

**STEAR, Outages and  
Wellness Checks, Oh  
My!**

**Mark Rayne and  
Jared Granberry**



# Presenters

- Mark Rayne - Deputy EMC - Operations
- Jared Granberry - Senior Staff Analyst,  
Operational Coordination

# Introduction

- The City of Houston is the 4<sup>th</sup> Largest City in the nation.
- Population is 2.3 million.
- Common languages spoken include Spanish, Arabic, French , Vietnamese, and Hindi.

# Disability, Access, and Functional Needs community

- 85 hospitals with 19,390 beds<sup>1</sup>
- 62 Nursing Homes with 7,790 beds<sup>2</sup>
- 7158 Total STEAR registrants
  - 1619 Requiring Ambulance transport
  - 5539 requiring para-transit transport
  - 1230 on powered medical equipment
  - 899 on oxygen
  - 1372 have service animals or pets

1. <https://www.houstontx.gov/about/houston/health.html>

2. <https://www.hhs.texas.gov/providers/long-term-care-providers/nursing-facilities-nf>

# STEAR program

- Initially formed from the TAR (transportation assistance registry)
- Required under State law
- Administered by TDEM CIS
- Stakeholder feedback taken in the STEAR TEMAC committee
- Intake via website or 211
- Defaults to being reset on an annual basis, but jurisdictions may keep data longer.

# Senate Bill 968

- Passed by the 87<sup>th</sup> legislature and signed by the Governor on 6/16/21
- Under Sec. 418.303 to 418.307, established a mandate to perform a wellness check
- Wellness check must be completed when
  - There is an extended power, water, or gas outage
  - A state of disaster is declared
  - Or an event is determined to require a wellness check by the Health and Human Services Commission, the Department of State Health Services, or the Texas Division of Emergency Management

# Senate Bill 968

- The wellness check targets medically fragile individuals, which is defined as any individual who would be “particularly vulnerable,” including
  - People with Alzheimer’s disease or similar disorders
  - People receiving dialysis
  - People diagnosed with a chronic debilitating illness
  - People who are dependent on oxygen therapy
  - People who have conditions requiring 24 hour supervision from a skilled nurse

# Senate Bill 968

- The wellness check has the goal of maintaining continuity of care or allowing a person to continue using a powered medical device.
- The wellness check must include an automated phone call and text to the individual
- A personalized telephone call to the individual
- If unresponsive to either of those, an in-person wellness check must be performed
- Wellness checks must be completed within 24 hours of the qualifying event



# Initial Planning Process

- Office of Emergency Management determined that a better STEAR response strategy was needed after Hurricane Harvey.
- The initial effort began as a combined effort between Planning, Operations, and Training and Exercise.

# Initial Planning Process

- In 2019, OEM began coordinating with Harris County OEM and Homeland Security, to discuss best practices for utilizing STEAR, and open lines of communication regarding when jurisdictions were acting on STEAR.
- OEM also began to coordinate with other City departments.
- The result was a Standard Operating Guidelines that outlined when STEAR would be used, how frequently it would be updated, how it would be entered into mass notification systems, what messaging would be sent out, and who would the responses be referred to.

# Initial Planning Process

- We began to test using Everbridge to smaller audiences.
- We also began to send Everbridge calls and texts to registrants, when a disaster was impending.
- With the advent of COVID-19, STEAR planning slowed, due to concerns over in person meetings and increasing COVID-19 workload. There were still ad hoc calls and coordination occurring.

# Senate Bill 968 Planning Process

- Began with a kickoff meeting of meeting of internal stakeholders, including Houston Fire Department, Houston Police Department, and Houston Health Department in July 2021.
- Met monthly through January 2022, with deliverables assigned at the conclusion of each meeting and review occurring at the meeting.
- The Standard SOG was revised and formalized from September 2021, to October 2021.

