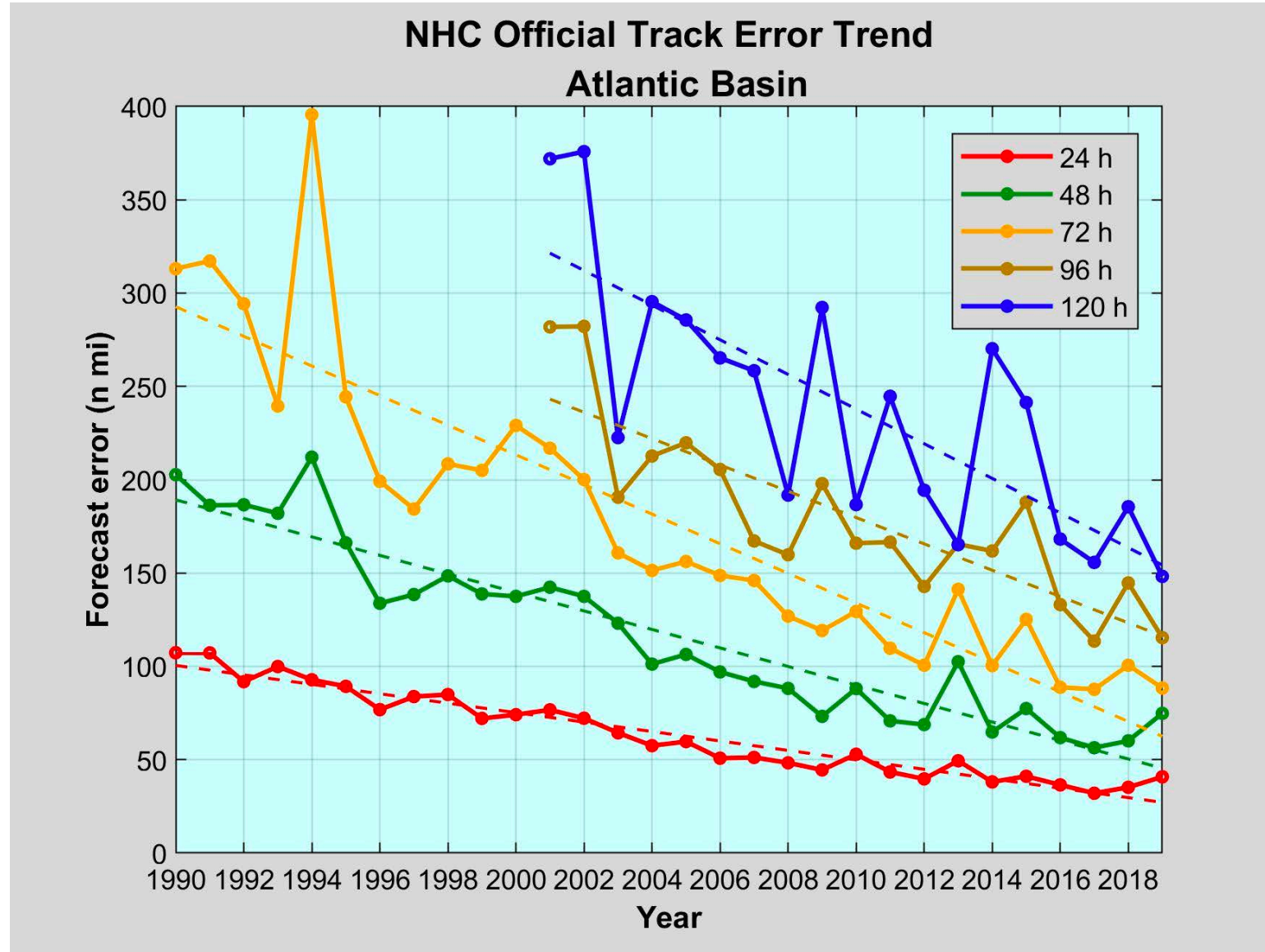
60-h forecast information also used as input for PSurge and for TC wind speed probabilities



