The author(s) shown below used Federal funds provided by the U.S. Department of Justice and prepared the following final report:

Document Title: DDACTS Evaluability Assessment: Final Report

on Individual and Cross-Site Findings

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Document No.: 247889

Date Received: August 2014

Award Number: 2012-IJ-CX-0037

This report has not been published by the U.S. Department of Justice. To provide better customer service, NCJRS has made this Federally-funded grant report available electronically.

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June 27, 2014

Brett Chapman National Institute of Justice 810 7<sup>th</sup> Street, NW Washington, DC 20531

RE: Evaluability Assessment of Law Enforcement Agencies Using the Data-Driven Approaches to Crime and Traffic Safety
Grant # 2012-IJ-CX-0037
(Urban Institute Project # 08816-000-00)

Dear Dr. Chapman:

The Urban Institute (UI) is pleased to submit the attached final report for DDACTS Evaluability Assessment.

Should you have questions of a technical nature, please direct them to Nancy La Vigne (202) 261-5763 or Dave McClure (202) 261-5358. Questions of a contractual nature may be directed to the undersigned below at (202) 261-5396.

Sincerely,

Don Spencer

# DDACTS Evaluability Assessment: Final Report on Individual and Cross-Site Findings

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With

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This project was supported by Award No 2012-IJ-CX-0037, awarded by the National Institute of Justice, Office of Justice Programs, US Department of Justice. The opinions, findings, and conclusions or recommendations expressed in this publication/program/exhibition are those of the author(s) and do not necessarily reflect those of the Department of Justice.

# **PREFACE**

In 2012, the National Institute of Justice (NIJ) awarded a grant to the Urban Institute (Urban) to conduct an evaluability assessment of the Data-Driven Approaches to Crime and Traffic Safety (DDACTS) initiative, developed by the National Highway Traffic Safety Administration (NHTSA) in collaboration with the NIJ and the Bureau of Justice Assistance (BJA). Urban identified 15 sites for this assessment from 441 law enforcement agencies that have received DDACTS training and/or technical assistance. Through interviews, reviews of program documentation and on-site observations, Urban researchers collected information across multiple domains to determine the feasibility of rigorous evaluation for each site. These domains included DDACTS program fidelity, consistency with DDACTS training curricula, implementation process and status, engagement and commitment of key personnel, adequacy of local data systems, and site willingness to support an evaluation. Based upon this information, Urban considered which evaluation designs were most suitable and feasible for each site. The assessment produced 15 individual site evaluability assessment reports (located in the appendix) and this cross-site final report, which synthesizes findings and themes. It is envisioned that these reports will be used to inform current and future DDACTS sites on the state of DDACTS implementation and use as well as to support potential future DDACTS evaluations undertaken by NII and NHTSA.

We express our gratitude and appreciation to all the people who worked with us through this project.

- Brett Chapman, Social Science Analyst, NIJ
- Jim Wright, DDACTS Manager and Manager of Driver Licensing Program, NHTSA
- Michael Brown, Director of Office of Impaired Driving and Occupant Protection, NHTSA
- Philip Gulak, Chief of Enforcement and Justice Services Division, NHTSA
- Richard Compton, Director of Office of Behavioral Safety Research, NHTSA
- Peggy Schaefer, DDACTS Project Manager, IADLEST
- Emily Tiry, Research Associate, Urban Institute
- Miriam Becker-Cohen, Research Associate, Urban Institute
- All the members of the selected sites who generously provided their time and experiences (they are not named in order to protect confidentiality)

This project was supported by the National Institute of Justice under grant 2012-IJ-CX-0037.

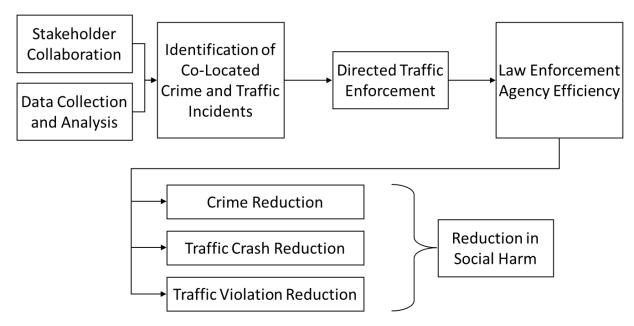
# **EXECUTIVE SUMMARY**

In 2012, the National Institute of Justice (NIJ), in conjunction with the National Highway Traffic Safety Administration (NHTSA), contracted with the Urban Institute (Urban) to assess the evaluability of the initiative known as Data-Driven Approaches to Crime and Traffic Safety (DDACTS). Researchers from Urban attended DDACTS trainings and interviews to develop a better understanding of the initiative.

Rather than a prescribed program with highly defined program elements, DDACTS is based on a set of seven general principles for affecting a data-driven approach to decision-making:

- 1. Partners and Stakeholder Participation
- 2. Data Collection
- 3. Data Analysis
- 4. Strategic Operations
- 5. Information Sharing and Outreach
- 6. Monitoring, Evaluation and Adjustment
- 7. Outcomes

Together, these DDACTS principles are designed to enable law enforcement to make more efficient use of resources by directing high-visibility patrols to the recurring times and places that have overlapping crime and traffic safety issues.



Working with stakeholders, Urban identified and conducted site visits with 15 jurisdictions from across the country to determine the state and nature of the form of DDACTS they are practicing. Importantly, as DDACTS is built on general principles, sites can develop versions of the model that are responsive to the unique characteristics of their own jurisdictions. As a result, the form of DDACTS developed and practiced can vary widely from site to site. Through site visits, Urban documented the variation in characteristics of each of the 15 sites, as well as collected information necessary for determining evaluability. These data informed a set of recommendations about which

sites should be considered for inclusion in a future evaluation, which should not, and which could be included pending development of certain conditions within their sites.

<u>Site</u>	Evaluability Assessment
Egg Harbor, NJ	Recommended
Gilbert, AZ	Recommended
Lafourche, LA	Recommended
Lansing, MI	Recommended
Shawnee, KS	Recommended
Thibodaux, LA	Recommended
Citrus Heights, CA	Pending
Everett, MA	Pending
Fargo, ND	Pending
Mesa, AZ	Pending
Winter Park, FL	Pending
Baltimore, MD	Not Recommended
Philadelphia, PA	Not Recommended
State College, PA	Not Recommended
Vermont	Not Recommended

In addition to assessing the evaluability of each site, we also identified recurring themes, implementation issues, and potential intermediate outcomes that a future evaluation could productively assess. These outcomes include changes in the following:

- targeted crimes
- types of traffic activity (typically collisions)
- police culture toward increased use of data in decision-making
  - o appreciation and utilization of the crime analyst
  - o using data to define shift assignments
  - o using data to justify discretionary stops
- communication within the department (across divisions)
- community relationships/perceptions of legitimacy
- officer-initiated collaborations on traffic pattern/infrastructure revisions
- officer discretionary time

Ultimately, site-specific variations and loosely defined program criteria create a challenging intervention to evaluate. However, it appears fully feasible to assess the impact of DDACTS in multiple sites through use of pre-post comparison group designs, as well as statistical controls for relevant between-group differences. Further, it should be possible to assess the implementation and process of DDACTS in several sites. Such an assessment alone, but certainly in conjunction with the findings of an outcome evaluation, would be highly beneficial for the field. Indeed, the qualitative data collected through this evaluability assessment suggests that DDACTS has enhanced agencies' adoption of data-driven decision-making throughout their organizations.

DDACTS has garnered significant enthusiasm from the field, and that support appears to be associated with significant changes in agency operations that are viewed by law enforcement as beneficial. Many agencies have provided analyses indicating a reduction in crime and/or traffic incidents approximately co-occurring with the implementation of DDACTS. This provides a strong

argument for conducting a rigorous, objective evaluation to discern the actual promise of the DDACTS model and thus its merits for continued expansion.		

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State College, Pennsylvania Thibodaux, Louisiana	
Vermont	
Winter Park. Florida	

# INTRODUCTION

The mission to protect and serve leads law enforcement officers to hold responsibility for many aspects of community well-being. Chief among these are crime control and traffic safety. However, despite the vast responsibilities of law enforcement, their resources are not limitless, leading agencies to seek more effective and efficient ways of doing business. The Data-Driven Approaches to Crime and Traffic Safety (DDACTS) initiative represents one such effort. DDACTS is designed to make more efficient use of scarce police resources to reduce crime and traffic collisions by identifying when and where crime and traffic incidents occur, and then responding with high-visibility saturation patrols. On its surface, DDACTS would appear to be a simple policy effort, but in practice it can be quite complex.

DDACTS prescribes agencies to integrate the following principles and activities into their crime and traffic safety activities: (1) Partners and Stakeholder Participation; (2) Data Collection; (3) Data Analysis; (4) Strategic Operations; (5) Information Sharing and Outreach; (6) Monitoring, Evaluation and Adjustment; and (7) Outcomes. Application of these principles is intended to enable sites to develop programs that are highly responsive to the unique nature of crime and traffic in their own jurisdictions. As a result, DDACTS implementation varies widely from jurisdiction to jurisdiction, creating a challenge for those seeking to evaluate the effectiveness of DDACTS across sites.

To address this issue, the Urban Institute (Urban) conducted an evaluability assessment of DDACTS, which was developed by the National Highway Traffic Safety Administration (NHTSA) in collaboration with the National Institute of Justice (NII) and the Bureau of Justice Assistance (BJA). Urban selected 15 sites for this assessment from 250 law enforcement agencies that have received DDACTS training and/or technical assistance. Through interviews, reviews of program documentation, and on-site observations, Urban collected data across multiple domains to determine rigorous evaluation feasibility. These data included DDACTS program fidelity, consistency with DDACTS training curricula, implementation process and status, commitment of key personnel, adequacy of local data systems, and site willingness to support an evaluation. Based upon this information, Urban assessed the feasibility of evaluation designs by site, considering both ex post facto and prospective evaluation approaches. The assessment produced 15 individual site evaluability assessment reports (located in the appendix) and this cross-site final report. These reports are to be made available for dissemination to current and future DDACTS locations as well as to the law enforcement program evaluation research community and will be able to be used by NIJ and NHTSA to inform the potential implementation of a rigorous evaluation of DDACTS in one or more sites.

This report details the site-specific and cross-site conclusions concerning the evaluability of the DDACTS model in police jurisdictions in the United States. The report begins by first providing an **Overview of the Evaluability Assessment Methodology** used through this project. The next section provides a synthesis of the **Cross-Site Themes and Outcomes** that consistently emerged across the selected assessment sites. These themes include both lessons that emerged through discussions with the selected sites, as well as outcomes (both anticipated and unexpected) that should be considered in the design of an evaluation. Following these common themes, the **Evaluation Design Considerations** that are relevant to building an evaluation are provided. These findings are presented in the language of research methods and analysis for the purpose of

providing prospective evaluators with design-specific considerations that emerged from across the different sites. The cross-site findings portion of the report closes with **Conclusions and Recommendations** based on the assessment of the selected sites. As appendices to the report, a more detailed discussion of the **Evaluability Assessment Process and Procedures** is included, along with **Site-Specific Reports** for each of the jurisdictions included in the evaluability assessment.

# OVERVIEW OF THE EVALUABILITY ASSESSMENT METHODOLOGY

At the start of the assessment, the Urban project team met with members from NIJ and NHTSA to discuss the scope of the assessment and for Urban to receive necessary contact information for DDACTS personnel. In the months following this meeting, one Urban representative observed a DDACTS training workshop to better understand the scope of the model. This information, combined with the DDACTS Operational Guidelines and additional materials, was used to develop a program logic model (see Logic Model below) and site visit protocol. Concurrently, Urban began outreach to DDACTS Subject Matter Experts (SMEs) to determine which sites would be chosen for the assessment. At this point, 441 agencies had attended DDACTS training; SMEs were asked to recommend sites they believed were successful at implementing core DDACTS principles. These recommendations, combined with input from the International Association of Directors of Law Enforcement Standards and Training (IADLEST) and NHTSA, as well as considerations of geographic diversity and program maturity, were used to finalize a list of fifteen sites.

Members from Urban then visited each site to conduct interviews with core DDACTS staff. As determined by the site visit protocol, the purpose of these interviews was to gather information on the following topic areas: (1) Site Characteristics; (2) Key Local Personnel; (3) DDACTS Implementation Summary; (4) Future Implementation Process Evaluation Feasibility; (5) Future Outcome/Impact Evaluation Feasibility. Findings and recommendations were compiled for each site (see the appendix), and culminated in this final evaluability assessment report.

#### PROGRAM DESCRIPTION

DDACTS leadership has stressed that DDACTS is a model of a process, not a program. This is a very important point to recognize, as it affects the form of DDACTS implemented in each jurisdiction. Additionally, being built around general principles, rather than specific program components, provides a great deal of flexibility for sites to tailor their programs to the specific characteristics of their jurisdictions. Interestingly, the principles are so broadly defined that several jurisdictions found they were already adhering to many or all, and at least one has begun applying these same principles to problems completely unrelated to the focus of DDACTS.

#### LOGIC MODEL

The following basic logic model was developed based upon multiple sources of descriptive information about DDACTS principles, anticipated outcomes, and hypothesized impacts. These sources include background materials such as NHTSA communications, the DDACTS <u>Operational Guidelines</u> (2009), observations of a basic DDACTS training workshop for new agencies, media reports, International Association of Directors of Law Enforcement Standards and Training (IADLEST<sup>2</sup>) materials, and other sources.

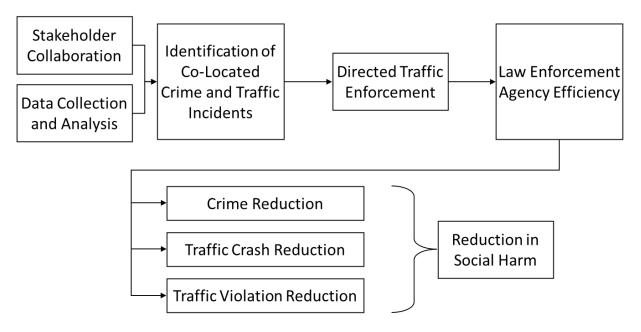
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<sup>&</sup>lt;sup>1</sup> For the purposes of this report, the term "program" is used to refer to the results of each site's application of DDACTS's seven principles. DDACTS itself is not considered a program, but the results of its application by an agency to its site-specific characteristics does result in that site's unique DDACTS program, which is necessarily different from the DDACTS programs developed by other sites.

<sup>&</sup>lt;sup>2</sup> See the section on "Methods of Dissemination" for an explanation of IADLEST's role in DDACTS.

DDACTS is designed to be a law enforcement model that relies upon local stakeholder collaboration and the collection and analysis of crime and traffic crash data to identify co-locations of high crime and traffic incidents in a jurisdiction. Of importance is the use of spatial (Geographic Information System (GIS)) analysis to pinpoint overlapping or adjacent hotspots of crime and crash incidents over a baseline period spanning several prior years. On the basis of the data analyses, high-visibility traffic enforcement approaches, directed toward the co-located hot spots, are encouraged. Through the application of this integrated community-focused and place-based approach, the model hypothesizes that law enforcement resources can be used more efficiently and will reduce crime, traffic crashes, and fatalities, thereby improving the quality of life in the community through harm reduction.

FIGURE 1 - PRELIMINARY DDACTS BASIC LOGIC MODEL



DDACTS as currently conceived is designed to be a recommended process<sup>3</sup> for law enforcement agencies and involves seven core principles, summarized below. It is not designed to be a one-size-fits-all approach and during trainings, DDACTS Subject Matter Experts (SMEs), who are practitioners with experience applying DDACTS in their jurisdictions, have underscored the idea that local conditions and practices may correctly lead to differences in emphasis among the core principles and local implementation within individual departments.

#### CORE DDACTS PRINCIPLES

The seven principles are described in detail in the <u>Operational Guidelines</u> and are summarized as follows:

<sup>&</sup>lt;sup>3</sup>It has been stressed by DDACTS program leadership that this is a model *process*, not a *program*.

# #1 - Partners and Stakeholder Participation

DDACTS highlights the importance of partnerships with other criminal justice agencies and community organizations for two primary reasons. First, collaboration can lead to the acquisition and analysis of new data sources to identify problems. Second, local stakeholders can help promote the implementation and acceptance of DDACTS in the community and they can also provide valuable feedback as to whether the model reduces social harm and improves citizen perceptions of public safety.

