



# Visual Analytics Law Enforcement Toolkit: Helping Law Enforcement Stay Ahead of Crime

A DHS Science and Technology Center of Excellence Solution

## Law Enforcement Tool Detects Crime Trends and Patterns

The **Visual Analytics Law Enforcement Toolkit (VALET)** integrates large volumes of criminal, traffic and civil incident data into a single, interactive user interface to help law enforcement decision makers, analysts and officers identify crime trends and patterns, discover crime anomalies, and perform predictive crime analytics in order to assist in allocating law enforcement resources.

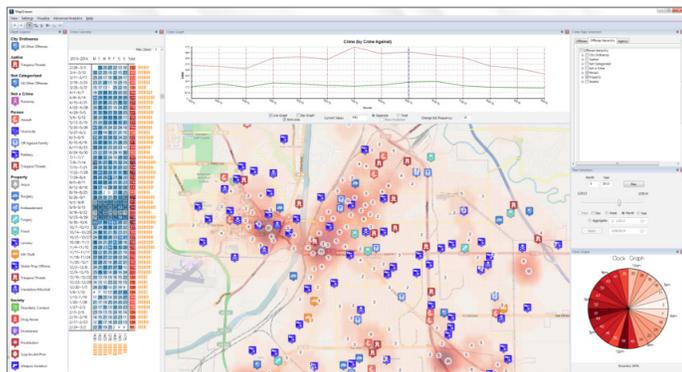
Developed by the Center for Visualization and Data Analytics, a Department of Homeland Security (DHS) Science and Technology (S&T) Center of Excellence, VALET provides users with a visual display of multiple integrated crime datasets and a variety of crime analyses capabilities.

## A Suite of Tools That Combines Advanced Crime Mapping with Visual Analytics

VALET is a suite of tools coupled with an interactive visual interface that integrates data analysis, mapping, predictive modeling, spatial and temporal modeling, and time series techniques.

VALET helps law enforcement officers and analysts:

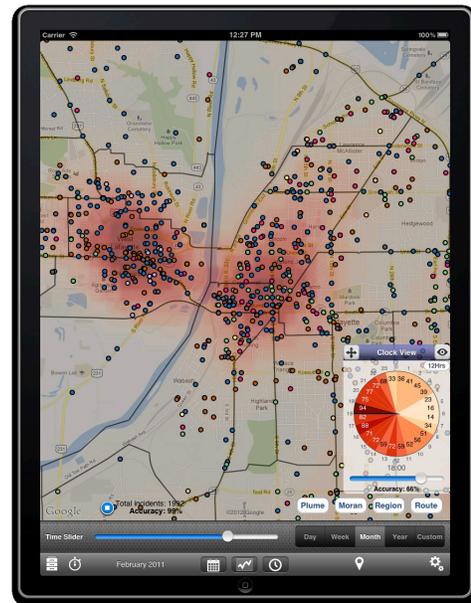
- Identify crime hotspots and anomalies
- Analyze trends and patterns in criminal activity through time (by day, week, month or year)
- Forecast crime hotspots to assist in the development of preventive measures and in resource planning and allocation
- Identify potential correlations among multiple datasets (for example, census data, daily weather reports, bus routes, zoning tracts, and community events calendars) against criminal, traffic and civil incident data



Screenshot of VALET showing linked line graph and calendar views.

## Benefits of Using VALET

- Can be used on multiple platforms including desktop or laptop computers, iPhones, or iPads
- Can be used for a variety of functions and activities including predictive analytics, training, investigation, response, recovery
- Integrates multiple datasets onto one visual display (for example, social media, street light locations, law enforcement records, weather reports, civil court data, and bus routes)
- Allows users to choose what types of data they want to look at or analyze



Screenshot of VALET showing crime hotspots.

## VALET Users

VALET has been deployed at:

- Illinois State Police Department
- Indianapolis Department of Public Safety
- Lafayette Police Department
- New York Police Department
- Ohio State Highway Patrol
- Purdue University Police Department
- Tippecanoe County Sheriff's Department
- West Lafayette Police Department