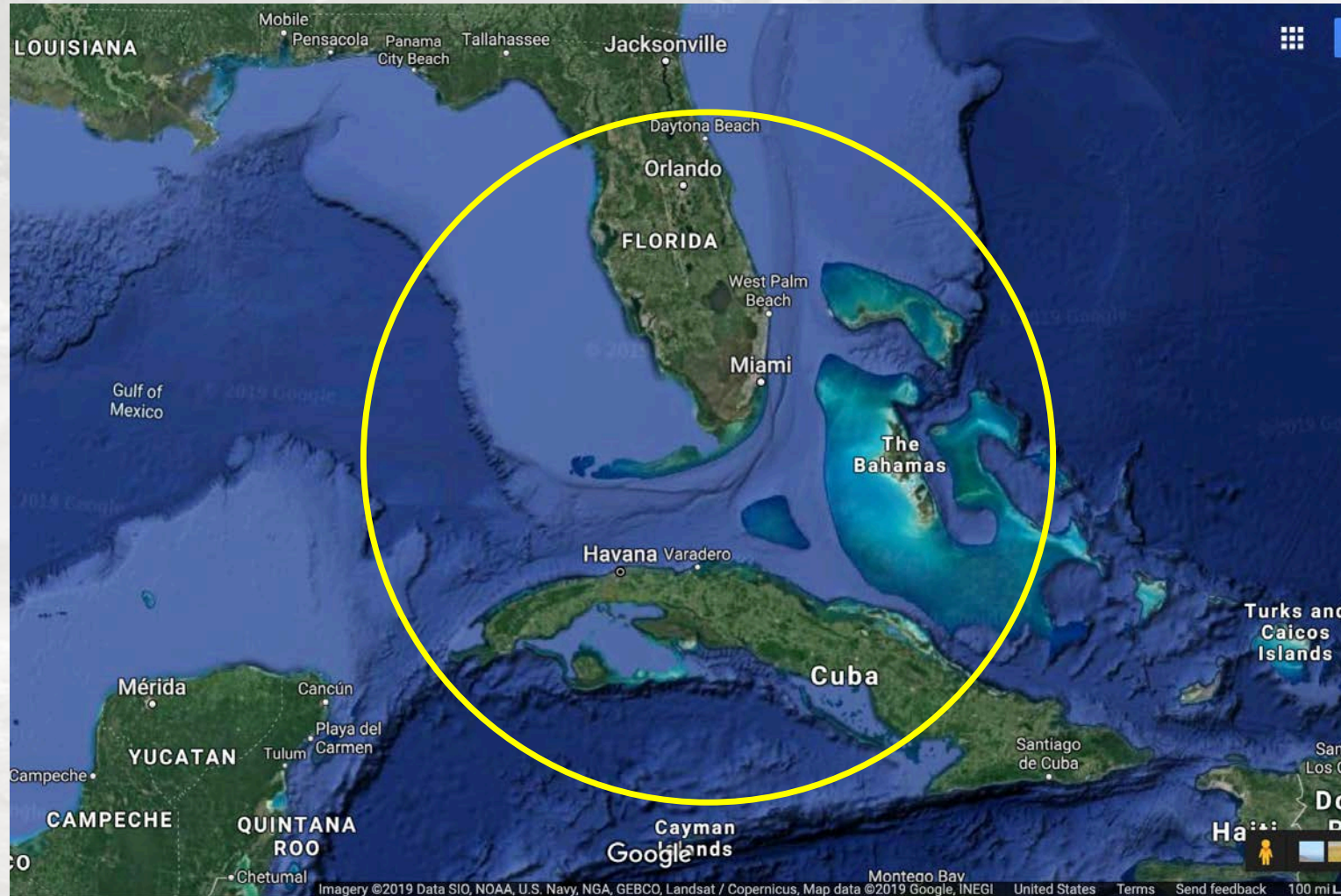
Florida Keys

Hurricane Season 2020

5-year Running Average Track Error

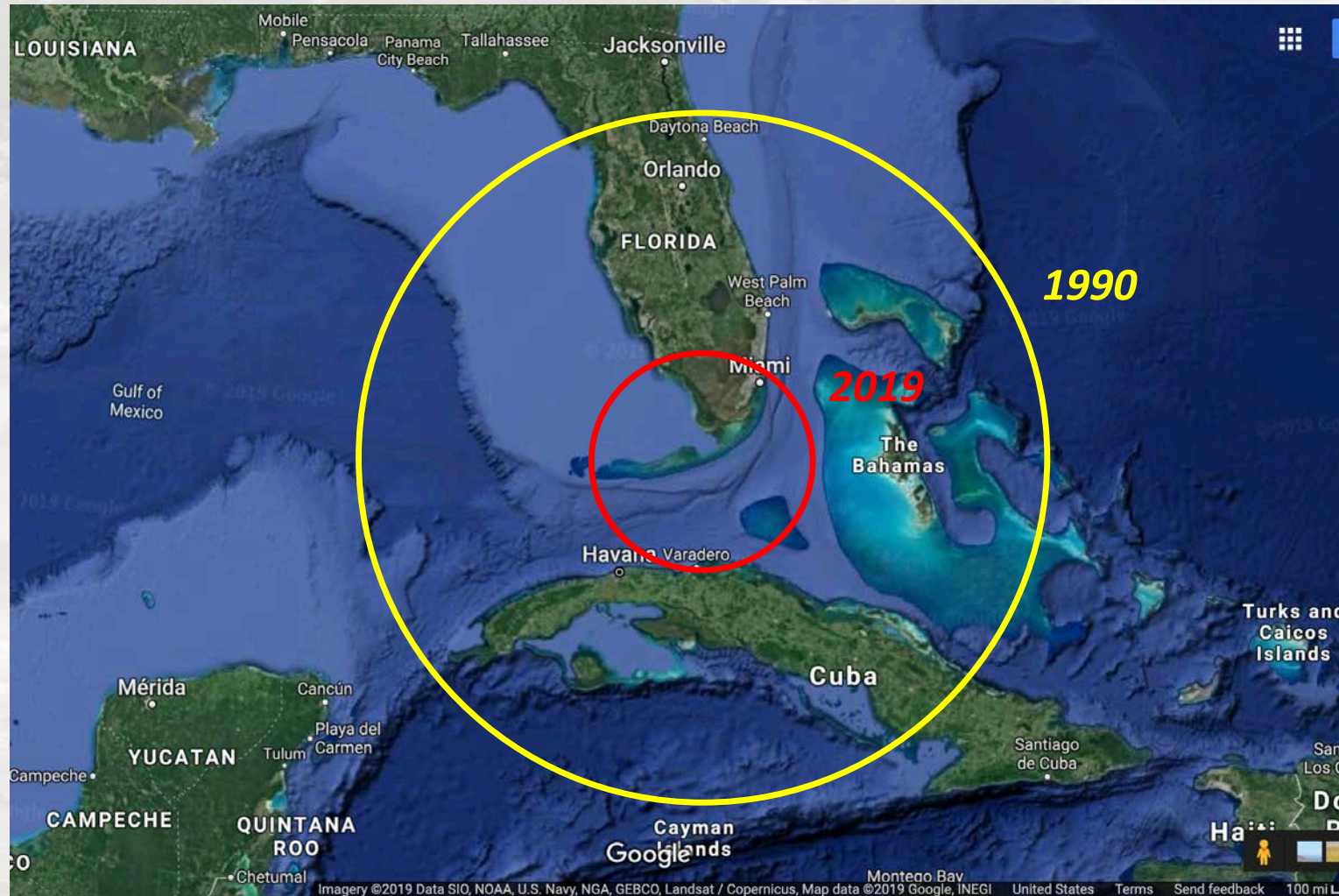


Accuracy in Track Forecasting 3-day Forecasts in 1990



Improvements in Track Forecasting

3-day Forecasts since 1990

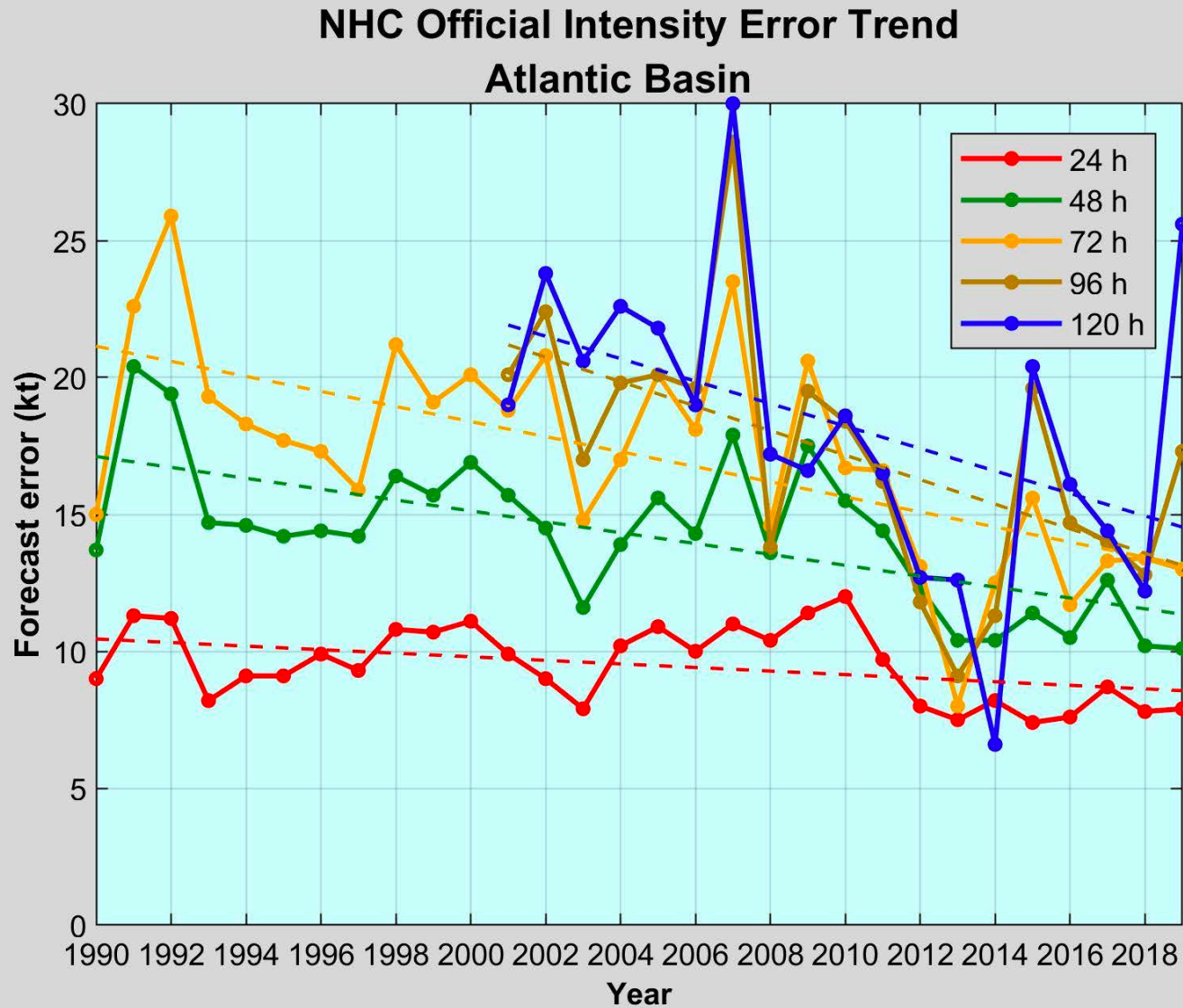




Florida Keys

Hurricane Season 2020

5-year Running Average Intensity Error





Florida Keys

Why the Weatherman Worries

Case #3: Hurricane Harvey

T-minus: Hours before Tropical Storm Force Winds arrive

- T-49 hrs: Harvey regenerates into a tropical depression
- 5-Day Track Error Cone over the coast
 - No forecast of a major hurricane



Florida Keys

Why the Weatherman Worries

Case #3: Hurricane Harvey

T-36 hrs: Harvey now a Tropical Storm

T-25 hrs: 5-Day Error Cone, forecast as a Major Hurricane

- Earliest Reasonable Arrival of TS Force Winds

 - 23 hrs' notice, ends up 2 hours early

- Most Likely Arrival of TS Force Winds

 - 29 hrs' notice, ends up 4 hours **LATE!!**



Florida Keys

Why the Weatherman Worries

Case #3: Hurricane Harvey

T-23 hrs: Harvey is now a hurricane (Cat 1)

T-00 hrs: TS Force Winds arrive on the coast

T+02 hrs: Harvey now a Major Hurricane

T+09 hrs: Northwest Eyewall reaches the coast

T+11 hrs: Landfall (Center of Eye) over the coast

Where were the nation's most powerful hurricanes five days before landfall?

Labor Day, Camille, & Michael did not exist!

Slide from Ken Graham, Dir., NHC,
FL GHC & Monroe TDC Workshop

Andrew 

Where were the nation's most powerful hurricanes three days before landfall?

