Automating Field Data Management – Heat Season 2019

Nov 20, 2019 Emergency Management



Background NYCEM GIS Mission

To support the decision making processes of NYC emergency management and its partners by producing reliable location-based information through the integration, analysis, and visualization of essential data distributed in the form of maps, datasets, summary metrics, and associated applications.



Background Heat Season

June - September

Heat Emergency Plan Cooling Centers

Key Players



Extreme Heat



Extreme heat is one of the most significant hazards facing New York City, and New Yorkers are especially vulnerable to extreme heat-related hazards during the summer months. Generally, extreme heat is defined by temperatures that hover 10 degrees or more above the average high temperature for the region, last for prolonged periods of time, and are accompanied by high humidity.

On warm summer days, the city can be as much as 10 degrees warmer than its surrounding areas. The city's infrastructure — largely made up of asphalt, concrete and metal — traps the heat. This is known as the "urban heat island" effect.

	Expand All	Collapse All
Know the Terms		+
What to Do Before Extreme Heat		+
What to Do During Extreme Heat		+
What the City Does		+

More Resources

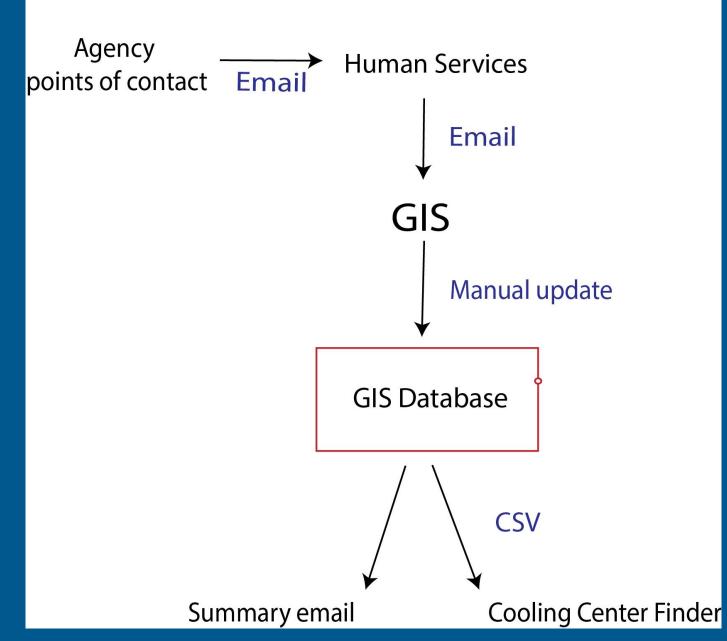
NYC Cooling Center Finder

- Heat-related illnesses and tips (NYC Department of Health & Mental Hygiene)
 Out of the set of the set
- Get information about ways to save energy from Con Edison and PSEG Long Island



Background

Previous Workflow





Fulcrum

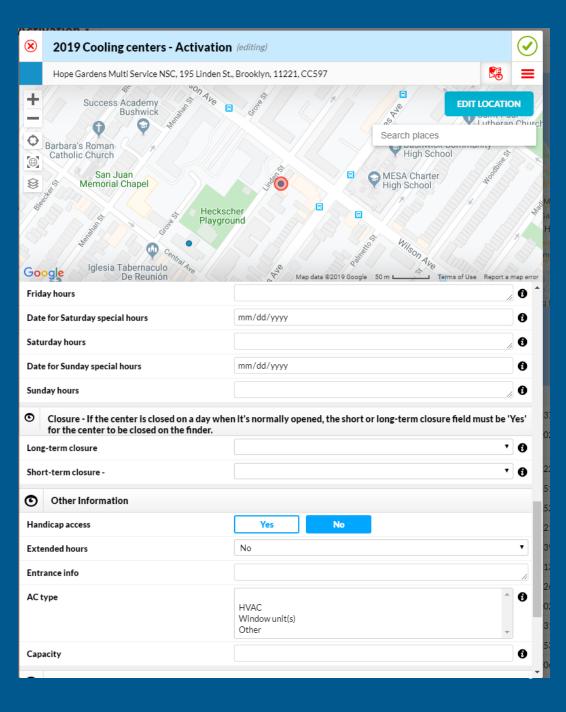
Pre-season Application

- GIS uploaded last year's list of cooling centers on Fulcrum
- Partner agencies reviewed information in the beginning of the season
- Downloaded data and set up in database

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Status	Updated (device)	8/16/2019, 10:59:16 AM 2 months ago by Linda Whitaker			
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Assignment Projects	Duration	1 minute, 5 seconds (Total Time) 1 second (Most Recent Update)	5 km L Terms of Use		
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	Project	DFTA 2019 🔹	GIS Admin	CC103	
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Fulcrum Activation Application





Fulcrum Activation Application

Partner agencies entered changes of cooling center hours at the start and throughout the activation

