

DDACTS: Traffic Safety by the Numbers

Early Successes in Region 2

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Over the past few years, increased publicity and marketing has sparked a national conversation among members of the law enforcement profession about the Data-Driven Approaches to Crime and Traffic Safety (DDACTS) initiative. DDACTS is being promoted as a tool to improve data applications, reduce needed resources and simultaneously drive down crime and crashes. Yet many in the field are asking, “What is DDACTS, and how does it work?” This article describes the DDACTS approach to combating crime and traffic safety, how it can benefit law enforcement agencies, how it works, what resources are needed, who should participate, and how to get an agency involved.

What is DDACTS?

DDACTS is a law enforcement operational model that integrates location-based crime and traffic crash data to establish effective and efficient methods for deploying law enforcement and other partner resources. By using geo-mapping to identify areas through temporal and spatial analysis, an agency identifies locations with high incidences of both crime and crashes, then deploys targeted traffic enforcement strategies to those “hot spots.” By saturating these locations with highly visible traffic enforcement, the DDACTS agency can play a simultaneous dual role: fighting crime as well as reducing traffic crashes and traffic violations. Drawing on the deterrent value of highly visible traffic enforcement and the knowledge that crimes often involve the use of motor vehicles, the goal of DDACTS is to reduce the incidence of crime, crashes, traffic violations, and social harm in communities across the country.[1]

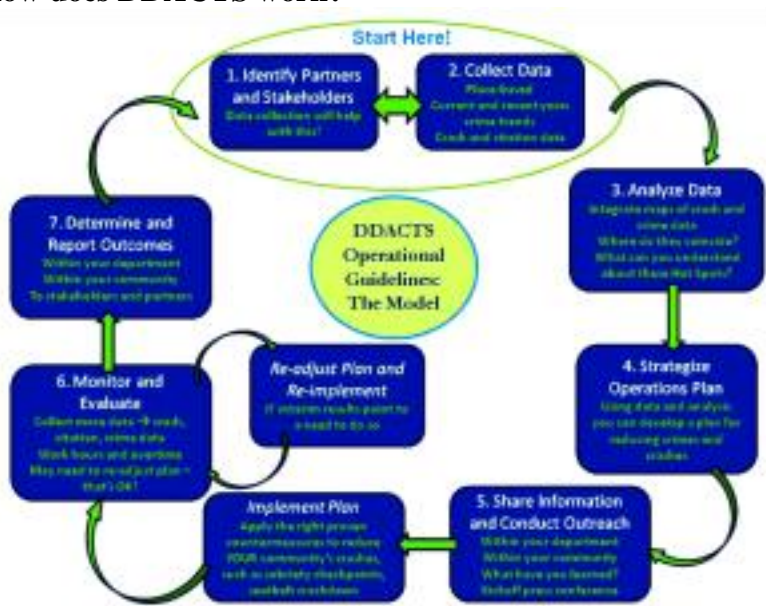
DDACTS is led by a national partnership co-sponsored by the U.S. Department of Transportation National Highway Traffic Safety Administration (NHTSA), and the U.S. Department of Justice Bureau of Justice Assistance (BJA) and National Institutes of Justice (NIJ). NHTSA, its federal partners and many additional national organizations provide technical assistance and other resources to states and localities interested in adopting the DDACTS model. The model’s focus on collaboration among law enforcement, community members and local organizations reinforces the crucial role that partnerships play in reducing social harm and improving quality of life. Building on this collaboration, the DDACTS model positions traffic enforcement as a logical rationale for a highly visible law enforcement presence in a community.[2]

How will DDACTS help my agency?

The DDACTS model ensures accountability and provides a dynamic, evidenced-based problem-solving approach to crime and crashes. This approach, grounded in community-oriented law enforcement, suggests that time- and place-based policing, “...as opposed to [traditional] person-based policing, is a more efficient focus of law enforcement; provides a more stable target for law enforcement activities; has a stronger evidence base; and raises fewer ethical and legal problems.”[3] The application of high-visibility traffic enforcement is a proven and effective

countermeasure that addresses both crime and crashes whether they occur simultaneously or independently in time and/or location. Furthermore, its reliance on geo-mapping to identify the nexus of crashes and crime provides a scientifically-based method for law enforcement to accurately target its efforts.[4]

How does DDACTS work?



A schematic of the seven guiding principles in DDACTS Operational Guidelines (click to enlarge)

DDACTS relies on seven guiding principles for successful implementation (see diagram, right). The new DDACTS agency starts by building community partnerships to establish support for highly visible traffic enforcement, while engaging agency-wide buy-in and participation. To aid the development of strategic countermeasures and an operational plan, the model is based on local data collection and analysis to identify crime, crash, and traffic-related “hot spots.” As law enforcement agencies execute these plans, routine information-sharing sessions with stakeholders reinforce the collective ownership of the DDACTS initiative. Finally, monitoring, evaluation, and the analysis of outcome measures provide data-driven feedback for adjustments to internal and external activities. The DDACTS Operational Guidelines[5] outlines procedures and highlights operational considerations based on best practices in the field for each of the seven guiding principles.[6]

Where is the DDACTS model currently being applied?

