Accelerating Adoption and Use of Emerging Location Based Services by Public Safety

July 9th, 2019

National Alliance for Public Safety GIS (NAPSG) Foundation

napsgfoundation.org | @napsgfoundation

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Agenda

Accelerating Adoption and Use of Emerging Location Based Services by Public Safety

Great Lakes AB from 3:15 to 4:00 PM

3:15 Introduction & Who is the NAPSG Foundation?

3:20 **Project Overview** – Mapping, Tracking, and Navigation

3:30 **Pre-plan Demonstration**

3:35 **Hands-on Exercise** – Put Yourself on the Map!

3:50 Discussion

4:00 Adjourned

About NAPSG Foundation

Our Vision

A Nation of emergency responders and leaders equipped with the knowledge and skills in applying technology and data to change the outcome for survivors.

- 501(c)(3) Non-profit organization established in 2005
- +20,000 member network: Public Safety leaders, first responders, and GIS practitioners
- Board of Directors comprised of public safety & emergency management industry leaders

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From Preparedness through Response and into Recovery

First Responders, Operators, and Decision Makers have access to and know how to use the right **actionable information** at the right time.

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How Do We Do It

Transferring knowledge and skills

Tech Assistance

Building capacity in using innovative technology

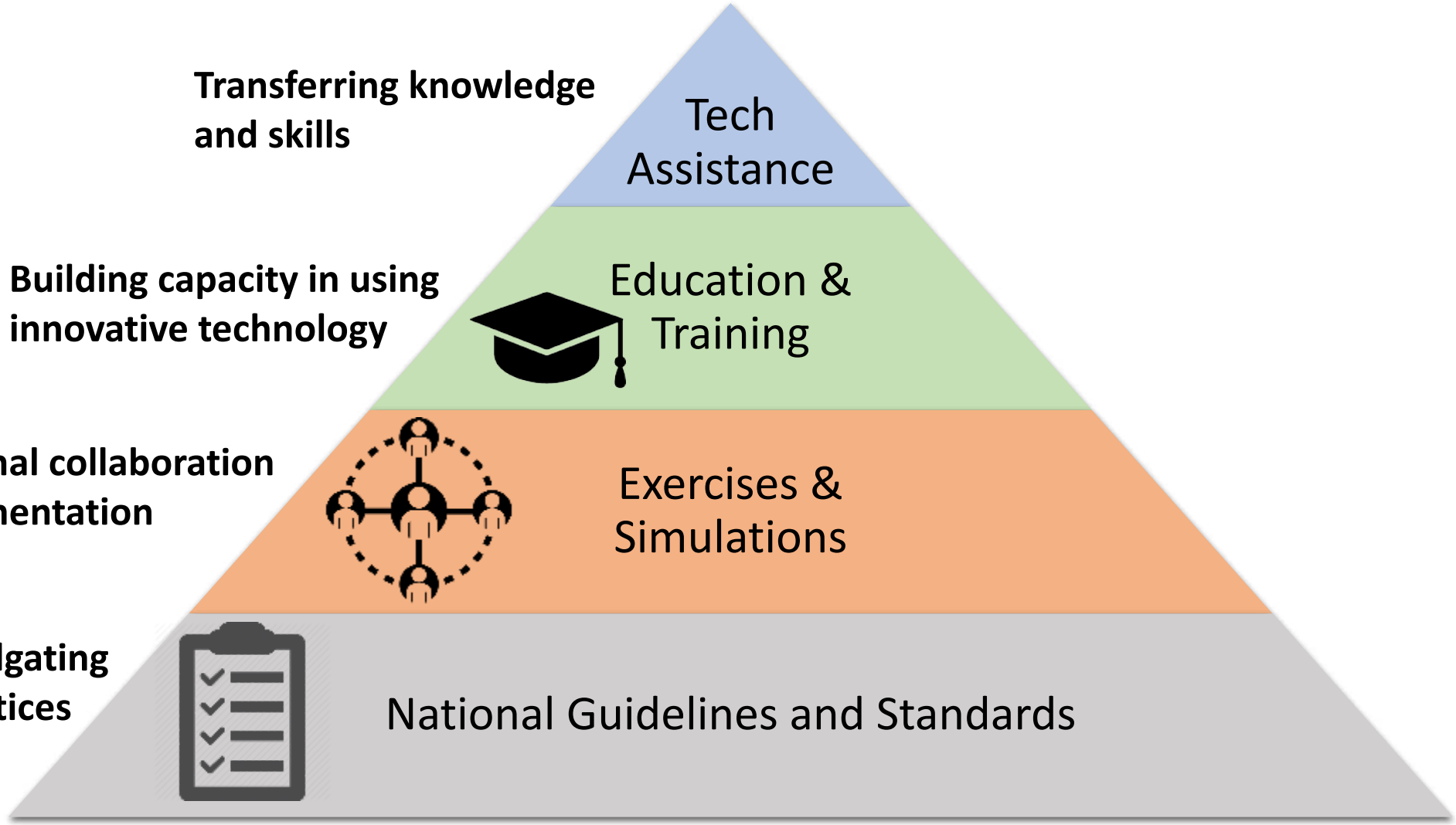
Education & Training

Fostering regional collaboration through implementation

Exercises & Simulations

Defining and promulgating consistent best practices

National Guidelines and Standards



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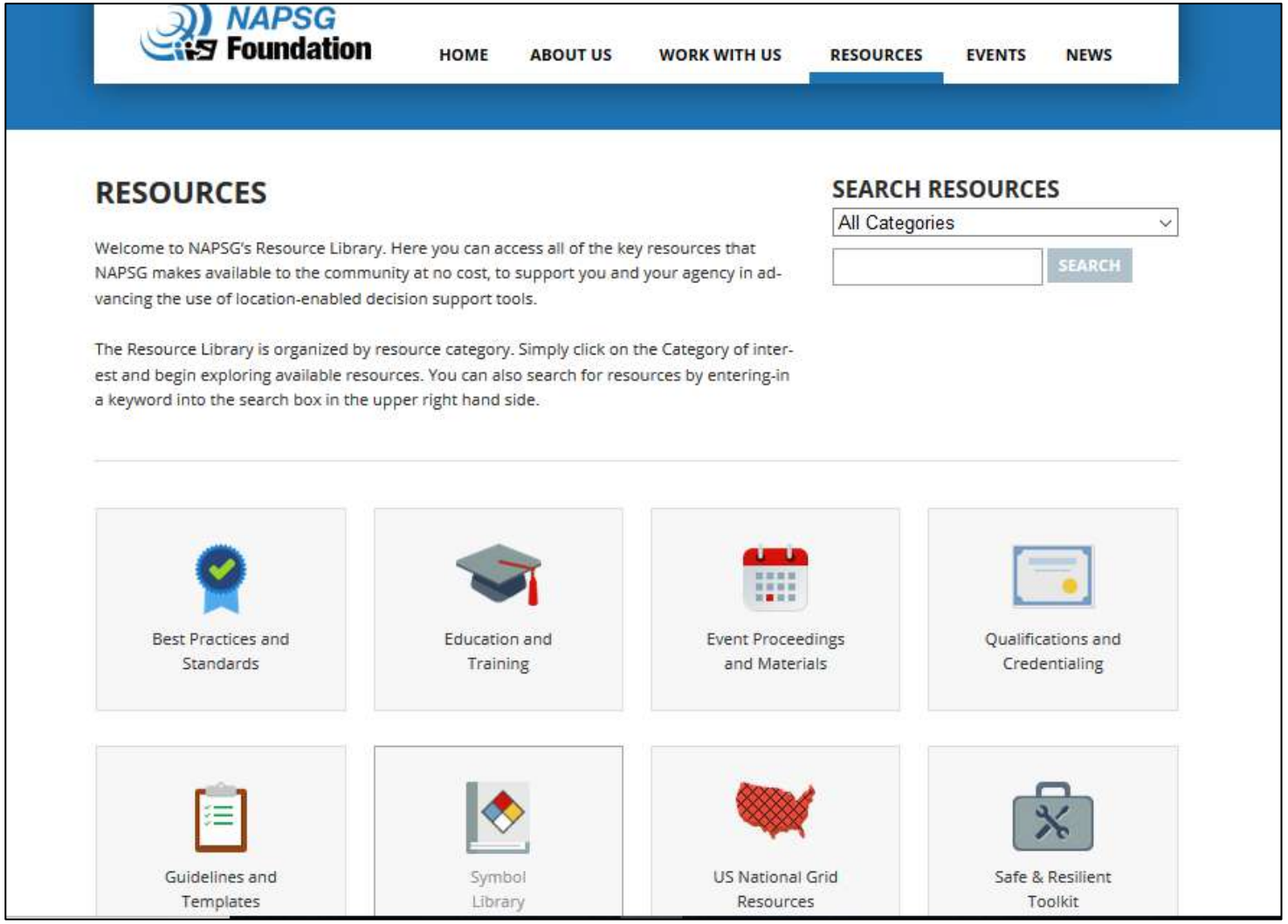
Resource Library



