



Enrich your GIS by Citizen Feedback

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Mobile Alert - Crowdsourcing



Crowdsourcing (definition):
To utilize labor, information, etc.,
contributed by the general public,
often via the internet for no
compensation



Crowdsourcing can be applied to
a wide range of activities and
tasks, from searching for answers
to searching for missing people

Product Description

Intergraph's Mobile Alert is a cloud service that provides crowd-sourced incident information to subscribing organizations, e.g. local governments or utilities.



Key Features & Benefits



- Provides citizens a simple app to send incident information to the authorities (e.g. pot holes, grafitti, broken sign posts, missing street lights etc.), thus allowing community members to assist in public works
- Pinpoints incident locations using photos and GPS locations uploaded by the citizens themselves
- The client app is available for Apple iPhone, Android smartphones, Windows Store and is a free download from the respective app stores
- Incidents are stored in the cloud and are available to subscribing organizations can access the information via a client portal and through WMS and WFS services
- Mobile Alert is an Intergraph hosted solution for subscribing customers. All installation, software upgrades, support and maintenance of the system is done by Intergraph

Mobile Alert - Benefits and Overview

- All government agencies, utilities and transportation organizations want to make the best use of their time, resources and \$\$\$\$. Citizens report events and incidents today using websites, phone calls, 3-1-1, but they need access to a computer, the internet, a website, or they need someone to pick up the phone - and then they have to remember, where and what they saw. Knowing exactly where an event or incident is located and its magnitude is extremely helpful. Mobile Alert takes the guesswork out of a citizen reported incident. GPS is used for location and a picture is sent to indicate the importance or severity. This allows for proper prioritization and size of field crew needed to respond.
- **1 in 5 people have smart phones globally. By 2015, 2 billion people will have a smart phone. 78% access the internet with their smart phone compared to 64% use PC's.** Mobile Alert allows citizens to report incidents with the same device they use in their daily lives for Facebook, Google+, Twitter, e-mail, etc.

Mobile Alert - Benefits and Overview

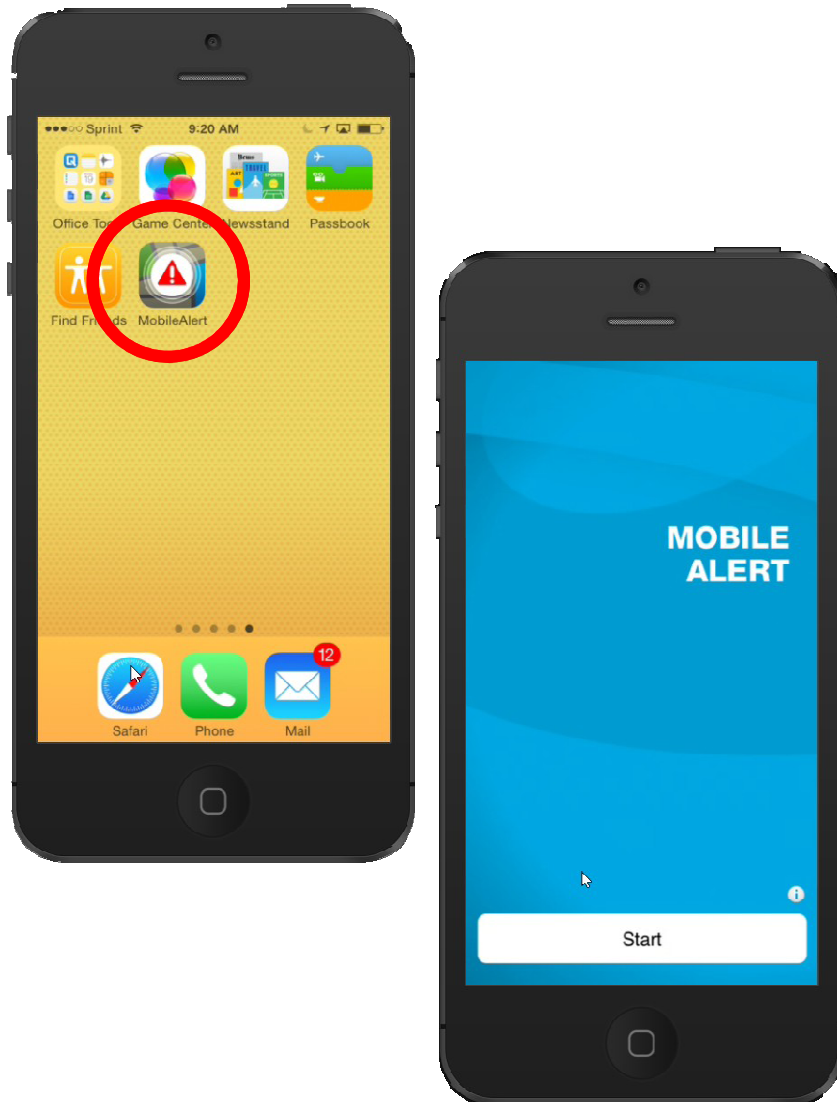


Mobile Alert is a cloud service that provides crowd-sourced incident information to subscribing organizations, e.g. local, regional, governments, utilities and transportation authorities

Mobile Alert client is free and available for iOS and Android mobile devices, downloadable from the respective Apple and Google Play app stores