# Senate Bill 968 Planning Process

- Utilized a detailed spreadsheet to track key project tasks
- Used Microsoft Teams to collaborate on files
- While meetings were held in person, we also had people attend virtually through teams.

# Senate Bill 968 Planning Process

STEAR Project Manager.xlsx

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STEAR Wellness Check Project						JUL			
Tasks / Activities	Agency Responsible	Task Lead	Start Date	End Date	WK 1	WK 2	WK 3	WK 4	
<b>STEAR Internal Coordination Group Meetings</b>									
STEAR Kick Off Meeting	OEM		7/16/2021	7/16/2021					
Meeting	OEM		8/3/2021	8/3/2021					
Meeting	OEM		9/8/2021	9/8/2021					
Meeting	OEM	Granberry	10/14/2021	10/14/2021					
Meeting	OEM		18-Nov	18-Nov					
Meeting	OEM		16-Dec	16-Dec					
Meeting	OEM		20-Jan	20-Jan					
<b>OEM ROC / Planning Meetings</b>									
ROC Huddle			9/29/2021	9/29/2021					
Planning Huddle			9/30/2021	9/30/2021					
ROC Huddle			10/13/2021	10/13/2021					
<b>Standard Operating Guide Development</b>									
Data Management	OEM	Granberry/Alvis	9/8/2021	10/14/2021					
Message Development	MYR/OEM	Benton/Hudson	9/8/2021	10/14/2021					
Emergency and Non-Emergency Use	OEM	Granberry	9/8/2021	10/14/2021					
Data Processing	OEM	Granberry/Alvis	9/8/2021	10/14/2021					
Everbridge Formatting	OEM	Granberry/Alvis	9/8/2021	10/14/2021					
Wellness Check	OEM	Granberry	9/8/2021	10/14/2021					
<b>Plan Development</b>									
Create Working Copy/Draft Plan	OEM	Alamia	8/16/2021	9/30/2021					
Evacuation Assistance	HPD CPU	Sgt. Turner							
Transportation Assistance	METRO	R. Herrera							
Wellness Check Process	HHD/HFD/HPD/OEM	Alamia / Granberry							
WCT Composition, Safety and Security Planning			10/27/2021	10/27/2021					

# Senate Bill 968 Planning Process

- Formal plan development occurred simultaneously, with the draft plan being complete by September of 2021.
- Other needed plans were identified, including
  - Evacuation Assistance Plans
  - Transportation Assistance Plans
  - Wellness Check Process Plans
  - Wellness Check Team Composition, Safety and Security Plans
  - Wellness Check Team Logistics Plans
  - Wellness Check Surveys, Scripts, and Polls Planning
  - Specialized Services Planning

