



Office of Information Technology Services



Data Analytics and Visualization – Public Safety Cluster

GIS Conference – August 18, 2017



Agenda

- NYS Public Safety
- Project Overview
- Visualization of GIS Information
- Predictive Aspects
- Prescriptive Modifications
- Trend Manipulation
- Future of Analytics for Public Safety

Our Customers

DHSES – Division of Homeland Security & Emergency Services

DOCCS - Department of Corrections and Community Supervision

NYSP - New York State Police

SCOC - State Commission of Correction

OPDV - Office for the Prevention of Domestic Violence

OVS - Office of Victims Services

DCJS - Division of Criminal Justice Services

Project Phases

Phase 1 - Eliminate paper

Completed December 2016

Phase 2 – Define and build agency dashboards

Completed August 2017

Phase 3 – Integrate Intra-cluster dashboards

December 2017 – March 2018

Phase 4- Integrate Inter-cluster Shared Dashboards

March 2018 – ?

Project Approach

- Provide overview to agency executives
- Meet with agency work groups
- Provide demonstration to agency executives

Approach

Agency determines:





- **What** data
- **Who** gets access
- **How** the dashboard view looks

Value Proposition







- ❖ Descriptive data
- ❖ Business defined dashboards
- ❖ Business defined targets and measures
- ❖ Shared data visualization
- ❖ Mobile access
- ❖ Significant efficiencies & resource savings gained





Michigan Public Safety Dashboard





-  Performance improving
-  Performance staying about the same
-  Performance declining
-  For information purposes only; not intended to measure performance



Crime Statistics			
	Prior	Current	Progress
Violent crimes (per 100,000 population)	429.8	427.3	
Percentage of violent crimes solved (clearance rates)	31.6%	34.2%	
Property crimes (per 100,000 population)	2,327.6	2,043.9	
Percentage of property crimes solved (clearance rates)	14.7%	16.1%	
Auto thefts (per 100,000 population)	248.3	213.5	
Number of arsons	1,977	1,706	