#### #2 - Data Collection

The collection of a variety of "traditional" and "non-traditional" data is encouraged under the DDACTS model. Examples of traditional data include both Part I and Part II crime incident records, code enforcement, traffic crash incidents, and causal factors. Examples of some non-traditional data sources include field interviews, citizen complaints, dangerous driving records, and license suspensions/revocations, among others.

# #3 - Data Analysis

The basic objective of analyzing data collected is to first identify crime/traffic problems so that jurisdictions can develop effective law enforcement strategies to counter them. Given the location-based nature of both crime and traffic accidents, analyses rely heavily upon geographic techniques such as GIS-produced hot spot maps. However, it is also recommended that other factors, temporal and environmental for example, be included in problem identification analyses.

# #4 - Strategic Operations

DDACTS is designed to use the data analysis findings to develop informed, objective decisions about the enforcement strategies and tactics a department can best deploy to solve the problems identified. Such strategies include high-visibility and directed patrols at targeted times and locations. It is also expected that some level of organizational change will take place to incorporate DDACTS into a department's daily enforcement procedures, versus the traditional approach of delegating all traffic enforcement activities to a limited portion of the agency's patrol force.

# #5 - Information Sharing and Outreach

Given the collaborative nature of the DDACTS model, this principle stresses regular and ongoing communication with local stakeholders and the community on progress and performance. It also includes soliciting and incorporating community feedback about implementation and observed outcomes.

#### #6 - Monitoring, Evaluation and Adjustments

The DDACTS model also emphasizes that departments should routinely monitor progress and performance toward meeting objectives. By further evaluating the effects of DDACTS on hypothesized outcomes and impacts, law enforcement leadership, working with local stakeholders, can make both strategic and tactical adjustments.

# #7 - Outcomes

Building upon the results of the previous principle's activities, the model stresses documentation of improved community well-being, primarily as measured through reduction in crime and crash incidents and improvements in traffic safety practices. The model also emphasizes documentation of DDACTS' impacts on organizational measures such as improved communications and data sharing across agencies, stakeholders, and community members.

#### METHODS OF DISSEMINATION

DDACTS is disseminated through training workshops convened throughout the country, which is conducted by NHTSA's DDACTS contractor, IADLEST. IADLEST hires DDACTS SMEs from agencies that have implemented the model, and teams of these individuals lead the training workshops. SMEs are typically chiefs of police, analysts, or other command staff, allowing for a variety of roles to be represented at workshops. Workshops are often organized by word-of-mouth networks whereby an agency that is interested in implementing the model serves as the hub location where the workshop is taught, and interested police agencies in the state attend. During trainings, sites learn about the core DDACTS principles, and SMEs provide implementation examples from their own sites. SMEs then assist participating agencies in developing a DDACTS implementation plan. Departments may send any number of their own staff, representing a range of positions, to the trainings. Following training, DDACTS Analytical Specialists (also hired by IADLEST) and SMEs reach out to departments to offer technical assistance and follow up on the progress of the DDACTS programs.

# CROSS-SITE THEMES AND OUTCOMES OF DDACTS

Throughout this project, Urban conducted group interviews with 15 different jurisdictions during site visits. The primary logic model of DDACTS is to identify the overlap between the occurrence of crime and traffic crashes in order to make the best use of scarce resources, and each jurisdiction implemented this model in a unique way (see appendix for detailed description of each site's DDACTS program). However, a variety of common themes emerged across sites that should be taken into consideration in the design of a future DDACTS evaluation. These include the fact that many intermediate outcomes besides crime and crash reduction could occur from the implementation of DDACTS, and these outcomes are worthy of measurement. Similarly, many sites experienced common challenges in DDACTS implementation, and their responses to those challenges may influence an evaluation in a number of ways. Key findings on these themes are described below.

# TRAFFIC ISSUES AND OUTCOMES

Several jurisdictions provided administrative data indicating that collisions were generally down in the years they have been implementing DDACTS. While this information provides a *prima facie* case for the improvement of traffic safety, it is not possible to attribute such improvements to the implementation/adoption of DDACTS without a systematic evaluation of the data. However, several traffic-related themes emerged from visits to the 15 assessment sites.

At least six of the sites reported making changes to intersections and/or traffic patterns as a result of the analyses completed through DDACTS. A common theme that emerged across sites was that analyses of collision zones led departments to consult with municipal engineers to redesign problematic intersections.

#### "They were just waving them through the intersection"

Based on an analysis of their collision data, Fargo identified an intersection near a commercial hub where it was difficult for inbound traffic to see oncoming traffic. They knew that this area had many collisions, but based on a review of the data, they were able to learn that many of these collisions were caused by the friendly people of Fargo in the oncoming lane of traffic waving people through the intersection. As a result of this analysis, they were able to work with the city engineers to redesign the intersection in a manner that prevented people from waving an inbound car into oncoming traffic.

Conversations with several of the sites illustrated that DDACTS has applications beyond automobile traffic. In one of the more urban jurisdictions, activity in the DDACTS zones included scrutiny of scooter violations. Another site recognized out-of-season bike traffic in identified zones as a mechanism for offenders to burglarize residential targets.

During a ride-along through the target area in another site, the officer pulled up behind a vehicle and quickly identified five separate visible traffic safety violations for which he could stop the vehicle, and then potentially discover criminal activity once speaking with the citizen. In this same jurisdiction, the officer explained that traffic citations and sanctions are often a more effective

mechanism for deterring criminal behavior. The officer conjectured that a chronic offender may not be significantly deterred from further criminal activity by the threat of arrest and a short stay in jail, but revoking a license or impounding a vehicle resonated in a much more pressing way on these individuals. Such outcomes can be more easily achieved through traffic citations.

Similarly, the officer explained that while arresting youth who drive into a target area to purchase drugs could yield negative repercussions for their life options, a simple traffic citation mailed to the youth's parents was a more effective and less punitive way to prevent the youth from revisiting the target area to buy drugs. A traffic citation is a simple and efficient means of affecting enforcement through raising parental awareness of the youth's presence in an area they should not be in without causing a formally recorded sanction that could adversely affect the individual's life options.

Indeed, implementation of DDACTS often caused departments to reconsider the role and utility of traffic enforcement within their department. In many cases, patrol officers were no longer just focusing on crimes and traffic officers were no longer just focusing on crashes. In this way, DDACTS also facilitated inter-department communication and overall efficiency by giving officers tools to address traffic and crime problems concurrently. Traffic data also often took on a more prominent role at intra-departmental meetings following DDACTS implementation. Additionally, DDACTS allowed departments to be responsive to a variety of causes of traffic, including rush hours, sporting events, poorly designed intersections/traffic patterns, and other traffic anomalies.

In some cases, implementation of DDACTS led to unanticipated advancements in traffic patrol practices. For instance, the combination of instituting written warnings and upgrading to advanced data systems (both discussed below) allowed departments to specifically track warnings issued. This enables officers to discern if someone they stopped for speeding had received a warning recently or even on that same day, and in some cases, if they had received a warning from a neighboring jurisdiction.

#### CRIME ISSUES AND OUTCOMES

As with traffic, several jurisdictions provided administrative data indicating that offenses were generally down in the years they have been implementing DDACTS. While this information provides a *prima facie* case for the improvement of public safety, it is not possible to attribute such improvements to the implementation/adoption of DDACTS without a systematic evaluation of the data.

# General Emphasis on Property and "Quality of Life" Offenses

DDACTS does not prescribe certain criminal offenses that should be targeted. However, it seems that many of the sites chose to focus on property and quality of life offenses, with a particular emphasis on burglary and theft from vehicles. Several of the sites mentioned that they had considered looking at violent crime, but did not continue to pursue that option for a variety of reasons, including: violent crime seems to be less predictable and systematic than property crime; domestic violence, at least, typically takes place inside the home where high-visibility patrol can't be as present; violent crime is less frequent; property crime is a greater concern to the community; and there is greater overlap between traffic and property crime than traffic and violent crime.

Although most sites emphasized property crimes and quality of life offenses, the nature of certain crime types, particularly burglary, seems to limit a department's ability to identify very narrowly defined target areas. Certain offenses have easily recognizable times of occurrence while others do not. With residential burglary, for instance, residents frequently are not present when the burglary takes place and do not know exactly when it occurred. By focusing on offenses that have such a wide range of potential times of occurrence, it is difficult or impossible for analysts to narrow the focus area to a tight time and place.

Another interesting finding was that a major driver of the identification of hot spots for property crimes, particularly in the areas that overlap with collisions, relates to the actions of loss-prevention agents in a given jurisdiction. In particular, "big box" retailers (such as Wal-Mart, Target and Kmart) with active loss-prevention agents were frequently identified as hot spots, as these businesses reported more offenses to the police. Relatedly, the large crowded parking lots and significant flows of traffic into and out of these locations made them a potential target area. Additionally, 24-hour convenience stores were often a locus of activity. However, few, if any, of the sites decided to focus officer efforts on such areas.

# Recognition of Chronic vs. Temporary Crime Zones

Through the DDACTS analysis, many departments were able to identify areas of chronic and temporary occurrences of crime. The chronic areas typically did not come as a surprise.

#### Caught in the Act

A common example of a short-term hot spot mentioned at many of the sites was a spike in burglaries. Early on during the roll-out of DDACTS in Egg Harbor Township, New Jersey, the police department identified a pattern of residential burglaries through their preliminary DDACTS analysis efforts. As a result, they were able to catch the offender in the act. During the group interview, everyone agreed that this early victory of the analysis went a long way toward establishing the credibility and utility of analysis for the line officers. The Winter Park Police Department in Florida similarly reported that DDACTS helped them with a particular influx of residential burglaries that had been occurring there and in neighboring jurisdictions.

Several sites made a distinction that there were certain parts of the jurisdiction that were chronically criminal, and identified suspected reasons for this, such as environmental factors and the culture of the community. They explained that it wasn't a surprise that these areas would turn out to be target areas in a long-term assessment of their overlapping crime and traffic areas. However, there were some other zones that they were able to identify on a much shorter time scale, and they decided to address these "micro-zones" in the same manner as the long-term and chronic target areas.

#### PUBLICITY OF THE PROGRAM

Different sites have approached publicizing their programs in different ways. Some sites have actively engaged with local media outlets, producing or contributing to news articles on their programs, and in some cases even posting billboards directly addressing the burglars in an area. In

another case, the department publicized its program by providing flyers to those who were stopped in the DDACTS zone.

# "There's an app for that"

Like many of the sites, the Gilbert Police Department in Arizona engaged in community outreach through DDACTS by promoting its program at community meetings. Gilbert, though, has been particularly involved in this area, communicating with specific business owners for certain hot spots and handing out DDACTS flyers when they make stops. Most notably, the site developed an iOS mobile web application that allows the public to view crime reports and submit anonymous crime tips.



https://itunes.apple.com/us/app/ddacts/id577102683?mt=8

Other sites don't publicize the existence of their programs at all, either because it has not been a priority or they have chosen not to do so.

#### ORGANIZATIONAL/DEPARTMENTAL ISSUES AND OUTCOMES

The adoption and continued use of DDACTS appears to coincide with some organizational outcomes that are worth recognizing and considering in the development of an evaluation. These outcomes are especially noteworthy, as police organizations can be resistant to the types of change that appear to be at least an intermediate outcome of DDACTS adoption in several sites. A comprehensive evaluation should include assessment of these factors in order to determine the size and direction of any causal relationship between DDACTS and these organizational themes.

#### Leadership

Strong leadership appears to be an important factor in the successful implementation and performance of DDACTS in a jurisdiction. Lack of enthusiasm for the program is likely correlated with a lack of leadership and managerial support, which theoretically would compromise implementation fidelity. It is therefore important to include a measure of organizational commitment and leadership in any future evaluation of DDACTS.

There was a sense among line officers in several sites that the introduction of DDACTS in the department was a policy *du jour* of the leadership, and that it was not necessary to invest much in the application of the model as it would be here today and gone tomorrow. In some of these cases, there was a sense that the leadership would travel to attend training, return to tell the middle management to start doing DDACTS, and that was the extent of the implementation. In all of these cases, the lack of tangible leadership led to poor adoption among officers, and significant efforts had to be made to develop officer buy-in in order to continue the effort.

In other sites, a dynamic chief or member of the command staff might find information on DDACTS and fill a leadership role in spreading adoption and acceptance of the model among officers. As with many programs, it is important to recognize the impacts of an influential leader on the success of a program; while DDACTS' successful adoption does not appear to be wholly dependent on the presence of strong leadership, it is clearly an important factor to consider in a process evaluation.

Interestingly, several of the sites adopted DDACTS within a short time-span of significant overhauls and restructuring in the department, which affected leadership assignments and morale.

# **Ripe for Change**

In Egg Harbor Township, New Jersey, the department was experiencing significant flux prior to DDACTS' adoption in 2011. In the mid-2000's a significant civil law suit was filed against the department, and the department also experienced a traumatic officer shooting. Additionally, many officers were laid off in the aftermath of the recession. The related turnover resulted in a complete restructuring of command staff in 2011, as well as changes to hiring practices for new officers. Stakeholders explained that these events made the department "ripe for change," and the entering police chief made the use of data-driven decision-making a priority from the start.

#### Discretion

A common challenge with DDACTS is that, at least initially, officers may perceive that it threatens their own discretion over how to perform their duties. One example of this is with the issuing of tickets. The DDACTS model emphasizes increased traffic stops and officer contacts with civilians in target areas, and in many sites, officers initially resisted DDACTS because they viewed it as a directive to "write more tickets." The officers felt that issuing more tickets would only draw scorn from the community, and those in economically distressed sites felt it was inappropriate. In response to this concern, many sites implemented a policy that would allow officers on DDACTS duty to make stops without writing tickets. Such stops still needed to be documented for data collection, so sites implemented a variety of documentation methods. Some departments began allowing written warnings, while others included a field in DDACTS reports for offices to mark if they gave a verbal warning. Following the institution of such policies, line officers began to feel more comfortable implementing DDACTS.

#### **Compliance Citations**

A particularly unique solution to preventing increased ticket writing was the equipment violation in Thibodaux, Louisiana. Law enforcement in Louisiana is not allowed to issue written warnings, so Thibodaux began issuing compliance citations for vehicle safety issues, such as a burned-out taillight. These citations can be revoked if a citizen visits the police department and demonstrates that the safety issue had been addressed within seven days of receiving the citation. The police are very happy with this mechanism, as it allows them to increase public safety without imposing burdensome fines on the community.

We anticipate that policies involving written warnings or documented verbal warnings will affect aspects of the implementation of DDACTS, which may consequently affect the outcomes as well. An evaluation should consider if a department implemented such a policy, and at what point in the DDACTS process it was implemented.

#### **Multiple Stops**

When issuing traffic warnings in Gilbert, Arizona, the department also handed out fliers about DDACTS in order to further explain the public safety goals of the initiative. In some cases, officers made stops and saw that the individual had already received a DDACTS flier, and thus already received a warning. In this way officers could ensure that they were not letting such individuals go with another warning.

In addition to the concern of increased traffic ticket issuance, many officers also viewed data analysts, or data-driven initiatives more broadly, as a threat to their discretion, and this view seemed to correspond with communication issues resulting from poor implementation (described in more detail in the Implementation section below). When the philosophy of a data-driven program was not explained to officers sufficiently, officers often felt that command staff was hiring a crime analyst to direct officer activity. To address this challenge, departments found ways to communicate that data analysis would be beneficial to officers. In Mesa, Arizona, department leadership communicated that targeting efforts based on the data would lead to greater efficiency and free up more discretionary patrol time. They conveyed this idea to the line officers in order to get their buy-in, as officers appreciate having more discretionary patrol time during their shift. In other jurisdictions, officers began to gain a greater appreciation of the data as the basis for their probable cause. In other words, they could tell a court judge they pulled over a car because it was in a target area, and not because of any individual characteristics of the driver.

#### Communication

Several of the sites mentioned that DDACTS helped them improve communication and break down some long-standing barriers between units and divisions. For many of them, this took place due to collaborative meetings between line officers and management, which either increased from pre-existing practice (COMPSTAT, for instance) or arose as a solution to address challenges from DDACTS implementation. Such meetings also improved communication between data analysts and officers, enabling officers to incorporate their on-the-ground knowledge of crime and traffic into DDACTS analysis and thus inform patrol assignments.

Communication on the perceived success of DDACTS also fostered a high degree of friendly competition among different units working in the DDACTS area. If one shift stopped a certain number of people in the target area, then the other shifts wanted to make more stops as well. This was the result of closing the feedback loop between officers and their data.