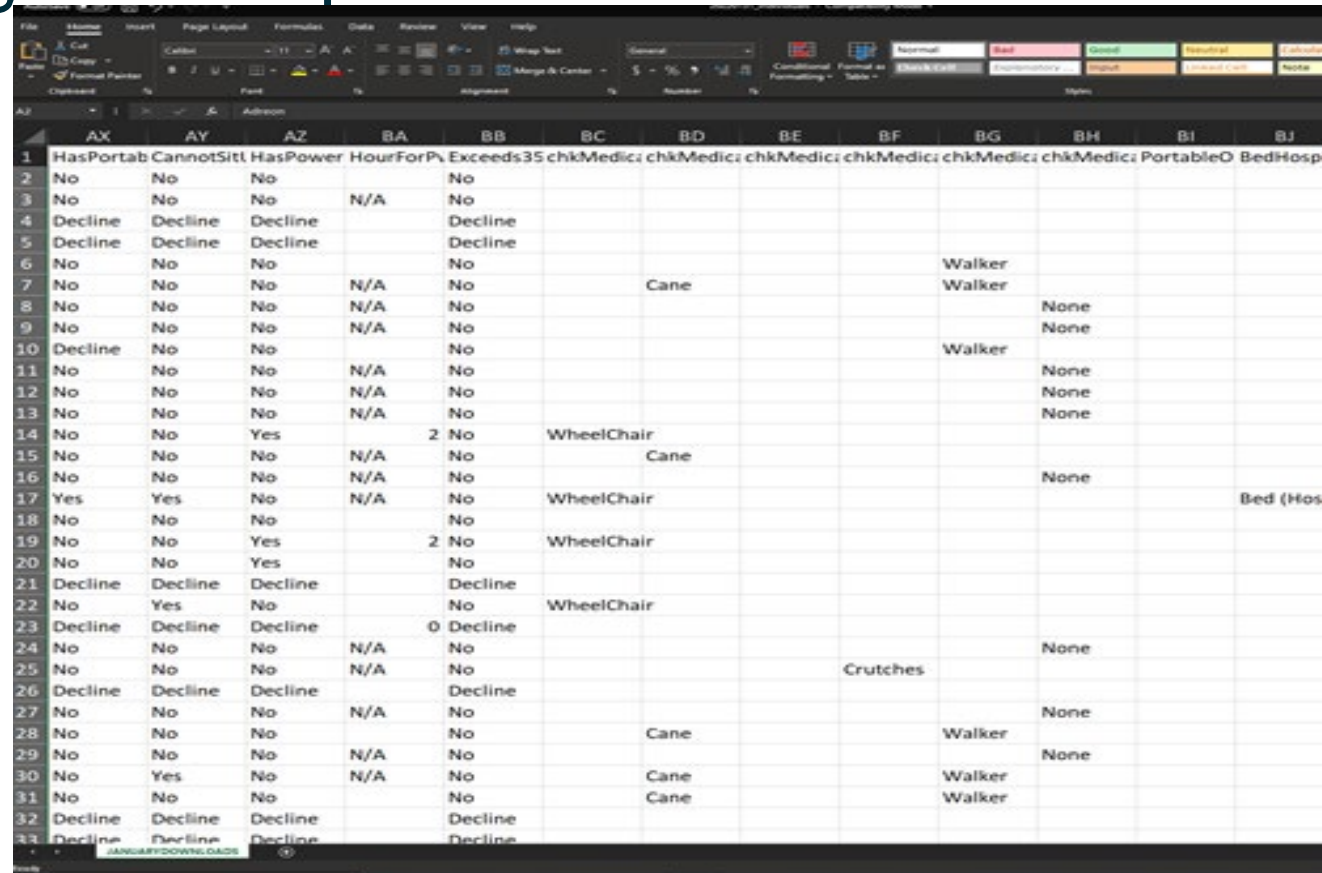
# Training Program

- After the plan was developed, it was decided we needed to train City departments on the portions of the plan they are responsible for.
- Training Areas include
  - HERT (Houston Emergency Response Team) Training
    - HERT is a surge staffing plan for disasters that utilizes non-emergency employees in disaster roles
  - Just in Time Training
  - Role of Wellness Check Team for City departments and outside stakeholders
  - Survey Technology (GIS)
  - Safety and Security while working in disaster zones



# GIS processing

- Download STEAR data individually by Zip Code and combine using a python script.