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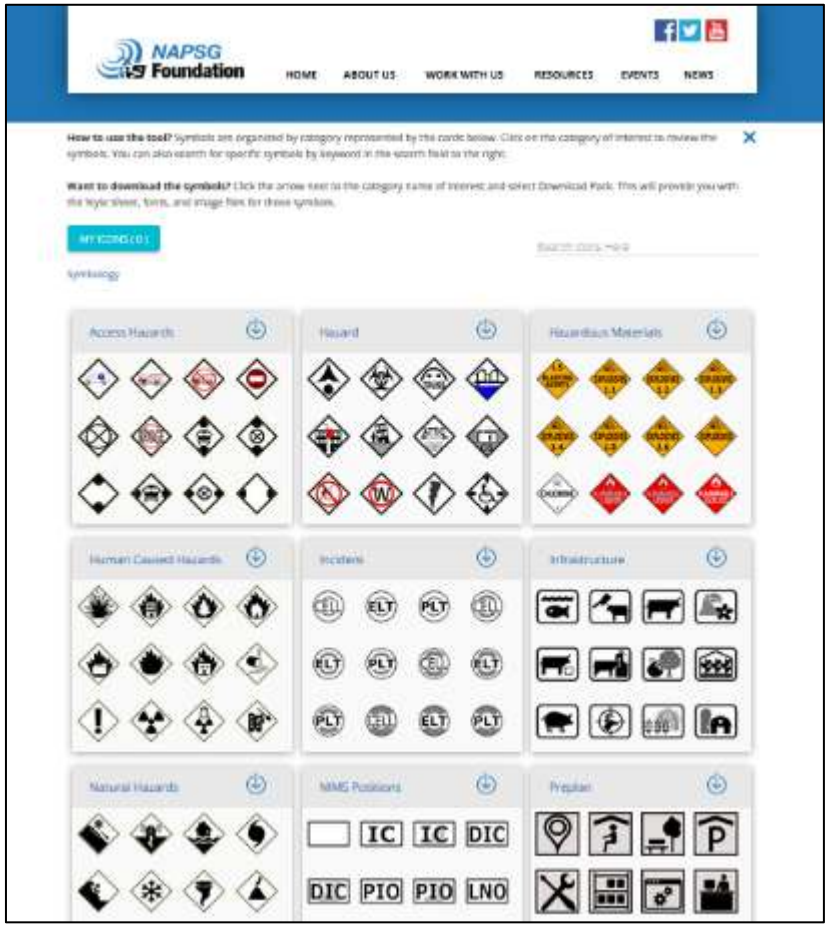
Guidelines and Standards

First Responder Core Information Guideline

Resource Management Dashboard Guidance

Standardized Incident Symbology



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i-Axis Project Overview

Paul Doherty, PhD - NAPSG Foundation

Problem

1) First responders are not rapidly adopting and using the existing Location-based solutions and capabilities available today.

2) Therefore, the research and development teams do not have actionable input from first responders to develop the practical solutions of tomorrow.

Question

What are location-based services (LBS)?

"provisioning of customized information, features, or services based on a user's current or projected location"

Poll

When you think of Location-Based Services in public safety, what capabilities come to mind?

Describe in 3 words or less.