# **Competition**

Once officers began to receive positive feedback on the outcomes of their DDACTS efforts, and could appreciate the outcomes of their efforts compared to those of others, a natural sense of competition arose among officers. In Everett, Massachusetts, for instance, officers were actually so engaged in the competition that they helped the analyst revise their reporting cycle so their unit wouldn't be disadvantaged in the reporting. The analyst had been using a 7-day cycle to report activity, but because units/teams worked in 4 day blocks, one unit/team was shorted one day's worth of activity. So, the analyst began using an 8-day reporting cycle to create a more even comparison of activity between units/teams.

# Cultural Change in the Organization

This was one of the most significant and surprising findings of the entire assessment. Police organizations are notoriously resistant to change, yet somehow the adoption of DDACTS appears to consistently precede or co-occur with cultural changes in the organization, particularly in a manner which increases the use and acceptance of data. To a lesser extent, structural changes also seem to be associated with DDACTS.

#### Acceptance of Data-Driven Decision Making

One of the primary reasons sites became interested in DDACTS is because they wanted to shift from a reactive model of policing to an effective, proactive model. DDACTS seemed to drive this cultural change in many cases. In the reactive model, officers spent their time responding to calls-for-service or conducting patrol based on instinct or intuition, but DDACTS drove departments to integrate data analysis into their everyday operations and direct officers to specific locations at specific times. Unlike other data-driven interventions (e.g., COMPSTAT, CeaseFire), the DDACTS approach has a very clear mechanism of action by directing officers to areas with a high crash and crime overlay. The model makes it very easy for officers to recognize the role of analysis and the analyst. As one officer put it, "This is not voodoo."

Prior to adopting DDACTS, many of the sites had tried some version of COMPSTAT as a means of shifting toward data-driven policing.<sup>4</sup> Many of these sites later discontinued the COMPSTAT program, while others found ways to balance the two, either by incorporating DDACTS principles into their pre-existing COMPSTAT program or by supplementing COMPSTAT with DDACTS. The critical pivot point in the distinction between program types was whether data were used primarily as an accountability tool for officer performance, as is done in the traditional New-York style COMPSTAT. The departments that did focus on data as primarily an accountability tool generally

<sup>&</sup>lt;sup>4</sup> "The CompStat model is a management process within a performance management framework that synthesizes analysis of crime and disorder data, strategic problem solving, and a clear accountability structure."

(http://www.compstat.umd.edu/what\_is\_cs.php)

had a direct lineage to the New York program. For these agencies, COMPSTAT was a significant cornerstone to department operations.

Many of the other sites, though, found that such a model was overly aggressive for their needs. Officers frequently perceived that command staff was using data as the basis of adversarial inquisition into officer performance, and this could sour them more generally on data-driven programs. Some agencies with this view implemented a version of COMPSTAT that did not involve data as an accountability tool, and for these agencies, transitioning to DDACTS primarily involved incorporating crash data into their programs. For those that discontinued COMPSTAT completely, DDACTS appeared to be a more suitable, user-friendly model. DDACTS also appeared to be a productive approach for agencies that had never had any prior experience with data-driven programs.

#### **Data-Driven Patrol Assignments**

In Thibodaux, Louisiana, upon implementation of DDACTS, management expected that data would be incorporated into all aspects of patrol operations, even for directing non-DDACTS patrols. With the adoption of crimereports.com, it became easy for line officers to observe certain changes in data and patrol operations. However, not all officers made full use of the available data. In one instance, patrol officers began to question their captain's assignments, as they did not align with the patterns of activity identified in the data. Following the patrol officers' lead, the chief began to question the captain about the misalignment between the data and his assignments.

#### <u>Incorporating DDACTS into Pre-Existing Data-Driven Approaches</u>

In Mesa, Arizona, DDACTS is the basis for all operations within the department, and was implemented when an earlier chief, with direct ties to the originators of the New York COMPSTAT model, took over leadership of the department. The model is very much the NYPD style, with data being used as an officer accountability tool at regular meetings. Mesa is a large police agency with 780 full-time officers (FBI, 2012), and they have several data analysts, one for each district. They are currently experimenting with DDACTS in one of the city's four districts, in order to see how a DDACTS model can be incorporated into COMPSTAT.

In Citrus Heights, California, the department experimented with COMPSTAT for a year and a half starting in 2008, but determined that it was not producing the desired results. They developed their own program called Crime and Trends in Citrus Heights (C.A.T.C.H.) that similarly involved monthly command staff meetings to discuss data, but used the data as a problem-solving tool, rather than an accountability mechanism. When the department learned about DDACTS, they found the model very similar to what they were already doing, and the process of incorporating DDACTS largely involved elevating the role of traffic within the department.

As has been mentioned elsewhere, DDACTS is built on seven general principles, rather than any specific programmatic components. These principles are broad enough to apply beyond the identification of co-occurring patterns of crime and traffic activity. In some instances, department

leadership reported that the DDACTS principles proved useful in solving problems outside of DDACTS patrol itself.

# **From Suppression to Solutions**

In Fargo, North Dakota, one of the officers used data to identify a chronic problem with DUIs that he felt was not being adequately addressed by the department. He pulled DUI data from Command Central and prepared the information needed to present to the relevant local businesses that needed to be aware of the problem. He reported that this was likely a more effective long-term solution than continued police enforcement of DUIs in the area.

# Appreciation of the role and value of the analyst

Many departments began DDACTS with a single sworn officer or detective conducting ad-hoc analyses and later determined that the effort would be more effective with the services of a professional crime analyst. Initially, line officers tended to be skeptical about the need for an analyst, and perceived that analysts were merely telling them information they already knew. For instance, department staff were often unsurprised when data analysis yielded a problem zone where officers already spent significant resources. However, it appears that over time, department staff came to see data as useful in a variety of ways. One department reported that the advantage of data is that an officer's view of community problems is no longer constricted to his own experiences in the field but rather represents the collective experiences of officers working different shifts in the same area. Another department stated DDACTS helped to illustrate for them the full magnitude of the crime and crash problem on a map.

#### **From Sworn to Civilian Analysts**

A variety of sites began the program with a detective or officer performing crime analyst duties, and later hired a professional, full-time analyst. With some exceptions, many of the detective analysts did not have formal backgrounds in data analysis. Their efforts were also frustrated by still having officer duties to manage in addition to their role as analyst. They were also typically filling this role in the early stages of DDACTS, when the department was still using an ill-prepared data system. All of these factors made it difficult to produce timely, accurate, and precise analyses for officers to use. Hiring a dedicated full-time analyst addressed many of these challenges. At least initially though, it raised new issues of the analyst's credibility with officers, as well as the analyst's authority for providing information about how officers should use their discretionary time. Uniquely, one department largely avoided these issues because its analyst was both sworn and professionally trained in analysis. Because of their experiences in the field, sworn analysts often have credibility that non-sworn analysts do not. Regardless, it appears that most departments have concluded that having a professionally trained analyst (whether sworn or non-sworn) takes priority.

#### Re-Consideration of Traffic Division as Crime Fighters

In several sites the perception that officers in traffic divisions are "older guys" nearing retirement who no longer want to "chase the radio" featured prominently. One patrol officer commented that he used to drive past stationary traffic officers on his way to responding to a call, even though that

traffic officer was already much closer to the scene of the call. The traffic officer wasn't responding because of organizational divisions and cultural perceptions that traffic officers don't respond to radio calls. This is not necessarily a formal policy, but nonetheless appears to be a strong and widespread cultural norm that DDACTS is changing. In site interviews several respondents reported that when patrol officers learned about DDACTS for the first time, their initial reactions were that they did not want to start doing traffic-like activities. However, as they began to learn more about the DDACTS model, its purpose, and its utility, that perception began to change and patrol officers came to recognize traffic activities as beneficial and congruent with patrol activities.

#### **From Traffic Stop to Drug Bust**

In Mesa, Arizona, members of the department explained that the role of traffic enforcement was changing under DDACTS and that traffic officers have been known to make arrests related to drugs or gang activity that resulted from a traffic stop. In one recent case, a traffic officer pulled over an individual who had stolen multiple vehicles from parking lots. These cases demonstrated to the department that traffic stops can be a significant crime-fighting tool.

# Outcomes, Rather than Outputs

In several sites officers expressed the value of viewing the data and seeing the results of their efforts in shifting officers' perspectives on the nature and importance of their work. Officers began to recognize how their activities had a more systematic impact on the jurisdiction. This resulted in a shift in thinking from, "I need to write tickets," to, "I need to write tickets in the areas where there is a speeding problem."

#### **Outputs vs. Outcomes**

Mesa, Arizona placed a strong emphasis on the difference between simple outputs (such as the number of speeding tickets written in an area) and actual outcomes (such as the reduction of speeding in an area). They very clearly articulated that they were more concerned with outcomes and that officers' perspectives had shifted toward an appreciation of how their actions, reflected in the data, were producing results both in their geographic areas as well as other parts of the jurisdiction.

Respondents in DDACTS sites referenced the challenge of getting officers out of their "honey-holes," where they know they can quickly rack up as many tickets as they like. Getting officers to move into the DDACTS target areas and conduct high-visibility and intensive patrols required an appreciation that their activities were expected to produce more than just numbers on a "score card." DDACTS participants also observed that providing officers with analyses showing how their activities were connected to the outcomes in the jurisdiction was critical for this shift in perspective.

#### Technology and Data Systems

Similar to the case of data analysts, DDACTS often coincided with or drove departments to upgrade to more sophisticated data systems in order for them to effectively implement the program. In one jurisdiction, at the onset of DDACTS a data analyst had to enter all data manually into Microsoft

Excel because it could not be easily exported from the department's Records Management System (RMS). This process was no longer necessary when the department shifted to a new RMS, which they invested in in part due to a firm commitment to DDACTS.

#### crimereports.com

Crimereports.com was a prominent tool for many of the jurisdictions. The website allows departments to display online crime maps that are updated on a routine basis and shared with the public. The data are entered internally through a web portal called Command Central, and officers typically have their own unique usernames and passwords to access Command Central. Many of the departments used this software to complement their DDACTS program. For example, a full-time analyst might use more sophisticated analysis software programs to conduct in-depth DDACTS analysis, but officers and command staff could view maps in Command Central at any point and utilize them for directing patrols.

As mentioned elsewhere, it was not uncommon for a department to begin DDACTS or another data-driven program with a sworn officer who showed an interest in data analysis. Additionally, efforts to use a Records Management System (RMS) for data analysis when it was not intended for that purpose served to further frustrate an already challenging situation. Many DDACTS respondents observed that progress in the sites improved dramatically as the department invested in a new data system and/or a dedicated professional analyst.

#### IMPLEMENTATION

Sites faced a variety of common challenges in the implementation of DDACTS. Most sites expressed the importance of buy-in from line officers, but some sites came to this conclusion after an initial implementation that did not sufficiently engage officers. A common story was that senior management promoting the model did not clearly explain to middle management or line officers how DDACTS should be executed. Different commanders sometimes gave conflicting explanations of the model to line officers, resulting in confusion and inconsistencies in the officers' understanding of what they were supposed to be accomplishing. Many officers also felt that the crime analyst was being brought in to tell them how they should do their job. Overall, officers in these sites were resistant to DDACTS at the outset, viewing it as a passing fad; confused by unclear or mixed messages about the purpose of DDACTS and their specific role in it; and resentful of analysts telling them how to do their jobs. Sites experiencing these issues found ways to address them, such as convening new training sessions with officers to ensure a consistent understanding of the model, or implementing monthly meetings designed to solicit and respond to officer input.

Although many officers' responses to DDACTS followed the common themes above, not all sites had trouble with officer buy-in. In some sites, command staff foresaw the issues of officer buy-in and sought to make it a key aspect of their programs from the beginning. A common strategy for doing this was ensuring officers understood the DDACTS philosophy, and that the model is largely intended to help officers by reducing long-term crime, decreasing calls-for-service, and increasing officer discretionary time.

A related common implementation challenge was the way in which some officers viewed being assigned to DDACTS duty. Certain officers disliked having a DDACTS shift because they perceived it

threatened their discretionary time, or disliked the departure from previous operations. Other officers liked it right away, feeling that it gave them a break from responding to calls-for-service, and in some cases management used DDACTS as an incentive for this reason. Command staff also sometimes made the case to officers that a benefit of DDACTS is the ability to use the program as the basis for probable cause in charges of racial profiling, whereby the officer could explain the concept of the DDACTS zone and how that led to the stop under question. Other officers came to view DDACTS as providing a valuable tool for them to accomplish their objectives in an alternative manner.

#### C.A.T.C.H.

The Citrus Heights Police Department serves as a good example of a site that transitioned into DDACTS in a manner that did not cause confusion or dissension within the department. Prior to DDACTS, the department routinely convened monthly meetings to review crime data under the program <u>Crime and Trends in Citrus Heights</u> (C.A.T.C.H.). After introduction to the DDACTS concept, the leadership realized they were already applying many DDACTS principles in their C.A.T.C.H. meetings. Rather than confusing anyone by introducing a new acronym and a new program, they simply elevated the discussion of traffic at the C.A.T.C.H. meeting and redefined the acronym to stand for <u>Crime and *Traffic* in Citrus Heights</u>. DDACTS implementers explained that other than them, no one else in the department would be familiar with a program titled "DDACTS," even though they were participating in the model on a regular basis.

#### **Burden vs. Reward**

The way in which officers perceive DDACTS duty appears to depend largely on the circumstances of the jurisdiction. For instance, some officers in Shawnee lamented being assigned to DDACTS duty because they had to spend time traveling from their beat to the target area. Officers assigned to beats in the western end of the jurisdiction spent a significant amount of time traveling to and from the DDACTS zone in the eastern end of the jurisdiction. This represented a lot of time out of their assigned area.

Conversely, in Philadelphia, where officers regularly respond to 30+ calls per shift, assignment to the DDACTS zone was used as an administrative reward. An officer working the DDACTS zone was expected to remain in the target area and was relieved of the obligation to "chase the radio," going from call to call.

# **EVALUABILITY RESULTS**

In addition to the themes that emerged from across the 15 sites, several evaluation-specific issues became apparent throughout the course of the evaluability assessment. This section reviews these issues as they relate to the different forms of internal and external validity, outcomes of interest, and potential levels or units of analysis.

<u>Site</u>	Evaluability Assessment
Egg Harbor, NJ	Recommended
Gilbert, AZ	Recommended
Lafourche, LA	Recommended
Lansing, MI	Recommended
Shawnee, KS	Recommended
Thibodaux, LA	Recommended
Citrus Heights, CA	Pending
Everett, MA	Pending
Fargo, ND	Pending
Mesa, AZ	Pending
Winter Park, FL	Pending
Baltimore, MD	Not Recommended
Philadelphia, PA	Not Recommended
State College, PA	Not Recommended
Vermont	Not Recommended

#### SITE SELECTION

Based on the information collected from each of the 15 candidate assessment sites, they have been categorized as either recommended, pending, or not recommended. It should be noted that these assessments of evaluability should not be construed as any sort of judgment about the quality or capacity of the department, but rather an assessment of whether the specific circumstances of their present and future application of DDACTS lend themselves to inclusion in a rigorous multi-site evaluation.

Sites that were assessed as "recommended" have provided evidence that they operate a version of DDACTS that can be assessed and compared to other similarly assessed sites. The sites that have been assessed as "pending" have the potential to be evaluated, but certain aspects of their current operation and/or future plans raise a degree of uncertainty about their suitability for evaluation. As conditions and unsettled issues are resolved in these sites, a more confident assessment of these sites' evaluability will be possible. Sites assessed as "not recommended" have aspects or conditions of their application of DDACTS and/or future plans that pose significant barriers to evaluating DDACTS in their jurisdiction. At some point in the future, these aspects may change in a manner that would allow evaluation, but there is not sufficient reason to believe these conditions will change to sufficiently improve evaluability in the near future.

#### INTERNAL VALIDITY ISSUES AND CONSIDERATIONS

Internal validity refers to the ability of a study to assess a causal connection between an action and an outcome. There are several different issues that can threaten internal validity, each of which is discussed in this section.

# **Comparison Sites**

Several sites have strong comparison sites, while others have weak or no reasonably equivalent comparison sites. To be a sufficient comparison site, the locations should be located within the same agency or in a jurisdiction or location with similar agency size, crime and traffic patterns, major through-fares, and data. Crucially, the comparison sites need to not be implementing DDACTS.

