



CAGIS Firebird:

Dispatch Integrated Mobile GIS for emergency services

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The Cincinnati Area GIS (CAGIS)



City of Cincinnati and Hamilton County, OH

Approximately 0.9 million in population

495 square miles

~ 425,000 parcels

~ 329,000 structures

~ 56,000 businesses

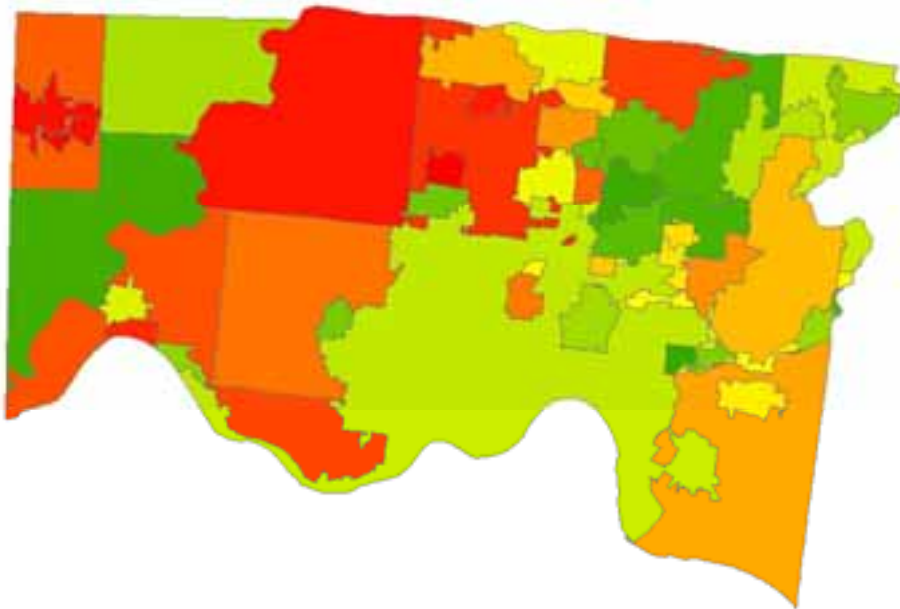
~ 3,000 miles of sewer

~ 3,380 miles of road

49 cities, villages and townships

5 EMS 911 agencies

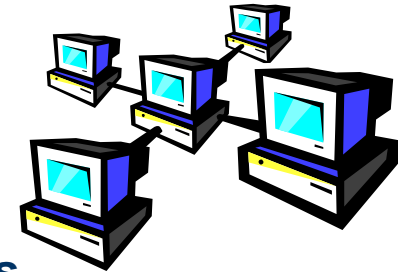
Approximately 14,000 employees



The Cincinnati Area GIS (cont.)

- **1993:**

- Initial data conversion completed
- 25 workstation users of CAGIS
- Data (~50% in network environment)
- Applications limited to making and plotting maps
- No business plan , No documentation of benefits



- **Today:**

- Integrated work order, customer service and billing systems
- Workflow management supported by GIS
- Integral part of permitting, licensing, service requests and capital project coordination as well as code enforcement
- Development of real-time applications for counter, desktop, and field.
- Professional and highly motivated team of 19 staff members, 1 doctoral fellow, ~3-5 interns



What is Cagis Firebird?



Cagis

FIREBIRD



Mobile Incident Mapping and FireMDC

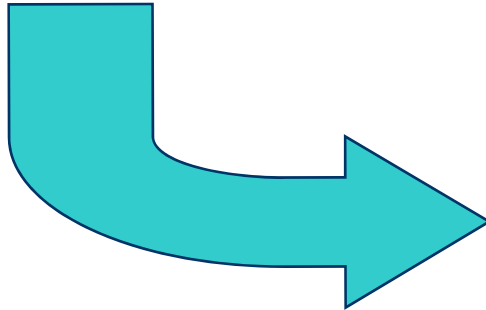
*Loading configuration for:
COLERAIN TOWNSHIP HAM OH -- Station 109*

Version: 1.01 - Fieldtest



What is Cagis Firebird?

- Mobile GIS with **integrated** dispatch is the main task.
- **Easy to use access to images and preplans.**
- Countywide **address look-ups** in real-time.



- ArcEngine based to have lower licensing costs
- One application for all firehouses in Hamilton County; specific configuration possible
- GIS application with little training needs.