	AX	AY	AZ	BA	BB	BC	BD	BE	BF	BG	BH	BI	BJ
1	HasPortab	CannotSit	HasPower	HourForPv	Exceeds35	chkMedic	chkMedic	chkMedic	chkMedic	chkMedic	chkMedic	PortableO	BedHospi
2	No	No	No		No								
3	No	No	No	N/A	No								
4	Decline	Decline	Decline		Decline								
5	Decline	Decline	Decline		Decline								
6	No	No	No		No					Walker			
7	No	No	No	N/A	No		Cane			Walker			
8	No	No	No	N/A	No						None		
9	No	No	No	N/A	No						None		
10	Decline	No	No		No					Walker			
11	No	No	No	N/A	No						None		
12	No	No	No	N/A	No						None		
13	No	No	No	N/A	No						None		
14	No	No	Yes		2	No	WheelChair						
15	No	No	No	N/A	No		Cane						
16	No	No	No	N/A	No						None		
17	Yes	Yes	No	N/A	No		WheelChair						Bed (Hos
18	No	No	No		No								
19	No	No	Yes		2	No	WheelChair						
20	No	No	Yes		No								
21	Decline	Decline	Decline		Decline								
22	No	Yes	No		No		WheelChair						
23	Decline	Decline	Decline		0	Decline							
24	No	No	No	N/A	No						None		
25	No	No	No	N/A	No				Crutches				
26	Decline	Decline	Decline		Decline								
27	No	No	No	N/A	No						None		
28	No	No	No		No		Cane			Walker			
29	No	No	No	N/A	No						None		
30	No	Yes	No	N/A	No		Cane			Walker			
31	No	No	No		No		Cane			Walker			
32	Decline	Decline	Decline		Decline								
33	Decline	Decline	Decline		Decline								

# GIS processing

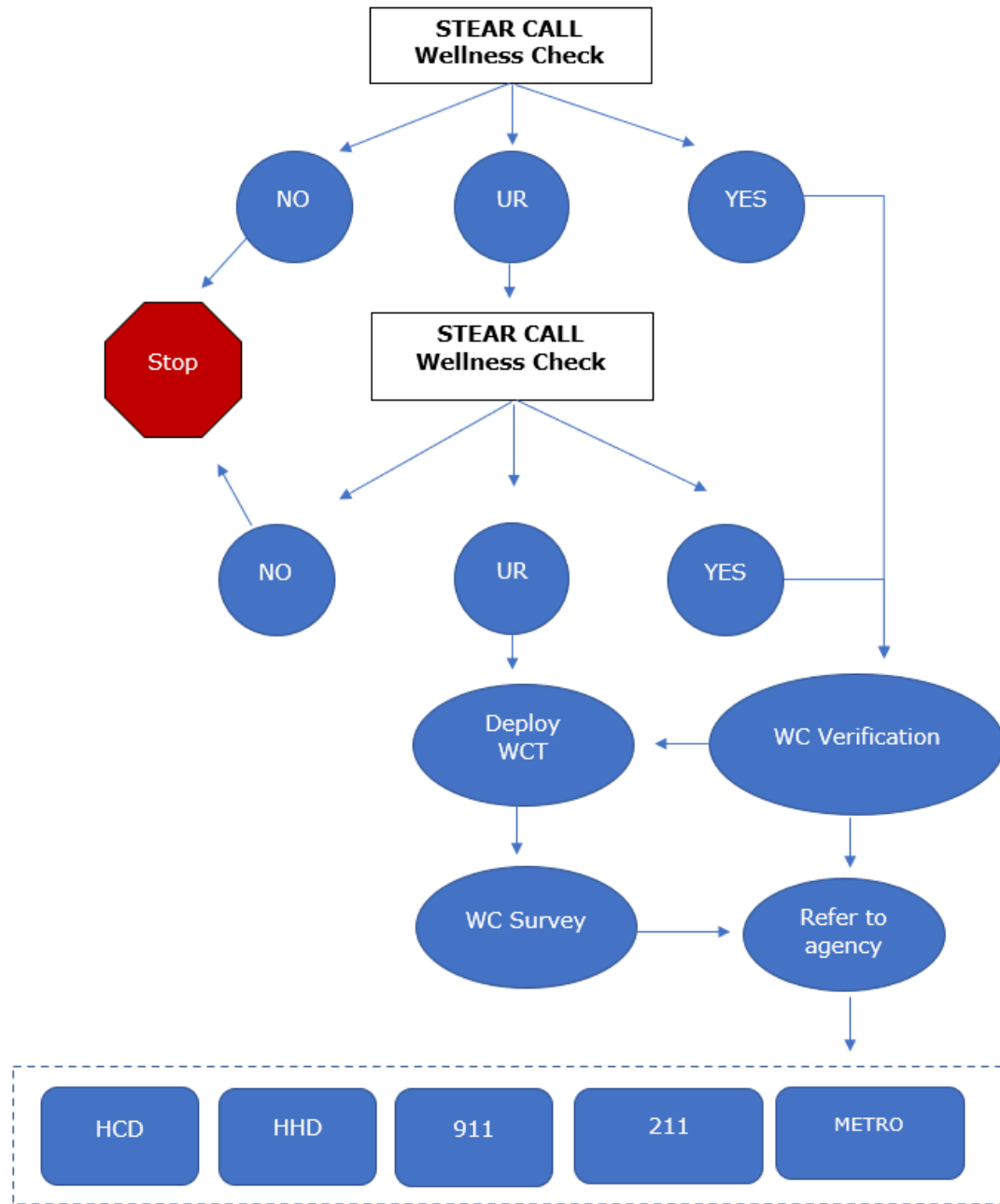
- Run a second python script in ArcGIS that does the following
  - Geocodes records (if there is not an attached latitude and longitude)
  - Removes all records outside the City limits
  - Attempts to locate any duplicate records
  - Summarizes totals of people in excess of 350 lbs, with powered medical equipment, with DME, with pets or service animals, for the entire city, as well as specific zip codes, watersheds and superneighborhoods
  - Stats are then exported into spreadsheets and uploaded into a webapp.
  - Appends all new records to a master database