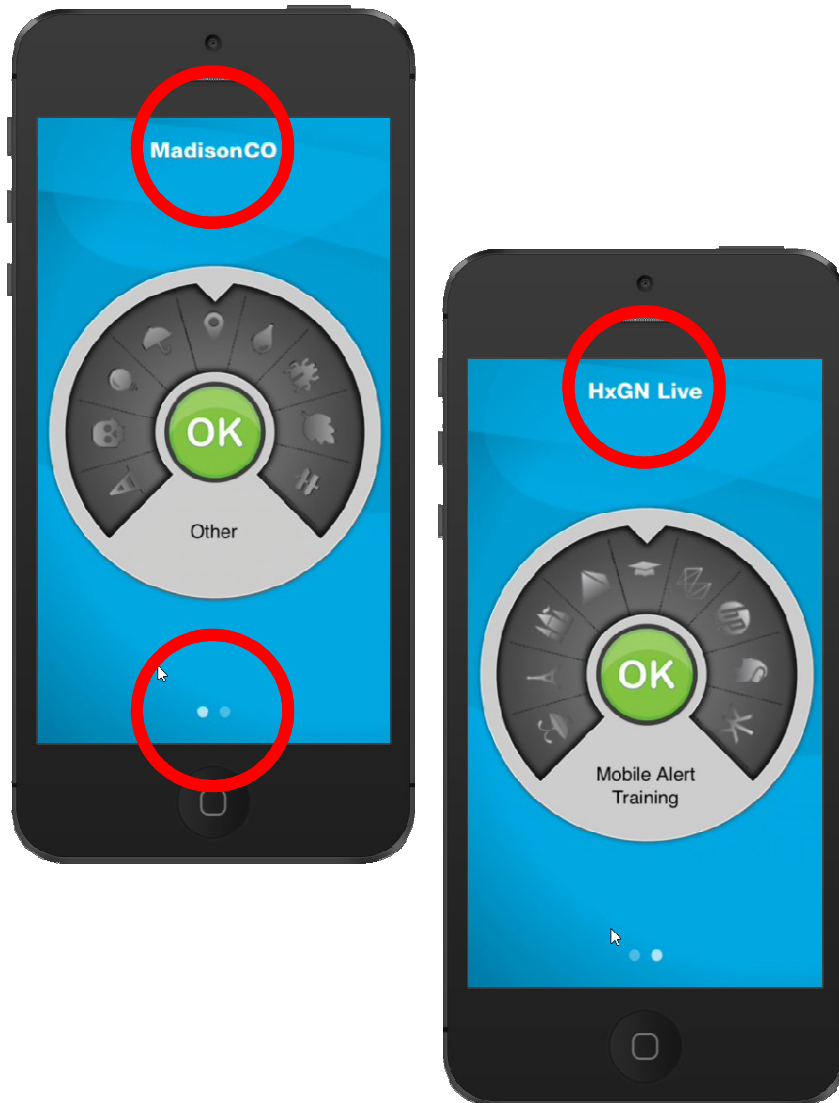
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Mobile Alert - Key Features



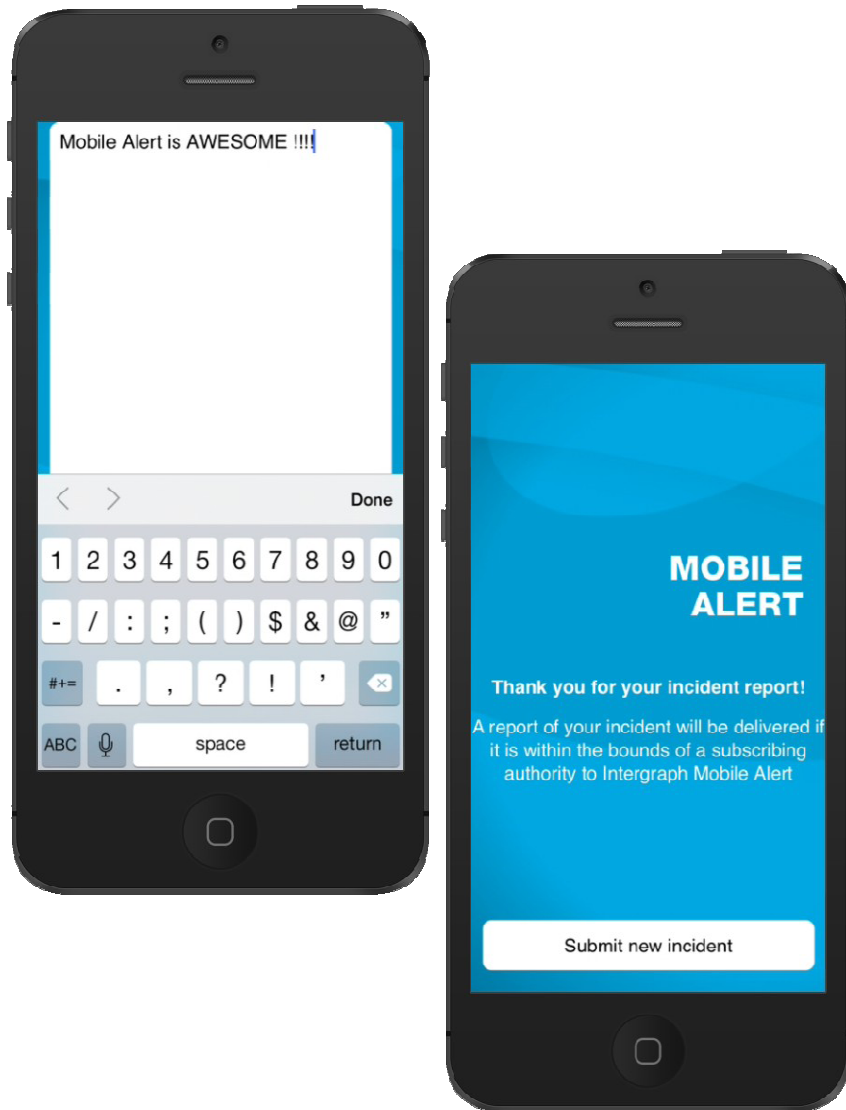
- Starts just like any other iOS or Android app on your smart phone or tablet
- Engages the device camera automatically, to take a photo of the event or incident to report. Citizen or user gets a chance to review the photo before sending the event or incident
- Uses the device's GPS to pinpoint the location of the event or incident given the signal strength and accuracy of the GPS
- Optionally, allows the user to position the event or incident on a Bing Maps display if the GPS is determined to be weak

