HunchLab™ uses advanced statistical analysis to identify changes in the geographic patterns in crime, automatically alerting appropriate police officials. Leveraging the existing data in an agency’s RMS, CAD and other databases, HunchLab provides advanced geospatial analysis tools to enable fast resource allocation to protect the public.

**Key Functions**
- Early detection and visualization of geographic spikes in crime data.
- Geographic notification alerting.
- Temporal data analysis.
- Geographic risk forecasting.
- Crime mapping.
- Crime intelligence dashboard aggregates user-defined visualizations across data stores.

**HunchLab helps agencies meet the following goals**
- Provide tools for intelligence-led policing.
- Analyze crime clusters that span multiple jurisdictions and districts.
- Integrate disparate databases.
- Assist with nationwide Suspicious Activity Alerting and Recruiting (SAR).
- Automate risk forecasting methods including near-repeat pattern analyses.

**HunchLab Serves**
- Police departments and public safety agencies that need effective and timely tactical deployment of staff and resources.
- State Police Information Networks.
- State and Major Fusion Urban Area Centers.
- Federal law enforcement agencies.
- Regional Information Sharing Systems (RISS).
- Crime analysis units that wish to extend their mapping capabilities to include automated statistics and alerts.

“Time of Day, Day of Week” charts visualizing density (left) and counts (right) of crime per hour block per day.
Geographic data mining, crime spike detection, alerting, and risk analysis

- Easily create your own custom search patterns, to set up specific criteria that control for time, location, and type of crime or identify threshold capacities.
- Complement your existing crime analysis tools with HunchLab’s automated crime spike detection, alerting, and risk forecasting to focus deployments on changing conditions.
- Leverage your current investment in RMS and CAD systems by generating more actionable information from your data.

Features

- **Change Detection Service**: An automated service that executes a series of search patterns defined by users. Each search pattern is called a Hunch.
- **Hunch Management Elements**: Hunches are defined by event classification(s), a geographic extent, a current time period, and a historic comparison time period. Users can share Hunches with one another and subscribe to Hunches that are relevant to their analysis work.
- **Mass Hunches**: Users are able to define Hunch parameters and test them in equal area catchments across a larger region.
- **Text Analysis**: HunchLab can use the narrative text of crime event reports as a source for detecting changes. This enables alerts to be created for the appearance of specific keywords in a report.
- **Alerting System**: Users are alerted of triggered Hunches according to their preferred mechanism (email, SMS, RSS, and GeoRSS).
- **Risk Forecasting**: Focus your deployments on areas with increased risk of near-repeat crimes. Visualize the current crime forecast geographically to adjust patrols to maximize your impact.

- **Intelligence Dashboard**:

  A customizable dashboard displays aggregation and summary statistics of information across data stores.

  - **Security**: HunchLab runs within your infrastructure, insuring incident data never leaves your network. Role-based security controls what users can access within the system.

System Requirements

**Operating System**

- Microsoft .Net Framework version 3.5 or above.
- Microsoft Windows Server 2003 or above.
- Microsoft IIS web server with ASP.Net 2.0 extensions.

**Database**

- Microsoft SQL Server 2008 for HunchLab components.

**Mapping Engine**

- GeoServer or other WMS compliant map server.
- ArcGIS Online, Google Maps, MS Virtual Earth & OpenStreetMap.

**Spatial Data**

- Incident’s spatial coordinates are stored in two database columns and custom districts can be stored as shapefiles, PostGIS, or geodatabase feature classes.