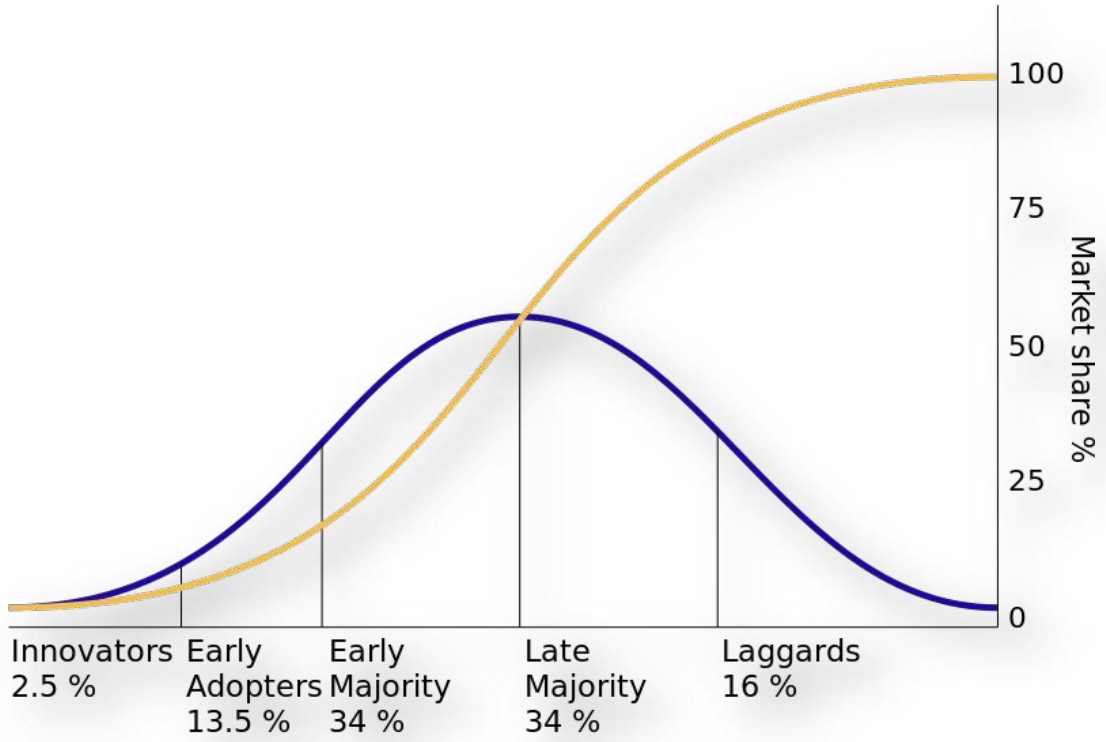
Go to www.menti.com

Enter code 14 58 43

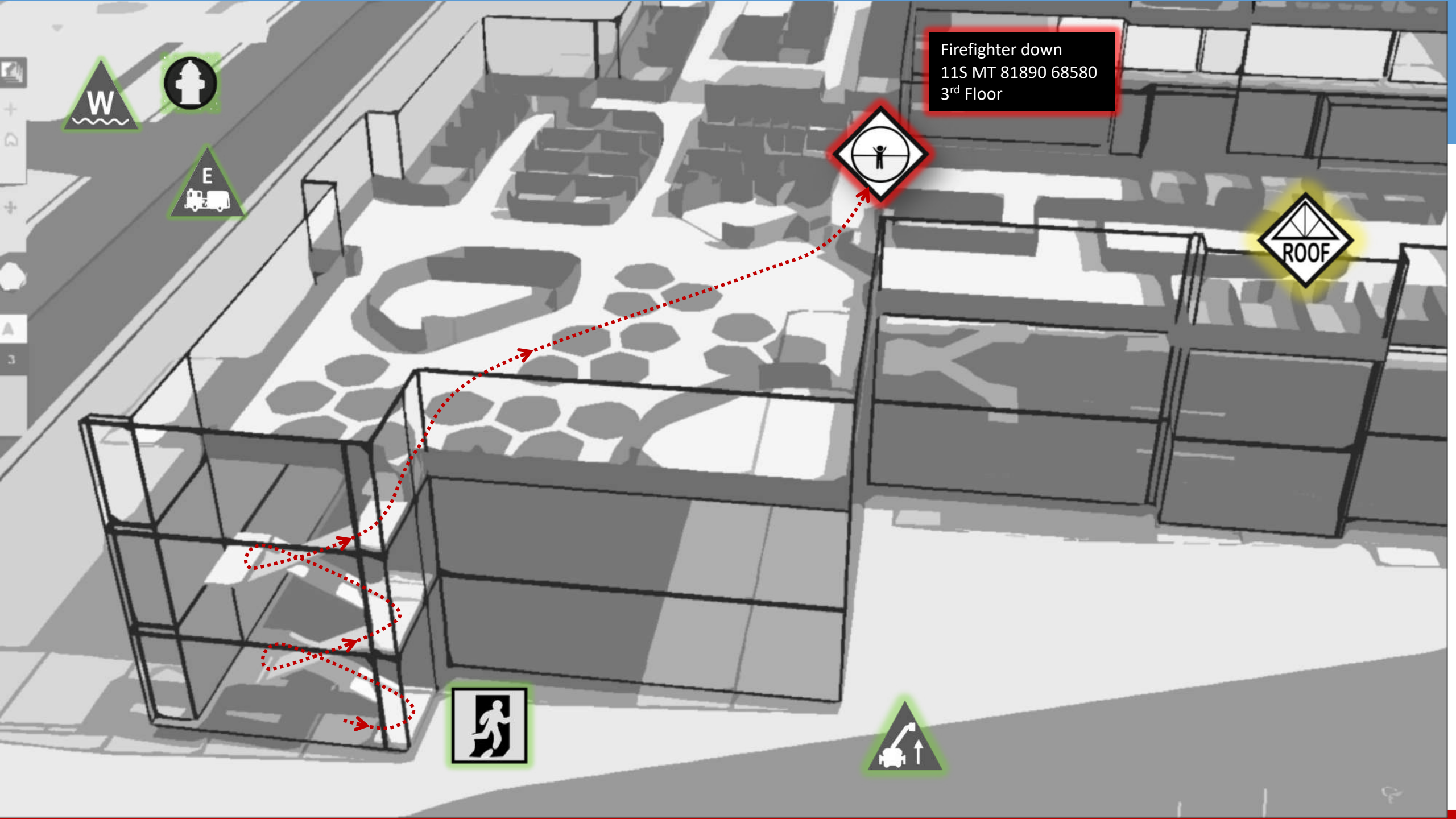
i-Axis Project Overview

Focus on Indoor:

- Mapping
- Tracking
- Navigation



This figure references the well-known “diffusion of innovation”, which represents market share / adoption over time.