Many of the sites were able to reach a consensus on their opinions of a reasonably comparable jurisdiction (details of each comparison site are included in the site-specific reports). However, there were several sites that were not able to identify an equivalent comparison site. In these jurisdictions, the concept of randomization and equivalent target areas *within* the jurisdiction were explored, but this was consistently rejected as an option. In many of the sites adopting DDACTS, current practices include using the data to identify problematic areas, and they were not willing to ignore problems in areas that had been recognized through their analyses.

#### Statistical Power

Statistical power refers to a study's ability to detect the presence of a statistically significant effect. The smaller the effect to be detected, the greater the statistical power must be in order to recognize it. By way of an analogy, if using a study to measure an effect were the same as using a microscope to view an object, then the size of the object would be the effect and the magnification of the microscope would be the statistical power. To see a small object, the microscope requires high magnification; likewise, to detect a small effect size, a study requires high statistical power.

The two primary determinants of amount of statistical power required are: (1) the anticipated size of the effect to be detected; and, (2) the size of the sample of cases. Small sample sizes and potentially small numbers of occurrences of crime and collisions could make it difficult to provide enough statistical power in any study to detect a small effect resulting from the program. With this said, several of the sites reported experiencing positive outcomes of implementing DDACTS, despite the inability to quantify these outcomes due to already very low levels of occurrence.

# Dosage

Related to concerns about variation in the construct of the program that is actually implemented (both on the books and in actual practice), the dosage of the intervention in any given site will be a critical consideration. Much of the assessments of officer activity leave open questions about the actual extent of officer activity in the target area. For instance, an officer in one site reported that the department was implementing the model very minimally, and that official records inflated the true dosage. This is because many officers were recording their time as DDACTS patrol in situations when it was not warranted, such as when they drove through the target area on their way to another location. Also, even where there is a large officer buy-in to performing DDACTS patrols,

there is the issue of whether the officers are spending enough time performing such activities to produce any reasonable expectation of a change in outcomes. For example, a single officer performing DDACTS in a large jurisdiction, where he may be the first to get called off in an emergency situation, does not provide much dosage.

#### EXTERNAL VALIDITY ISSUES AND CONSIDERATIONS

External validity refers to the ability of a study to generalize findings to other sites. There are several different issues that can affect external validity, each of which is discussed in this section.

# Sampling Bias

As many of the selected sites have been engaged in DDACTS for a substantial period of time, they also contain individuals who have become SMEs (i.e., paid trainers for DDACTS). This could create a potential bias if those individuals have a vested interest in promoting the DDACTS model, and could compromise the generalizability of findings from these sites to other sites that do not have such experts working within their jurisdiction. Therefore, in the future if there are more sites without a DDACTS SME, there might be a difference in outcomes between these and those with an SME.

# Geographic Over-Representation on the East Coast

Various DDACTS stakeholders have explained that the model began on the East Coast, and is continuing to spread to the West. This explanation was consistent with findings from the field. Representatives from the Citrus Heights, California site explained that the model was likely to be expanded to other jurisdictions in the state.

# **CONSTRUCT VALIDITY**

As DDACTS is more loosely based on principles of operation, rather than specific program components, any future evaluation will need to carefully identify the specific form of DDACTS that is being implemented in a given site. As can be seen in the site-specific summaries contained in the appendix of this report, there is significant variation in the form of DDACTS implemented in each jurisdiction. These differences make it inappropriate to aggregate the specific implementations of DDACTS across sites. However, the introduction and application of the seven principles, which appears to have been consistent across the selected sites, could be viewed as an intervention in itself. Doing so would allow for the aggregation of outcomes from across sites. It would also necessarily change the scope of conclusions that could be drawn from an evaluation. Any observed outcomes would result from the department's decision to implement DDACTS' seven principles, rather than from the specific DDACTS program each department actually implemented. This may appear to be a slight distinction, but it is an important one.

It is important to note that one of the apparent strengths of the DDACTS design is that it is a set of flexible principles, rather than a rigid program. This allows each site to adopt a strategy that fits the specific characteristics of its own jurisdiction. However, this means that over all the sites involved in DDACTS, the designs of the programs take into consideration a very large number of site-specific characteristics. Any future evaluators need to account for these factors during the selection of sites to include in a sample. They will be difficult to control for statistically, so it will be important to

consider these factors in the design of the methods, particularly if an evaluation is intending to generalize the findings to a larger population.

#### MEASUREMENT VALIDITY

Much of the administrative records appear to be a reasonable measure of officer activity. However, the sites have explained that these data may be more complete in some locations than others. For instance, in the more affluent communities, the police expect they are called to all instances of collisions, while in the less affluent communities they believe there is a greater incidence of collisions for which no report is made.

Similarly, there is variation in the expectation of extra-departmental law enforcement activity by other organizations operating within the jurisdiction (see the site-specific descriptions for agencies with authority to operate within the prospective evaluation sites).

# JURISDICTION CHARACTERISTICS (AFFECTING INTERNAL AND EXTERNAL VALIDITY CONSIDERATIONS)

The selected sites represent a variety of different types of jurisdictions, and the differences appear to have an effect on the manifestation of the DDACTS model. Most notably, jurisdictions with seasonal populations, such as college towns and resort areas, appear to have unique crime and traffic patterns compared to other jurisdictions. This is a relevant difference that could affect the outcomes and performance of DDACTS, and should be controlled for by the design of any evaluation of the program, as developed in a given site.

As mentioned previously, the DDACTS model allows each site to adopt a strategy that fits the specific characteristics of its own jurisdiction. When designing the methods of a future study, it will be important to consider the factors below, particularly if an evaluation is intending to generalize findings to a larger population. Not surprisingly, characteristics such as size and jurisdiction type seem to play a significant role in each jurisdiction's experience and policy development through DDACTS. However, less obvious factors also seem to influence the program in each jurisdiction. Some examples are described below.

#### **Population Diversity**

DDACTS can create tensions with regard to disproportionate minority contact, particularly in more demographically diverse areas compared to the more homogenous sites visited. Most often, this issue was discussed during site visits as it related to the use of the data to explain the rationale for officers' discretionary decision-making about what stops to make. It is likely that outcomes influenced by population diversity will not be generalizable from sites characterized by high diversity to those with lower diversity, and vice versa. As discussed further in the Discretion section of this report, some officers began using the DDACTS analysis of target areas to explain and justify stops of individuals who felt they were unfairly targeted on the basis of race.

#### **International Licenses**

In Everett, Massachusetts, particular issues arose because of the concentration of immigrants, many of whom were undocumented. As DDACTS inherently leads officers to make more traffic stops, the initiative opened up discussions about how to handle challenges arising from undocumented status. When an officer makes an arrest, the arrestee is automatically finger printed, and undocumented cases need to be reported to the Department of Homeland Security. The department arrived at a policy that if during a minor traffic stop they discovered an individual did not have a license, they would summon that individual to court instead of making an arrest. Part of their DDACTS efforts included education on which forms of international licenses were legally sufficient for individuals to operate a vehicle.

# **Prominent Venues and Attractions**

Several of the sites visited had significant, unique venues that might cause crime and traffic to vary seasonally, and largely distinguish the sites from others under study. In State College, Pennsylvania, for instance, roughly 100,000 visitors may enter the jurisdiction on a football weekend to see the Penn State football team at Beaver Stadium. This alters traffic patterns and increases congestion considerably from other times of the week and year. Furthermore, the primary concern of the State College Police Department is assaults stemming from student drinking, a crime type that is largely tied to the university's football culture. Another example is in Vermont, where visitors come into Killington and other ski resort areas every winter, resulting in a large uptick in crime and crashes.

#### "Dark Nights"

Philadelphia has many unique characteristics that distinguish it from other jurisdictions. Among them, the city has multiple major sporting venues that drive significant crime and traffic activities. As a result, the Philadelphia Police Department will only dedicate officer resources to DDACTS during what they call a "dark night," which is when none of the major sporting venues are open.

The presence of these prominent venues and events represent outliers in the patterns of activities occurring in these jurisdictions, and make them very difficult to compare to another site. In other words, it is difficult to find a sufficiently similar comparison site to use for a quasi-experimental design. Additionally, the outliers cannot be isolated through matching, so less rigorous statistical controls would likely need to be employed in these jurisdictions.

#### Weather Patterns

Weather is known to affect both crime and traffic patterns. Several of the jurisdictions visited are prone to extreme weather, including significant snowfalls (Vermont, State College, Fargo), temperatures too hot to remain outdoors for long (Gilbert, Mesa), or hurricanes/tornados (Lafourche, Thibodaux, Shawnee). Such effects must be taken into consideration as part of the

evaluation. Relatedly, different locations have seasonal fluctuations in population/demographics, as retired individuals move to warmer areas during the winter and cooler areas during the summer.

# Urbanicity

Departments held a significant concern about the displacement of criminal activity to other locations, which is a factor that might vary based on the urbanicity of the jurisdiction. Consistent with the research on this topic, urban jurisdictions did not express this as a concern. However, the more suburban and rural jurisdictions, particularly those focused on property offenses, were under the impression that offenders were already traveling to areas to commit crimes. These departments worried that, after recognition of a target area, criminal offending might increase in non-target areas.

#### "I didn't want to go there, the police are everywhere."

According to DDACTS respondents in Thibodaux, offenders arrested in Houma, Louisiana, which neighbors Thibodaux, have told the police that they are in the area because there is too much enforcement in Thibodaux. One captain explained that if criminals have to travel to other areas, they will likely be out of their comfort zone.

Additionally, in the suburban communities, the presence of commuters traveling to nearby cities affected the nature of the traffic activity. Some sites had reputations as speed-traps, in which case officers were conducting highly visible activity, but not interacting with members of the community. Further, some of the commuting activity took place on highways, which were policed by a different law enforcement agency (primarily the state police). In these areas, much of the traffic activity occurs in locations that are not close to centers of criminal activity. These situations also affect the data that are available and drive the incidence of collisions within the boundaries of the jurisdiction.

#### **Concurrent Jurisdictions**

In each site there were multiple law enforcement agencies operating. Frequently, informal norms dictated which agency would handle activity in which locations. For instance, in a location with a university and a major highway, it is possible for law enforcement activity to be carried out by the local police department, the sheriff's office, the state police/highway patrol, and the university police department.

# "A lot of cops live here."

In Gilbert, Arizona, the department explained that law enforcement officers in Arizona have statewide jurisdiction, and that many officers from neighboring jurisdictions live within their community. Theoretically, they explained, an officer from another jurisdiction could make a stop on his way home from work. In such a situation, the record of that stop would not be likely to appear in the department's data system.

This is important, and potentially problematic, as the enforcement activities of officers from another agency are not typically made available in the records systems of the primary law enforcement agency. Thus, data on these activities may be difficult or impossible to include. However, all the sites explained that while such cases may be possible, they believed that if it occurred at all it would be only a miniscule proportion of the enforcement within their jurisdiction. See the site-specific reports for more detail on the nature of concurrent jurisdictions in each site.

# UNIT OF ANALYSIS

The unit of analysis refers to the level or subject that is being evaluated. In the case of DDACTS, conceptually, there are four potential levels for the unit of analysis: (1) target times and locations; (2) target locations; (3) shift; and (4) jurisdiction. However, based on our observations and for reasons that are described below, the analyses are probably best completed at the jurisdiction level, with a sub-analysis of outcomes in the target area versus other areas in the same and comparison jurisdictions.

The primary reason for this is that sites almost universally identify all potential target areas within their jurisdiction, and apply DDACTS in those locations. Often, a site has only one target area, so a comparison target area is not an option. Where there might be a second target location, it is almost always receiving the same treatment, so it could not serve as a comparison site. Other sites that do not have a co-occurrence of crime and traffic are inherently different and present a threat to internal validity. However, where there are data to support such an effort, pre-post comparisons between the target area and the rest of the jurisdiction could demonstrate shifts caused by the program. Importantly, however, the target areas appear to be drivers of criminal and traffic activity for the entire jurisdiction, so results should be interpreted with caution.

Adding consideration of entire comparison jurisdictions is highly advisable, and in many sites comparison jurisdictions have been identified. Ideally, DDACTS target areas could be identified in these comparison jurisdictions and comparisons could be made between outcomes in the defined target area(s) receiving DDACTS and the area(s) in the comparison sites without DDACTS activity.

Importantly, however, many of the intermediate outcomes that are highly recommended for inclusion in the evaluation can only be assessed at the department/jurisdiction level, which is the most comprehensive unit of analysis being proposed. With that said, it may also be possible to conduct a more fine-grained assessment of outcomes at the unit of analysis of the target location, but this will only be applicable to certain outcomes, in certain jurisdictions, and the results will need to be interpreted with a great deal of caution. It is not recommended that analyses be conducted at the shift or "time and location" unit of analysis.

#### **Target Times and Locations**

At this unit of analysis, the target times and locations could be compared to other times and locations outside the defined area.

This is problematic, as many sites were not able to include a highly defined temporal dimension in the first analysis of their targeted areas. Further, only a few outcomes of interest would be specific to time and place (e.g., collisions during rush hour). Therefore, it is not recommended that time and location be used as the level of analysis.

# **Targeted Locations**

At this unit of analysis, the targeted locations within a jurisdiction would be compared to other locations in either the same or a different jurisdiction.

This approach, however, presents concerns about displacement and/or diffusion of crime and traffic incidents following targeted DDACTS enforcement. Additionally, within-jurisdiction comparisons are inherently challenging, as any equivalent area within the jurisdiction is often designated as a DDACTS target area shortly after it is identified. Thus, the most viable approach is to compare the target location(s) in a DDACTS jurisdiction with the researcher-identified equivalent target location(s) in a comparison jurisdiction.

#### Shift

At this unit of analysis, differences in outcomes would be assessed across shifts. This approach would be best suited to jurisdictions where one shift is engaged in DDACTS and another is not. However, there is a significant possibility of spillover effects in this approach, threatening internal validity, and thus it is not recommended.

# Jurisdiction

At this level of analysis, differences in outcomes are compared across entire jurisdictions. Perhaps the most viable approach would be an evaluation of the differences in outcomes at both the jurisdictional level (comparing a DDACTS jurisdiction with a matched comparison non-DDACTS jurisdiction) and the targeted location area(s). Such an approach would allow for the assessment of outcomes that may appear at different levels of analysis. In particular, crime and collision declines may be more pronounced in the target area, and may not be so large that they would "move the dial" enough to allow a detection of the difference within the entire jurisdiction; thus, analysis at the location area level of analysis would show the difference. However, changes in the acceptance of data-driven decision-making could be experienced department-wide, so a jurisdictional assessment would be required to capture such a change.

#### OUTCOMES OF INTEREST

In addition to considerations of the various threats, challenges, and issues related to the validity of studies evaluating DDACTS, it is also critical to note that there are outcomes of interest that fall outside of expectation. DDACTS is advertised as a means of improving public safety through reductions in crime and traffic collisions. These are readily apparent and obvious outcomes to measure. The previous section describing cross-site themes and outcomes has reviewed many of the issues that emerged consistently enough to justify the expectation that there is some correlation with the adoption of DDACTS, and thus these themes should be considered as potential outcomes to assess in an evaluation. These outcomes include changes in the following:

- targeted crimes
- types of traffic activity (typically collisions)
- police culture toward increased use of data in decision-making
  - o appreciation and utilization of the crime analyst

- o using data to define shift assignments
- o using data to justify discretionary stops
- communication within the department (across divisions)
- community relationships/perceptions of legitimacy
- officer-initiated collaborations on traffic pattern/infrastructure revisions
- officer discretionary time

# CONCLUSIONS AND RECOMMENDATIONS

DDACTS is a promising initiative that has garnered a great deal of support and enthusiasm from many in law enforcement. A primary feature of DDACTS is that it is based on the site-specific application of general principles to meet the site-specific needs of the jurisdiction. This appears to result in a highly responsive approach to operationalizing data-driven operations in the departments engaged in the effort. However, it also creates a diversity of program variations across sites that make comparisons and evaluability challenging.

Through this evaluability assessment, a wide diversity of program formulations and degrees of implementation of DDACTS were observed in the 15 candidate sites. Some sites are not currently implementing an effort that they themselves consider DDACTS, while others are applying the principles to such an advanced degree that their programs do not resemble DDACTS in any other site. However, several sites are implementing reasonably comparable versions of DDACTS and have conditions that lend themselves to evaluation of their programs. There is sufficient infrastructure and commitment in the field to support an evaluation of the DDACTS model in these sites. However, the intervention should be considered as a broad application of the seven principles and the specific outcomes considered as a product of each site's unique application of those principles.