Inside Cagis Firebird

- Modular approach as VB.NET stand-alone application based on ESRI ArcEngine
- Independent sections:
 - Data communication including dispatch processing and GPS integration
 - Map interface
 - Specific project plug-in as business logic
 - Configuration via XML-file



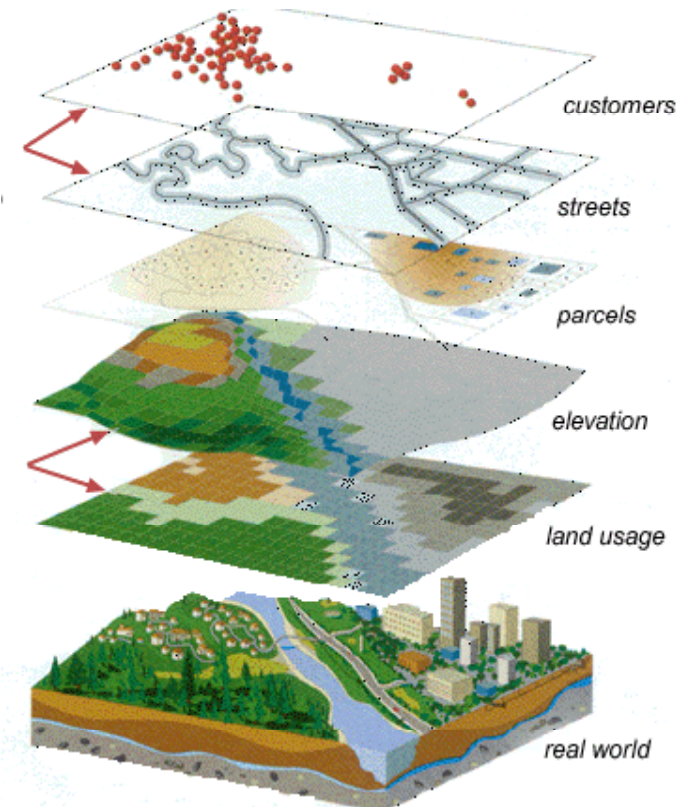
Data communication

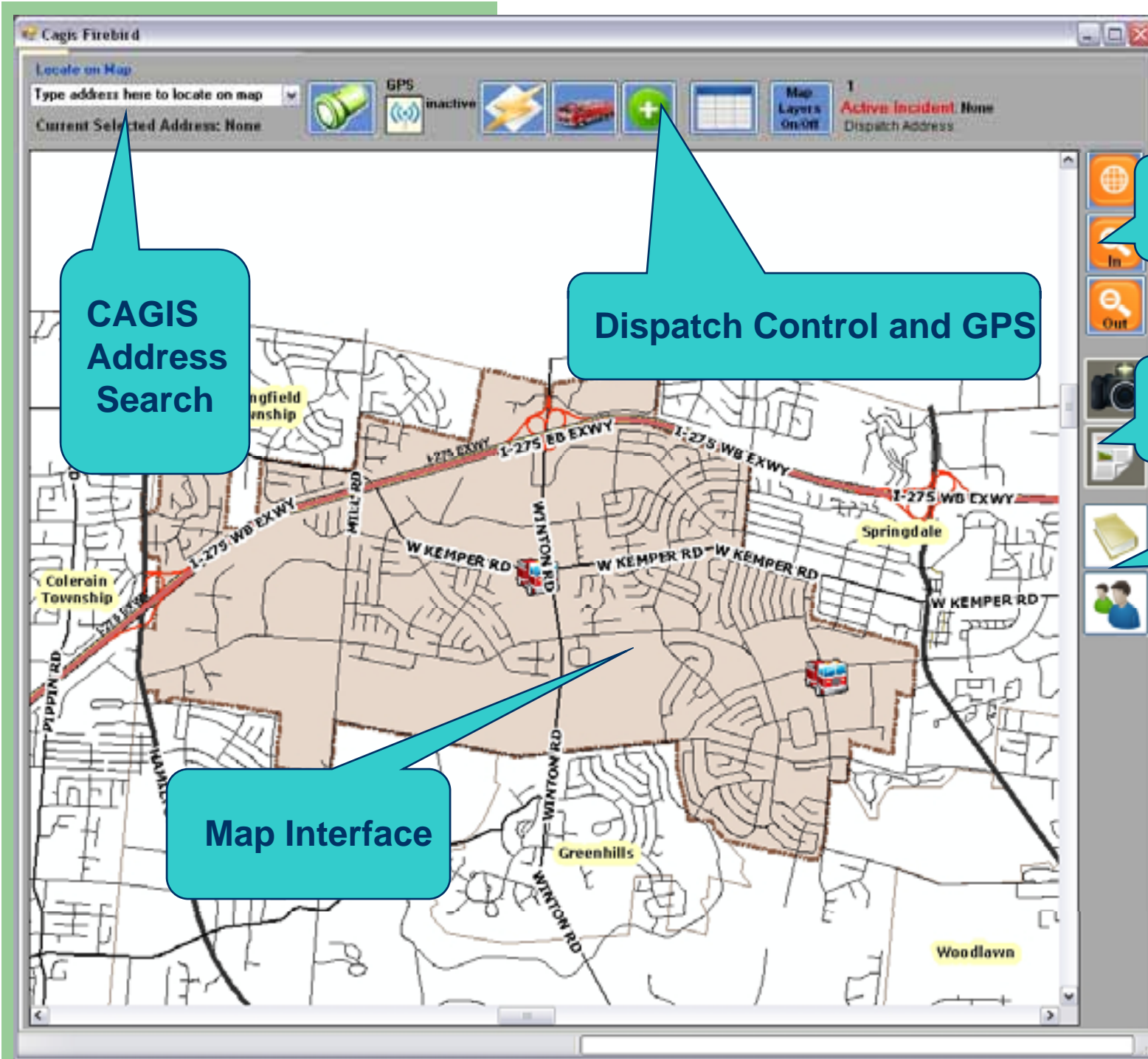
- **Linking to existing MDC dispatch controls**
- **Enabled Download from SDE/SDO or Oracle Environment**
- **GPS integration to represent fire truck's position**
- **Implemented Geolocator for Hamilton County specific geocoding with accurate addressing.**
- **Preplan and Image Inventory**



