

**NIYAM IT**<sup>TM</sup>

# **Flood Risk Advisor**

The AI Voice Assistant for Vital Flood Risk Information

# The Challenge

## Accessibility is the Problem:

- + Enormous amounts of environmental data are being produced to address disaster management and climate change. However, the sheer volume of exponentially growing data produced from a variety of resources makes categorization, sharing, and analysis **daunting for public agencies**.
- + National Research Council highlights the accessibility of flood risk information as the **key to achieving resilient communities**.

**THE SHEER  
VOLUME  
OF ENVIRONMENTAL  
DATA MAKES IT  
DIFFICULT  
TO ACCESS**

# The Approach

## Intelligent Assistants are the Answer:

- + Intelligent virtual assistants can serve as a critical resource to **address big data challenges** faced by stakeholders preparing for and responding to floods.
- + Life-like intelligent assistants use advanced AI and speech recognition technologies to **enhance information flow** for emergency managers and the public.

**VIRTUAL ASSISTANTS  
CAN SIMPLIFY ACCESS TO  
DATA AND IMPROVE THE  
FLOW OF  
INFORMATION**

“

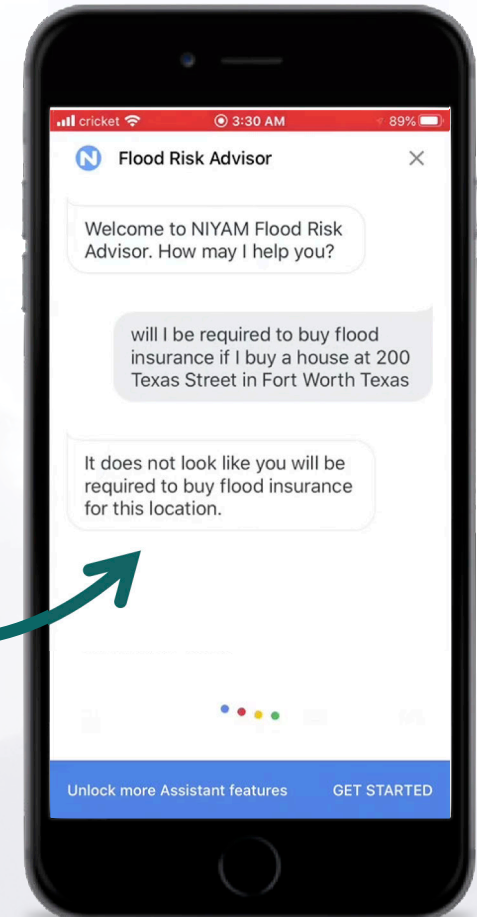
***Agencies can increase their preparedness by incorporating AI-enabled intelligent virtual assistants into their response strategies.***

Scott Clarke  
Government Computer News (GCN)

# Our Solution

The Flood Risk Advisor answers flood risk questions in natural language by generating knowledge from authoritative data resources.

The Flood Risk Advisor allows the public to **stay informed about flood risk** in their community. For instance, prospective homeowners may ask about future flood risk on a property using apps like Messenger, Google Assistant, or Skype, and receive a concise and useful answer as if they are talking to an actual flood expert.

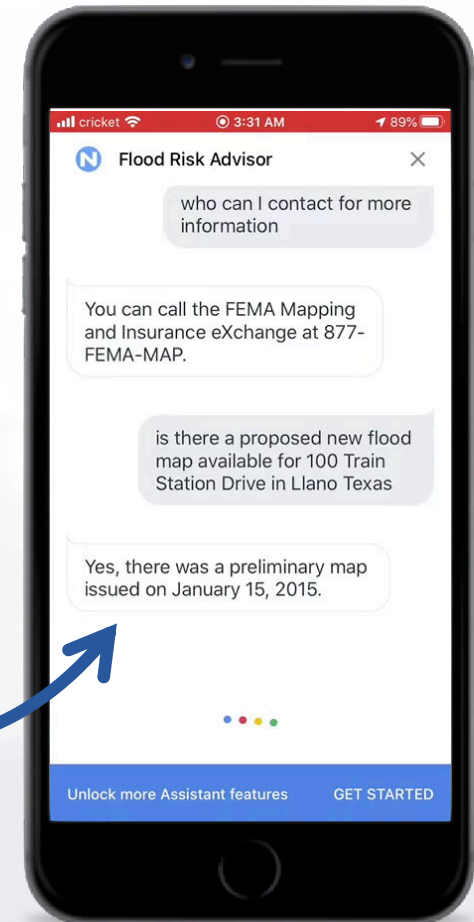


# Our Solution

The Flood Risk Advisor automatically finds and analyzes information from distributed data sources to answer questions, saving valuable time.

We leverage artificial intelligence and machine learning (AI/ML) to empower stakeholders with access to actionable knowledge – **simply ask a question and get an immediate answer in natural language.**

Our technology continuously improves by learning the relationship between flood risk questions and agency databases as they evolve.



# Easy Integration

Flood Risk Advisor can be integrated into any website as well as a wide range of communication channels for voice-enabled support.