The results of this evaluability assessment indicate that it would be fully feasible to evaluate the impact of DDACTS on crime and traffic activity. Furthermore, it is recommended that in addition to an evaluation of the effects on crime and traffic, any DDACTS evaluation should include a focus on the implementation of DDACTS, its effects on the organizational and operational characteristics of the department, and its effects on the interactions with the community. Indeed, based on qualitative data resulting from stakeholder interviews associated with this assessment, it appears that the most significant and important outcome to be affected by DDACTS will be a change in the culture of the police departments toward an increased acceptance and use of evidence-based and data-driven decision-making.

Successful execution of a multi-site DDACTS evaluation should include both a quantitative and significant qualitative component. It will also be necessary to create and operationalize measures of abstract concepts, such as acceptance of data-driven decision making, application of the seven DDACTS principles, and cultural change.

Importantly, observations and conversations with the 15 sites suggest that there are important intermediate outcomes of DDACTS, in addition to the advertised outcomes of reducing crime and collisions while improving efficiency and conserving resources. This report has detailed these intermediate and attendant outcomes, which will be critical outcomes to measure during an evaluation of DDACTS. While the anecdotal evidence seems to suggest that DDACTS has a positive impact on the primary outcomes, there is relatively less recognition of the existence of these intermediate outcomes, let alone an appreciation of how DDACTS affects them. These intermediate outcomes (including culture changes, adoption of data systems and analysis, operationalization of data-driven decision-making, and community perceptions of police legitimacy) are important components of best practice in policing and thus merit inclusion in any systematic evaluation of DDACTS.

# APPENDIX – EVALUABILITY ASSESSMENT PROCESS AND PROCEDURES

## KICK-OFF MEETING

To begin the project, the Urban project team held a kickoff meeting with core staff from NIJ and NHTSA. The purpose of this meeting was to discuss the background and status of DDACTS, define the scope of Urban's project, and determine a plan of action moving forward. From this meeting, Urban received information to contact IADLEST and initiate workshop visits and outreach. Urban, NIJ, and NHTSA also agreed on a regular schedule for conference calls. In the following month, one member from Urban attended and observed DDACTS training to better understand the scope of the model. This information, combined with the DDACTS Operational Guidelines and additional materials, was used to develop a program logic model and site visit protocol.

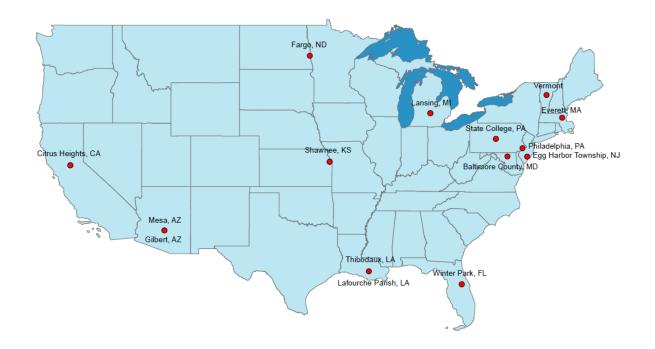
#### SITE SELECTION

Site selection was conducted using an informal snowball sampling method. The Urban research team received a spreadsheet from IADLEST indicating that 441 law enforcement agencies had received DDACTS training. However, the list could not indicate which sites had implemented DDACTS following training, or the extent of implementation among those that had. The research team decided that soliciting site recommendations from DDACTS Subject Matter Experts (SMEs) and other DDACTS personnel was the best approach for identifying sites that had fully adopted the initiative in full following training.

Urban received contact information for DDACTS SMEs through IADLIST. During these calls, Urban asked SMEs to identify the sites they felt exceeded at implementing key DDACTS principles (they could recommend their own agency). The most frequently recommended sites were compiled into a list of 25 agencies. This was the approach taken to identify a preliminary list of 25 promising sites for the assessment from the 441 agencies that had attended a training.

IADLIST and NHTSA made further recommendations, which included sites featured prominently in local media outlets for their DDACTS program. Through discussions with NIJ and NHTSA, Urban identified, a final list of 15 sites was selected for the assessment. Two sites were selected specifically because they had recently received training at the time of selection. In addition to ensuring that the 15 agencies were sites that chose to adopt DDACTS, the research team also wanted the sites to represent a geographically diverse sample.

A major limitation to this approach was the inability to determine the number of sites that had attended trainings, but did not implement a DDACTS program in their jurisdiction. Another limitation was that the SMEs participating in the snowball sampling were primarily familiar with other SME sites, as the SMEs travel together to conduct trainings.



# DEVELOPMENT OF PROTOCOLS FOR DATA COLLECTION

Following the identification of the 15 sites, a protocol for collecting information from each of the 15 sites was developed. The protocol is as follows:

- 1. **Site Characteristics** Identify to the extent possible the following characteristics in advance of the site visit (department websites, telephone interviews with key local staff) fill in missing information on site.
  - a. Population served
  - b. Population density
  - c. Department size (number of officers, estimated budget, yearly local statistics)
  - d. Department structure (of importance is existence of separate crime analysis and traffic enforcement units)
  - e. Local transportation profile (highways, public transportation, infrastructure, local accident and fatality statistics)
- 2. **Key Local Personnel -** Identify in advance key DDACTS personnel and supervisors beginning with IADLEST training rosters, subject matter expert list and department website, supplemented by telephone interviews.
- 3. **DDACTS Implementation Summary** Review press releases, website etc. in advance. However, documentation of current implementation status and past history will be dependent on site visit interviews and observations. Interviewees should include crime/traffic analysis personnel, traffic unit supervisors (if applicable), patrol supervisors and senior management.
  - a. Date of DDACTS training
  - b. Implementation status (program maturity)
  - c. Status of implementation of each of the core principles and the extent to which local conditions or decisions prioritize or set aside one or more principles.
  - d. Experience of DDACTS implementation (planning, changes over time, basic implementation process, data used and how, challenges that needed to be overcome).
  - e. Comparison of implementation with DDACTS training curriculum (local explanations for similarities and differences)
- 4. **Future Implementation Process Evaluation Feasibility** Explore implementation data availability and willingness of local key stakeholders to participate in an implementation evaluation in the future. Interviews of same personnel as outlined in #3 plus identify active partner points of contact for interview on site or through follow telephone calls (see primary component #1 of the DDACTS model).
  - a. Existence, quality and availability of implementation documentation (meeting summaries, MOUs, rosters, etc.)
  - b. Willingness to participate in an implementation evaluation (will require affirmation from chief executive or senior command with decision authority)
- 5. **Future Outcome/Impact Evaluation Feasibility** Explore outcome/impact data availability and willingness of local key stakeholders to participate in an outcome/impact evaluation in the future. Interviews of same personnel as outlined in #3 plus identify active partner points of contact for interview on site or through follow telephone calls (see primary component #1 of the DDACTS model). Also important to document outcome and impact data availability and willingness to share with evaluators in the future—will need to talk to key IT staff about RMS/CAD/traffic data access in particular.
  - a. Existence, quality and availability of outcome/impact data (RMS/CAD, traffic, etc.), mapping software applications and ease or difficulty associated with data extraction. Existence, quality and availability of law enforcement productivity and efficiency rate denominator data will also need to be explored for consideration of enforcement efficiency measures. Survey feasibility for perceptual outcome measures also needs to be assessed.
  - b. Willingness to participate in an outcome/impact evaluation (will require affirmation from chief executive or senior command with decision authority, along with other local partners depending on the nature of collaboration)
  - c. Feasibility of comparison group/locations or random assignment evaluation designs (explore primarily with supervisors and executives to identify potential comparison departments not implementing DDACTS)
- 6. **Evaluability Assessment Findings** Synthesize pre-, on-site, and post-interview, observation and other data collected for this individual site (cross site findings to be separately addressed in the final report)
  - a. Recommended evaluation approach (if feasibility is affirmed)
  - b. Alternative approaches
  - c. Evaluation duration/other parameters
  - d. Estimated cost
  - e. Challenges and potential evaluation obstacles
- 7. Assessment Summary and Recommendations

Group interviews were completed at each of the 15 sites. These group interviews included a variety of officers and staff from each of the sites, and sought to include representatives of command level staff, the crime analyst, a DDACTS point of contact, as well as members of traffic and patrol divisions as necessary and applicable. Each meeting lasted between 2–2.5 hours, and site participants ranged in number from as few as three to more than 20 in one site. The following site-specific reports are the results of each of these visits, as well as background research and follow-up phone calls. This information is intended to provide readers with an understanding of the characteristics and context of each site, the status of its DDACTS program, and other information relevant for designing a study of DDACTS in that jurisdiction.

# BALTIMORE COUNTY, MARYLAND

## Baltimore County Police Department

June 12, 2014

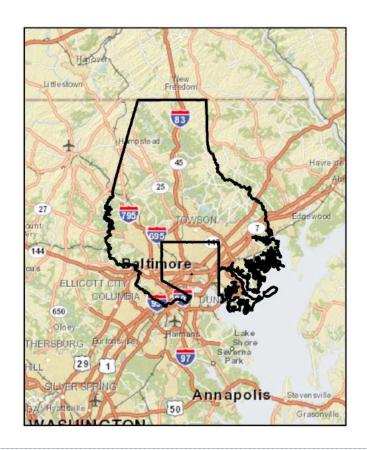
#### SITE CHARACTERISTICS

Baltimore County is a large metropolitan county consisting of 598.30 square miles. It surrounds the city of Baltimore on three sides to the south and borders the state of Pennsylvania to the north. The county is primarily suburban in its southern regions, but also borders the Chesapeake Bay to the southeast and is largely agricultural in the northern portion. The estimated population was 823,015 in 2013 with a 2010 population density of 1,345.5 persons per square mile. In 2012, the population was 61.4 percent white, 27.0 percent black, 5.4 percent Asian, and 4.6 percent Latino. 2008–12 estimates indicate median household income was \$66,068, with 8.5 percent living below the poverty line, and 35.3 percent of those age 25 and over had a bachelor's degree or higher.

#### Transit Profile

The county's 2,600-mile highway system is made up of a combination of rural roads and large thoroughfares servicing business and recreational areas as well as feeding into Baltimore City in a spoke-like configuration. Interstate 95 traverses the county to the east, I-83 is a major north-south route from Baltimore City to Pennsylvania through the center of the county, I-70 to the west begins in the county, and the Baltimore Beltway (I-695) encircles Baltimore City mostly within the boundaries of the county. As a large metropolitan county, numerous public transportation alternatives also exist, including a light rail system, a subway system, a commuter rail (MARC), and an extensive network of bus transportation. In addition to the county's large size there are a variety of unique features that can affect traffic congestion and safety. These include having a large population of commuters working in Baltimore City; several college campuses located in the southern region; the State fairgrounds that host numerous recreational events, including the State Fair each summer; and a large business concentration in the area of Hunt Valley, among others. In 2011, Baltimore County reported 15,534 reportable<sup>5</sup> crashes, 66 fatal crashes, and 8 alcohol-related fatalities (Baltimore County Police Department, 2011).

<sup>&</sup>lt;sup>5</sup> Motor vehicle crashes are only reported to the State of Maryland if certain criteria are met, most commonly that a vehicle needed to be towed or there was serious bodily injury or death.



#### Crime Profile

Consistent with its size and population, Baltimore County is among the assessment sites with higher crime rates for violent crime (5.1 per thousand persons, 4,145 total) and medium rates for property crime (28.5 per thousand persons, 23,327 total) (FBI, 2012).

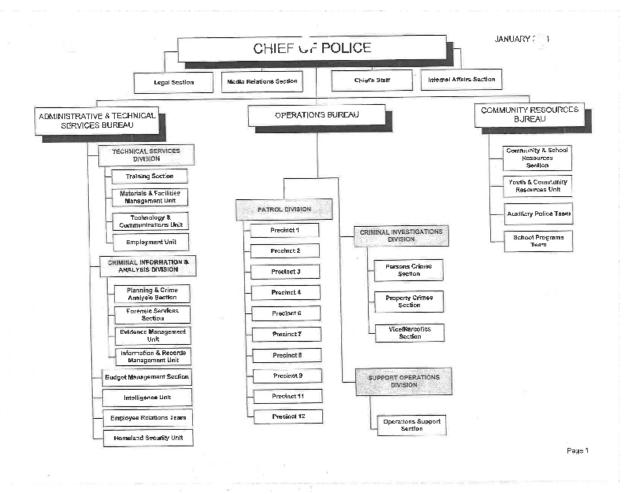
#### **Unique Site Characteristics**

Baltimore County is one of the two county-level sites under study. It differs from the other, Lafourche Parish, in that it immediately surrounds a major US city, Baltimore, while Lafourche Parish is somewhat removed from New Orleans. Additionally, the Baltimore County PD is significantly larger than the Lafourche Parish Sheriff's Office and is the second largest DDACTS site under study (the largest site is Philadelphia).

## DEPARTMENT CHARACTERISTICS AND KEY LOCAL PERSONNEL

The Baltimore County Police Department, which is occasionally confused with the Baltimore City Police Department, is a separate and distinct organization and the primary law enforcement agency for the County of Baltimore. As a large agency, the county is divided into 10 precincts. The police

agency is among the largest under study, with 1,838 full-time officers (FBI, 2012) and an annual budget of \$192,955,213 for fiscal year 2011.6



Three of the key local department staff that were leaders in the development and implementation of DDACTS are no longer involved with the initiative. A captain, who was intensively involved in championing DDACTS within the department and who also conducted many of the early trainings for NHTSA, has left the department. The sergeant who oversaw the traffic management section for the department has transferred to patrol as a shift supervisor. The Department's traffic and crime analyst, who was originally and actively involved in DDACTS from a data analysis perspective (as well as an IADLEST Subject Matter Expert), has also left the BCPD. However, the roles filled by these key individuals have been transitioned to other actively engaged officers.

## Concurrent Law Enforcement Jurisdiction

The Baltimore County Police Department (BCPD) is responsible for law enforcement county-wide, as there are no incorporated towns or cities in the county. However, the Maryland State Police also have jurisdiction in the county and have primary law enforcement responsibility along the

 $<sup>^{\</sup>bf 6} \ \underline{\text{http://resources.baltimorecountymd.gov/Documents/Police/2012pdfs/annual report2011.pdf}$ 

interstate highways. BCPD may also interact with the Maryland Transit Administration Police Force (MTA) or the Maryland Transportation Authority Police (MdTA). However, site representatives explained that the possibility of any enforcement in the DDACTS areas by another agency is very minimal, and that it is even less likely that enforcement would take place without their knowledge or record.

## Prior Use of Data and Other Related Programs/Initiatives

BCPD has long been a national leader in crime analysis, problem-solving, and the use of spatial analyses. The department has a unit dedicated to crime analysis, which prepares and distributes weekly reports. BCPD has used COMPSTAT since the late 1990's. Prior to the dissemination of DDACTS, BCPD had already developed and implemented its own Crash-Crime Project, which was very similar to DDACTS (as explained further below).

#### DDACTS IMPLEMENTATION SUMMARY

As explained in the body of the full Evaluability Assessment Report, DDACTS is more of an approach than a program. There are a set of common guiding principles that can manifest in different ways to suit the needs of a given jurisdiction. This section is not intended to be any sort of assessment of whether the jurisdiction has "correctly" or "faithfully" implemented DDACTS, but rather to provide a narrative description for the purposes of understanding the nature of implementation in this particular site and illustrate the construct available for study.

The emphasis on the co-location of crime and traffic crashes in the county began in 2007 under the leadership of a captain. At the direction of the chief, the captain initiated an internal study of the co-location of crash and crime problems. On the basis of this data-driven analysis, the BCPD Crash/Crime Project was initiated. The project's goal was to reduce crime and traffic crashes in the identified target areas through targeted enforcement. The department also emphasized community outreach and public awareness.

In July 2008, the NHTSA Enforcement and Justice Services Division hosted an initial meeting to discuss its new DDACTS initiative. BCPD was an invited participant at this meeting and shared the successes and challenges of its Crash/Crime Project with those in attendance. Given the similarities of BCPD's project and the DDACTS initiative, BCPD subsequently became one of the six pilot sites for the DDACTS model.

The DDACTS initiative in Baltimore County appears to have been highly regarded by subject matter experts involved in the implementation of DDACTS elsewhere across the country. Despite its close adherence to the core DDACTS principles, a number of challenges have been reported. Principally, there has been significant turnover among the key staff responsible for the development and growth of the Crash/Crime Project, and the program's evolution into DDACTS. It appears there may have been a temporary lull in program specific activities during the transition of DDACTS from departing officers to the current leadership. Since completion of the transition, the department has demonstrated a clear and continuing commitment to the program.

