



INCIDENT ANALYSIS

The ability to spot and analyze incident trends, such as frequency, geography, and time of day events occur, is more urgent than ever. Incident analysis tools from Intergraph form an intuitive and user-friendly environment for analysis of incident activities, allowing you to make quick decisions, create intelligence products that detect spatial patterns, and effectively deploy resources to improve response.

Since the distribution of incidents across geography is not random, the ability to delineate areas of abnormal frequency is essential to optimizing resources. Understanding where incidents occur and comparing locations with other factors – time, relative location to other geographic features, and offense statistics – help define problem areas. I/Incident Analyst, our incident analysis product, can pinpoint those areas, using spatial analysis and digital mapping to leverage geospatial data captured in your other public safety software applications.

For ease of use, I/Incident Analyst can display data as both simple and complex maps. Simple maps display the locations of individual incidents, and can be used to direct resources to places they are needed most. Complex maps can be used by policymakers to observe trends and track action in areas of high incident frequency. Complex maps can also animate change in an area over time, and determine journey distance between incidents.

KEY FEATURES

- **Data Connectivity** – Provides seamless Web Service access to the Intergraph computer-aided dispatch and records management systems databases, and extensibility to other incident data sources
- **Pin Mapping** – Allows users to dynamically create color-coded pin maps based on database attributes such as incident date, time, location, and offense type

- **Incident Count Mapping** – From incident count map data, creates a map that uses color to represent different values among defined geographic areas such as police precincts, city voting districts, or census tracts
- **Journey to Incident Mapping** – Supports two types of analysis: “distance to incident” analysis (e.g., measuring serial offenders average and maximum distances traveled to commit a crime), and “distance to recovery” analysis (e.g., linking stolen and recovered property or vehicles to identify routes taken after a crime)
- **Repeat Incident Mapping** – Uses graduated point symbols to represent the number of incidents at a location, allowing you to quickly make comparisons among repeat places and the number of incidents
- **Hot Spot Mapping** – Provides a number of commands for automatically extracting hot spots from a plot of incidents, helping police direct patrols where they are needed most
- **Isoline Mapping** – Includes a single-step command for generating isoline maps, which are extremely useful at distilling complex information into a simple picture; displays lines that indicate a change in the frequency of incidents in a particular area
- **Change-Over-Time Mapping** – Provides an intuitive set of mapping tools to visualize change-over-time, allowing decision makers to assess the impact of crime reduction initiatives to determine their effectiveness and identify emerging crime areas
- **Temporal Reporting** – Allows users to create incident/time-of-day histograms, giving them the latest information on trends and patterns in their locality

CUSTOMER BENEFITS

The majority of incidents local law enforcement agencies respond to are initially recorded within the command-and-control environment and those that result in a crime allegation are transferred to the

crime recording or records management system. I/Incident Analyst fuses data from multiple sources and identifies spatial patterns from point locations. It provides benefits in:

- **Strategic Assessment** – Identifies priority neighborhoods and the conditions experienced within them
- **Tactical Assessment** – Locates where tactics have been deployed and displays their impact
- **Target Profiling** – Profiles areas where suspects/offenders reside and the areas where they focus their activities
- **Pattern Analysis** – Identifies emerging crime hot spots, connects a crime series, and predicts where the offender may reside
- **Risk Analysis** – Identifies areas at a higher risk of incidents occurring

INCIDENT ANALYSIS VERSION 6.1.1 ENHANCEMENTS

Intergraph's version 6.1.1 release of our Incident Analysis application includes the following additions and modifications:

AVL Analysis and Reporting

- New I/Tracker Files to Database utility enables you to schedule and easily locate and bulk-load I/Tracker files into an Access, SQL, or Oracle database.
- New configuration files allow you to extract information from the AVL source using the Incident Query command, so you can ask questions of your AVL data through a simple interface, and in turn easily produce maps.
- New AVL Playback command allows you to display and/or play back the historical AVL locations of a single unit or multiple units within a single agency, or multiple units from multiple agencies simultaneously.

Automated Mapping

- Enhanced Change-Over-Time command provides a graphical user interface for the animation of a single chronological feature containing time information, or for the animation of multiple legend entries. The enhancement lets you take the same query as

before, and animate it such that the defined interval (e.g., a one-week period) is displayed and then removed, the next interval is displayed and then removed, and so forth until the animation completes.

- Enhanced Journey to Incidents command lets you display the location of an incident in relation to the perpetrator of the incident, or to display an incident's location in relation to where the incident elements (cars, bikes, TVs, etc.) were recovered.
- New reporting option added to the Incident Count command allows you to create choropleth maps of incidents based on numeric characterization, such as population or number of commercial buildings. With these additions, you can create a number of different choropleth maps, such as maps depicting number of residential break-ins per 1000 residents, or number of petty thefts per 100 businesses.

Configuration Management

- Configuration File Editor lets you easily create, modify, and maintain configuration files, allowing you to expand and modify connectivity to other data sources such as text files, Excel files, and other ODBC-compliant databases – without having to learn XML.

COMPONENTS OF INCIDENT ANALYSIS

Our Incident Analysis application includes:

- I/Incident Analyst

ABOUT INTERGRAPH

Intergraph is the leading global provider of engineering and geospatial software that enables customers to visualize complex data. Businesses and governments in more than 60 countries rely on Intergraph's industry-specific software to organize vast amounts of data to make processes and infrastructure better, safer, and smarter. The company's software and services empower customers to build and operate more efficient plants and ships, create intelligent maps, and protect critical infrastructure and millions of people around the world.

Intergraph operates through two divisions: Process, Power & Marine (PP&M) and Security, Government & Infrastructure (SG&I). Intergraph PP&M provides enterprise engineering software for the design, construction, operation, and data management of plants, ships, and offshore facilities. Intergraph SG&I

provides geospatially powered solutions to the public safety and security, defense and intelligence, government, transportation, photogrammetry, and utilities and communications industries. Intergraph Government Solutions (IGS) is an independent subsidiary for SG&I's U.S. federal and classified business.

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