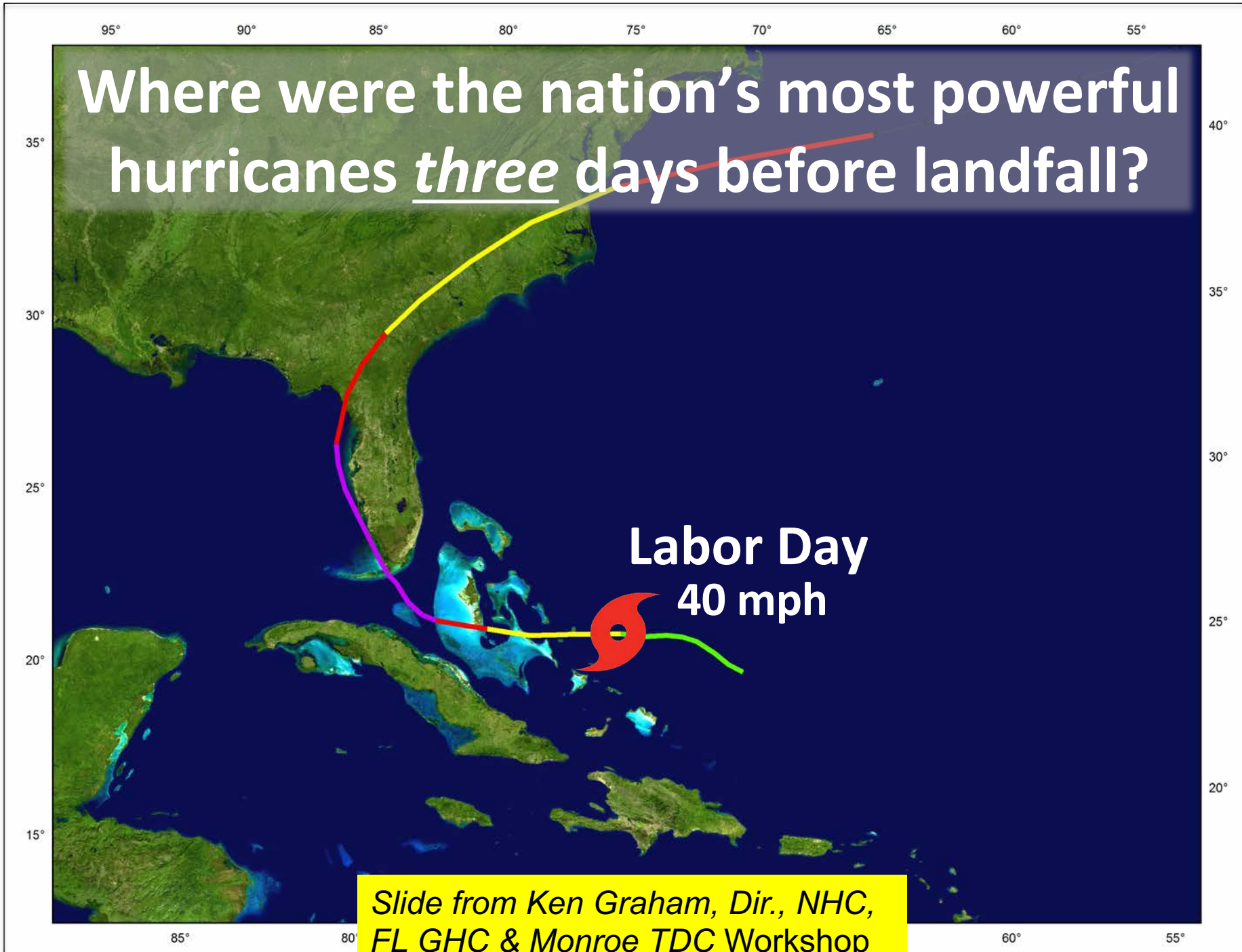


Slide from Ken Graham, Dir., NHC,
FL GHC & Monroe TDC Workshop

Where were the nation's most powerful hurricanes three days before landfall?

Labor Day
40 mph

Slide from Ken Graham, Dir., NHC,
FL GHC & Monroe TDC Workshop



Where were the nation's most powerful hurricanes three days before landfall?