W
E
Firefighter down
11S MT 81890 68580
3rd Floor
ROOF

Identify best practices

Daily Problem	Significant Event	Audience	Best Practice
Finding a single patient in an indoor mall	Mass Casualty Incident in a sports stadium	EMS	Utilize common 2D and 3D Incident Symbology.
Welfare check in an apartment building	Active shooter in an educational complex	Law Enforcement	Standardized approach to the frequency of tracking location updates to optimize situational awareness.
Building and smoke alarm inspections	“Mayday” response in a burning skyscraper	Structural Firefighters	Consistent approach to visual cues provided by heads up displays.

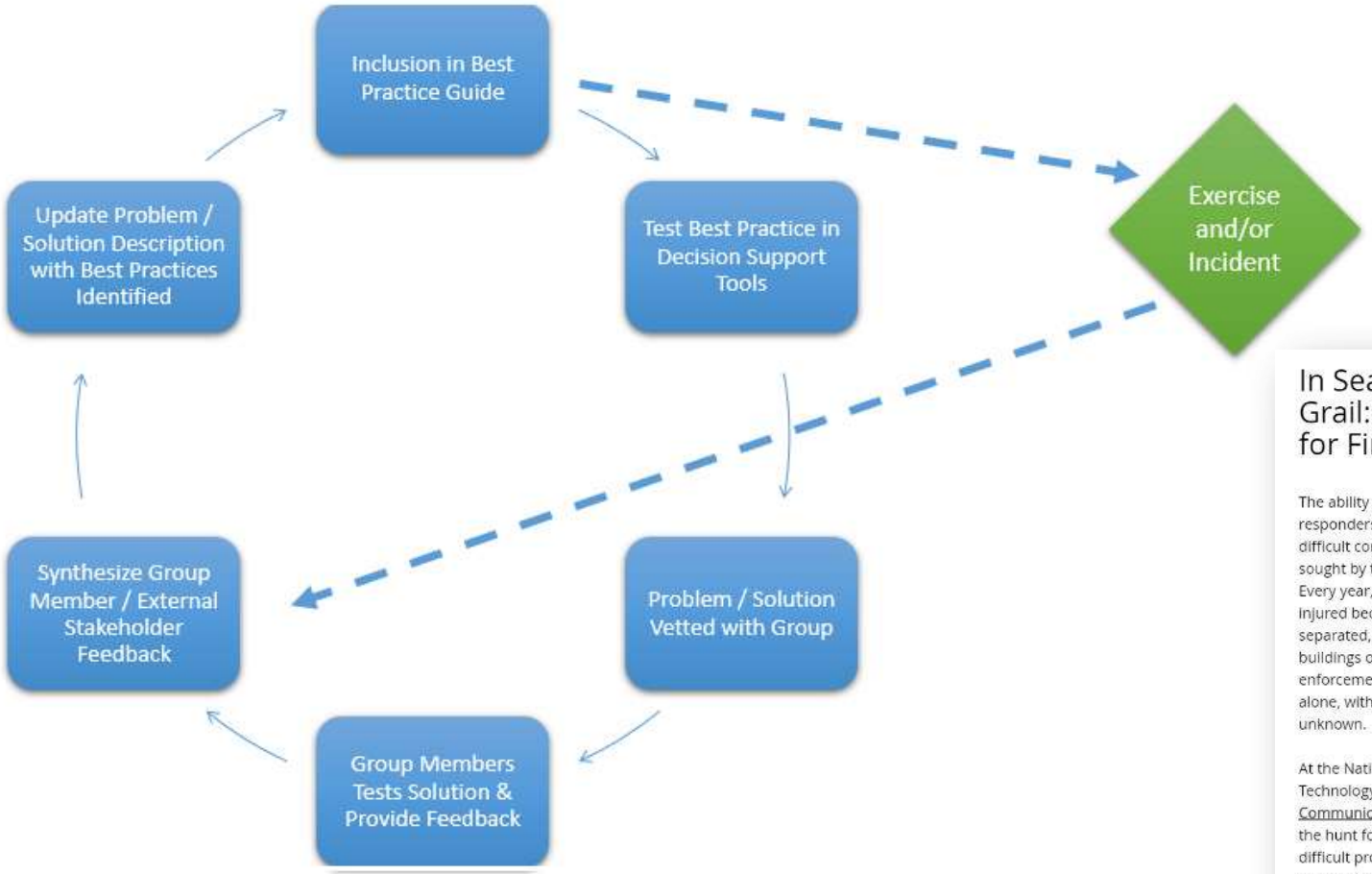
Identify and test potential solutions

Daily Problem	Significant Event	Audience	Best Practice	Solution
Finding a single patient in an indoor mall	Mass Casualty Incident in a sports stadium	EMS	Utilize common 2D and 3D Incident Symbology.	Location from e911 phone call(s) plotted on an indoor navigation map for EMS personnel.
Welfare check in an apartment building	Active shooter in an educational complex	Law Enforcement	Standardized approach to the frequency of tracking location updates to optimize situational awareness.	Live tracking of law enforcement officer(s) on a 3D viewer.
Building and smoke alarm inspections	“Mayday” response in a burning skyscraper	Structural Firefighters	Consistent approach to visual cues provided by heads up displays.	Detailed turn by turn instructions (audio / visual) for firefighters to a known location in a building.