Map interface/ control

- Built on ESRI Mapcontrol
- Implements ArcEngine standard navigation toolbar controls
- Integrated CAGIS Address Search and zoom-to-location
- GPS guided mapping





**CAGIS
Address
Search**

Dispatch Control and GPS

Map Interface

Map Navigation

Pre Plans

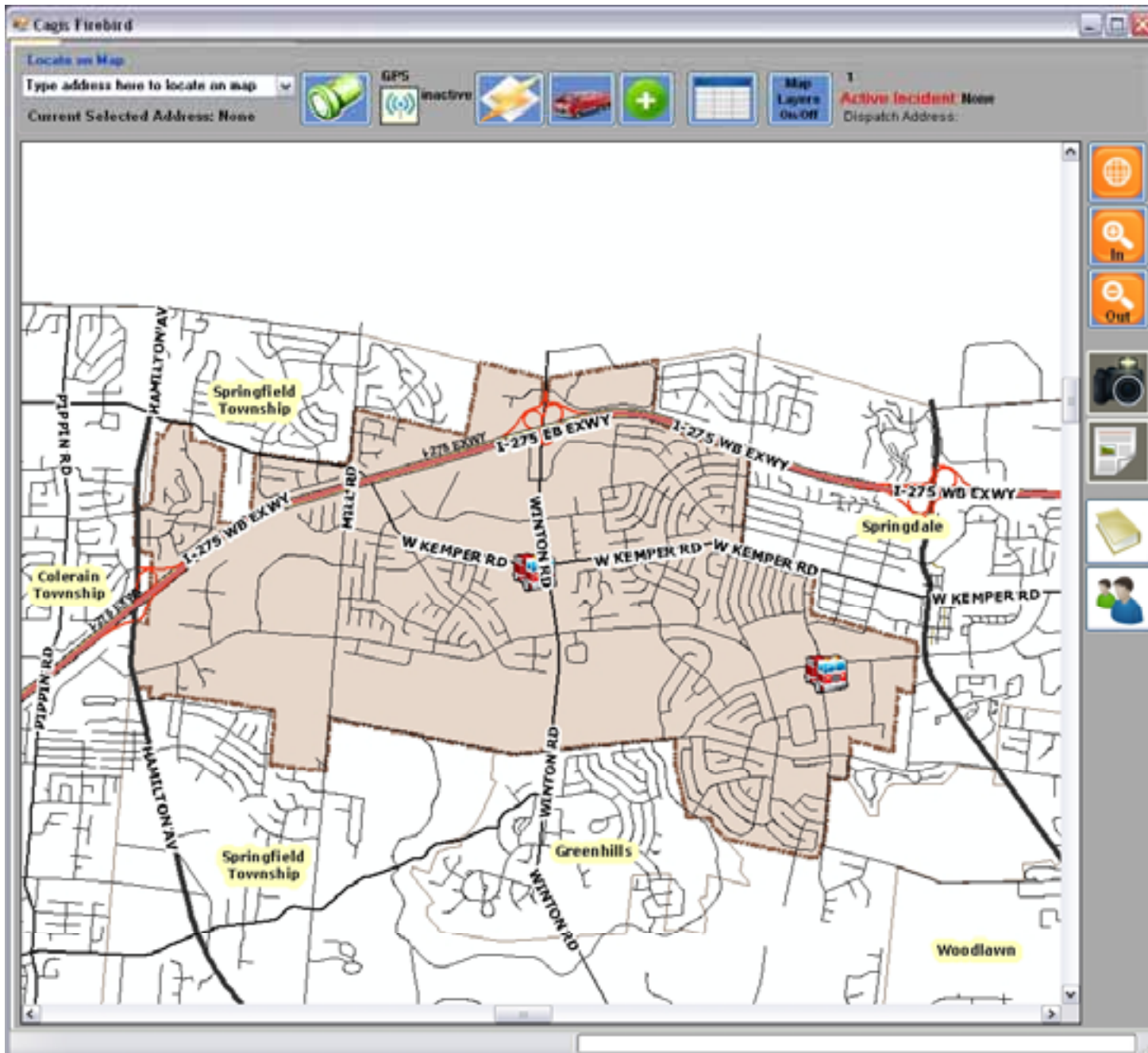
Contacts

Who uses Cagis Firebird?