## Partners and Stakeholder Participation

The project also included partnerships with other law enforcement agencies, the State Highway Administration, and the Highway Safety Office. Particularly, the Maryland Highway Safety Office (MHSO) was launching its "Traffic Safety Is Public Safety" program in 2007, which corresponded with the beginning of the BCPD Crash/Crime Project. The two agencies partnered on training for the programs. BCPD also developed a partnership with the Division of Parole and Probation to identify criminal offenders under supervision in target areas. Community outreach is also very important to the department. Outreach officers in each precinct attend community meetings with data on crime trends and calls-for-service.

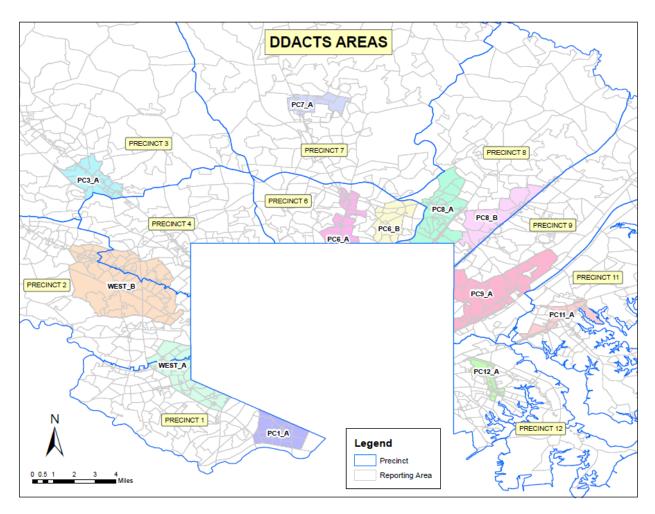
#### **Data Collection**

Data collection initially focused on burglaries, robberies, and personal-injury crashes, as data analysis revealed these to be commonly associated. With the implementation of DDACTS in 2009, this category was expanded to include auto theft and theft from autos. Crash data in the county are not as robust as crime data. Reportable crashes require reporting to the State, but processed data turnaround can currently take up to 18 months. BCPD is currently a pilot site for the State of Maryland's Automated Crash Reporting System (ACRS), which is expected to be implemented statewide at the beginning of 2015. ACRS provides a much greater level of detail in reporting, and is expected to greatly reduce the time to availability of crash data.

Within the last year, BCPD has adopted an Electronic Traffic Information Exchange (E-TIX) system, whereby officers can scan drivers' licenses and registration to automatically fill-out information, and then print tickets from the officer's vehicle. The system supports geo-coding, but the feature is not currently in active use.

#### Data Analysis

The department identified hot spot locations based on where the above metrics were most commonly associated over the three years prior to implementation.



Analysis revealed that "hot spots" were commonly found along the secondary traffic spoke-like arteries that radiated from Baltimore City into the county. As the department transitioned into DDACTS, analysts began using kernel density mapping to identify target areas in each precinct (example of target areas provided above). Six of the most significant corridors were selected, involving all of the ten precincts, and each was divided into three segments.

# **Strategic Operations**

Implementation of the DDACTS model is centrally controlled by a captain within BCPD. The traffic management section provides administrative support and the crime analysis similarly provides data support. However, each of the ten precinct captains sets their own DDACTS goals and objectives, directs interactions with local stakeholders, and collaborates with the analysts to identify target locations. Examples of objectives might be to reduce crashes and crimes by five percent, reduce speeding, and increase seat belt use. Self-initiated traffic enforcement was the primary strategy for achieving these outcomes. Results of DDACTS, as well as other data-driven activities, are potential areas of focus during the department's COMPSTAT meetings.

The department developed a paper form for completion by officers after traffic stops, in order to measure enforcement levels in target areas. Some questions of reliability were raised about the use of these forms. However, as previously mentioned, the department has implementing a new

automated traffic citation system (E-TIX), which partially address this activity measurement issue. Staff also reported that as currently configured, GPS-generated x,y coordinates are not linked to the citation records, making location identification problematic given the substantial volume of citations issued each year. However, locations are recorded as addresses or intersections, which the department's crime analysts can then convert to x,y coordinates.

## Information Sharing and Outreach

The BCPD and MHSO partnered on several outreach initiatives coinciding with its Crash/Crime projects. These included a paid media campaign, signage warning of increased enforcement in corridors, roadway safety audits, and personnel recognition. The department also participates in the State Police's Electronic Traffic Information Exchange (E-TIX) system, and is a pilot site for the State of Maryland's Automated Crash Reporting System (ACRS), which is expected to be implemented state-wide at the beginning of 2015.

## Monitoring, Evaluation, and Adjustments

The site periodically reviews the DDACTS locations to determine if they require adjustment. Site representatives explained that a new commercial development will likely produce a new target area once construction is completed. The department also went through many adjustments in transitioning from the Crash/Crime Project in 2007 to DDACTS in 2009, as are discussed above.

#### Outcomes

The department mentioned a report from the original Crash/Crime Project that included some outcome data.<sup>7</sup> The department also has significant aggregate data available on crime and traffic activity, and the analysts are capable of reporting more specific and targeted outcome data.

# FUTURE IMPLEMENTATION PROCESS EVALUATION FEASIBILITY

It does not appear that sufficient ongoing implementation documentation exists to support a future implementation process evaluation. However, an ex post facto examination of the evolution of BCPD's Crash/Crime Project through DDACTS' implementation, leadership transition, and current form might be feasible and potentially valuable. A major impediment to this would be the turnover of key leadership at command and supervisor levels and the difficulties associated with interviewing them about past implementation efforts. However, there is significant institutional commitment to DDACTS, and department leadership has indicated they would be willing to participate in an evaluation.

# Availability of Historical Implementation Documentation

Due to variation in the characteristics of the ten precincts, documentation of implementation in a future evaluation would require separate and original data collection efforts within each of the precincts.

http://www.policechiefmagazine.org/magazine/index.cfm?fuseaction=display&article\_id=1840&issue\_id=72009

# Availability of Implementation Activities and Documentation Moving Forward

DDACTS activities and operations are a potential topic of focus during the department's COMPSTAT meetings. Discussions during these meetings include consideration of implementation, operation, and performance.

## FUTURE OUTCOME/IMPACT EVALUATION FEASIBILITY

BCPD has a long history of participating in external evaluations and conducting its own internal research initiatives. The DDACTS approach has become a normal part of a range of data-driven police practices in Baltimore County. As such, it is not necessarily viewed or treated as a separate program as much as part of routine operating procedure. Consequently, it would be difficult to isolate the effects of DDACTS-specific activities from the other routine activities undertaken by the Baltimore County Police Department.

## Outcome Data Availability

BCPD maintains an up-to-date automated records management system comprised of both crime incident and calls-for-service records. These data have been utilized by its crime analysis section for sophisticated analytic purposes for many years and the department is well known for its analytic and data-driven problem-solving activities, including GIS-based mapping applications.

However, the availability of data to measure crash and traffic safety outcomes in a future evaluation is more problematic. Reportable crashes are documented in hard copy, paper formats. These reports are then forwarded to the Maryland State Police for data entry and summary data analyses. The paper records are retained by the county but are not automated. Unfortunately, automated records from these reports from the State are typically delayed up to 18 months due to processing requirements. However, the statewide ACRS (described above) has the potential to address this issue moving forward, along with citation data from the E-TIX system.

# Activity/Productivity Data Availability

For an empirically sound evaluation, it is critical that changes in traffic enforcement be measured, since it is hypothesized that the increase in enforcement will yield the desired crime and traffic crash reductions. Therefore, assessing the variations in enforcement activity (i.e., the initiative "dosage") is required.

Within the department, calls-for-service information is available, although such data are quite limited. BCPD did seek to supplement activity data by asking patrol officers to complete a paper and pencil form when initiating a traffic stop. This form includes data on the number and type of traffic stops, whether citations or warnings were issued, drugs seized, money seized, or weapons seized. If arrests took place for criminal violations, these are also described. These data are routinely entered into a stand-alone database and could be a valuable source of activity information. As with any such self-report activity log, there are potential concerns about the consistency and reliability of the use of these activity forms.

## Presence of a Comparison Site

Baltimore County is unique in its mix of urban, suburban, and rural areas. Site representatives explained that there is not an ideally equivalent comparison county, but suggested Anne Arundel County, and Montgomery County as potential options.

County	Population	Violent crime	Property crime	Violent Crime Rate	Property Crime Rate	Police Officers
				Per thousand	Per Thousand	
				persons	Persons	
Baltimore	817,455	4,145	23,327	5.070615508	28.53612737	1,838
<b>County (2012)</b>						
Montgomery	1,004,476	1,795	16,695	1.787001382	16.62060617	1,121
<b>County (2012)</b>						
Anne Arundel	544,403	2,485	13,399	4.564633185	24.61228171	658
County (2011)						

UCR does not provide population data for county agencies. Population figures are based off of Census 2012 estimates. Anne Arundel County data is not available in the 2012 UCR. Figures are from 2011.





The site representatives explained that Montgomery County (map on the right) has a similar demographic mix to Baltimore County, and also has rural, urban, and suburban areas. According to UCR data, Anne Arundel County (map on the left) has similar violent and property crime rates, though it is a much smaller department.

#### **EVALUABILITY ASSESSMENT FINDINGS**

Given BCPD's organic development of a DDACTS-like program on its own, the department would make an interesting and useful site for an implementation assessment. There could be great lessons to learn from how the department organized its version of the program, how it adapted its original

conception to fit the program elements that comprise the seven DDACTS principles, and how it has been incorporated into routine procedures. However, as the site is already involved in several other data-driven initiatives that overlap with DDACTS activities, it seems that it would be very difficult to isolate the impacts of DDACTS on outcomes from all the other programming Baltimore County has in place. For this reason, Baltimore County is not recommended as a site for an outcome evaluation.

#### ASSESSMENT SUMMARY AND RECOMMENDATIONS

While BCPD is not recommended for inclusion in a future DDACTS outcome evaluation, the Urban assessment did raise awareness of the need to include a sustainability component in any future implementation process evaluation design. Understanding the factors affecting sustainability has important implications for the selection of law enforcement agencies to participate in the DDACTS training, as well as for future adaptations of the DDACTS model to best align with local department characteristics and crime/crash problems.

# CITRUS HEIGHTS, CALIFORNIA

## Citrus Heights, CA Police Department

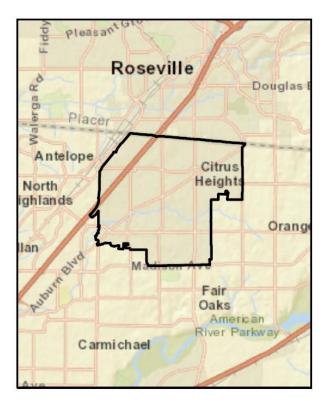
October 14, 2013

#### SITE CHARACTERISTICS

Citrus Heights is a city in Sacramento County, California, located northeast of the city of Sacramento. It occupies 14.23 square miles. In 2012, Citrus Heights had a population of 85,112 (FBI, 2012), with a 2010 population density of 5,854.7 persons per square mile. The population in 2010 was 72.6 percent white, 3.3 percent black, 16.5 percent Latino, 3.3 percent Asian, and 5.4 percent two or more races. The city's population is largely blue-collar with a significant Russian population. 2008–12 estimates indicate that median household income was \$54,236, with 12.8 percent of the population living below the poverty line, and 19.2 percent persons 25 and older had a bachelor's degree or higher.

#### Transit Profile

Interstate 80 passes through the northwest corner of Citrus Heights and runs to the city of Sacramento. Greenback Lane and Sunrise Boulevard are also thoroughfares with significant traffic in the city.



#### Crime Profile

Relative to the other sites included in this assessment, Citrus Heights has moderate rates of violent crime (3.9 per thousand persons, 329 total) and a high rate of property crime (36.6 per thousand persons, 3,117 total) (FBI, 2012).

## **Unique Site Characteristics**

Historically, Citrus Heights has been plagued by both high property crime rates (both locally and in comparison to other DDACTS sites) and a high incidence of traffic fatalities. For this reason, traffic safety has been a priority that is highly elevated within the department. Citrus Heights is also the only California site among the 15 candidate DDACTS evaluation sites. In addition to other differences, California sites are faced with realignment issues that do not exist in other states. As a consequence, jurisdictions in California have returning offenders, which can affect their crime rates, as well as state-provided AB109 funds, which Citrus Heights has used to support its full-time crime analyst.

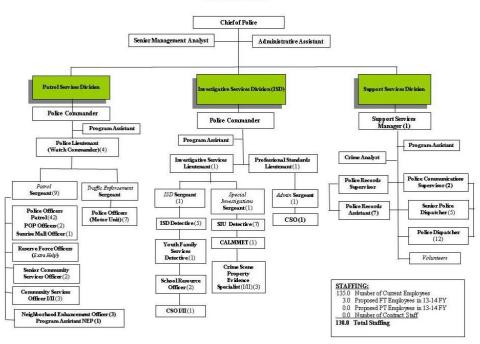
#### DEPARTMENT CHARACTERISTICS AND KEY LOCAL PERSONNEL

Citrus Heights is a new city, incorporated in 1997, with the Citrus Heights Police Department founded in 2006. Command staff feel that this puts them in a unique position to try new programs and strategies without experiencing pushback for diverging from precedent. The police department has a FY2013 budget of \$18,962,0148 and 85 full-time officers (FBI, 2012).

<sup>8</sup> http://www.citrusheights.net/docs/15.pd.pdf

#### POLICE DEPARTMENT

Organization Chart



The core DDACTS team includes the department's patrol services commander, traffic sergeant, lieutenant of special operations, one additional lieutenant and former traffic sergeant, and one analyst.

#### Concurrent Law Enforcement Jurisdiction

California State Highway patrol has jurisdiction surrounding Citrus Heights and on I-80. The Sacramento County Sheriff's Department also has jurisdiction in the city but rarely makes stops. Citrus Heights estimates that a negligible amount of traffic and crime enforcement in Citrus Heights is conducted by outside agencies.

## Prior Use of Data and Other Related Programs/Initiatives

Citrus Heights has employed a full-time data analyst since its founding in 2006. The agency implemented COMPSTAT for a year and a half beginning in 2008, and began its own data-driven program, Crime and Trends in Citrus Heights (CATCH), in 2009. The site's implementation of DDACTS was only a slight adjustment from the pre-existing CATCH, unlike other sites that started DDACTS from scratch. Despite being a new agency, Citrus Heights has been using data since its founding.

The department has also received other grants related to traffic safety, such as for DUI checkpoints and DUI repeat-offender checkups.

#### DDACTS IMPLEMENTATION SUMMARY

As explained in the body of the full Evaluability Assessment Report, DDACTS is more of an approach than a program. There is a set of common guiding principles that can manifest in different ways to suit the needs of a given jurisdiction. This section is not intended to be any sort of assessment of whether the jurisdiction has "correctly" or "faithfully" implemented DDACTS, but rather to provide a narrative description for the purposes of understanding the nature of implementation in this particular site and illustrate the construct available for study.

Citrus Heights implemented CATCH in 2009, and attended a DDACTS training in March of 2013. Due to the similarities between the programs, the site folded key aspects of DDACTS into CATCH without undergoing a complete program change. CATCH involves monthly staff meetings during which crime trends are reviewed and bi-weekly meetings of the core management. The monthly meetings are not required for all officers, but many attend. The department later incorporated traffic into the program and changed the name to Crime and Traffic in Citrus Heights. When the agency began implementing DDACTS in 2013, the major change was to focus on the overlay of traffic and crime (both in terms of data analysis and strategic operations) rather than treating both as separate categories. The site plans to reevaluate its focus areas in 2014, one year after the original DDACTS analysis.

Similar to some other sites, the Citrus Heights program has broad specifications regarding when CATCH/DDACTS patrol takes place, and what measurement outcomes to focus on during those times.

## Partners and Stakeholder Participation

Prior to DDACTS, the department already had developed significant officer buy-in to data-driven processes through their CATCH program. Additionally, the department also already had a strong history of community engagement. Neither of these was significantly affected by the institution of DDACTS in the jurisdiction.