Goals

- Create a community of Innovators and Early Adopters using existing solutions (indoor and/or outdoor).
- Identify existing and proposed best practices.
- Accelerate the adoption of new and emerging LBS into public safety daily operations.

Want to join the quest?



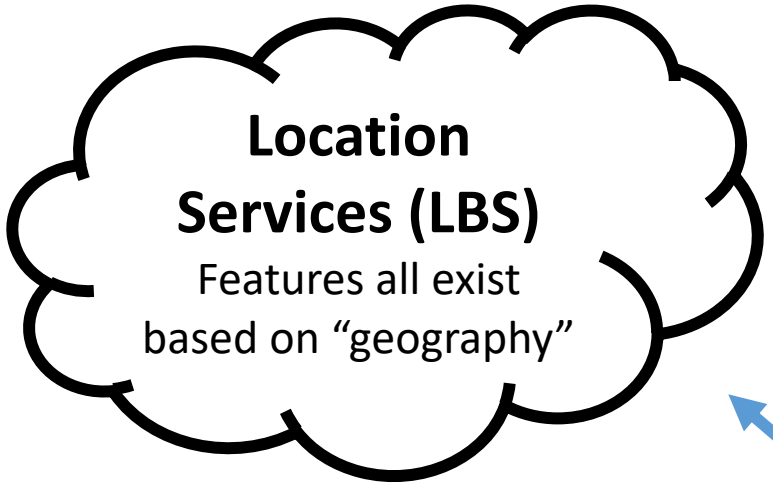
External Considerations

External Sources

Open source, commercial data, etc.

NG 911

GIS Oriented Next Generation 911



Building Information Systems

Modern building systems to monitor systems

Existing GIS

GIS systems that exist within a jurisdiction

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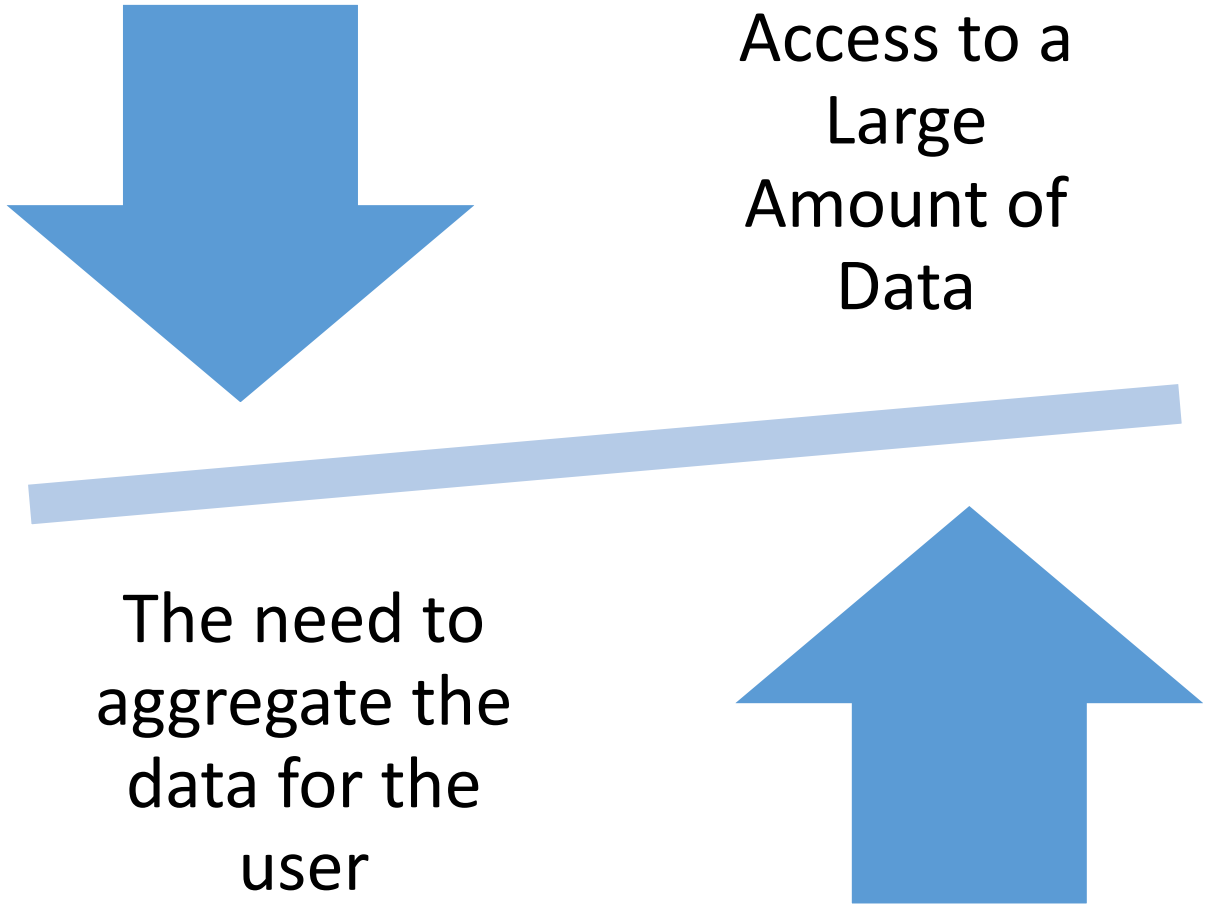
Balancing Act