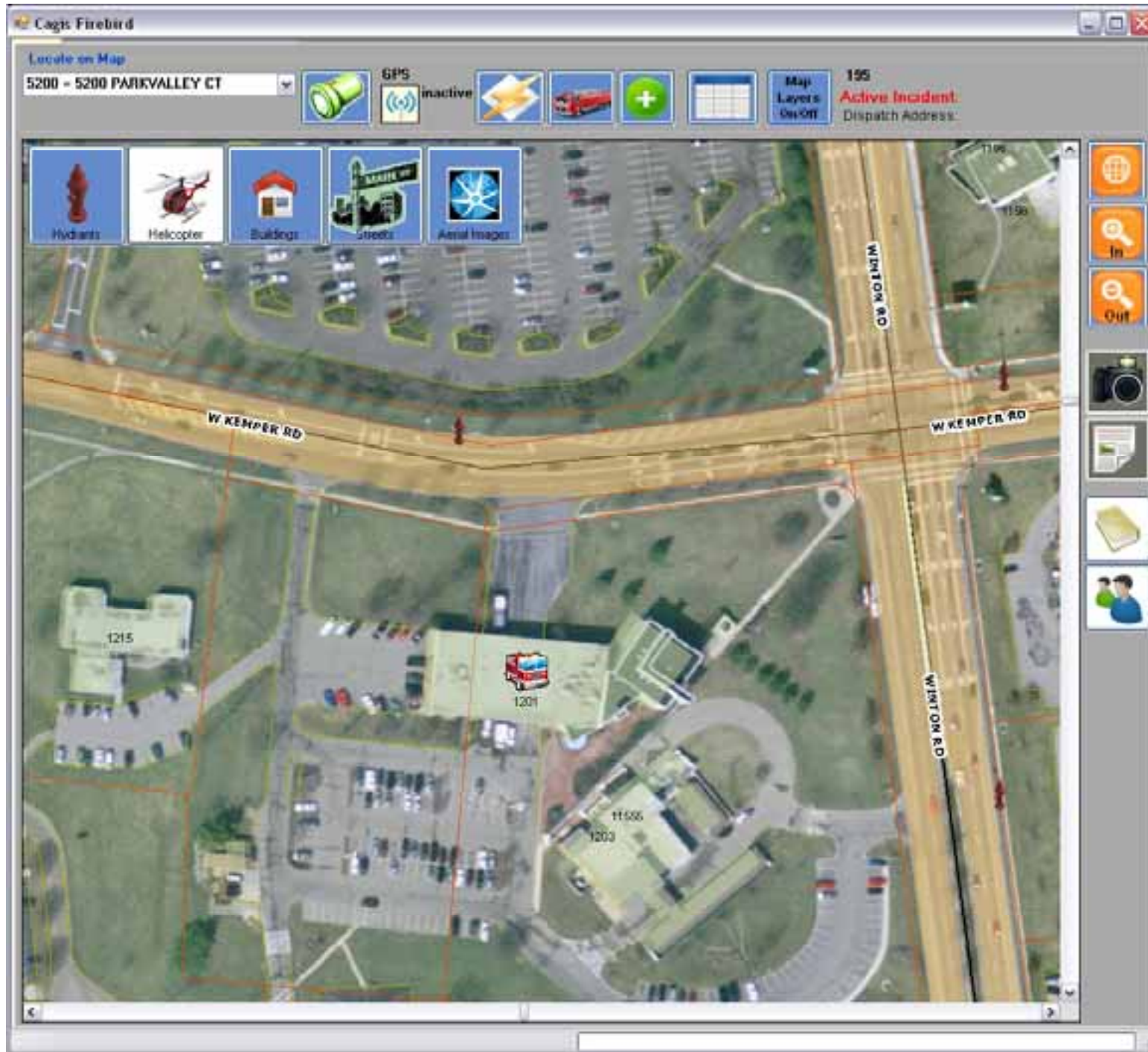


- **Forest Park FD**
- **Colerain Township FD**
- **Indian Hills FD**
- **Next in implementation: Sycamore Township**
- **Phase in other FD after presentation to Regional Fire Chiefs Committee**

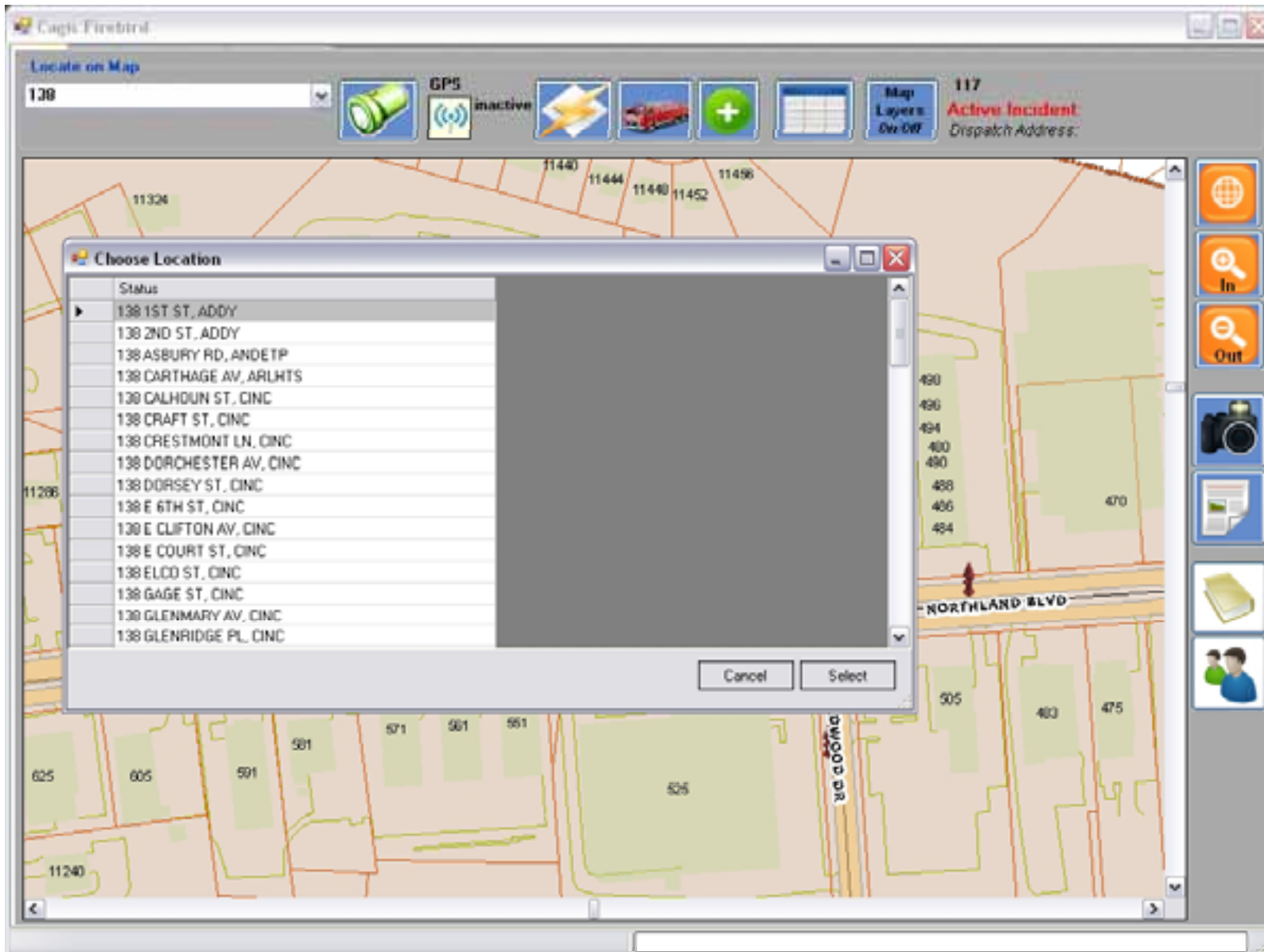
- 
- Screenshot vs Demo



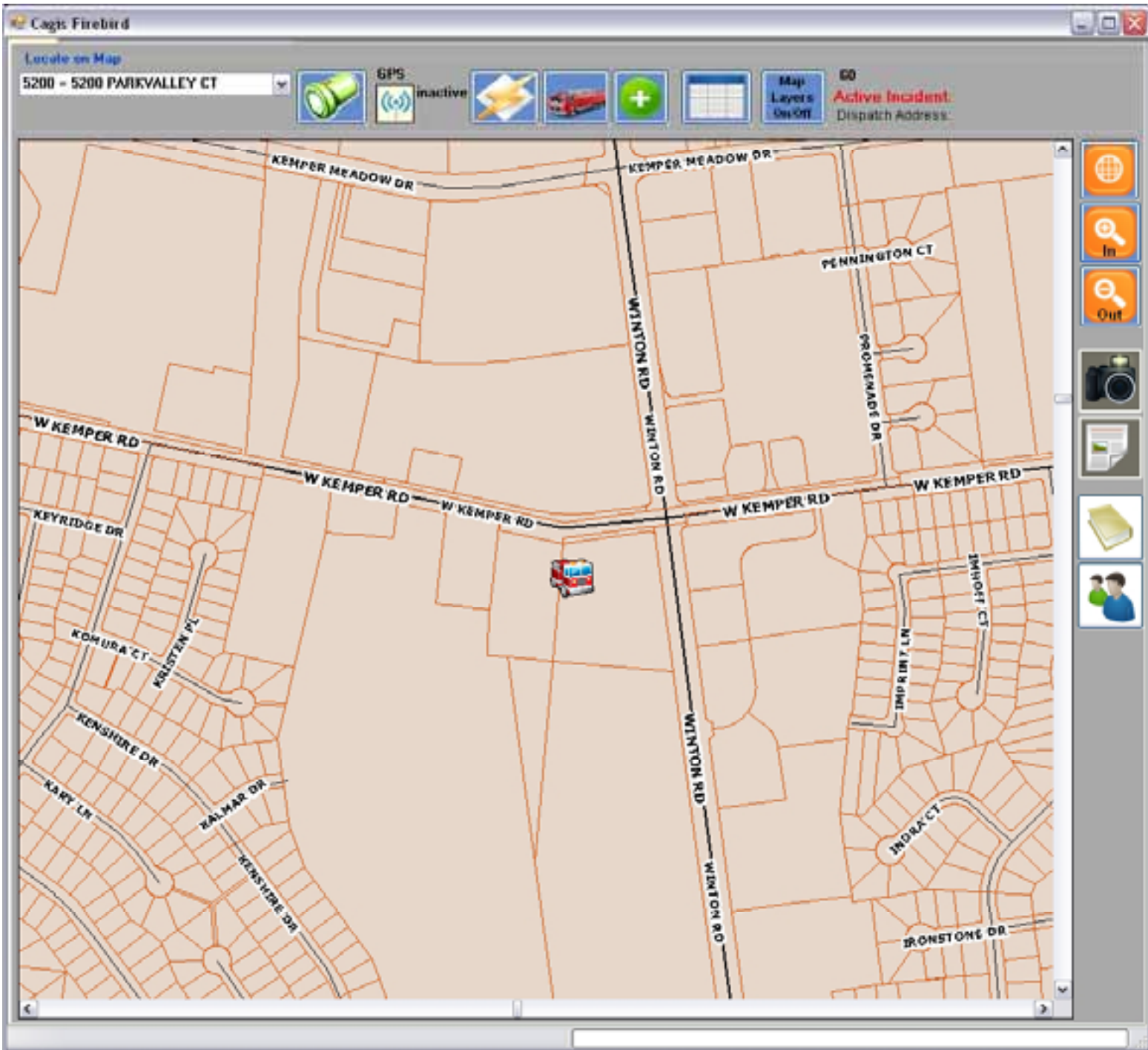
Startup screen

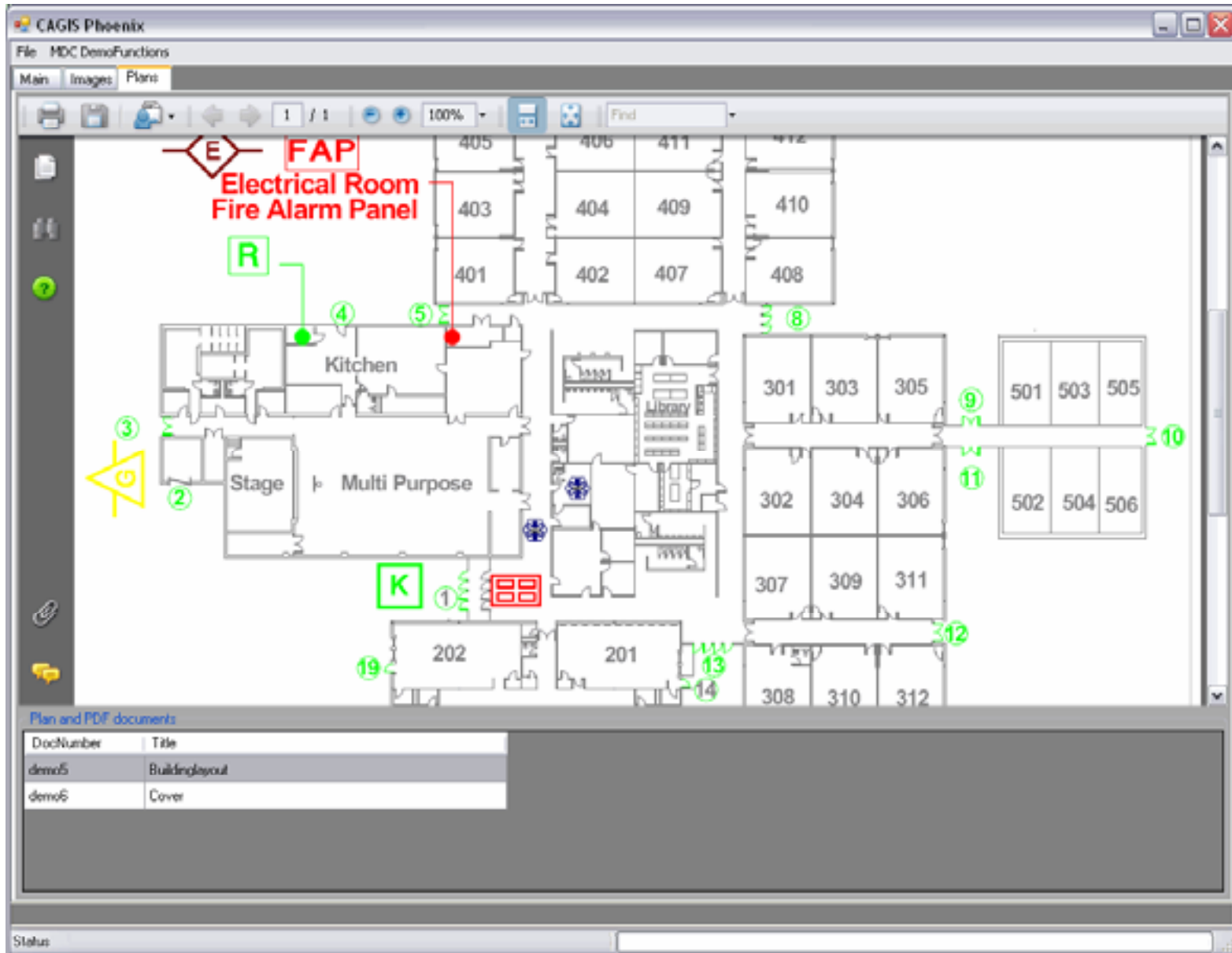


Aerial Imagery And