



**REQUEST FOR INFORMATION:
EVACUATION**

Response Deadline: May 23rd, 2022



City of Boston
Mayor Michelle Wu



Emergency Management

LETTER TO THE COMMUNITY

Dear Evacuation Stakeholders,

Evacuating the City of Boston is a complex process that requires strong communication, coordination, and access to real time data that can be analyzed by decision makers. Climate change is fueling extreme weather, causing storms to move faster up the coast towards our City, which tightens the timeframe in which we can execute evacuation plans. Terrorism and hazardous materials accidents join a long list of additional scenarios that may prompt residents to leave their homes and head to a safer location. Stationary signage that is difficult to interpret is not enough, and traditional evacuation plans with static routes only provide a foundation for which more dynamic and accommodating operations are needed. Due to evolving hazards, the City's evacuation planning must improve to ensure decisions can be made faster and communications regarding life safety actions (i.e., evacuation and shelter) can reach all Boston residents through inclusive equitable communication methods.

The purpose of the Request For Information (RFI) is to leverage subject matter experts, and other partners, to assist the Boston Office of Emergency Management (OEM) to:

- Build on existing planning efforts and improve the City's evacuation plan
- Develop a strategy for future partnerships and investments

To support this planning initiative Boston OEM invites you to respond to this RFI. The responses received through this RFI:

- Are public record and will be shared with state and regional evacuation partners to benefit our overall approach.
- Can be focused on one area of evacuation or address a holistic approach to evacuation.
- Participation -- or lack thereof -- in this process does not help or hurt any entity's chances for partnership opportunities with us in the future.
- Is for planning purposes only and does not commit OEM or the City to issue a solicitation or award a contract.
- Will serve solely to assist the City and our partners in understanding the current landscape of evacuation with regards to the solicited information or to inform the development of a possible solicitation for a Request for Proposal in the future.

After the submission period ends, we may invite respondents to tell us more about their ideas. Also, responses may be showcased at public events so we can share the ideas we received with a broader group. These steps will help us better build an innovative and comprehensive evacuation process. Should the City choose to pursue any specific ideas



from the responses to the RFI we will engage in public processes with the Boston community at that time.

We value your input and welcome your response. Please respond via this [Google Form](#), and if you have any questions, contact sarah.eig@boston.gov.

Sincerely,

City of Boston Office of Emergency Management

WHERE WE ARE

The City of Boston's Office of Emergency Management (OEM) has been working on an update to the City's Evacuation Support Annex, part of the overall City's Comprehensive Emergency Management Program. The draft plan covers shelter-in-place, evacuation, and re-entry. The City's plan assumes some residents will evacuate on their own volition and using their own resources, while others will need varying degrees of resources and support. Coordination with neighboring jurisdictions and the Commonwealth of Massachusetts will be vital to the execution of this updated plan. OEM has also been developing updates to evacuation routing to incorporate areas of growth and change in the City.

It is important to highlight that there are two critical definitions when it comes to the City of Boston evacuating population: Self-Evacuating and Critical Transportation Needs (CTN). The self-evacuating population refers to evacuees with the means and capability to evacuate the impacted area without government-provided transportation assistance. CTN are evacuees with limited or no access to transportation who require government assistance to evacuate safely. CTN may include, but are not limited to, homebound populations; individuals with Access and Functional Needs, including individuals who do not speak English; individuals with household pets; unaccompanied minors; and individuals with no access to a vehicle or a ride with a friend/family. The effectiveness of an evacuation relies on incorporating solutions to support both populations. OEM is committed to ensuring that our plan updates are equitable and inclusive of all Boston residents.

Beyond CTN, there are a variety of priority populations that should be considered when building out evacuation planning. Boston has a wide range of healthcare facilities, public housing, and colleges and universities. Each of these areas will require additional considerations to include dedicated routing and accessible evacuation assembly points. We have begun exploring point to point healthcare facility evacuation, outreach with the higher education community, and building a partnership with public housing, but more



needs to be done to better support our community stakeholders within evacuation planning.

The theme throughout is how we can incorporate innovation and technology to equitably enhance all aspects of evacuation. The focus is on utilizing systems and supports that are already present in the community or could be easily integrated into the community for use both in emergency and non-emergency situations.

WHERE WE ARE GOING

The Evacuation Plan can not just live in the pages of a document. It needs to be functional and support all residents in being prepared for an evacuation, whether it be a notice event, such as a hurricane, or a no-notice event, such as a hazardous materials incident. The evacuation also needs to support all residents and ensure that it meets people where they are and accounts for their needs. Please apply a racial justice and social equity lens when submitting your responses. This RFI is looking to create innovative solutions for how the City:

- **Develops Alternative Routing** - On a good day, a commute has obstacles due to road and building construction, hazardous conditions (downed tree), community events (parade), and re-alignment (road diet, bus only lanes). It is important to have primary evacuation routes and a capability to create in-the-moment routing to serve as alternative routing due to a multitude of forecasted and unforecasted impacts to the primary route. Routing does not end at the City's border and our tools to support routing should be able to look past borders as well.
- **Utilizes Technology and Existing Platforms** - Waze and Google Maps are two examples of existing technology platforms that are utilized on a daily basis by commuters to navigate their routes. It is important that we leverage existing platforms that residents are familiar with to support them in an emergency situation. What other existing blue sky platforms can also help in an emergency whether it is to support routing, public information, or other information sharing? What interactive tools could be used to track evacuation routes as they are being used and in turn update both evacuees and city personnel in real time?
- **Utilizes Way Finding Tools** - Marking mechanisms serve to physically or digitally mark evacuation routes to allow residents to find their way out of a dangerous area. Dynamic signage that can be changed if routes change or utilizes existing infrastructure is beneficial to both City officials and residents. Creating climate friendly signage such as lighting with solar battery storage is also important when considering these tools.
- **Informs** - It is important to reach out to all members of the community before, during, and after an evacuation to share information using a variety of methods

and platforms to make sure as many people as possible are informed. Evacuation can only run smoothly when all members of the community are aware of what is taking place and what their role in evacuation is. It is important to share informative and consistent information throughout the evacuation that is able to reach and be understood by all members of the community including those who will be self-evacuating and those with critical transportation needs.

- **Supports Multi-Modal Evacuation** - Residents and visitors alike move around the City in different ways and we believe the same will be true in an evacuation. Traditional routing does not account for bikes, scooters or walking routes and it is important to give people options to evacuate the way they move. What are ways to support multi-modal evacuation routing?
- **Supports Critical Transportation Needs** - The CTN definition is broad because in an evacuation, it may be harder for a large quantity of people to get out on their own. Since a variety of people fit the CTN definition, it is important to come up with a variety of ways to support them. From getting information about resources, to the best placement for evacuation pick up locations, to utilizing alternative methods for evacuating when primary methods are unavailable based on the incident, to leveraging technology that is already used to pivot towards evacuation operations.
- **Displays Information** - If data can not be shared in an easy to understand and easy to manipulate format the full understanding of what that data represents will be lost. Additionally, if the tools used to support evacuation decisions are difficult to use, explain, and update the decisions will not be enhanced and maybe even hindered. Awareness of the situation and having everyone on the same page are vital components of an effective and efficient evacuation, as is confident leadership. Our evacuation process needs decision support tools and information displays that aid decision makers in visualizing the situation to support making necessary decisions. These tools need to be easy to update with publicly available information (ie. census) and executed with minimal training. Tools that are able to be integrated into existing City used platforms, such as ArcGIS are even more beneficial as it already aligns with how the City views information. Options for public-facing components such as a public dashboard will also help to advise the public on the decisions being made and how the overall evacuation is being executed. The ability for information displays to take into account the decision making side and the public information sides is key and should be thought of together.
- **Engages with the Public** - Adopting changes and rolling out an updated evacuation plan requires a strong and equitable public engagement campaign. It is important that we work together to make sure that the right information gets to the right people in a method that they are comfortable with. Especially when discussing a topic such as evacuation it is important to work together with the public as we would during an actual evacuation. This helps to build trust, legitimacy and validation by the community. Methods for evaluating our public engagement on evacuation is just as important. If we are not engaging with the

public in ways that are amplifying our message then we need to adjust to ways that are more effective. This is especially true of CTN populations who need a variety of methods of engagement to be truly prepared.

- **Leads with Innovation** - There are a variety of areas of evacuation that would benefit from the contributions of technology and innovation. Simulation tools would allow us to test our plans and assumptions regarding a variety of scenarios so that we can sharpen our overall planning. Incident management tools that would help the City manage and maintain a full site picture of a large-scale evacuation event. What other areas of evacuation could be improved that haven't been covered? What technologies exist that should be used to increase the effectiveness of evacuation? How can we adapt our evacuation zones to optimize traffic modeling for an evacuation?

RESPONSES

INTRODUCE YOURSELF

Please tell us more about why you are submitting a proposal and how your background qualifies you to make this recommendation. We're open to all types of experience and expertise, whether academic, professional, political, or personal.

SHARE YOUR IDEAS

In the linked Google Form please share your innovative ideas that will help shape an evacuation that will be supportive of all residents of Boston and beyond. Your response can be focused on one area of evacuation or address a holistic approach to evacuation.

TIMELINE AND PROCESS

IMPORTANT DATES

Date / Time	Event	Notes
3/25/2022	RFI Publicly Released	
4/06/2022	Questions Due	Submitted to EngageOEM@boston.gov
4/08/2022	City will provide responses to questions	Answers will be posted to Evacuation RFI Google

		Drive Folder
5/23/2022*	RFI Responses Due <small>*This is an extension from original due date</small>	Submitted via Evacuation RFI Google Form

ADDITIONAL INFORMATION

- This Request for Information (RFI) is for information and planning purposes only and shall not be construed as a solicitation or as an obligation on the part of the City to issue any competitive procurement or award a contract. It will help us develop our strategy for future partnerships and investments, but your participation -- or lack thereof -- in this process does not help or hurt your chances of partnering with us in the future.
- The City will not award a contract on the basis of responses to this RFI nor otherwise pay for the preparation of any information submitted, for any vendor presentation, or the City's use of such information.
- All responses to this RFI will be public record under the Massachusetts' Public Records Law, Mass. Gen. L. Ch. 66 s. 10, regardless of confidentiality notices to the contrary; do not submit confidential information in your response.
- By submitting, the respondent authorizes the City of Boston to publicize, refer to, and use your response as it sees fit.