# Web App Demo

<https://mycity.maps.arcgis.com/apps/webappviewer/index.html?id=ab6f2f0315614b5999d1a85736556821>

# Importing into Everbridge for mass notification

- Final python script that pulls information from the master database and formats it correctly for Everbridge
- Enables us to send mass notifications with information via phone call and text
- Can target specific groups via area boundaries, or for certain categories such as “Has Powered DME” or “is on oxygen” as well as specific language groups
- Able to send out a poll via Everbridge, to ask questions such as “Do you need evacuation?” or “Are you running low on oxygen and are unable to get it replenished?”



# Wellness Checks

- The initial wellness check will consist of an automated phone poll via voice and text message.
- The question asked via poll will be “Do you want to be contacted by a Wellness Check Verification Team?”
- If they are un-responsive, a follow-on call will be sent in 1 hour.
- If they respond yes, to either the first or second call, they will be referred to the Wellness Check Verification team, who will contact the individual via phone call.
- If they are unresponsive to automated phone calls, an in-person Wellness Check team will be sent to their residence.

# Wellness Checks

- The Wellness Check team (WCT) will consist of members of Houston Police Department (HPD), Houston Fire Department (HFD), Houston Health Department (HHD), and the Houston Emergency Response Team (HERT).
- They will be deployed initially to a staging area near concentrations of people who require a wellness check, and will be accompanied by supervisory staff, where a safety briefing will be performed, and radios, maps, and tablets issued.
- WCT members will wear shirts identifying them as City employees and carry their City identification.

# Wellness Checks

- Surveys will be conducted utilizing Survey 123 and the City's Public Safety ArcGIS Online (AGO).
- Phone Surveys and In-Person Surveys will ask the same questions.
- Needs identified by the Phone Survey will be referred to the appropriate agency (Housing and Community Development, HHD, 911, 211, METRO, etc)
- WCTs will have access to language access lines, deaf services, etc.
- WCTs will notify the resident of what agency they are being referred to, and an ETA of when services will be provided.



# Wellness Checks

- The staging area will have food/water for WCT members, as well as shelf-stable food and bottled water to provide to residents whose only need is food and water.
- If the WCT is unable to resolve the need, the person will be referred to the WCVT for follow-up and further escalation of the need.