35°
30°
25°
20°
15°

40°
35°
30°
25°
20°

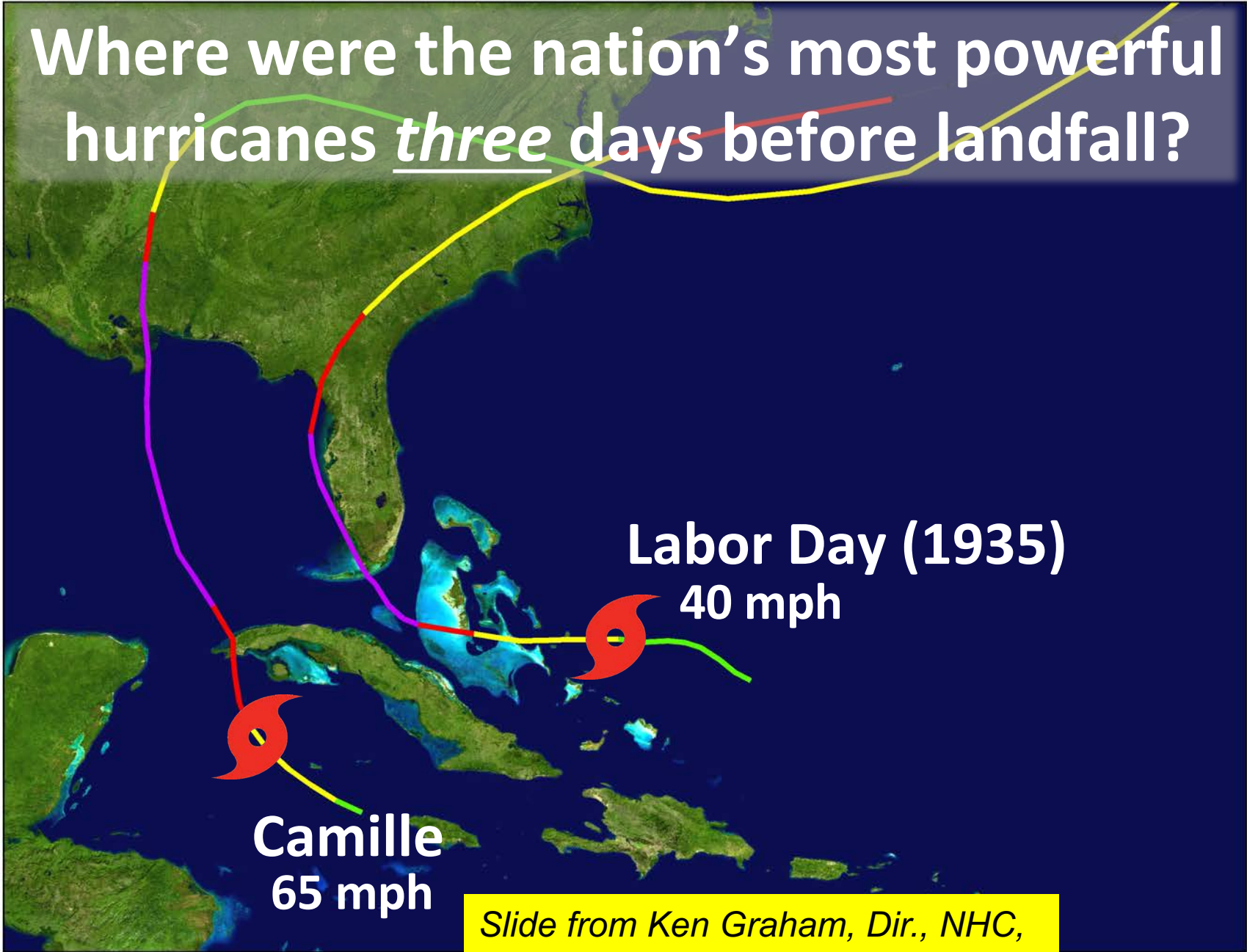
95° 90° 85° 80° 75° 70° 65° 60° 55°

85° 80° 55°

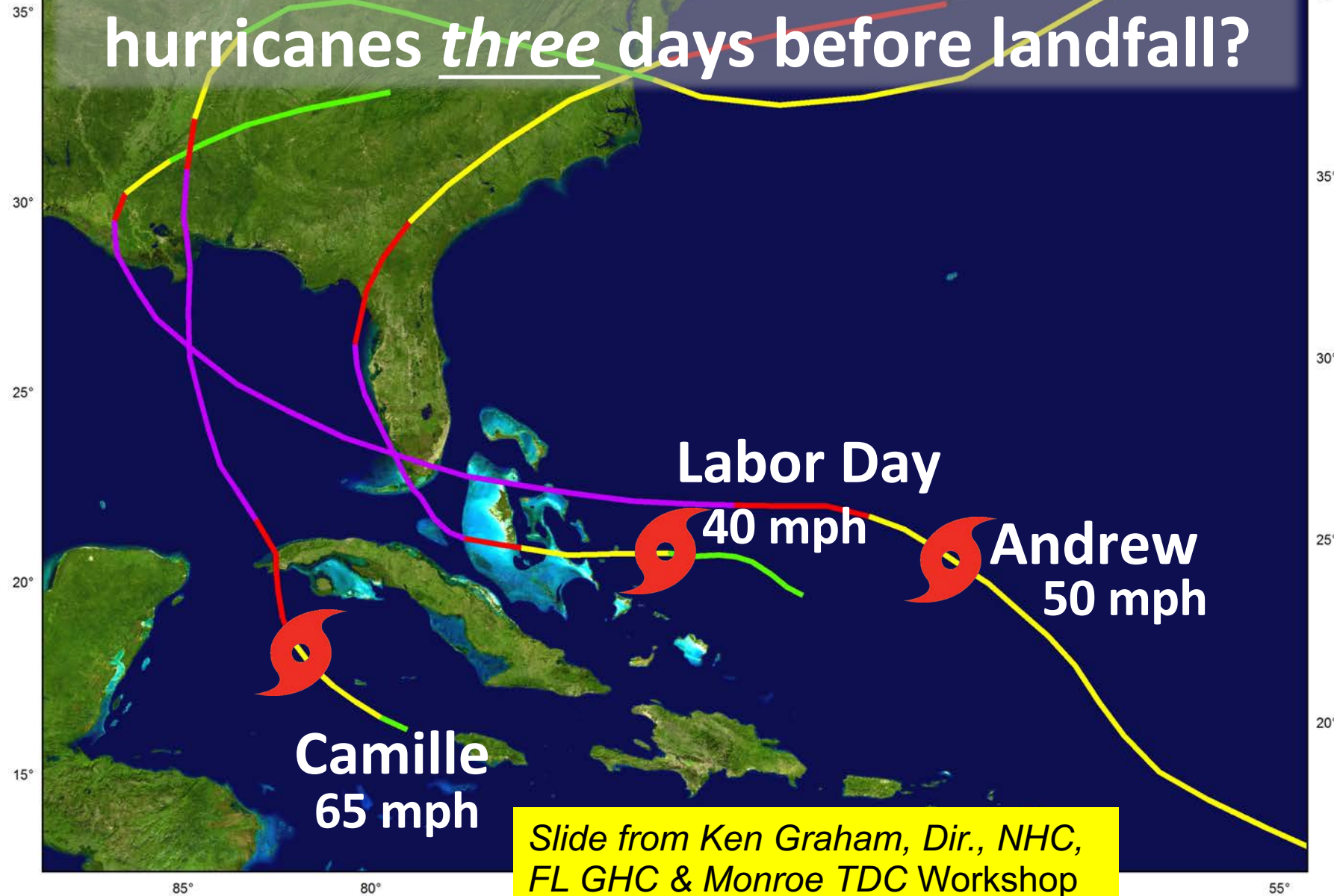
Labor Day (1935)
40 mph