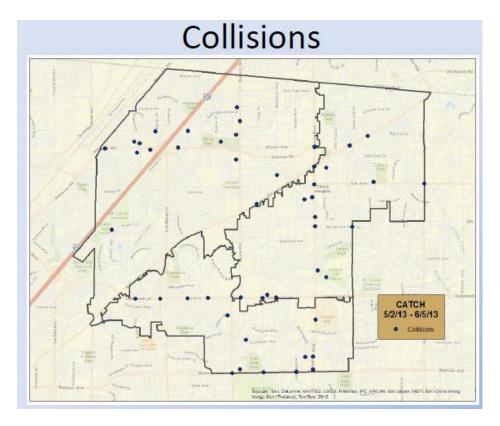
#### Data Collection

The site includes all crime types in its analysis, but focuses primarily on Part I crimes, particularly stolen vehicles, vehicular burglary, and residential burglary. The site determined that these crimes would have the largest community impact. The city's rates of robbery, aggravated assault, and larceny were unlikely to produce enough hot spots.

When crashes occur on private property and without an injury, it is up to the discretion of the officer whether to report it. All reported collisions are documented. The department also has an online reporting system for hit-and-runs, and estimates that there have been roughly 25 such occurrences from the beginning of 2013 to the time of our site visit. The department also indicated that there are gaps in its citation data and that they only map crashes that are cleared by a citation.

#### Data Analysis

Data analysis was conducted with three years of crime and crash data. The department later had to stress that officers have some type of documentation for all traffic activity so that information could be applied to analysis and strategic operations.



The CATCH/DDACTS program uses a combination of focus areas and hot spots. The city has been divided into three beats that are designed to have approximately equal incidence of crime. Within these areas there are more specific hotspots, such as the high-traffic areas of the intersection of Greenback Lane and Sunrise Boulevard and the intersection of Greenback Lane and Auburn Boulevard, as well as the northwest residential area. Retail locations represent the highest crime areas.

#### Strategic Operations

Officers are afforded a high degree of discretion in strategic operations, while also being encouraged to focus on hotspots within their beat rather than patrolling the entire area. All patrol teams receive action plans with day-of-week and time-of-day analyses to guide when and where crimes and crashes are most likely to occur in the hot spots. There is no time requirement for CATCH/DDACTS, but command staff estimate that officers will spend a third of their day conducting proactive enforcement when calls-for-service are minimal. All proactive activity is tracked. There is a major focus on thinking about traffic's effect on crime, as opposed to treating it as a completely separate category.

## Information Sharing and Outreach

Because DDACTS implementation did not involve a major rollout, the agency did not have press releases or other corresponding communications. Community outreach has not been a major part of the program.

## Monitoring, Evaluation, and Adjustments

Every commander is assigned two Part I crime types, and is responsible for those city-wide. CATCH meetings for the entire department are held monthly, and core staff look at hot spots every two weeks. At the end of a year of DDACTS, the data analyst plans to reevaluate the broader focus areas. The site anticipates that its core intersections will continue to be problem spots.

#### Outcomes

The department provided Urban with an example of a monthly presentation from a CATCH meeting. There are separate sections of the presentation for different crime types (burglary, vehicular burglary, motor vehicle thefts, and robbery), as well as traffic. Each segment of the presentation contains various analyses, such as monthly totals across multiple years, totals broken down by day-of-week and time-of-day, hot spot maps, and information on particular cases. The traffic presentation has separate maps for targeted enforcement, traffic stops, and collisions.

#### FUTURE IMPLEMENTATION PROCESS EVALUATION FEASIBILITY

Conducting an implementation and process evaluation in Citrus Heights would be highly productive. The site itself is a relatively new police department (beginning in 2006), and the agency has prioritized many of the DDACTS principles since its inception. On the one hand, this limits the applicability of lessons about the department's adoption of DDACTS to other sites. But on the other hand, it provides a unique opportunity to document the development of a data-focused police organization from the beginning, and how the introduction of DDACTS coincided and shaped that process.

Many of the people involved in DDACTS have been with the department since the department's inception, and everyone involved in the adoption of DDACTS is still at the department.

While this issue presents a minor challenge for conducting an outcome evaluation, the site explained there is a small possibility it may be expanding its service to a new jurisdiction in mid-2015, and that it would again implement its version of DDACTS in that new site. This would provide another useful and productive opportunity for an implementation/process evaluation, provided the site actually does expand its service to this new jurisdiction.

# Availability of Historical Implementation Documentation

Much of the historical implementation data would come from a combination of interviews with key staff and a review of the routinely updated data in the CATCH presentations.

#### Availability of Implementation Activities and Documentation Moving Forward

Implementation and process data could be collected through interviews, review of CATCH data, and periodic attendance at the CATCH meetings.

## FUTURE OUTCOME/IMPACT EVALUATION FEASIBILITY

The site is willing to participate in an evaluation. There is some question about the availability of a relevant comparison site that is receiving comparable levels of service, as many smaller jurisdictions receive policing services through the sheriff by default, and must create their own police departments for jurisdiction-specific police services. Depending on the availability of data from multiple sites, it may be possible to control for this effect statistically.

The data are available to conduct an outcome evaluation in the site.

There are other nearby jurisdictions that are in various stages of implementing DDACTS. It may be possible to conduct a multi-site evaluation that is localized in this region. This may be especially productive, as Citrus Heights is the most western site considered in this assessment. The participants in the group interview expressed that they perceive differences between East Coast policing jurisdictions and West Coast jurisdictions, where the latter have fewer officers per citizen, and so must manage to do much more with less. In their understanding, this made DDACTS a good fit for the conditions they face.

## Outcome Data Availability

Approximately 18 months prior to our site visit, the Citrus Heights Police Department had transitioned to a new records management system (RMS). The respondents told us the new system is more user-friendly on the front-end (where data are entered), as well as one the back-end (where data are used for analysis). They explained that they were able to include the data from their old system into the database of their new system, but there could be some challenges in comparing preand post-transition data.

The site explained that the data can be exported, but that it has never worked with an evaluator before, nor had it provided data to an outside organization.

## Activity/Productivity Data Availability

For a scientifically sound evaluation it is critical that changes in traffic enforcement be measured, since it is hypothesized that the increase in enforcement will yield the desired crime and traffic crash reductions. Therefore, assessing the variations in enforcement activity (i.e., the initiative "dosage") is required.

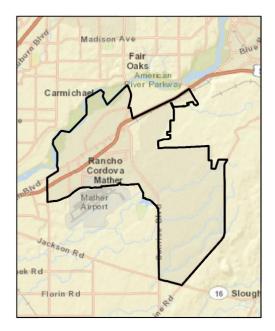
The site uses its own records system for recording traffic activity. This system is arranged to provide data to the Statewide Integrated Traffic Records System (SWITRS), which is a two-year-old collision database.

All officers are involved in the implementation of DDACTS. They collect records on all activity, which provide time and location data that can be used to determine if the activity is occurring in the DDACTS target area. The participants explained that they receive approximately 120–200 calls-for-service per day, and that approximately one-third of officer time is proactive.

Additionally, the respondents explained that officers are increasingly observing that police presence in the CATCH zone is the reason for their activities and the tickets they are writing.

#### Presence of a Comparison Site

Citrus Heights and Rancho Cordova are both cities in the Sacramento metropolitan area. Staff from the Citrus Heights Police Department conjectured that both jurisdictions have similar traffic patterns, as major thoroughfares feeding into Sacramento pass through both cities.



City	Population	Violent crime	Property crime	Violent Crime Rate Per thousand persons	Property Crime Rate Per Thousand Persons	Police Officers
Citrus Heights	85,112	329	3,117	3.865495	36.62233	85
Rancho Cordova	66,214	393	2,107	5.935301	31.82107	

Citrus Heights has its own police department, while Rancho Cordova is currently only receiving law enforcement through the sheriff's office, suggests that there may be a baseline difference in the nature of the service provided.

#### **EVALUABILITY ASSESSMENT FINDINGS**

A pre-post comparison group design would appear to be most appropriate for conducting an evaluation in Citrus Heights. There are some issues with the equivalency of comparison sites, both in terms of the rates of crime and the nature of the baseline differences in services provided. As Citrus Heights has its own police department, and the recommended comparison site receives services through the sheriff's office, it could be a challenge to isolate the effects of DDACTS activities from the differences caused by different levels of service.

Given this condition, as well as the fact that several nearby jurisdictions are also in various stages of implementing the DDACTS program, there may be an opportunity to collect data from several

DDACTS and non-DDACTS jurisdictions in the same location and use statistical controls to increase the equivalency of conditions of each site.

## ASSESSMENT SUMMARY AND RECOMMENDATIONS

A critical aspect of the evaluability of DDACTS in Citrus Heights will be the comparability of the comparison site(s). Further exploration of whether it is possible to conduct a multi-site evaluation that is localized to suburban Sacramento is therefore warranted. Several sites attended the training, and focusing on several sites in this same area could provide a greater evaluation of the DDACTS models across several different formulations, but within the same regional context. (A similar approach might be adopted in Mesa/Phoenix and in Thibodaux/Lafourche).

## EGG HARBOR TOWNSHIP, NEW JERSEY

Egg Harbor Township, NJ Police Department

October 10, 2013

#### SITE CHARACTERISTICS

Egg Harbor is a township in Atlantic County, New Jersey that occupies 66.59 square miles. In 2011 it had a population of 43,501 (FBI, 2012), with a 2010 population density of 650.51 persons per square mile. The 2010 population was 64.0 percent white, 9.6 percent black, 13.0 percent Latino, 11.8 percent Asian, and 3.3 percent two or more races. 2008–12 estimates indicate median household income was \$69,432, with 6.5 percent of the population living below the poverty line, and 28.5 percent persons 25 and older had a bachelor's degree or higher.

## Transit Profile

Due to its proximity to tourist attractions Atlantic City and Cape May, Egg Harbor has a sizeable amount of traffic. They are also at the outer edges of the Philadelphia commuting area. The department noted that there is only one way to get to Atlantic City that does not involve driving through Egg Harbor. The major thoroughfares traversing the area are the Atlantic City Expressway, which leads to Atlantic City and the Garden State Parkway going from north to south. Additionally, the department indicated that there is no public transportation in Egg Harbor and that the city is not pedestrian friendly, thus adding to the traffic.



Department staff explained that collisions have always been a major focus for the department, with an average of about 2,200 crashes per year.

## Crime Profile

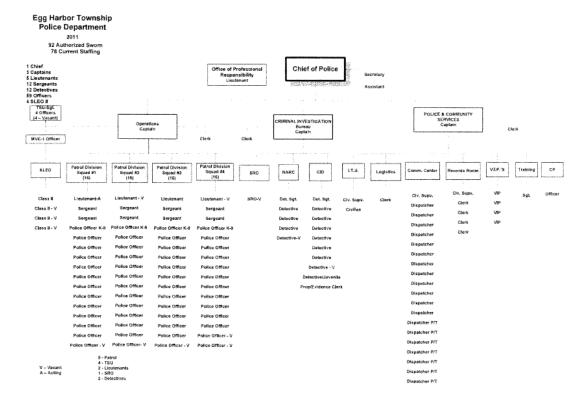
In comparison to other sites under study, Egg Harbor Township has a moderate rate of violent crime (2.3 per thousand persons, 99 total) and a low rate of property crime (19.6 per thousand persons, 854 total) (FBI, 2012).

## **Unique Site Characteristics**

The police department indicated that Egg Harbor experienced heavy foreclosures as a result of the 2008 economic crisis. The resulting decrease in tax revenue led to layoffs in the department. Just prior to these layoffs, Egg Harbor experienced a significant population boom. The combination of a growing population and a shrinking department left the Egg Harbor Police Department in a position where it needed to be able to do more with less.

#### DEPARTMENT CHARACTERISTICS AND KEY LOCAL PERSONNEL

The police department has 83 full-time officers (FBI, 2012) and an FY13 budget of \$9,328,021.9 The participants explained that the department had experienced several negative events in the late 2000s and that a significant organizational restructuring and wave of retirements primed the agency for change. The current chief took the position at the beginning of 2011 and is now a DDACTS SME. The department had previously relied on a sworn member of its department to serve as data analyst, but now has a dedicated civilian analyst, who took the position in August 2013.



<sup>9</sup> http://www.ehtgov.org/Budgets/2013%20Budget.pdf

The Egg Harbor Police Department was experiencing significant flux prior to DDACTS implementation. In the mid-2000's there was a significant civil law suit against the department, and the department also experienced a traumatic officer shooting. Additionally, many officers were laid off in the aftermath of the recession. All the related turnover resulted in "a complete restructuring of command staff" in 2011, as well as changes to hiring practices for new officers.

## Concurrent Law Enforcement Jurisdiction

The New Jersey State Highway Police have primary jurisdiction on the Atlantic City Expressway and Garden State Parkway. However, both of these thoroughfares have exits that feed directly into the Egg Harbor DDACTS zone. The Atlantic County Sheriff's Office can operate in Egg Harbor. The township also shares borders with 13 other nearby townships, producing an overlap in police activity. The police department in Egg Harbor is currently working on agreements with the other nearby departments to ensure that those agencies share data on any enforcement activity in Egg Harbor's DDACTS zone.

## Prior Use of Data and Other Related Programs/Initiatives

The department's use of data prior to DDACTS was limited. Department staff described their pre-DDACTS operations as primarily reactive policing. They would use a push-pin map to identify areas of frequent activity and then position patrol cars in those locations.

#### DDACTS IMPLEMENTATION SUMMARY

As explained in the body of the full Evaluability Assessment Report, DDACTS is more of an approach than a program. There is a set of common guiding principles that can manifest in different ways to suit the needs of a given jurisdiction. This section is not intended to be any sort of assessment of whether the jurisdiction has "correctly" or "faithfully" implemented DDACTS, but rather to provide a narrative description for the purposes of understanding the nature of implementation in this particular site and illustrate the construct available for study.

Egg Harbor lieutenants and sergeants attended a DDACTS workshop in the spring of 2011. At the time, the department was experiencing a shift in command staff. DDACTS operations began that October when it purchased services from crimereports.com. The following month, the jurisdiction experienced a wave of burglaries, and participants explained that the analysis allowed them to better understand and address the problem. According to the chief, this early success led others in the department to accept the value of data analysis.

The department later experienced several issues in DDACTS implementation, such as lingering resistance from some line officers and other issues that are described below. The department hired a full-time analyst in August 2013, with the goal of further narrowing the target ranges of times and locations for its DDACTS program.

## Partners and Stakeholder Participation

The Police Division in Hamilton Township is the sister agency of the Egg Harbor Police Department. Egg Harbor is working on data agreements with the various towns with which it shares a border. The department also works with the Atlantic County Prosecutor's Office on DUI checkpoints.

Line officers were initially resistant to the concept of DDACTS because they did not fully understand how it worked. As they have come to recognize that the program is more about public relations and community engagement than it is about writing tickets, their appreciation of the program has increased. Further, early success with the analysis of a burglary wave, as well as more recent efforts to provide officers with feedback on the results of their efforts, have also increased enthusiasm.

#### **Data Collection**

Current data collection relies heavily on crashes, shoplifting incidents, and robberies. These incidents have the most accurate times reported and determining timeframes for DDACTS duty is currently a priority for the program (discussed below). The department is also concerned about burglaries, but the temporal data are not as precise as with other offenses. The site's goal for DDACTS is not necessarily to focus on property crime enforcement, as the township has a reasonable amount of violent crime as well.

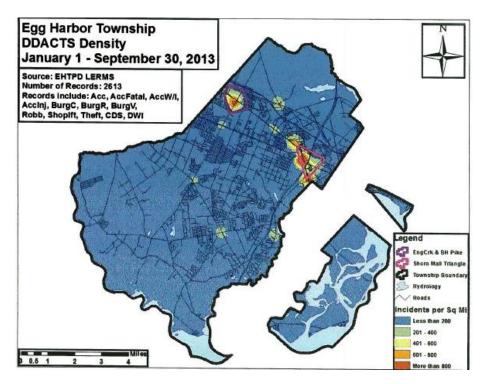
The department is currently investing in a new crash reporting program. The department's current crash data does not always specify crash location, such as if crashes occur on roadways or private property (for example, parking lots for shopping centers). New Jersey requires police to report any crash with \$500 of damage or more. Most crashes, including minor crashes, likely get reported to the police. Sometimes the department will get called for a crash that occurs on a ramp, even though it is not its jurisdiction.

## Data Analysis

The department has gone through various phases of target areas. Analysis for the most recent area was conducted for crimes occurring January 1 through September 30, 2013.



When DDACTS initially started, the department targeted robberies in the south of Egg Harbor (see the map above).



Since then, the target area has been what it refers to as "the triangle," and in September 2013 they expanded to English Creek and Black Horse Pike (see the map above). "The triangle" is a commercial center, as well as the area where cars exit from the major expressway and parkway. The department notes that it may be difficult for DDACTS to address chronic problems in this area because many of the crashes involve visitors off of the highway, as opposed to Egg Harbor citizens. The expanded area is more residential, but does have a shopping center. With its new analyst and improved data systems, Egg Harbor hopes to be able to further refine its target times and locations for DDACTS activities.