Mobile Alert - Key Features



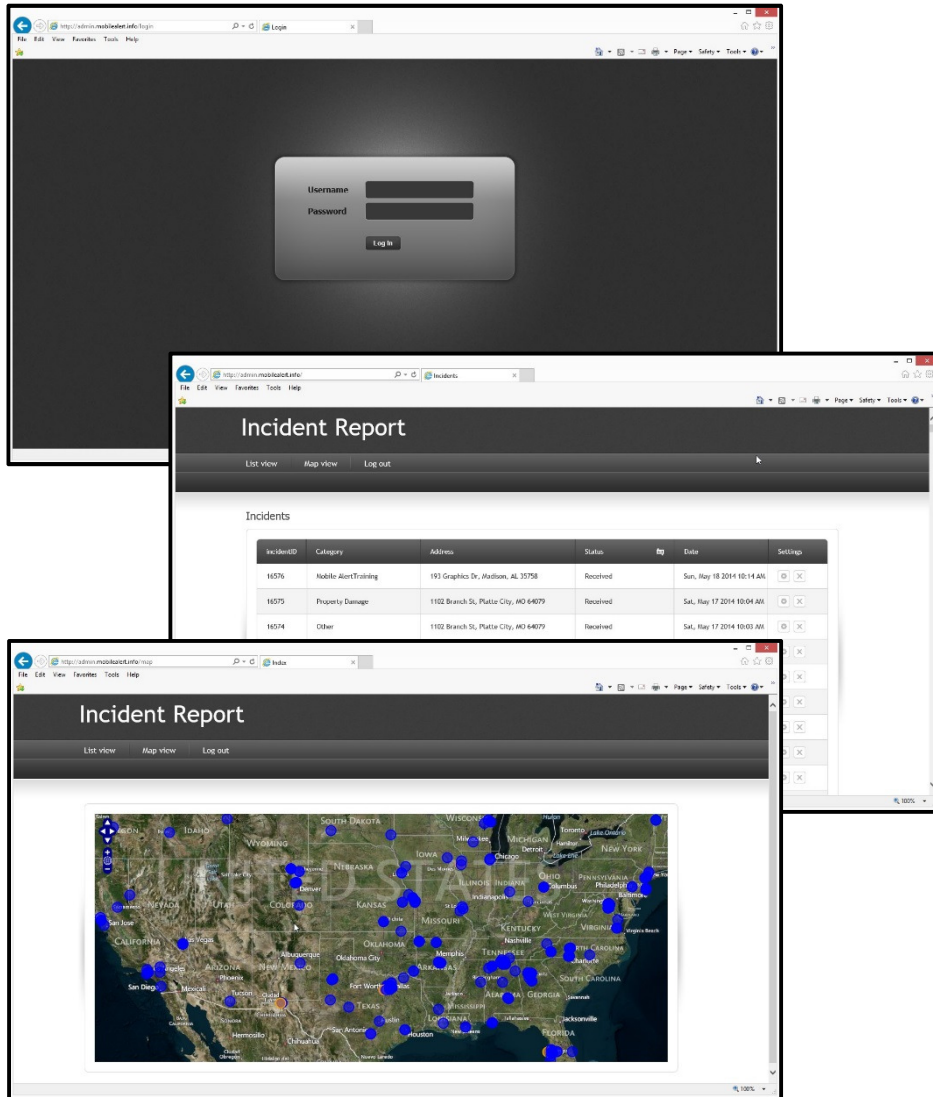
- Categorize the event or incident with an easy-to-use wheel that uses both graphics and text to describe each category
- Categories are dynamic based on user or citizen's location using subscribing organization's area of interest or political boundary
- Categories can be easily customized to match the types of events or incidents reported by varying departments (e.g. one set of categories for roads department and other for utilities)
- In the case of overlapping areas of interest, just swipe between the each subscribing organization's set of categories

Mobile Alert - Key Features



- Mobile Alert is completely anonymous
- Allows the user or citizen to provide a comment about the event or incident if the category itself is not enough
- In just a few quick and easy steps, taking less than 30 seconds, a citizen or user can record and send an event or incident to a subscribing organization.
- Mobile Alert is available globally, localized in several languages and configures the language itself based on the device's language/culture setting

Mobile Alert - Key Features



- Normally, in less than 5 minutes, the incident or event is received and processed and an e-mail is sent to a subscribing organization with details of the event or incident and links to the photo and Bing Maps display with marker to the address
- Intergraph-hosted backend service supplies subscribing organizations with access to all recorded events or incidents via the Mobile Alert Portal using username/password authentication
- Review all incidents recorded in the subscribing organizations area of interest or political boundary in either a list view or map view


Mobile Alert - Key Features

16360	Illegal Parking	La Harpe Blvd, Little Rock, AR 72201	Received	Tue, Apr 29 2014 10:07 PM	 
16359	Streetlight Problem	151 Rolling Lea Pl, Madison, AL 35758	Received	Tue, Apr 29 2014 8:18 PM	 
16358	Tree- Obstruction	County Road B-32, Vina, AL 35593	Received	Tue, Apr 29 2014 6:34 PM	 
16355	Other	37 E Pershing Rd, Kansas City, MO 64108	Received	Tue, Apr 29 2014 2:49 PM	 


Details

Category: Tree- Obstruction
 Comment: Big pine tree
 Address: County Road B-32, Vina, AL 35593 (approx. 5 meters from point)
 Longitude: -88.021025366638
 Latitude: 34.3657608842797
 Camera Heading: -1 degrees (0 degrees is north)
 Accuracy: 10 meters
 Status:

Image




Map

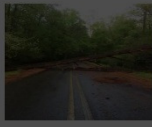


Details

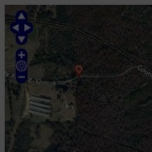
Category: Tree- Obstruction
 Comment: Big pine tree
 Address: County Road B-32, Vina, AL 35593
 Longitude: -88.021025366638
 Latitude: 34.3657608842797
 Camera Heading: -1 degrees (0 degrees is north)
 Accuracy: 10 meters
 Status:



Image



Map



- E-mail can be directed to appropriate personnel at the subscribing organization based on category
- Access individual events or incidents from the list view or map view. Track and modify the status of each as well.
- For each event or incident the user at the subscribing organization can see the category, address and accuracy information, photo and Bing Maps display which provides geographic context or neighborhood where event or incident is located.
- WFS service is provided that allows subscribing organization to retrieve all incidents within the area of interest to other clients for further geoprocessing



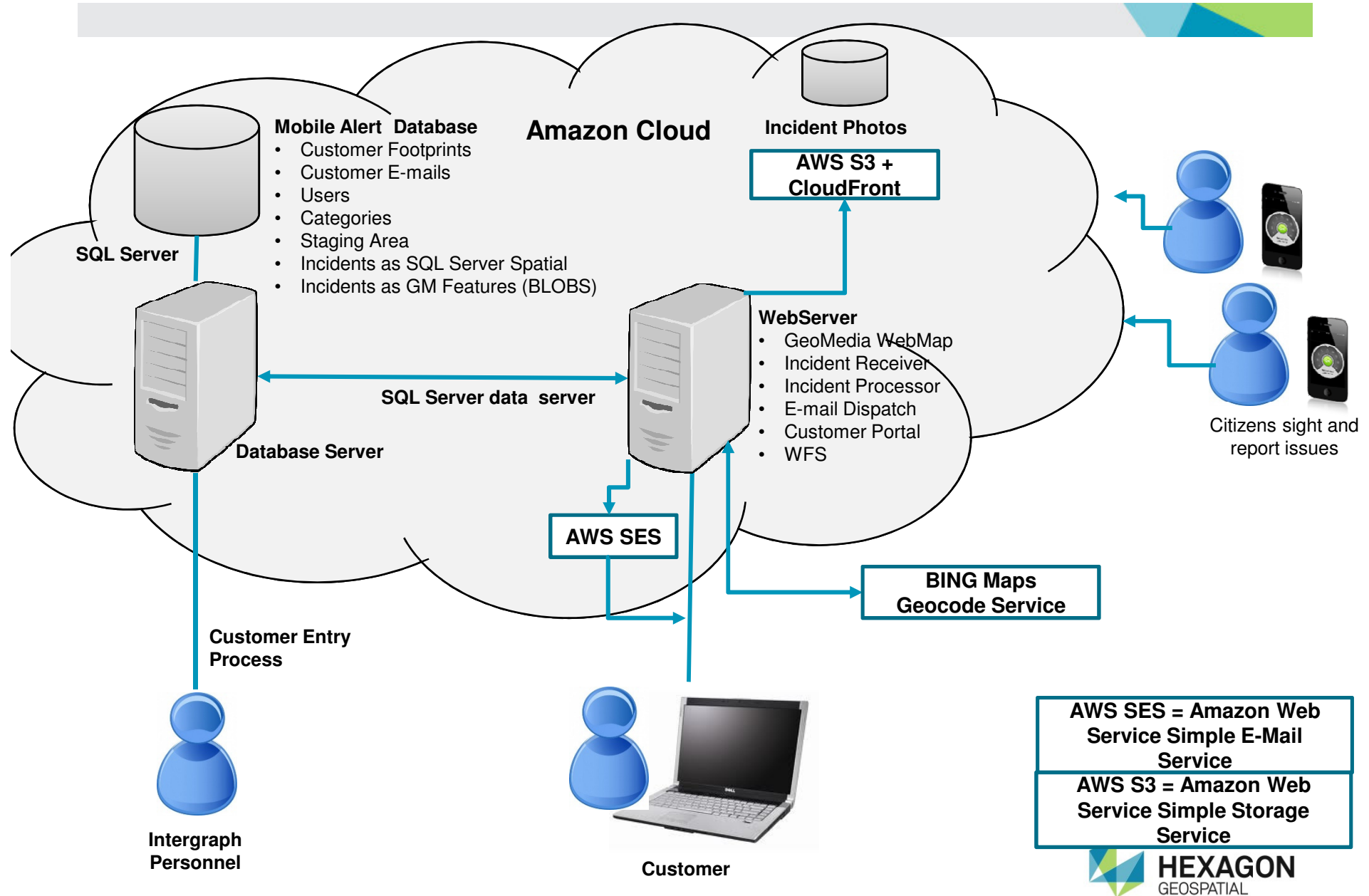
Integrating Mobile MapWorks

Integrating Mobile MapWorks