Camille
65 mph

Slide from Ken Graham, Dir., NHC,
FL GHC & Monroe TDC Workshop



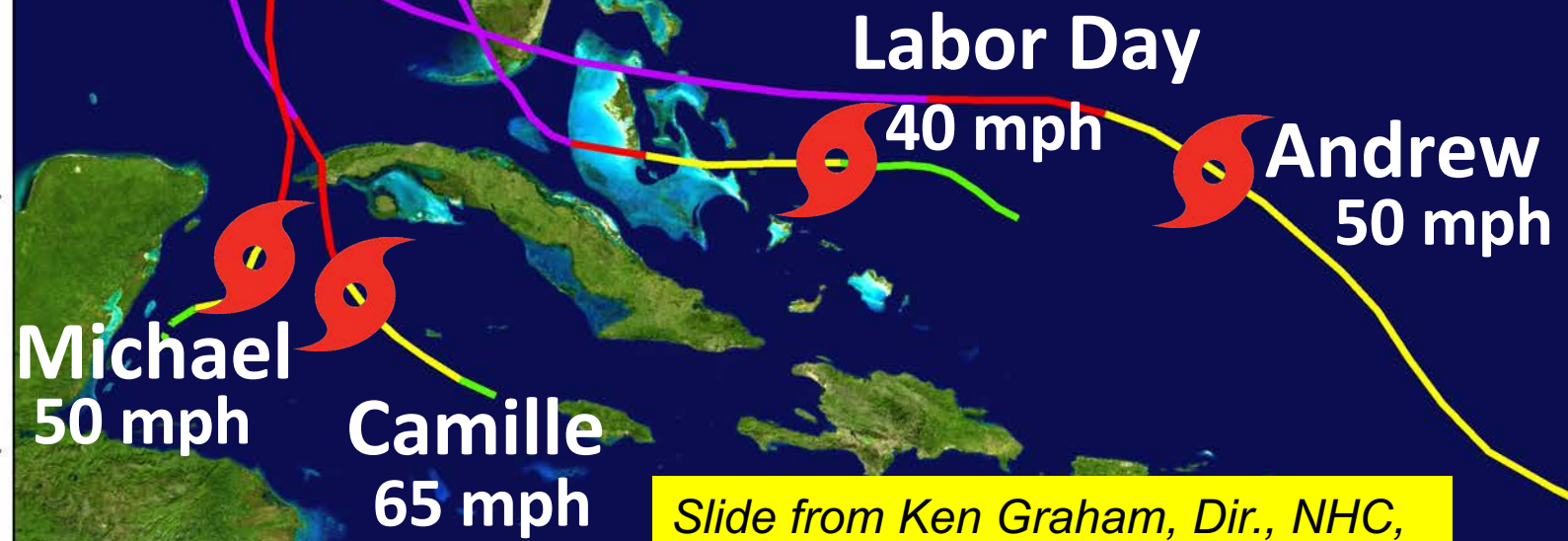
Where were the nation's most powerful hurricanes three days before landfall?