⊙	Special hours changes by date and day of week - Leave as-is if hours are not changing			
Regu	ılar hours	M - F 9a-5p	11	
Date	* for Monday special hours	07/22/2019	ׇ▼ ð	
Mon	day hours	CLOSED	20	
Date	* for Tuesday special hours	07/23/2019	0	
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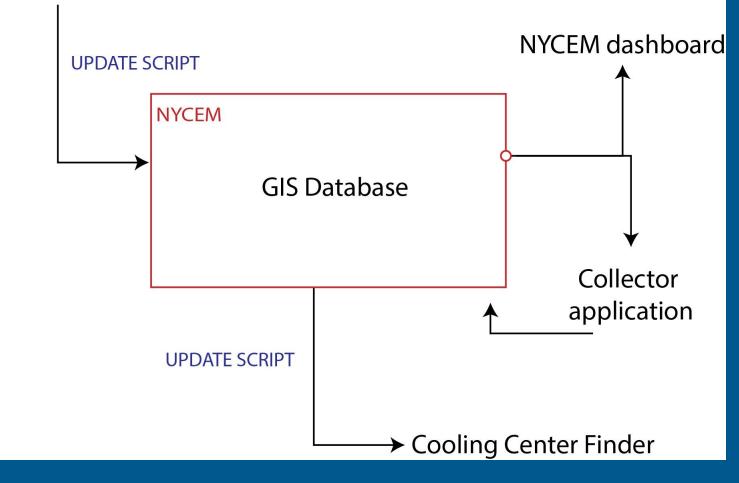


Workflow

Current Workflow

Agency points of contact

Fulcrum form





Output GIS team

Tue 7/30/2019 10:39 AM	
Success - Cooling Center Data Automation (10:38:32.470758)	222 July 30 2019)
To NYC OEM GIS Data	
Cc	

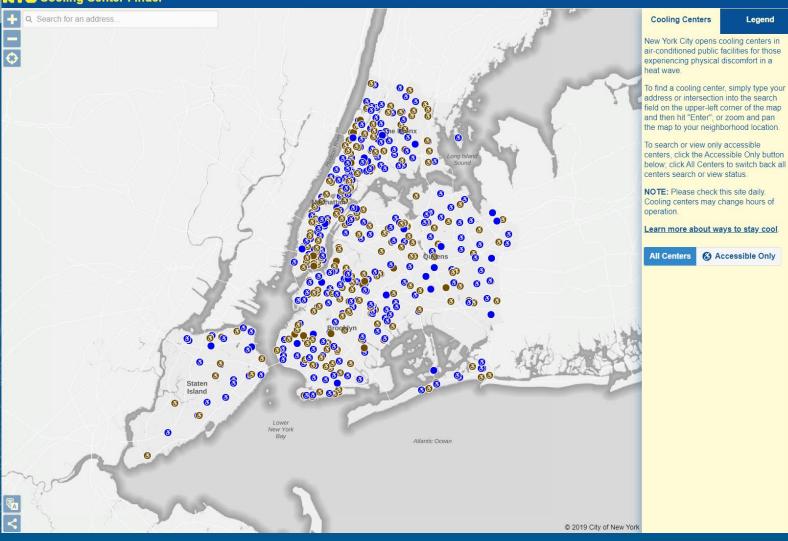
Cooling Center Data Automation post success on 10:38:32.498219163 July 30 2019

https://maps.nyc.gov/oem/cc



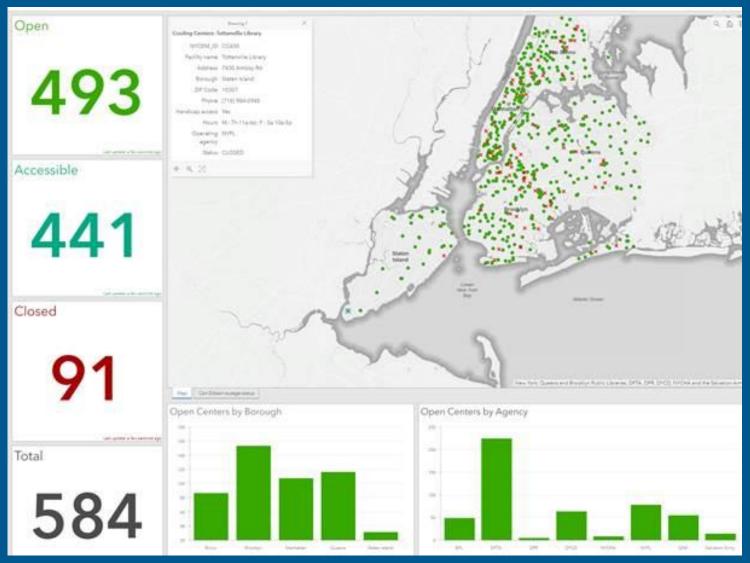
Output Cooling Center Finder

NYC Cooling Center Finder



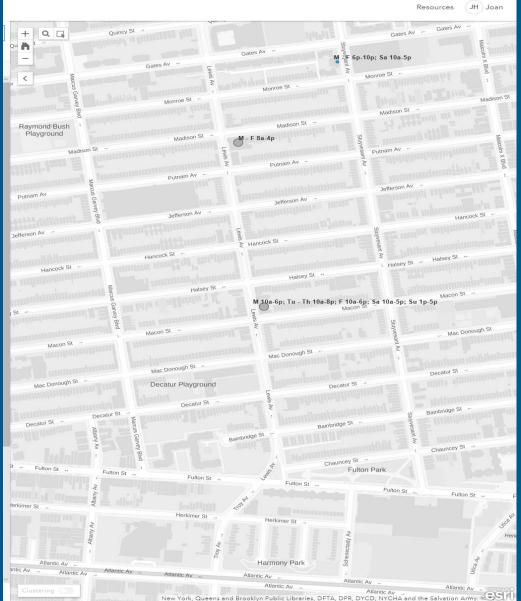


Output ArcGIS Online dashboard for NYCEM



ArcGIS Collector and Workforce NYCEM Site Visits

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Lesson Learned

- Fulcrum licenses
- System based on partner parameters
- More specific data questions



Coming Soon...

- Refining backend process
- Accessibility on Finder
- Analysis and field collection tools



QUESTIONS?

yhiguchi@oem.nyc.gov