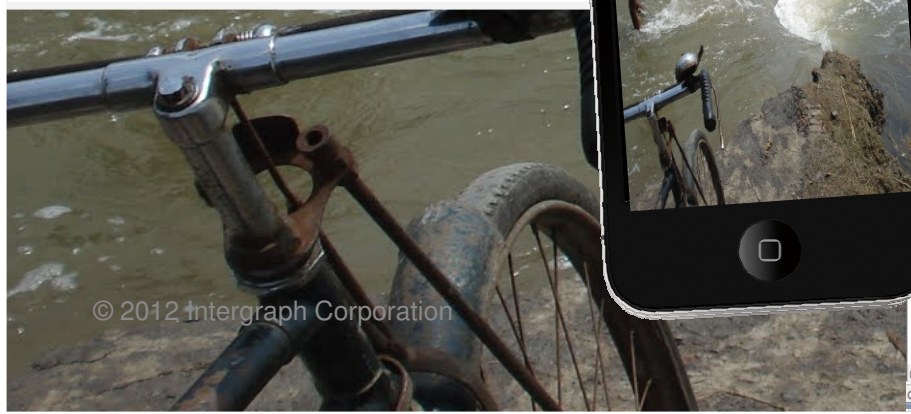
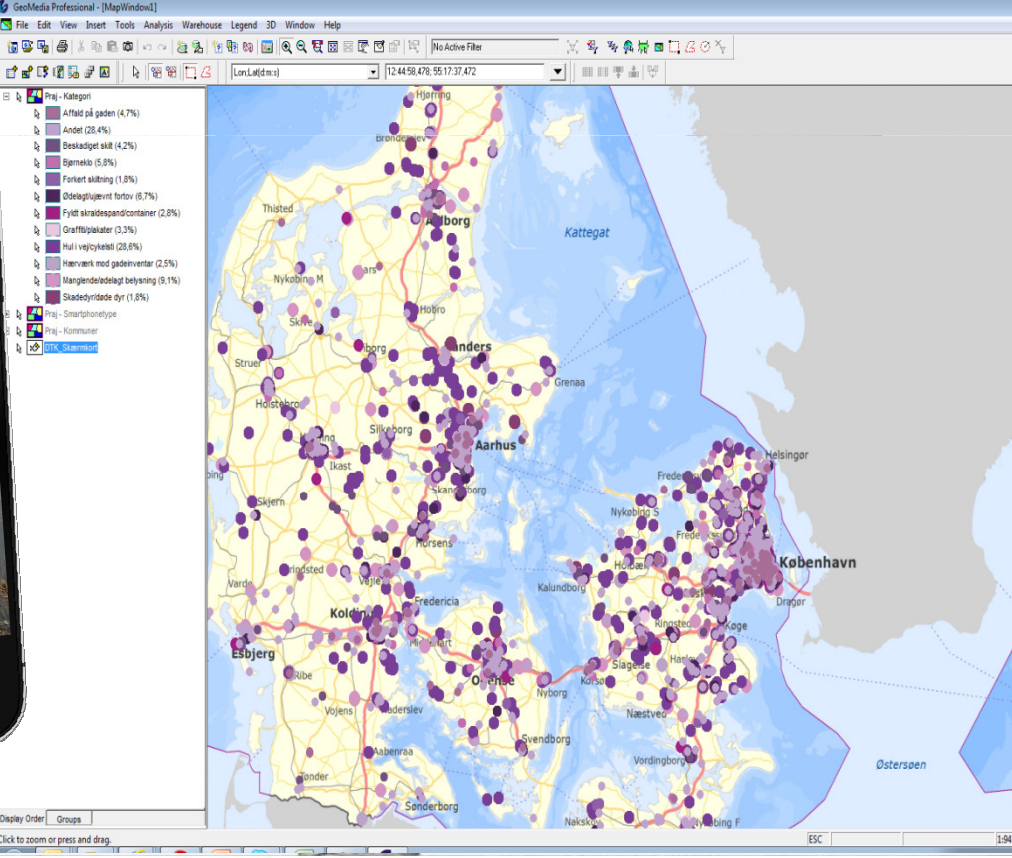
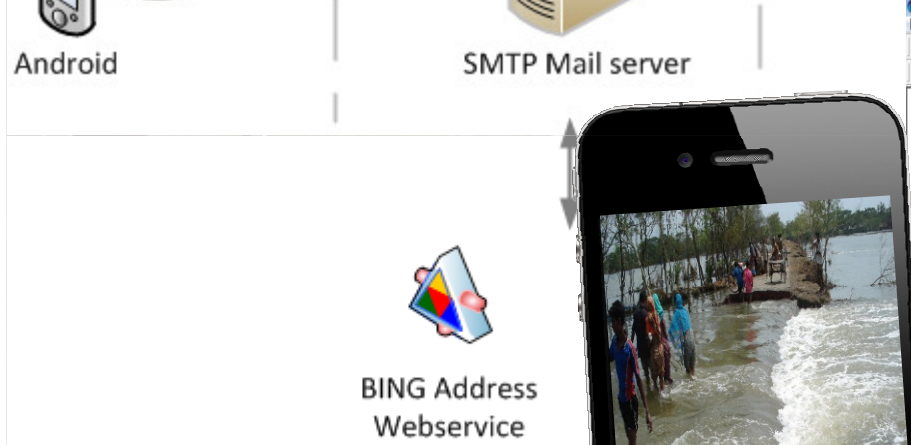
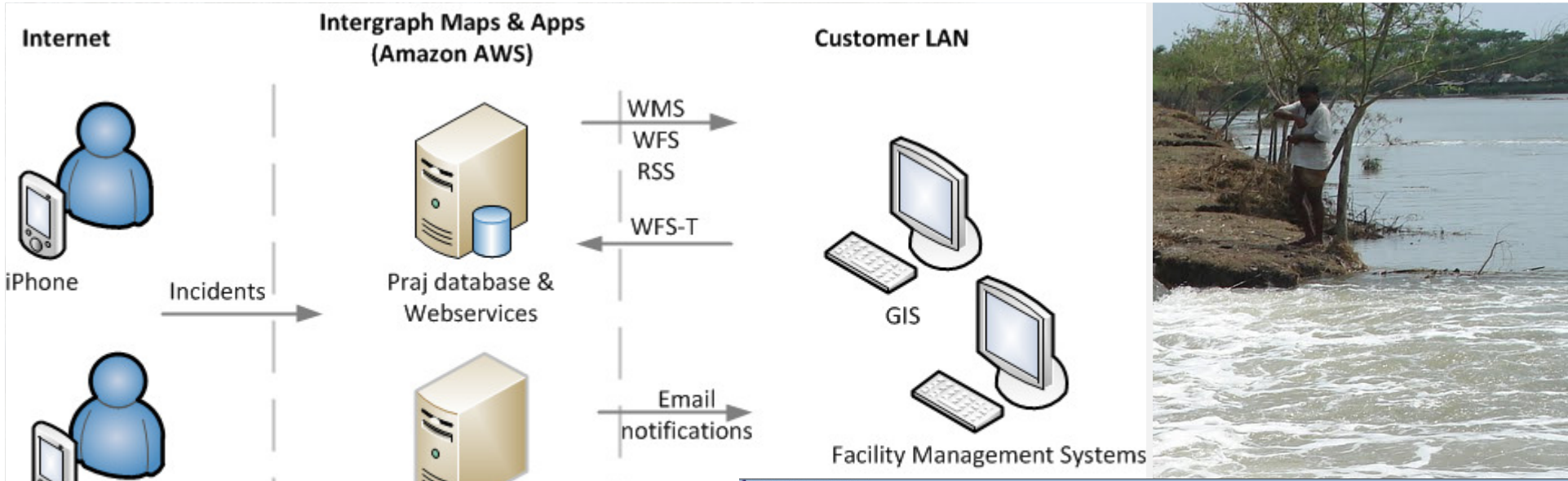
- WFS service is provided that allows subscribing organization to retrieve all incidents within the area of interest to other clients for further geoprocessing
- Mobile MapWorks is a field inspection and editing application available on iOS and Android tablets.
- Mobile MapWorks supports the game OGC-compliant WFS service as Mobile Alert making it a perfect candidate client for Mobile Alert events and incidents that need resolution by field crew and personnel
- Imagine a citizen reporting an event or incident and a field crew around the corner getting it on their field tablets in less than 5 minutes.