Slide from Ken Graham, Dir., NHC,
FL GHC & Monroe TDC Workshop

Where were the nation's most powerful hurricanes three days before landfall?

**All tropical storms!
All rapidly strengthened!!**



*Slide from Ken Graham, Dir., NHC,
FL GHC & Monroe TDC Workshop*

AAA Survey



Hurricane Season: 42% of Floridians Less Likely to Evacuate due to Covid-19 Concerns

80% of Floridians who would evacuate, would leave for a Category 2 hurricane or greater

31 May 2020

Floridians are increasingly concerned about the 2020 Hurricane Season and the coronavirus is one of the reasons why.



Hurricane Season 2020

NWS Florida Keys Operations in Pandemic

- Currently in Phase 0

- All critical forecast & warning operations continue inside the facility
- Augment as needed for technical repair and weather hazard
- No visitors, including core partners

- Social distancing, masks when within 6 feet
- Door controls
- Briefings conducted remotely, telework
- Authorization for one NWS rep per EOC stand-up

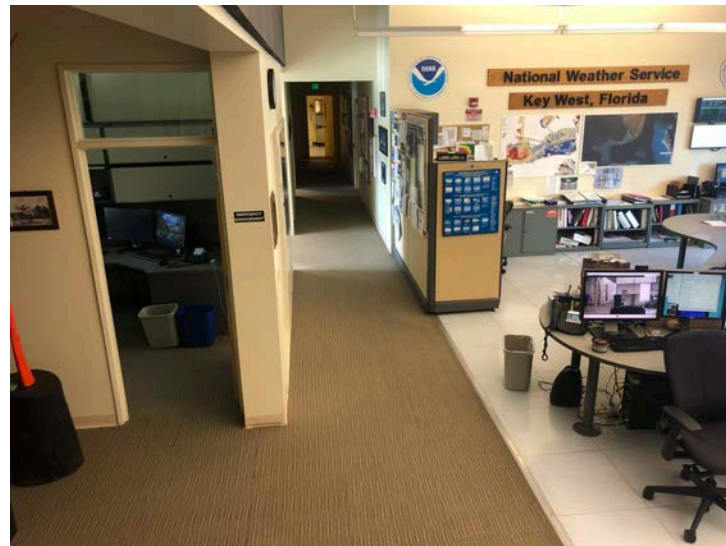




Hurricane Season 2020

NWS Florida Keys Operations in Pandemic

- Phase 1 Re-Integration
 - Following CDC (federal) reopening guidelines, using State and Local trend data
 - Supervisors return to offices
 - Middle management, perhaps in staggered rotation
 - Accounting for those in high risk or family care situations





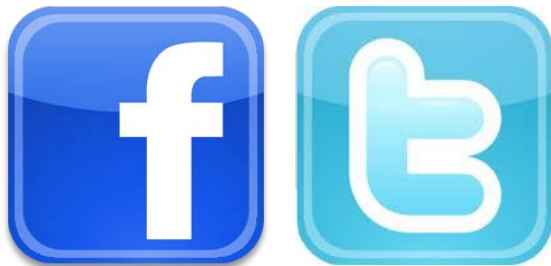
WEATHER INFO



Call 305-295-1316



CH: 2, 4, 5



NWSKeyWest

<http://weather.gov/key>
<http://hurricanes.gov>

THE FLORIDA KEYS NATIONAL WEATHER SERVICE: *Supporting Weather-Sensitive Decisions and Actions*



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Florida Keys
WEATHER FORECAST OFFICE



<http://www.weather.gov/key>
[facebook.com/NWSKeyWest](https://www.facebook.com/NWSKeyWest)



[NWSKeyWest](https://twitter.com/NWSKeyWest)