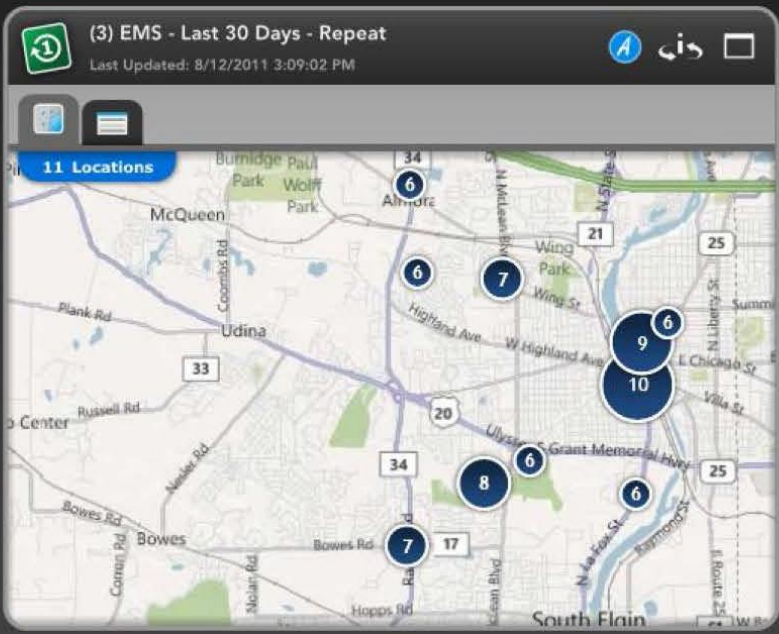
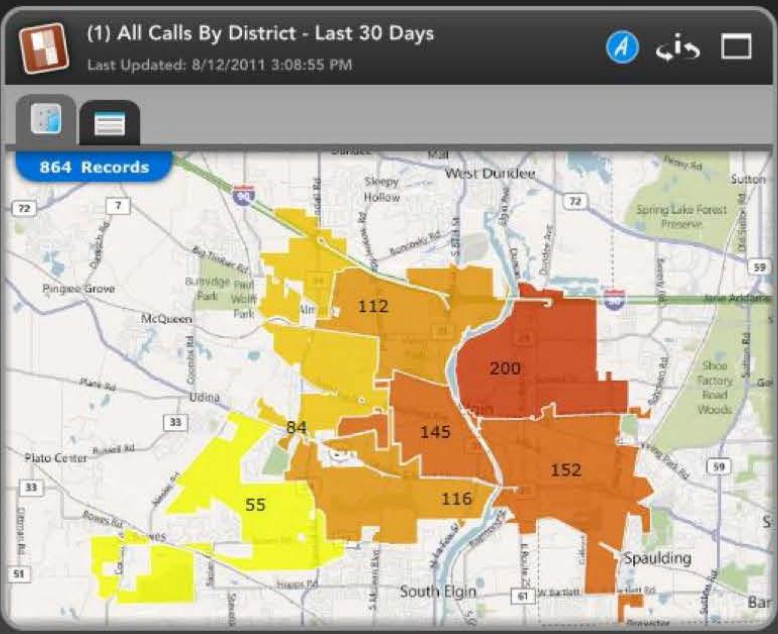
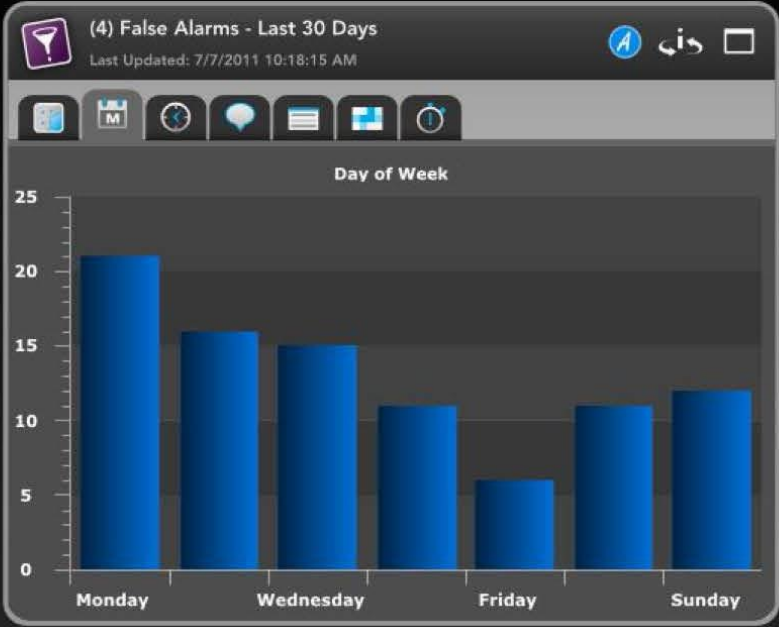
Crime Prevention			
	Prior	Current	Progress
Percentage of prescribers enrolled in the Michigan Automated Prescription System	45.9%	32.4%	
Drug court recidivism rates – percentage of participants with new convictions within four years	--	13%	--

Law Enforcement and Criminal Justice			
	Prior	Current	Progress
Average number of days for processing forensic tests related to criminal investigations	60	48	
Number of drug-related arrests (per 100,000 population)	397	380	--
Arrests under the age of 18	21,241	18,658	--
Arrests age 18 and over	251,825	227,784	--
Citizens per police officer	582	581	--

Corrections			
	Prior	Current	Progress
People serving their first prison term	5,455	5,208	--
Recidivism – percentage of parolees returning to prison within 3 years	29%	30.3%	
Number of parole absconders at large	1,383	1,211	
Cost per prisoner per day	\$96.30	\$95.84	
Parolee post-incarceration employment	26.1%	30.3%	

“Prior” and “Current” refer to the prior and current years for which data are available, unless otherwise noted.