# Wellness Check Survey

## Resident Information

Name:		
Address:		Apartment #:
City: Houston	State: Texas	Zip Code:
Primary Contact Number:	2 <sup>nd</sup> Contact Number:	

## Continuity of Care Information

Are there any persons in your household that need immediate medical attention?	Yes	No
Do you have a sufficient supply of Medications?	Yes	No
Do you have a sufficient supply of Medical Supplies and Equipment? ( <u>consumable</u> , durable)	Yes	No

## Immediate Needs Information

Do you have access to adequate supply of Power?	Yes	No
Do you have access to adequate supply of Water?	Yes	No
Do you have access to adequate supply of Food?	Yes	No

# Wellness Check Team Job Aid

Wellness Check Team Job Aid	
<input type="checkbox"/>	Deploy to designated staging area.
<input type="checkbox"/>	Obtain briefing from Wellness Check Taskforce Leader.
<input type="checkbox"/>	Meet with assigned team members.
<input type="checkbox"/>	Receive Just-in-Time training and safety briefing.
<input type="checkbox"/>	Obtain equipment for wellness check operations.
<input type="checkbox"/>	Review Wellness Check Survey to become familiar with questions.
<input type="checkbox"/>	Receive assignment and Wellness Check sites/locations.
<input type="checkbox"/>	Coordinate transportation and check vehicle.
<input type="checkbox"/>	<u>Remain with your team at all times.</u>
<input type="checkbox"/>	Assess physical and mental health of other team members.
<input type="checkbox"/>	Before approaching any homes monitor surroundings to ensure safety.
<input type="checkbox"/>	Clearly identify yourself as a City of Houston Employee performing a Wellness Check.
<input type="checkbox"/>	Conduct wellness check assessments and fill out survey forms appropriately.
<input type="checkbox"/>	Distribute referral and information sheets to resident.
<input type="checkbox"/>	Maintain situational awareness.
<input type="checkbox"/>	Conduct survey and fill out appropriately.
<input type="checkbox"/>	Ensure wellness check survey is uploading with an internet connection or saving to device.
<input type="checkbox"/>	Turn in all equipment and supplies to the City of Houston EOC.

# Wellness Check Taskforce Leader Job Aid

Wellness Check Taskforce Leader Job Aid	
<input type="checkbox"/>	Obtain briefing from the Operations Section Chief, Branch Director, or EOC.
<input type="checkbox"/>	Deploy to designated staging area.
<input type="checkbox"/>	Provide Just-in-Time training and safety briefing for all wellness check teams.
<input type="checkbox"/>	Receive equipment for wellness check teams and distribute accordingly.
<input type="checkbox"/>	Receive site /location assignments and assign to WCTs.
<input type="checkbox"/>	Review Wellness Check survey forms, information, and reports for appropriateness and accuracy.
<input type="checkbox"/>	Serve as the Safety Officer for Wellness Check Teams and coordinate with EOC SOFR.
<input type="checkbox"/>	Monitor team, ensure team members work in pairs for safety.
<input type="checkbox"/>	Monitor team, ensure that no team member works passed assigned operational period.
<input type="checkbox"/>	Monitor team, ensure that team members take breaks throughout the day.
<input type="checkbox"/>	Monitor team, ensure that team members are staying hydrated and in good health.
<input type="checkbox"/>	Maintain situational awareness of team and location during operations.
<input type="checkbox"/>	Assist WCTs with technical issues or refer to COH EOC for technical assistance.
<input type="checkbox"/>	Upon completion of operations, return to staging location or EOC.
<input type="checkbox"/>	Ensure all equipment is collected from team members and returned.

# Public Education campaign

- The PIO/JIC will develop and disseminate posts regarding the STEAR program, SB 968, and the wellness check process via our social media and website.
- Attempting to leverage Houston Television (a City department tasked with assisting in recording and productive of Public Service Announcements), local University television, and radio.
- Pursuing funding via grant, or City budget to publish flyers and other promo material.

# Questions?

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