Product & System Architecture



AWS SES = Amazon Web Service Simple E-Mail Service

AWS S3 = Amazon Web Service Simple Storage Service

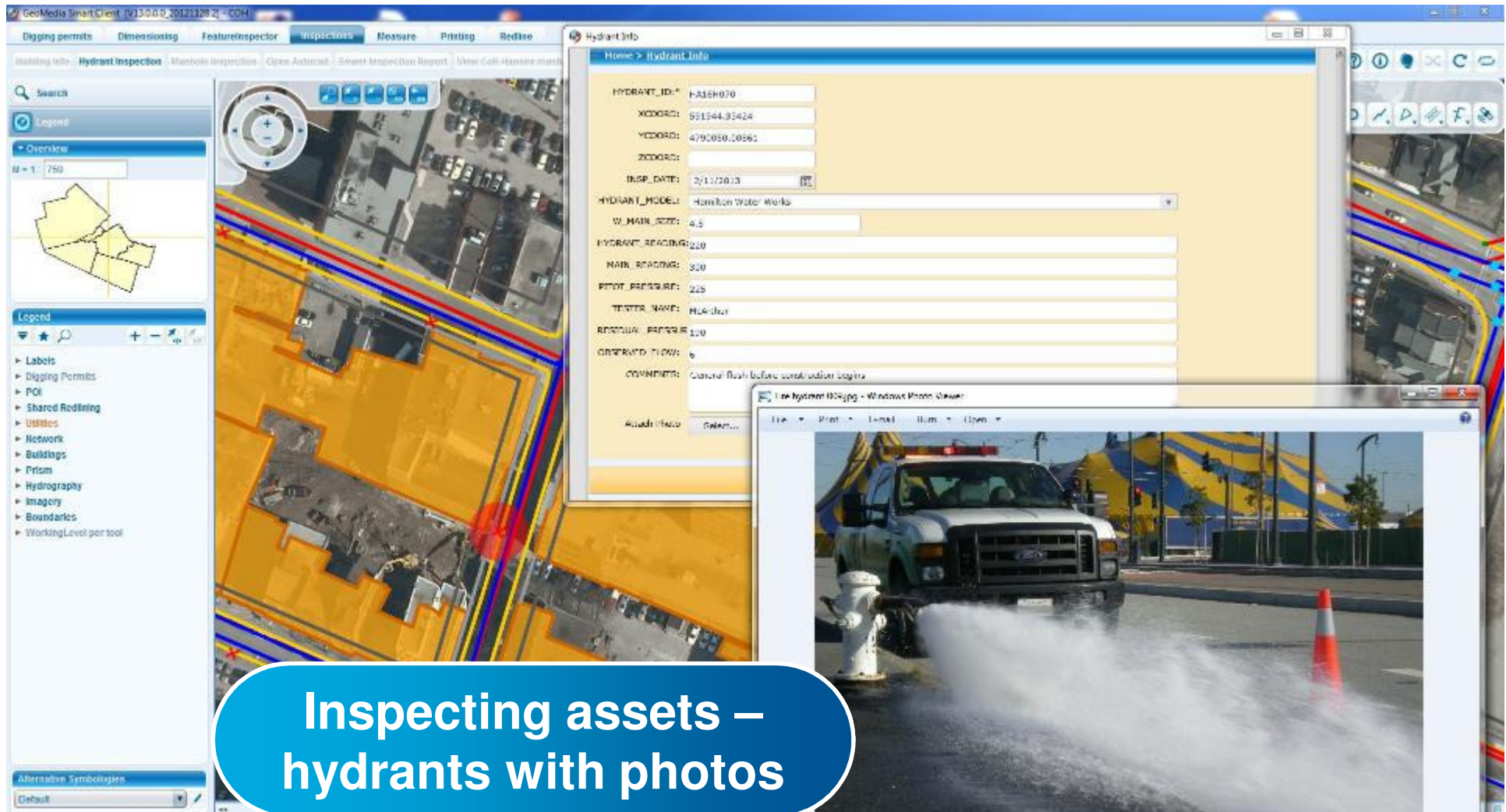


Public Works Asset Management

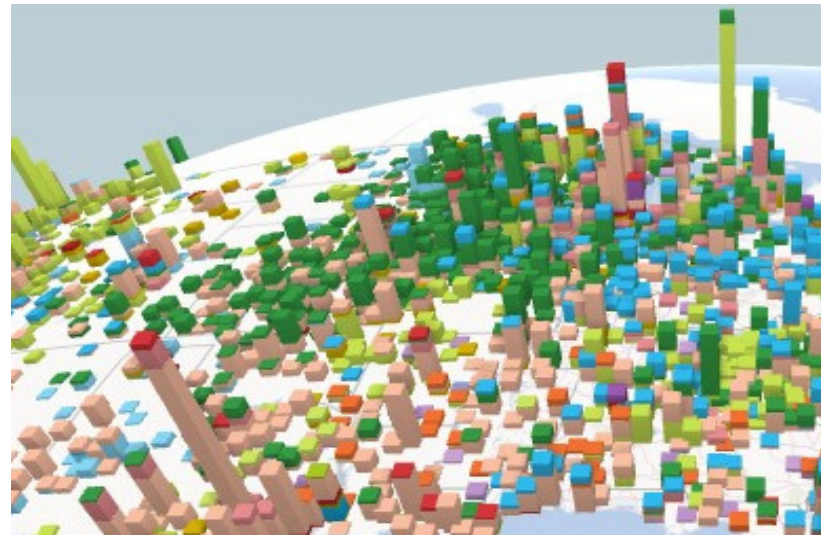
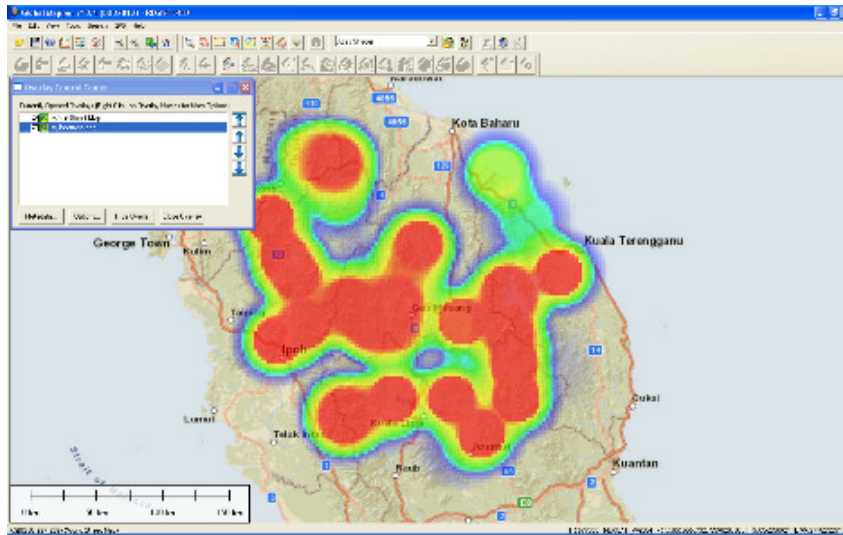
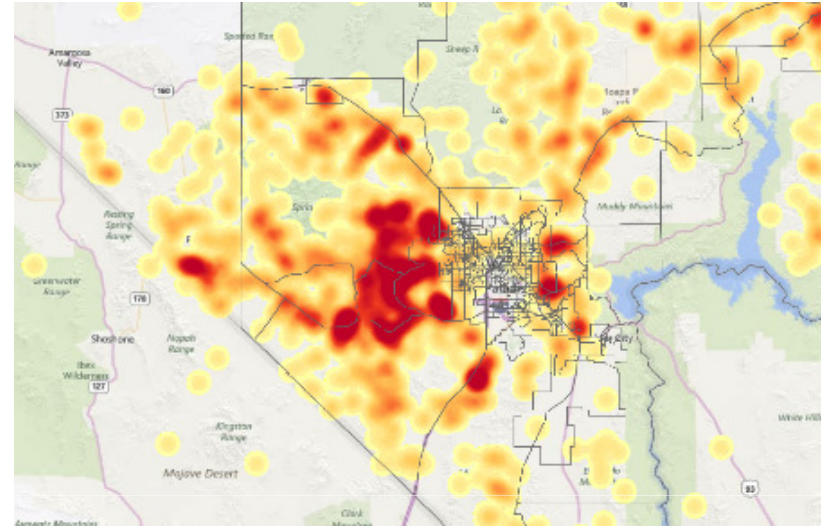
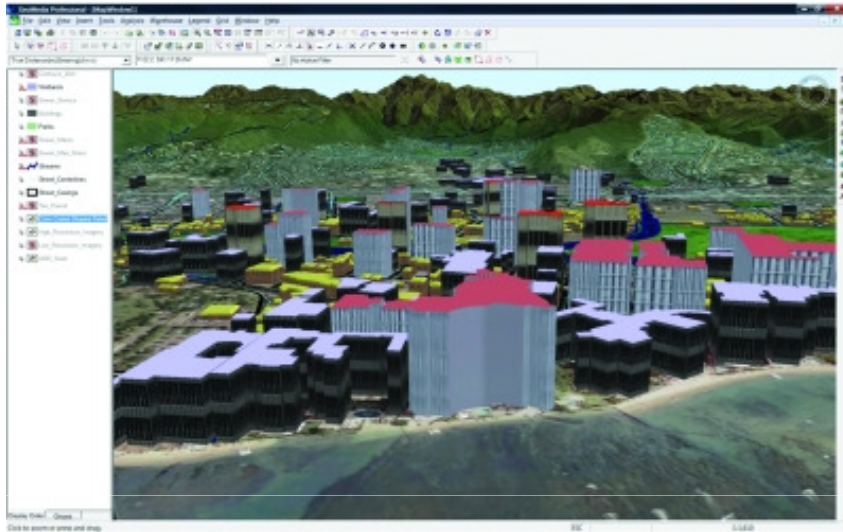
The screenshot displays the GeoMedia SmartClient interface. The main window shows an aerial map with overlaid utility lines in red, blue, and yellow. A 'Building Info' dialog box is open, showing details for 'Commerce Place CIBC'. The dialog includes fields for NAME, PLAN_NAME, Building, and Comments, along with an 'Upload Photo' button. A 'Windows Photo Viewer' window is also open, displaying a photograph of the 'WATERSTONE' building. The interface includes a search bar, a legend, and various toolbars. A blue callout box at the bottom of the map area contains the text 'Inspecting buildings with Mobile Alert photos'.