#### Strategic Operations

The department estimates that at any given time, there are 8–11 officers on duty in Egg Harbor. The goal is to have as many individuals on DDACTS duty as are available, even if there is a high volume of calls-for-service. The major goal of current data analysis efforts is to determine what times saturating the area will have the greatest effect. Staff expressed concern that sometimes a high number of crime incidents occur at night when there are few crashes. The department plans to hold monthly data meetings to solve the issue of timeframe.

To ensure that line officers can be available for DDACTS assignment, sergeants and lieutenants began responding to nuisance calls themselves to relieve pressure on their officers.

#### Information Sharing and Outreach

The department notes it has distributed several articles in the community regarding DDACTS, and that most feedback it has received has been positive. The agency primarily conducts outreach through social media such as Facebook and Twitter.

# Monitoring, Evaluation, and Adjustments

DDACTS participants expect the recent hiring of its full-time analyst will lead to more specific patrol operations and timeframes in the future. For example, the expanded DDACTS zone was identified through the use of higher-level data analysis.

Command staff plan to provide monthly DDACTS reports to officers so they can see the results of their activities. They expect that such results will help officers buy into the program.

#### Outcomes

The department provided a PowerPoint showing figures comparing statistics in the "triangle" target area in 2013 with the three-year average. Statistics measured include crashes broken down by type (total, fatal, injury), burglaries (commercial, residential, vehicle), DWIs, robberies, shoplifting incidents, and thefts. The document also has figures breaking down crimes by day of the week. Another PowerPoint compares DDACTS figures between 2012 and 2011, including patrols, summonses, arrests, hours, crashes (total, injury, fatal), and crimes broken down by type.

#### FUTURE IMPLEMENTATION PROCESS EVALUATION FEASIBILITY

Egg Harbor Township would make an informative case study in the implementation of DDACTS. As previously mentioned, several organizational and economic developments preceded its implementation, and these dramatically affected the organization. The participants explained that a new chief and a change in the hiring requirements, along with several other developments, made the department ripe for adopting a change. During early implementation, Egg Harbor experienced similar challenges found in other sites (e.g., low initial support among line officers, confusion about the design of the program), but the site has been able to overcome these challenges through the successes of its data analyses and the early adoption of model features intended to increase the level of input of line-level officers.

Additionally, the site has recently hired a full-time analyst who is working to further refine the agency's understanding of the DDACTS target area. As the analyst continues in this process, new implementation and process elements should emerge and contribute to the richness of an implementation/process evaluation.

Egg Harbor's willingness to participate, as well as its record keeping and institutional knowledge, suggest that this site would produce a very useful implementation/process evaluation.

# Availability of Historical Implementation Documentation

Initially, the description of the program was passed along by word of mouth, and different officers had varying interpretations of how the program was supposed to operate. Many of the officers and other participants in the department have a clear recollection of their rocky fledgling implementation efforts. In particular, one SME working in the site explained that he describes the story of Egg Harbor's troubled implementation when he attends DDACTS trainings.

# Availability of Implementation Activities and Documentation Moving Forward

Participants explained that they intend to continue documenting the information that they already collect and that they will begin to expand the level of detail of information collected in the future (e.g., additional crash codes for distinguishing the types of collisions).

## FUTURE OUTCOME/IMPACT EVALUATION FEASIBILITY

Agency representatives indicated that they would be willing to participate in an outcome evaluation. They also appear to have sufficient data available to support an assessment. There are some concerns surrounding comparability and data availability in neighboring sites. But with the large number of neighboring sites to choose from, this problem should not be insurmountable.

## Outcome Data Availability

All officer contacts are recorded in the department's CAD system and assigned a case number in the records management system (RMS). The data export process has been time consuming, but not complicated, and the new analyst is learning how to complete this process more efficiently. The agency is in the process of acquiring a new data system to record crashes, as the current system only has a few codes to distinguish between types of crashes. The new system will allow for a greater level of differentiation. The department is also tracking court outcomes on traffic tickets, dismissals, and the reasons for any dismissals.

Egg Harbor has not worked with a research organization in the past, but if an MOU process only covers basic data-sharing agreements, the chief could approve it. Otherwise it may require approval by the city council.

One potential challenge with outcome data is the number of jurisdictions bordering Egg Harbor. At the moment, data collected by the Atlantic County Sheriff's Office does not go directly to the Egg Harbor Police Department; it comes to them through the court records system. However, Egg Harbor is beginning conversations with the sheriff's department about data-sharing arrangements. They also expect to have a data-sharing agreement with the 13 surrounding townships in place by the first quarter of 2014.

## Activity/Productivity Data Availability

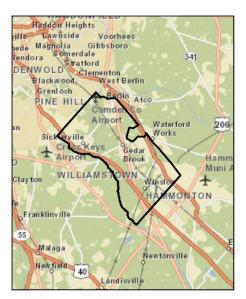
For a scientifically sound evaluation it is critical that changes in traffic enforcement be measured since it is hypothesized that the increase in enforcement will yield the desired crime and traffic crash reductions. Therefore assessing the variations in enforcement activity (i.e., the initiative "dosage") is required.

Egg Harbor collects special records that summarize officer DDACTS activity. The department keeps these records in both electronic and hard-copy forms. The department generates monthly statistics on officer performance from RMS and CAD data, and has comprehensive yearly evaluations. Some members of the command staff hold quarterly evaluations for officers.

Additionally, the department recently adopted a new traffic reporting system. In this new system it will be able to specify codes at a greater level of detail than it are currently able. It is particularly interested in being able to analyze different types of crashes to better identify patterns.

## Presence of a Comparison Site

Egg Harbor and Winslow are similarly-sized townships in southern New Jersey. Egg Harbor Police Department staff noted that the south side of Winslow may have higher crime rates than Egg Harbor, but that the jurisdictions were otherwise similar.



City	Population	Violent crime	Property crime	Violent Crime Rate Per thousand persons	Property Crime Rate Per Thousand Persons	Police Officers
Egg Harbor Township	43,501	99	854	2.27581	19.63173	83
Winslow Township	39,660	122	704	3.076147	17.75088	71

The rate of property crime is fairly similar in the two sites. The UCR data show that violent crime rates are slightly different, though not incomparable. Given the close proximity to several other jurisdictions, it may be possible to account for variations between jurisdictions with statistical controls. This approach could further strengthen the analysis of the program's impact in Egg Harbor by providing controls for minor differences between sites. Egg Harbor explained that it expects to have a data-sharing agreement in place with the neighboring towns sometime during the first quarter of 2014, which should make it easier for an evaluator to collect the necessary data from a comparison site.

#### **EVALUABILITY ASSESSMENT FINDINGS**

A pre-post comparison group design would be appropriate for conducting an evaluation in Egg Harbor. It may be advantageous to include data from multiple comparison sites and employ statistical controls to mitigate between-site differences. The site explained that it expects to have data-sharing agreements in place with neighboring jurisdictions in early 2014, which should facilitate this data collection process, provided that the other jurisdictions are willing to share their data as part of an evaluation effort. Additionally, as the site has recently hired a full-time analyst, there is internal infrastructure support for data collection.

#### ASSESSMENT SUMMARY AND RECOMMENDATIONS

Egg Harbor Township represents a viable and productive candidate for both an implementation/process evaluation as well as an outcome evaluation. Based on conversations with the site and a review of the materials it provided, it is recommended that the site be included in an evaluation. However, participation should still consider neighboring jurisdictions' willingness to share their data with researchers for the purpose of an evaluation.

# **EVERETT, MASSACHUSETTS**

Everett, MA Police Department

September 10, 2013

#### SITE CHARACTERISTICS

Everett is a city roughly five miles north of downtown Boston, occupying 3.43 square miles. It is located in Middlesex County and surrounded by other Boston metropolitan area cities, such as Medford. The city's population was 42,476 in 2012 (FBI, 2012), and it is very densely populated, with 12,165.5 persons per square mile in 2010. The 2010 population was 53.6 percent white, 14.3 percent black, 21.1 percent Latino, 4.8 percent Asian, and 3.8 percent two or more races. The department indicated that Everett is an "international city" with a large immigrant community. 2008–12 estimates indicate median household income was \$49,702, with 12.8 percent of the population living below the poverty line, and 15.8 percent of persons 25 and older had a bachelor's degree or higher.

#### Transit Profile

Several highways run through or nearby Everett: Massachusetts Route 16 traverses the city from east to west and Massachusetts Route 99 goes through the city from north to south and leads to downtown Boston. US Route 1 also runs adjacent to the city from north to south and leads into downtown Boston. Activity in and out of Boston can affect traffic patterns in Everett. In particular, department representatives indicated that when there is construction on key bridges into Boston, more commuters will drive through Everett. The Massachusetts Bay Transportation Authority has bus routes going through Everett.



#### Crime Profile

In comparison to other sites, Everett has a moderate rate of violent crime (4.0 per thousand persons, 170 total) and property crime (23.2 per thousand persons, 986 total) (FBI, 2012).

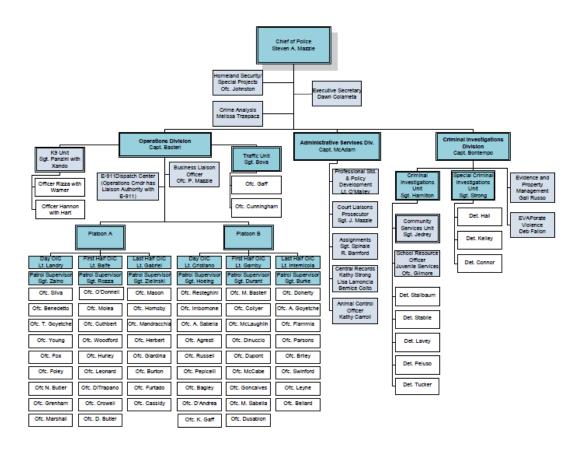
# **Unique Site Characteristics**

Everett has a very high immigrant population. Many of these individuals have a questionable citizenship status, which affects their interactions with the police. Also due to proximity to Boston, Everett is more urban than most of the sites under study. It is possible that a casino will be established in Everett in the next three years, which is expected to affect crime and traffic patterns. Everett also has an industrial waterfront.

#### DEPARTMENT CHARACTERISTICS AND KEY LOCAL PERSONNEL

The police department has 94 full time officers (FBI, 2012) and a FY2013 budget of \$7,721,595.45 (City of Everett, 2013). UI met with the chief, one captain, the full-time data analyst, and one part-time data analyst. The chief is a DDACTS SME.

<sup>10</sup> http://www.ci.everett.ma.us/Everett\_files/budget/index.htm



Because Everett is a satellite city of Boston, law enforcement activity is conducted in the jurisdiction by a variety of different agencies, as described in further detail below.

### Concurrent Law Enforcement Jurisdiction

**The Massachusetts Bay Transportation Authority (MBTA) Transit Police Department –** The MBTA owns a transit yard in Everett, and its bus routes also go through Everett. Incidents occurring on buses or in the transit yard fall under the jurisdiction of the MBTA Transit Police Department, but the Everett Police Department may be a first responder for such incidents.

**Massachusetts State Police** – Everett's biggest interaction is with the Massachusetts State Police. State police may do some traffic stops in Everett, especially because Route 16 is part of State Police jurisdiction. Such stops would not show up in Everett's system. Everett also has a sobriety checkpoint program in partnership with State Police.

**Medford Police Department and Malden Police Department -** Everett has MOUs with the Medford and Malden Police Departments regarding investigations, as Medford and Malden are both directly west of Everett.

**Middlesex County District Attorney** – The district attorney's office is responsible for investigating homicides that occur in Everett.

# Prior Use of Data and Other Related Programs/Initiatives

At the time of the visit, the department's data analyst had been there for five years. Prior to that, the agency engaged in very little data analysis.

#### DDACTS IMPLEMENTATION SUMMARY

As explained in the body of the full Evaluability Assessment Report, DDACTS is more of an approach than a program. There is a set of common guiding principles that can manifest in different ways to suit the needs of a given jurisdiction. This section is not intended to be any sort of assessment of whether the jurisdiction has "correctly" or "faithfully" implemented DDACTS, but rather to provide a narrative description for the purposes of understanding the nature of implementation in this particular site and illustrate the construct available for study.

Representatives from Everett attended a DDACTS training in July 2011. They spent the next 12 months cleaning data, conducting analyses, preparing training materials, and delivering training to officers, and began program implementation in July 2012. At the time of the site visit, they had recently completed a year one summary of their DDACTS activities. From the outset, the chief sought to give the brass ownership of the program in order to get buy-in. There was initial skepticism among the line officers, but once they realized that DDACTS was not going to be a passing fad they began to accept it as a legitimate department priority. Now, buy-in is characterized by the informal, friendly competition that routinely ensues among DDACTS officers who aim to outperform those assigned to other shifts.

The first round of implementation can best be characterized as general, particularly in the area of analysis. Agency representatives explained that their expectations for the first round were low, and that they wanted to see if the program was a useful tool. Everett is currently planning to expand DDACTS to a second target area. This second round of DDACTS will include a more finely tuned analysis that will account for time and place of co-occurring patterns of traffic activity and specific crime types.

### Partners and Stakeholder Participation

Everett City Hall is a stakeholder in the DDACTS operations, with the police department reporting to city hall on DDACTS outcomes at regular intervals. Everett is partners with a variety of other police agencies. As previously mentioned, the department has MOUs with Medford and Malden, and works frequently with Massachusetts State Police on DUI checkpoints. Coinciding with DDACTS, the agency has recently increased the number of checkpoints.

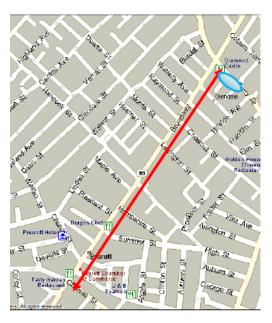
#### **Data Collection**

In the first round of DDACTS, Everett chose to focus on all Part I crimes. It plans to choose a second DDACTS zone focusing on motor vehicle thefts and residential burglaries in the near future.

Traffic data are separated into crashes that occur alone and crashes that occur with other moving violations. For the most part, it is difficult to determine the number of unreported incidents. It is likely that undocumented immigrants do not call the police for minor crashes. DDACTS respondents expressed varying opinions on reporting accuracy, with some believing that the police are called in most cases. For example, the department often receives calls for minor hit-and-runs.

## Data Analysis

The first DDACTS zone was determined based on three separate analyses (three-year, year-by-year, area-specific trends).



The target area consists of Everett Square and Glendale Square, the city's two primary downtown areas. Both are located on Broadway Street and contain various businesses, including a shopping center. Glendale Square (indicated by the blue circle above) was added to the original target area in April 2013.

### **Strategic Operations**

Officers are expected to spend a half-hour per day in the DDACTS zone. During these times they are free from responding to calls-for-service. There are no quotas for particular metrics such as tickets or contacts, as long as they spend the full time allotted patrolling the DDACTS zone. The leadership describes the department's general strategy as "walk-and-talk," meaning that their goal is for officers to make their presence known in as many stores and restaurants as possible during DDACTS duty.

### Information Sharing and Outreach

The department has not made it a point to formally explain DDACTS to local store and business owners, but it does explain that the officers' presence is part of general operations. This ensures owners are comfortable with the police presence and do not think they are being targeted.

#### 65 - Everett, Massachusetts

## Monitoring, Evaluation, and Adjustments

As already mentioned, the second DDACTS zone will be determined based on motor vehicle thefts and house thefts. The department also plans to include more data-based specifications as to how officers spend their time during DDACTS shifts.

#### Outcomes

An annual DDACTS report to city hall provided to Urban by the Everett Police Department includes a variety of output and outcome measures. Outputs in the DDACTS zones, such as patrols, citations, arrests, time, tickets, and walks are compared between the first six months and the second six months of operations. Regarding outcomes, crashes, robberies, and Part I crimes are compared for DDACTS and non-DDACTs years for both versions of the target zone (i.e., with and without the Glendale Square extension), with percent changes calculated.

### FUTURE IMPLEMENTATION PROCESS EVALUATION FEASIBILITY

The site is planning to begin a second round of DDACTS in October, although there was some sense that this start date might slip to other organizational demands. In this second round, the agency will be conducting new trainings, which leadership indicated they would allow a researcher to observe. Notes are not taken during these trainings, but the training materials are available for review.

# