Regional Police Collaboration and Community Engagement Using GIS and Crime Analysis Dashboards

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Data Analytics and Dashboard Technology Help Police Cut Crime

• CLEMIS PROJECT CASE STUDY:
• A dashboard project is now actively underway to deploy a turnkey dashboard solution implemented by The Omega Group in partnership with ESRI, CLEMIS and member agencies. All participating CLEMIS agencies (nearly 90) have seamless access to analyze near real-time crime data in exciting new ways across the political boundaries criminals typically like to ignore.
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PROJECT VISION STATEMENT:
Fully incorporate into Police operations integrated "best crime analysis practices" through the use of a dashboard in an effort to both:

- analyze crime trends and
- strategically deploy critical police resources

PROJECT BACKGROUND:
Police agencies across southeast Michigan have been exploring ways to better analyze crime trends and strategically deploy critical police resources. The challenge is in dealing with large volumes of data dispersed across multiple agencies, that are difficult to convert into actionable information.
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PROJECT BUSINESS DRIVERS:
1. The desire for one current and holistic view of the data across the entire Police Department; a single source of the truth
2. Eliminate time consuming processes that can produce conflicting information
3. The crucial need for focused deployment of police resources
4. Reduction of crime across the city and region
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PROJECT OBJECTIVES:

• Enhance the output of crime analysis: have multiple views available such as CAD data, RMS data, accident data, parolee and sexual offender data within a single dashboard

• Implement a dashboard solution that is user-friendly and empowers staff to easily analyze data that traditionally was trapped in the “system”

• Improve the quality and accessibility of CAD and RMS information for decision support and resource planning

• Eliminate redundant “shadow systems” where crime data is exported from the primary system and processed in another, thereby improving operational productivity by spending more time analyzing and less time processing data

• Add analytical functionality that supports intelligence-led, data driven policing (DDACTs)

• Incorporate local GIS mapping information in order to enhance investigations
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PROJECT CRITICAL SUCCESS FACTORS (Challenges):

• Ensuring that all of the reporting and statistical needs of the City and Police Department are thoroughly defined, documented and understood

• Ensuring that staff time is not wasted during this process, but also ensuring that appropriate staff has input into the process

• Active and candid feedback from project participants regarding functional requirements

• Obtaining buy-in from the police department
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PROJECT SOLUTION:
CrimeView Dashboard is a web-based application by the Omega Group that is accessible by authorized law enforcement personnel within the CLEMIS consortium. The CrimeView Dashboard solution can be configured to support different organizational contexts.

These contexts may include shared end user roles such as:

- **Patrol** (Beat / Neighborhood / Service Area Book)
- **Supervisory** (Patrol Brief)
- **Executive** (Command Brief, Mayor Brief)
- **Task force** (Gang, Drug, Violent Crimes, etc.)
- **Specific initiatives** such as, Data Driven Approaches to Crime and Traffic Safety (DDACTS), and directed patrols.
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Demonstration:
• DDACTS
• Trend Analysis
• Daily Briefing
• The Ann Arbor Art Fair
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DDACTS ZONE – HAGGERTY RD & NINE MILE RD

Pre DDACTS Enforcement

DDACTS Enforcement

Map Legend
Targeted Crime Hot Spot Density

DDACTS Zone Statistics

- Targeted Crimes (Burglary, Larceny, Motor Vehicle Theft): 72%
- Police Contacts: 792%
- Hours Spent: 26.7%
- Distance Traveled: 260%
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PROJECT NEXT STEPS:

• Advanced Reporting: Briefing
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PROJECT NEXT STEPS:

- Advanced Reporting: Statistics
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PROJECT NEXT STEPS:

- Fire Department
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A presentation by Matthew Brown on how the San Diego Harbor Police Department uses GIS and Dashboard technology:

• Present both the Intel/Analyst role and the Sworn Command role
• Strategy sessions developing the Playbook Missions and resulting Directed Enforcements
• Development of the subsequent Command Team meeting
• Resulting in multiple patrol officer lineups
In response to an uptick of vehicle burglaries with unforced entry, to include two in the past two weeks in the area of the Hilton Harbor Island (1880 and 1960 Harbor Island Drive) (15-02695 and 15-02734), increase patrol awareness in parking lots. This should include periodic 602/604 tie-ups with foot patrol. These vehicle burglaries have taken place in both daylight hours and hours of darkness. Enter 11-53s in CAD in response to this directed enforcement. Click on the paperclip attached to this Playbook Mission to view the FI and photo of a possible vehicle caser FBI in the Tom Hamms Restaurant parking lot by Raul Monoz on 6/30/15.
Thank You
Have a great UC!
‘There are lies, damned lies, and statistics’

“There are lies, damned lies, and statistics” is a quote variously attributed to Samuel Clemens, Winston Churchill, Benjamin Disraeli, Karl Marx, and Theodore Roosevelt. In many cases, this is true. Statistics presented alone, with no comparison or context, are like nuclear power: they can be used for good or evil.

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