Since the seven pilot sites were launched in 2009, several hundred agencies seeking to adopt the model have undergone formal training. Many of those agencies are actively applying the model today. The following are a few law enforcement agencies that have implemented the model in NHTSA Region 2:

- After just one year of DDACTS implementation from March 2013 to March 2014, the Evesham, New Jersey Police Department had a 35 percent reduction in motor vehicle crashes, 82 percent reduction of burglaries, and 34 percent reduction in shoplifting

incidents in the targeted zone. Captain Christopher Chew, now Chief of Police, said that Phase I of the DDACTS operational plan had well eclipsed the goals for reducing crime in the area for several key categories.^[7]

- In Egg Harbor Township, New Jersey, the agency has seen a reduction in both motor vehicle crashes and burglaries in one specific targeted DDACTS zone, referred to as the Shore Mall. In 2013, the agency saw a 9 percent reduction in motor vehicle crashes in the zone. Additionally, in January of 2014 they reported a 53 percent decrease in burglaries in this same zone, which they attribute to the higher police presence during the DDACTS patrols.^[8] Captain Ray Davis of the Egg Harbor Township Police Department told NBC40, “With the budget crises that we’ve had in the years past, we were forced to look at different models of policing in order to take the manpower and resources that we have and best allocate them in a more efficient and effective manner—and DDACTS has proven to be a good model.”^[9]
- The Philadelphia Police Department (1.5 million population, 6,734 officers) initially focused their DDACTS efforts on a small multi-block area in one precinct where the crime data demonstrated rampant drug and gun violence, as well as a large number of collisions. DDACTS helped the Department effect a 38 percent decrease in violent crime and a 15 percent reduction in crashes in the target area during the first two months of 2012.^[10]
- The Peters Township Police Department, located in Western Pennsylvania, implemented DDACTS in 2013. Comparing 2012 data to 2013 the agency experienced a 23 percent decrease in crime and an 11 percent decrease in injury crashes in the targeted DDACTS enforcement area. “The DDACTS Model provides a simple analytical process that utilizes your crime, crash and traffic data that results in a plan of action to reduce crime and crashes. The results prove it works. The program also offers technical assistance in retrieving data from your records management systems and mapping the data,” says Chief Fruecht of the Peters Township Police Department.^[11]
- At the July, 2014, New York State Association of Chiefs of Police Conference in Lake Placid, New York, Chief Brian Kilcullen and Matthew Douglas, Intelligence Analyst Supervisor of the Schenectady Police Department presented on the topic of “Evidence-Based Policing.” The Chief spoke about how his agency faced budget cutbacks, and how essential it was for his agency to deploy their law enforcement resources more effectively. He and Analyst Douglas gave an overview of their agency’s time-line of the implementation of the DDACTS model and the success they have had. In 2013, the agency had a significant reduction in crashes (16.4 percent) and crime (10 percent) in their DDACTS zones.

A number of other agencies across the country are seeing similar significant successes as they begin implementation, and develop approaches sculpted to address the unique crash, crime and social harm problems in their respective communities.

Do I need additional resources?

With continued slow recovery from the recent economic downturn, many agencies are facing dramatic budget cuts. Law enforcement executives are being forced to make difficult decisions on how to allocate their diminished resources. Unfortunately, traffic safety is often one of the first areas selected for resource reduction. Instead, limited resource environments mean it is ever more critical to examine how traffic safety and enforcement can benefit communities through DDACTS.

So what are the costs involved in implementing DDACTS? For some agencies, there may be start-up investments needed in computer software and training. Others may benefit from specific traffic safety enforcement refresher training. Many of the DDACTS national partners offer free resources to assist.

For instance, the National Institutes of Justice (NIJ) offers training classes in the Introduction to Crime Mapping and Analysis, Intermediate Crime Mapping and Analysis and Advanced Crime Mapping and Analysis at no cost. In addition to training, agencies are encouraged to explore grant funding opportunities from the Bureau of Justice Assistance, Justice Assistance Program, the State Highway Safety Office and the private sector.

The DDACTS model provides a consistently economical way of doing business, because its reliance on geo-mapping to identify the nexus of crashes and crime provides a scientifically-based method for law enforcement to accurately focus its resources.

“At a time when we have been tasked with ‘doing more with less’ DDACTS has provided us with a model to deploy our limited resources in a proactive manner that can provide quantitative results,” says Chief Michael Morris of the Egg Harbor Township Police Department.