Demonstration

Geospatial Pre-plans

Chris Rogers

Map of Location-Based Services Innovation

Hands-On Exercise

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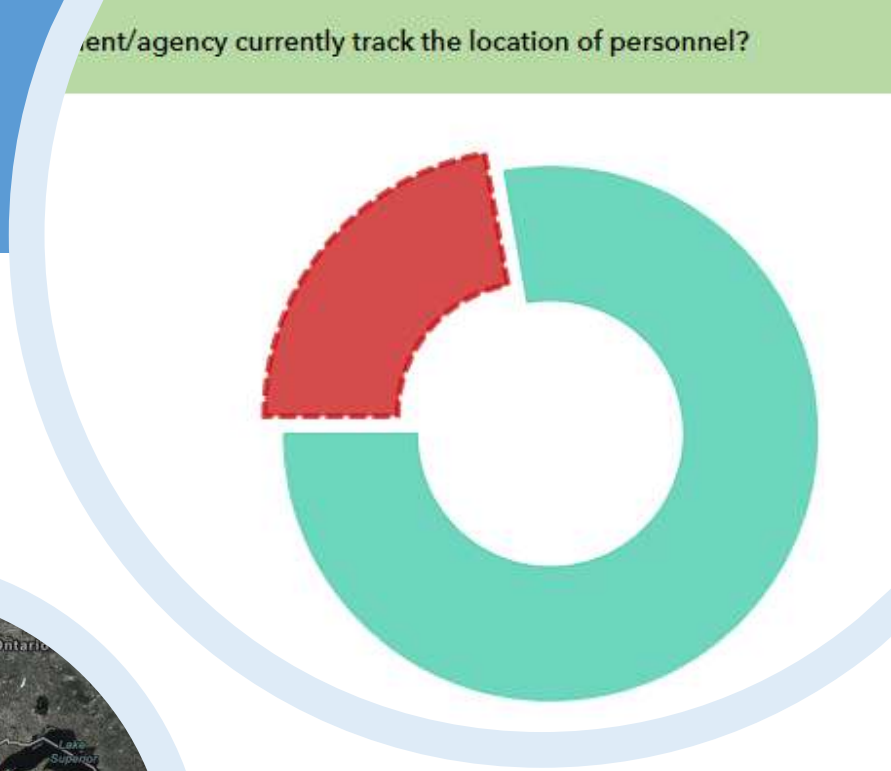


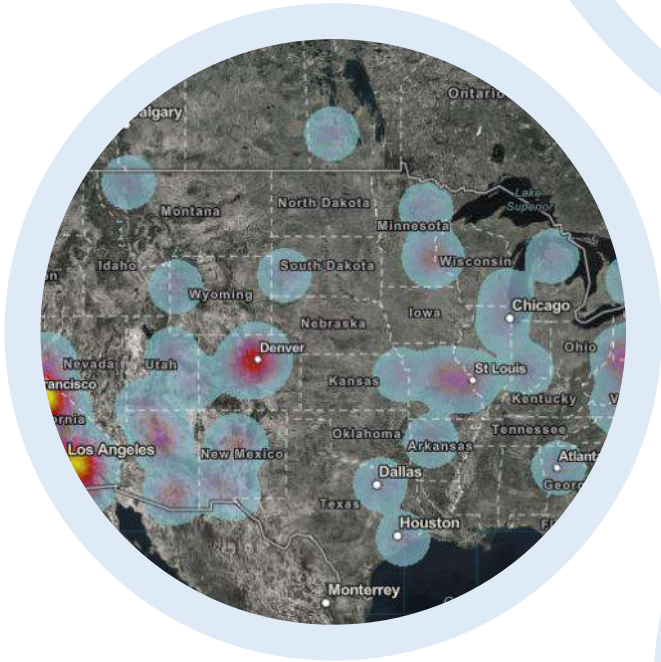
<u>Add your department to the map</u> and share how you are using:

- Mapping
- Tracking
- Navigation

bit.ly/20190709_iAxis

1. Open Camera
2. Point at QR Code*
3. Open the link

*Some phones require that you hold the “home” button



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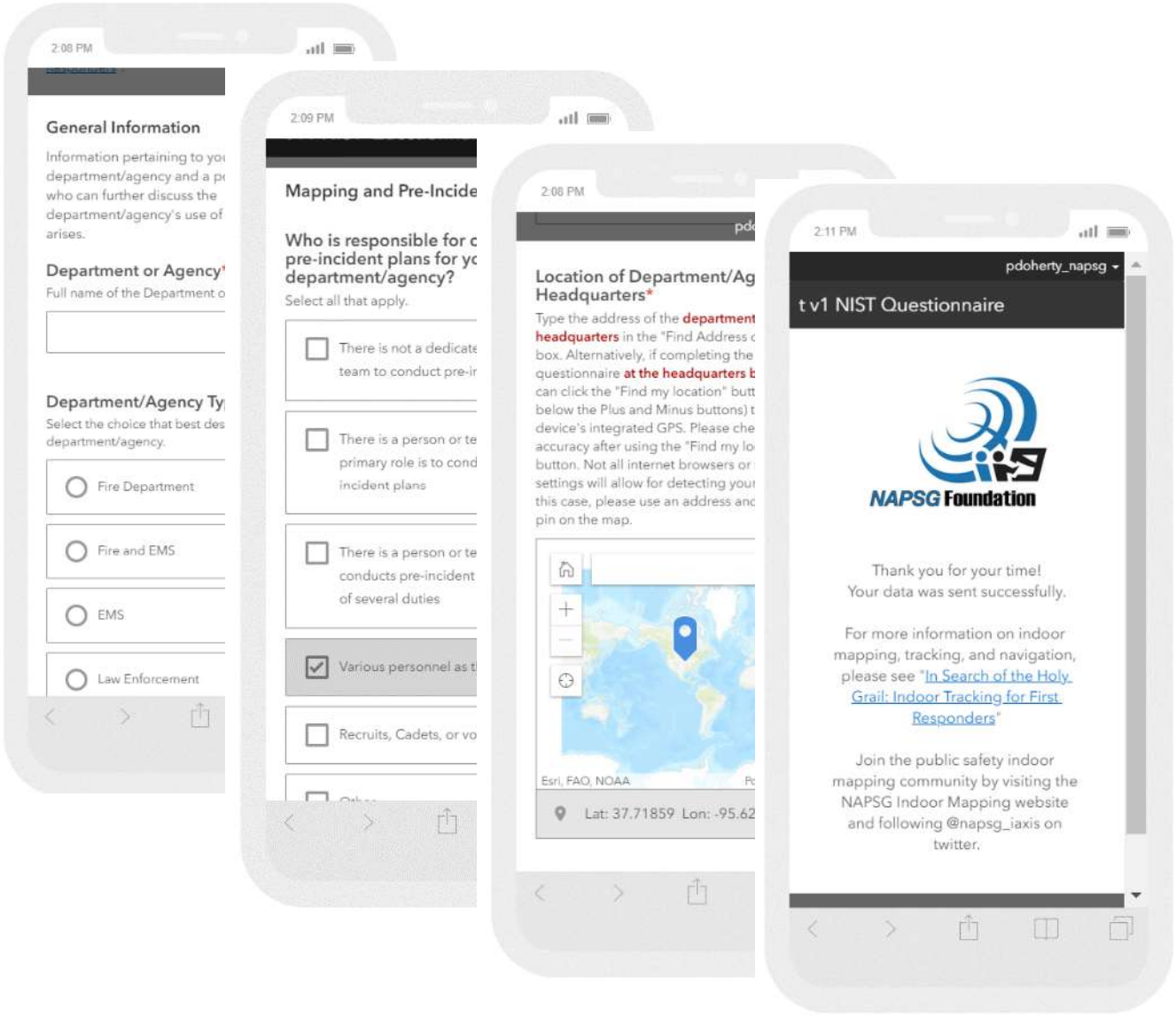
How does it work?

1. Fill-out the form.
2. Add yourself to the map.
3. Submit the form.
4. See your department on the map.

You can also open this on your PC https://bit.ly/20190709_iAxis



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Next Steps

2019

InSPIRE

LBS Innovation Outreach Toolkit

LBS First Responders Working Group

2020

Regional Workshops

Best Practice Guide

2021

Virtual Trainings

LBS Public Safety Technology Gap Priority List

InSPIRE
Innovation Summit for Preparedness & Resilience

Galveston, TX November 12th – 14th

Questions and Discussion

Thank you!

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Jared Doke* jdoke@publicsafetygis.org

#PSCR2019

Get your hands on the tech!

Demos

BACK TOMORROW

Open

8:00 AM