BRIEFING BOOKS
LIBRARY
QUERIES ON DEMAND
HOT SHEET



Enterprise Portfolio

ITS - Public Safety Cluster - Project Dashboard



Number of Projects

57

Est. PS Cost - IT

\$28.8M

Est. NPS Cost - IT

\$93.9M

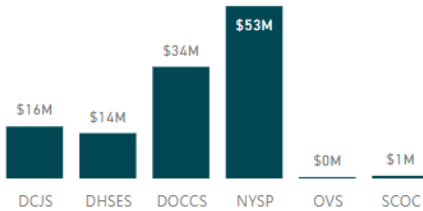
IT Total Cost

\$122.7M

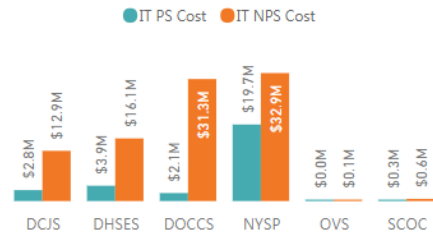
Total Implementation Cost

\$124.5M

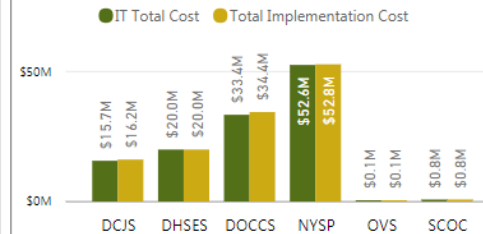
Est. Total Cost by Agency



Est. IT Cost by Agency



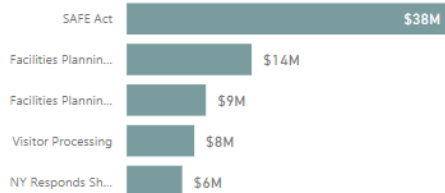
Est. IT Cost by Agency



Filter Section

- Agency
- DCJS
 - DHSES
 - DOCCS
 - NYSP
 - OVS
 - SCOC

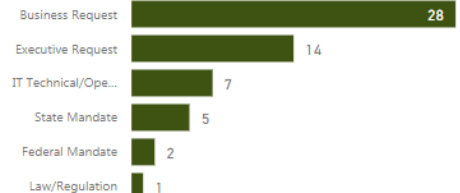
Top 5 Projects by Cost



Top 5 Projects by Duration (Days)



Projects by Request Type

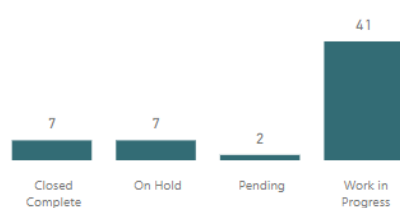


- Req. Type
- Business Request
 - Executive Request
 - Federal Mandate
 - IT Technical/Operatio...
 - Law/Regulation
 - State Mandate