How can my agency get started?

For agencies interested in pursuing the implementation of DDACTS, it is recommended that they first make themselves familiar with the Operational Guidelines, which can be found at www.nhtsa.gov/ddacts. Once initial interest turns into intent to adopt the model, agencies are encouraged to contact their State Highway Safety Office (SHSO), NHTSA regional office, or NHTSA regional law enforcement liaison. These key partners will provide the agency with a DDACTS Agency Inventory Worksheet, a tool to help the agency obtain a “snapshot” of what it currently has in place to support the DDACTS process, and begin to identify obstacles to implementation. Completed through a joint effort with agency staff, the worksheet determines specific issues or needs for technical assistance that can then be further explored by participating in the DDACTS Implementation Workshop. In addition, the worksheet can serve as a self-assessment of the agency’s data collection and analysis capabilities as well as operational plans. At a minimum, worksheet completion should involve the operations commander, street supervisor, and the crime/crash analyst (or the staff who perform data analysis). Although not mandatory, it is then critically important that agencies interested in implementing DDACTS attend a DDACTS Implementation Workshop.

What is the DDACTS Implementation Workshop?

NHTSA and its supporting partners offer the DDACTS Implementation Workshop, a 16-hour intensive workshop designed for law enforcement agencies interested in adopting the DDACTS model. DDACTS Implementation Workshops provide focused technical assistance by guiding participants on the theories and applications behind each of the seven guiding principles, helping identify key roles in applying the principles within their agency and neighborhoods, and developing an agency-specific DDACTS Implementation Action Plan to achieve specific outcomes that reduce social harm.[12]

Under a contract with the International Association of Directors of Law Enforcement Standards and Training (IADLEST), DDACTS Implementation Workshops are facilitated by a team of established subject matter experts, NHTSA regional offices and SHSOs to assure their success. The workshop is comprised of a series of peer-facilitated interactive sessions between a team of subject matter experts (SMEs) and their counterparts from the participant agencies. Three SMEs represent commanders, supervisors and analysts from existing DDACTS sites engage the commanders, supervisors and analysts from participant agencies. The workshops are strategically scheduled and located so that several (6-8) agencies are accommodated by a single workshop. Involving this number of agencies maximizes the impact of each workshop while providing the focused attention each agency requires, and also enables sharing of best practices among participant agencies. Using the DDACTS Operational Guidelines and related tools, attendees are led through the operational process to 1) define each of the seven guiding principles, 2) identify specific roles in applying the seven guiding principles at their agency, and 3) with their agency representatives in attendance, develop an agency-specific DDACTS Implementation Action Plan.

Since 2010, IADLEST has conducted 80 workshops for more than 600 law enforcement agencies across the country, with additional workshops scheduled in the future. Implementation Workshops have benefited a broad range of agencies with focused technical assistance, from large urban centers to university-based to smaller rural departments. Agencies interested in learning about workshops scheduled in their area should inquire through their relevant NHTSA regional office or SHSO.

How can my agency get involved in DDACTS?

If you are interested in learning more about DDACTS and participating in a workshop near you, please contact your SHSO (individual office contact information at www.ghsa.org/html/about/shsos.html) or the NHTSA regional office covering your state (individual office contact information at www.nhtsa.gov/nhtsa/whatis/regions/).

For general information about DDACTS, the growing community of active sites, and the national partnership, you can also find DDACTS on [Facebook](#), [Twitter](#) and [LinkedIn](#), or write to ddacts@dot.gov.

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Endnotes

1. National Highway Traffic Safety Administration. (2009). DDACTS Operational Guidelines, page i.
2. Ibid.
3. David Weisburd, "Place-based Policing, *Ideas in American Policing*, Police Foundation, No. 9, January 2008.
4. National Highway Traffic Safety Administration. (2009). DDACTS Operational Guidelines, page ii.
5. National Highway Traffic Safety Administration; DDACTS Operational Guidelines (DOT HS 811 185 version 1.1); August 2009
6. Ibid.
7. Robert Linnehan. *Evesham police doubling down on DDACTS*. WWire, April 29, 2013. <http://thenjwire.com/>
8. Matt Alba. *Increased patrols in EHT "hotspots" help curb crime and crashes*. March 5, 2014. <http://www.nbc40.net/story/24768652/>.
9. Ibid.
10. Christopher W. Bruce (2012). Towards Better Data Driven Operations: The DDACTS Success Story. *IADLEST Newsletter*, volume number 23, page 11. <https://www.iadlest.org/>.
11. H. Fruecht, personal communications, August 25, 2014
12. National Highway Traffic Safety Administration. (2010) DDACTS Implementation Workshop Abstract. page.1.