Map Layer Control



Universa Address Look-up





Pre Plan Menu

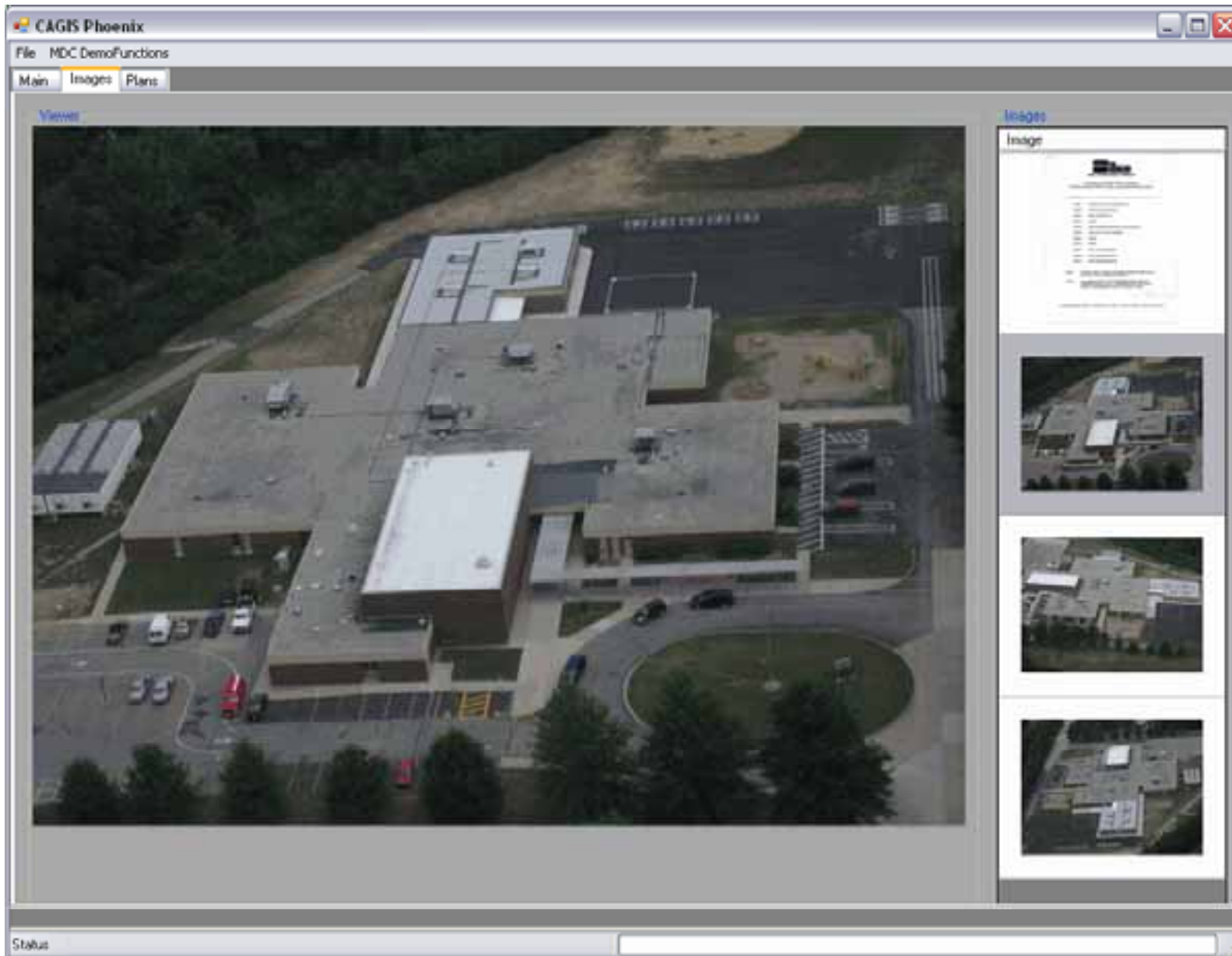
