Proactive Location Identification for Emergency Response and 911 Purposes

Identifying Commercial Properties, Certificates of Occupancies, and Boat Docks for 911 Purposes

Victoria Ogaga
E911 Coordinator
St. Johns County Sheriff Office
Proactive Location Awareness Benefits:

• Developing an **understanding of risks**, requirements, and current capacities.

• **Planning and readiness** activities that begin with having information available

• Geographic Information System (GIS) and other technologies can be used to **identify high-risk and problematic areas**
Key Factors When a Disaster Strikes:

- Knowing what you need
  - What are the risks for your community
  - What vulnerabilities exist because of the risks
  - What are the effects and consequences of these vulnerabilities?

- How to find what you need
  - **Saves:**
    - **Lives**
    - **Resources**
    - **Critical Infrastructure**

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HAZARD ANALYSIS

Risk:
Power Outage

Vulnerability:
Loss of power to critical facilities

Effect:
Loss of usage of facilities w/o generators

Consequences:
Loss of critical facilities such as hospitals
What Can Location Information Provide:

Assistance with:

– Developing mitigation plans

– Managing limited resources in the midst of chaos

– Prioritizing recovery efforts once the dust settles.

– Maintaining shared situational awareness across multiple jurisdictions
What Can Location Information Provide Continued:

Assistance with:

– Identifying ideal locations for prepositioning assets ahead of an impact

– Exercising response and recovery plans during non-disaster times

– Understanding near real-time possibilities during an event when time is not a luxury.
Examples of Proactive Location

• Identify how or where certain areas should be evacuated, or even how first responders (law enforcement, medical personnel, fire service etc.) should approach certain areas during a disaster.

• Identify homes and communities that have mitigated against potential hazards as low risk areas.

• Quickly identify and assess damaged homes and infrastructure in the wake of a disaster.

• Essentially, if you have data, it can be mapped, analyzed and utilized to make better decisions in a measurable amount of time.
Identification of Properties - Damage and Rapid Needs Assessments Perspective:

Field teams are intended to validate – not find – damage and impact information.

— Benefits:
  • Aiding with life saving and life-sustaining measures
  • Response prioritization
    — Identify high risk versus low risk areas
  • Handling resource requests
    — Identify areas needing tarps, food, water, ice etc.
  • Dissemination of public information
    — Who to tell what and when
Example: Boat Docks Benefits:

– 911 address postings on docks:
  • A initiative was launched to provide brochures for residents to voluntarily post their 911 addresses
  • The conforming residents are mapped/tracked so that these can be marked as lower risk areas due to being locatable

– Identify Mitigation initiatives for water rescue:
  • Communication gaps
  • Structure hardening for public safety
  • Identify known Location identification issues – GPS
    – Map areas that may be known to have limitations for radio communications and GPS for the folks that do not have this institutional knowledge

– Recovery:
  • Identify the areas as they are rebuilt or not. If areas are not rebuilt and other incidents occur this may be used to determine appropriate action
How to use Certificates of Occupancy to keep addresses information current

How general location information can be used to show the severity and magnitude of the disaster.

Address points and parcel information for all properties

<table>
<thead>
<tr>
<th>Event Data</th>
<th>Example of Proactive Data Collection</th>
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<tbody>
<tr>
<td>• Windshield Surveys • Resources</td>
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<tr>
<td>• Power Outages     • Food</td>
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<td>• Evacuations       • Shelters</td>
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<td>• Pre-event imagery</td>
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<td>• Property Ownership</td>
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<td>• Land and Building Values</td>
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<td>• Property Types</td>
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Commercial versus Residential Properties

A picture is worth a thousand words:

• Where are the areas prone to flooding?
• Where are power outages?
• Roadway awareness:
  – Barriers, obstructions, and debris
  – Dirt versus paved
• Community Information:
  – Homes construction, (modular homes, multi-family, etc.)
  – Heavily vegetated areas
Long-term Community Needs:

If the incident is of a severity that resources needed to recover are expected to exceed local and State Government capability:

– The loss of low-cost or subsidized housing

– Economic Impact created by displaced employees or damaged businesses

– Disaster-Related Unemployment
What Can Location Information Provide Continued:

- Are these roads public or private?
- Where are the modular homes?
- Are these accessible roads?
- What are your accessible roads?
- Are these homes in a flood zone or evacuation zone?
- Which homes or streets have power?
- Is this a high crime area?
- Special needs residents?
- Where are my people and what do they need to do in this area?
- Where am I if everything is flooded? (USNG GRID)
- How many of these properties are commercial?
- Have any resources been deployed in this area?