



## Data Driven Approaches to Crime and Traffic Safety CASE STUDY



**Agency:** Schenectady, New York Police Department

**Workshop Attended:** Albany, New York

**Date of DDACTS Implementation:** August 2012



### **Agency Demographic and Background:**

The Schenectady, New York Police Department is located in the eastern portion of the state approximately 10 miles from the state capital of Albany, and just west of the borders of Massachusetts and Vermont. The city was a manufacturing center known as "The City that Lights and Hauls the World" – a reference to two prominent businesses in the city, the Edison Electric Company and the American Locomotive Company. The city suffered heavily from the industrial and corporate restructuring which caused a loss in both jobs and population. Recently, the city has been attempting to shape a new economy, based in part on renewable energy. The city of Schenectady is an urban area with a diverse population: 56.3% white; 21.5% African American, 9.5% Hispanic; and 5.7% Asian. The estimated median household income in the city is \$36,673, which is 36%, below the state income average.

The police department is a full-service agency with jurisdiction spanning 11 square miles, responsible for providing protection to almost 66,000 residents. At the time of DDACTS implementation, the department was comprised of 149 sworn officers and 75 civilians who responded to 81,282 calls for service including one full-time grant funded analyst. The goal of the department was to reduce crashes, which prior to implementation, were reaching 4,500 per year with incidents of violent crime on the rise as well: Shots fired calls (124); Robbery (244); and assaults (518).

### **Lessons Learned:**

Personnel Component: Critical personnel are instrumental in implementing the DDACTS approach – particularly in the early stages. When key personnel are absent for an extended period (Chief/Analyst for example), this can hinder the time it takes to successfully launch the model.

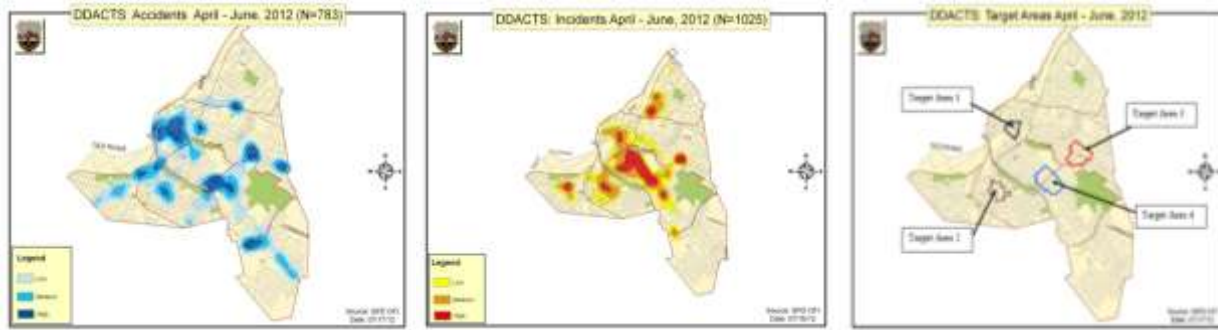
Analytical DDACTS Product: Understanding that the end product of a DDACTS report should include specific information that is essential for different parts of law enforcement (Patrol, Platoon Commanders, Assistant Chiefs and Chief). Schenectady PDs DDACTS reports have evolved to incorporate information deemed important, to all ranks and assignments in the department.

### **Prior to Implementation:**

The Schenectady Police Department faced many of the same challenges to implementation commonly reported by other agencies, to include: high call volume, limited flexibility among personnel, and traffic crash data not easily extractible; as well as, the long-term absence of key personnel. The agency attended one of the five New York DDACTS workshops held in Albany April 3 - 5, 2012 and immediately set out to develop a methodical and well thought out plan. They leveraged their resources with the state's Operation IMPACT program as part of their initial plan.

### **Pre and Post DDACTS:**

While conducting the operational model’s guiding principles of data collection and analysis, the department identified four areas where a disproportionate amount of vehicle crashes and crime were occurring, as seen in the maps below.



The Schenectady Police Department successfully refocused officers’ attention in the four designated “DDACTS zones.” The efforts in the first 11 months resulted in decreases of 10.2% in crime and 16.4% in crashes in those areas.

	Crime				Traffic Crashes		
	Pre-DDACTS (5 Yr Avg)	Post DDACTS	Percentage		Pre-DDACTS (5 Yr Avg)	Post DDACTS	Percentage
Downtown	431.2	405	-6.1%	Downtown	493.8	370	-20.2%
Eastern McClellan St	161.4	168	+4.1%	Eastern McClellan St	168.2	139	-17.4%
HH / Central	318.4	298	-6.4%	HH / Central	354.6	318	-10.3%
Mont Pleasant	213.4	138	-35.3%	Mont Pleasant	110.2	104	-5.6%
<b>Total</b>	<b>1124.4</b>	<b>1009</b>	<b>-10.2%</b>	<b>Total</b>	<b>1113.6</b>	<b>931</b>	<b>-16.4%</b>

**The Future:**

The long-term effect of the agency’s efforts to decrease traffic crashes and crime throughout the city has also shown to be successful with reductions in Uniformed Crime Report - Part I offenses and traffic crashes with and without injuries as seen below. Schenectady’s success has rested on many factors but the continuation of monitoring focused DDACTS enforcement has ensured resources maintain on course. Below is a 2017 Schenectady DDACTS map outlining two identified DDACTS locations and a map illustrating where Schenectady’s resources are concentrated, demonstrating targeted enforcement efforts coinciding in the DDACTS zones.

To date, the efforts continue to successfully reduce the number of victims being affected by traffic crashes and crimes.



Traffic Crashes (citywide)	
2012	13.5% Reduction
2013	9.3% Increase
2014	2.9% Increase
2015	6.1% Reduction

Part I Offenses (citywide)	
2012	8.8% Reduction
2013	3.9% Reduction
2014	18.1% Reduction
2015	29.3% Reduction
2016	20% Reduction
2017 YTD (Jan-May)	25.2% Reduction

2012-2013 Compared to Prior Year  
 \*2014-16 Compared to a 5 Year Average