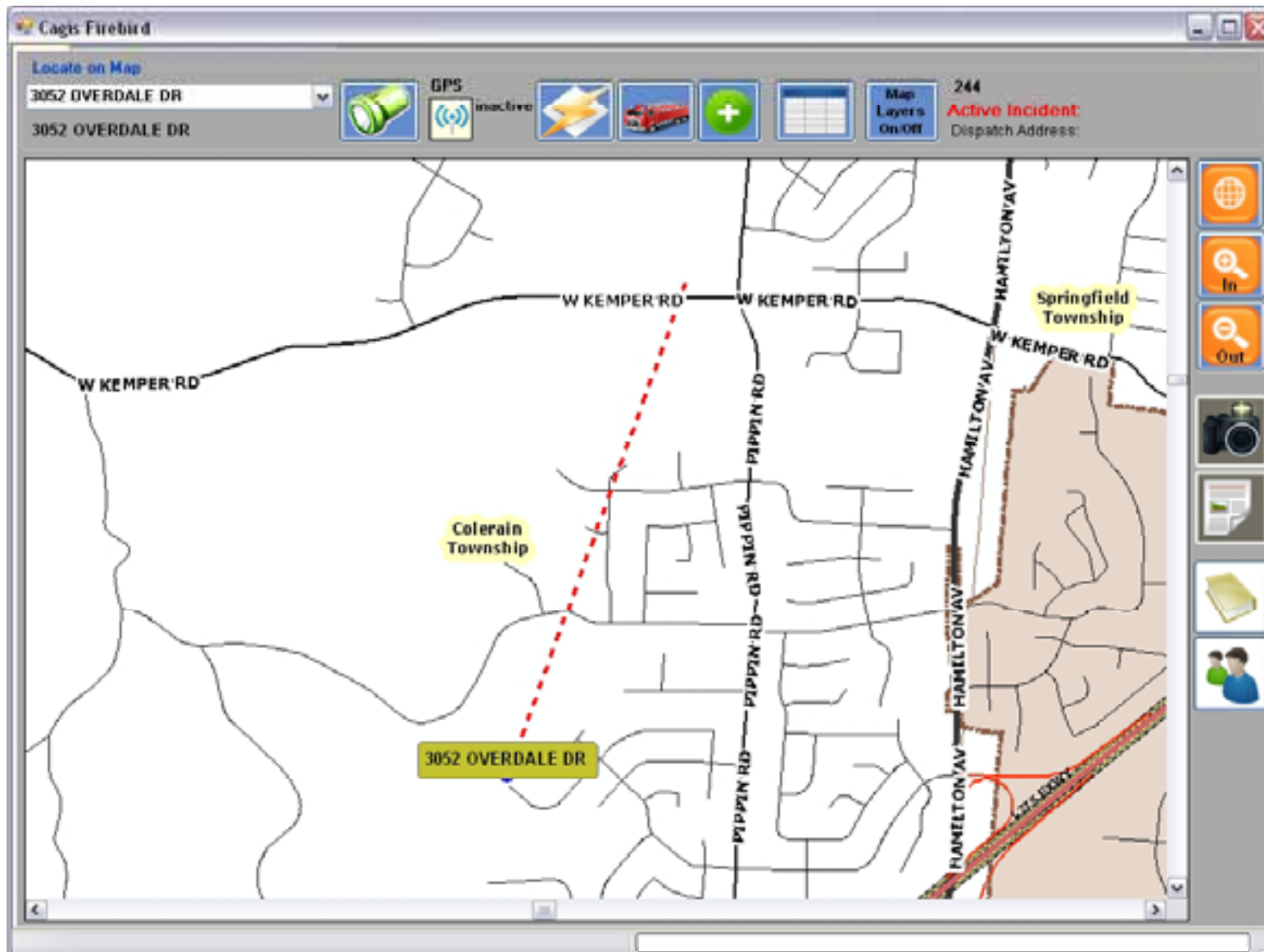


Image
Menu



Routing



Thank you