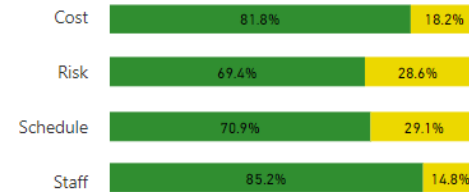
Projects by Priority



Projects by State



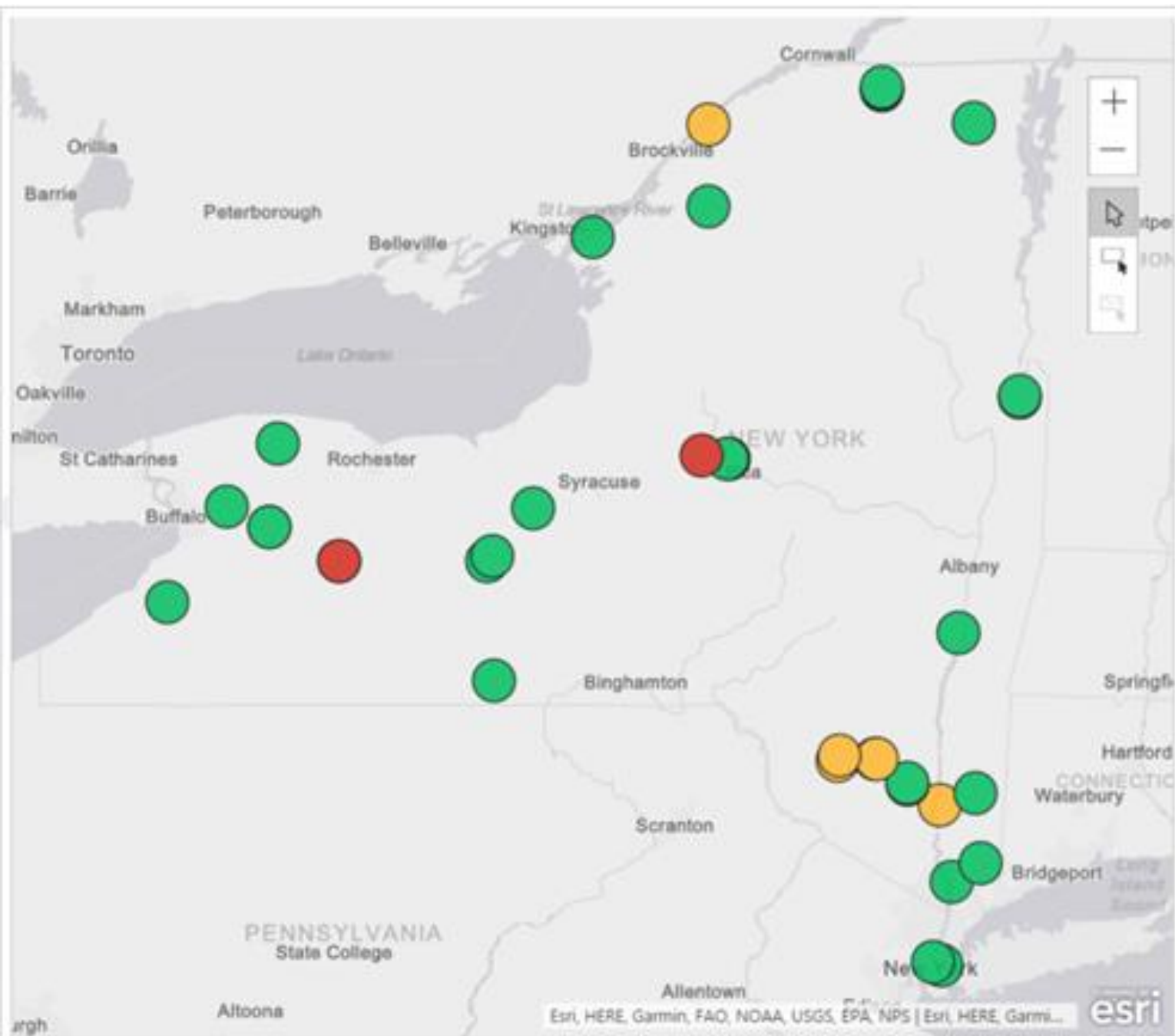
Project Status



- Project State
- Closed Complete
 - On Hold
 - Pending
 - Work in Progress

- Priority
- 1 - Critical
 - 2 - High
 - 3 - Moderate

Uploaded On: 08/07/2017



Predictive / Prescriptive / Trends

- Tip of the Iceberg Approach
- Immediate Insight into Agency Data
- Predictive Statistical Approach
- Prescriptive Manipulation of Resources
- Future Trend Manipulation

Future of Analytics

- Visualized Insight into Environment
- Geospatially Presented
- Mobile Accessible
- Better Intel

Questions & Thank You