Inspecting buildings with Mobile Alert photos

Public Works Asset Management



Proximity & Frequency Analysis



Few More Applications

The image displays two overlapping GIS application windows. The top window is a desktop GIS interface showing a map with colored overlays representing different pavement conditions. A legend on the left lists 'SCI Ratings' with categories: 0 to 34.9 (1), 35 to 54.9 (16), 55 to 69.9 (795), 70 to 79.9 (3,958), and 80 to 100 (8,663). A 'Pavement Rehabilitation Analysis Run Results' window is open, showing 'Analysis ID: 1008' and 'Unit of Measure: FT'. Below this is a table with columns for 'Asset Unit ID', 'Street', 'C/L', 'Target', 'M/M', 'M/M', 'Point', 'Dist', 'Original Act', 'Dist', 'Activity', 'Co', 'Dist', 'Area', and 'Dist Cost UD'. The bottom window is a web-based 'IntelliWhere TrackForce Map' showing a street map with various colored markers (red stars, blue circles, green squares) and a data table below it.

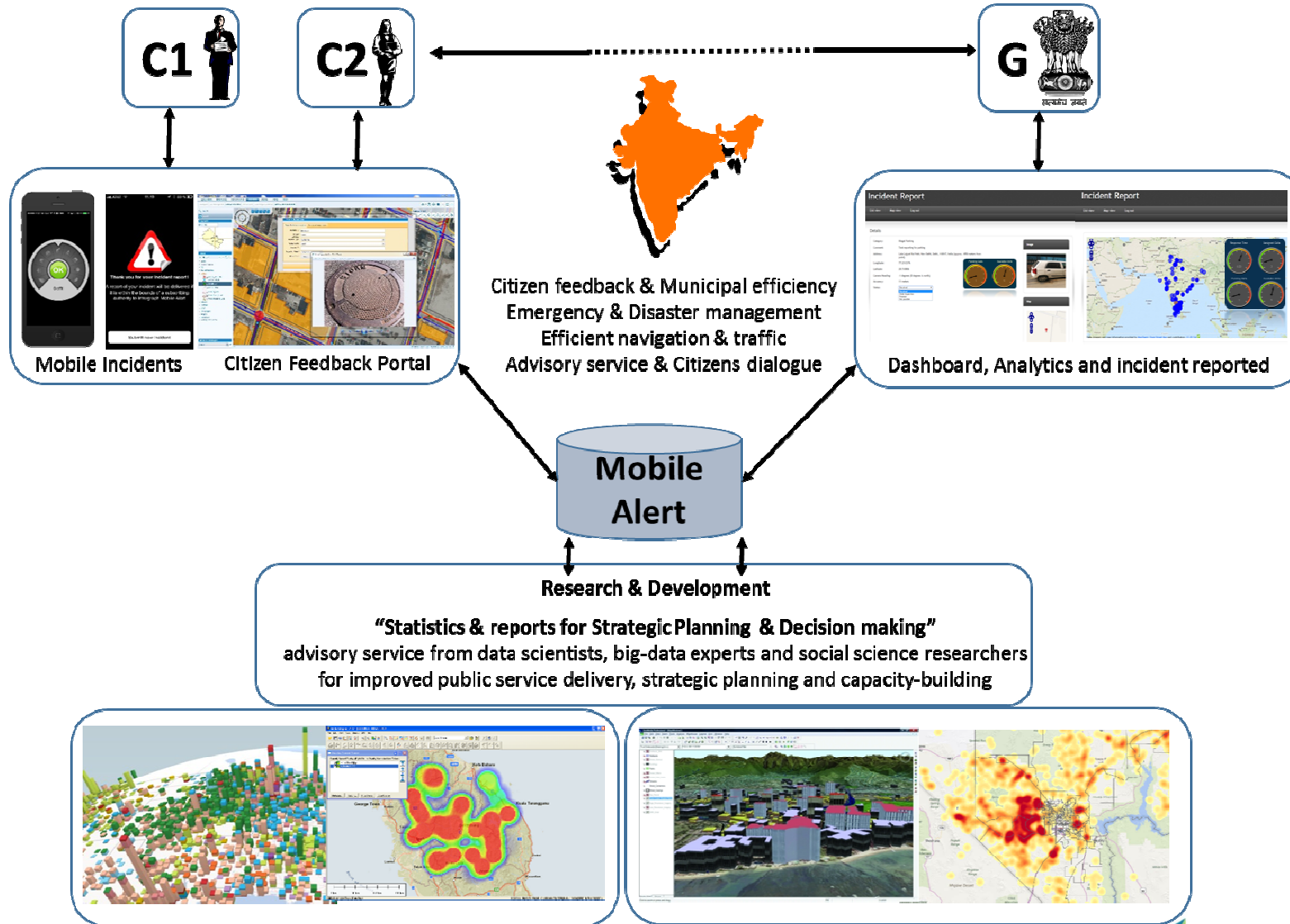
Pave

Tracking

107031	107031	Water Operations	1355 MAIN ST HAM,	Available
107032	107032	Water Operations	ARVIN AV SC,	Available
107037	107037	Water Operations	KELLY ST HAM,	Available
107043	107043	Water/Waste water	STUART ST HAM,	Available
107044	107044	Water Operations	KING ST DU,	Available
107066	107066	Construction	MAIN ST HAM,	Available
107069	107069	Construction	ARVIN AV SC,	Available
109338	109338	Meter Technicians	BAY ST HAM,	Available
109339	109339	Meter Technicians	MORLEY ST HAM,	Available

Mobile Workforce Tracking

Functional Architecture





Utilize The Power of a Photo

Thank You