## Chat Applications & Smart Assistants

- + Facebook Messenger
- + Microsoft Skype
- + Slack
- + Google Assistant
- + Microsoft Cortana
- + Apple Siri

*And more...*

## Smart Speakers & Virtual Reality Devices

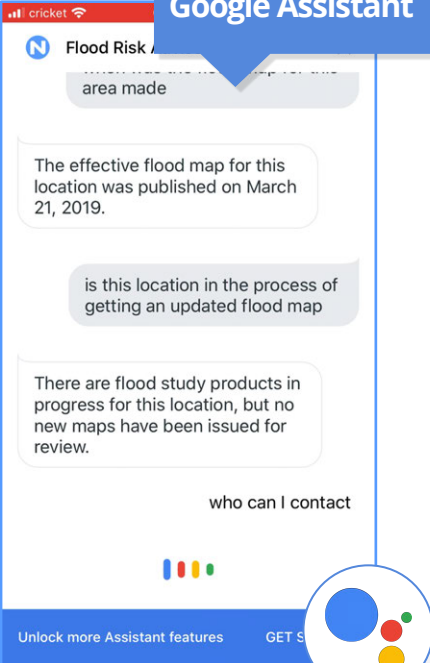
- + Google Home
- + Amazon Alexa
- + Microsoft HoloLens
- + Oculus Go
- + HTC Vive
- + Smartphones

*And more...*

# Demo

Want to see the Flood Risk Advisor in action? **Ask us about our Demo Video.**

**Google Assistant**




The effective flood map for this location was published on March 21, 2019.

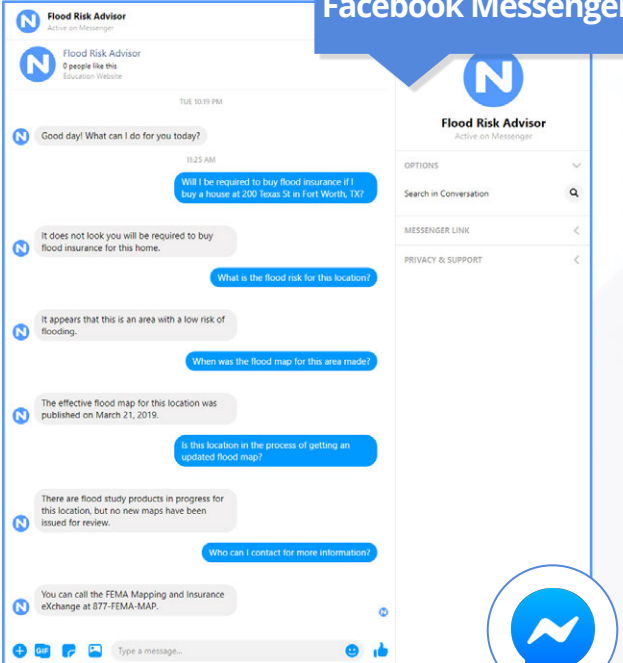
is this location in the process of getting an updated flood map

There are flood study products in progress for this location, but no new maps have been issued for review.

who can I contact



**Facebook Messenger**



Good day! What can I do for you today?

Will I be required to buy flood insurance if I buy a house at 200 Texas St in Fort Worth, TX?

It does not look you will be required to buy flood insurance for this home.

What is the flood risk for this location?

It appears that this is an area with a low risk of flooding.

When was the flood map for this area made?


The effective flood map for this location was published on March 21, 2019.

Is this location in the process of getting an updated flood map?

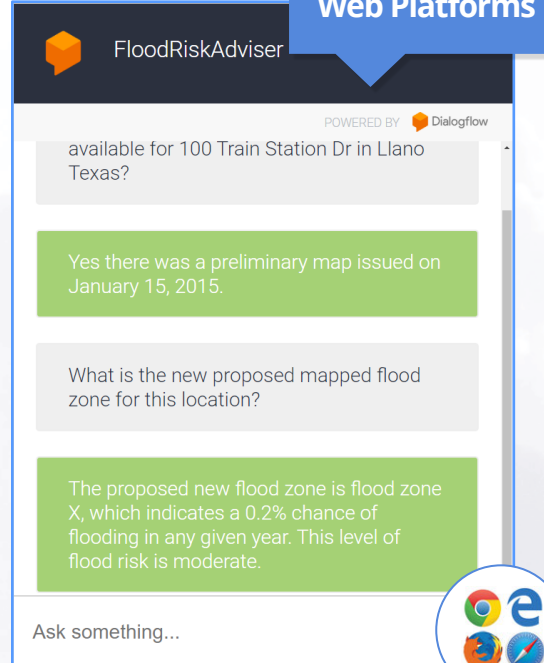
There are flood study products in progress for this location, but no new maps have been issued for review.

Who can I contact for more information?

You can call the FEMA Mapping and Insurance eXchange at 877-FEMA-MAP.



**Web Platforms**




available for 100 Train Station Dr in Llano Texas?

Yes there was a preliminary map issued on January 15, 2015.

What is the new proposed mapped flood zone for this location?

The proposed new flood zone is flood zone X, which indicates a 0.2% chance of flooding in any given year. This level of flood risk is moderate.

Ask something...





# Contact Us

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Schedule 70: GS-35F-144DA | SBA Certified 8(a) | SBA Certified HUBZone | CMMI DEV LVL 3 | ISO 9001:2015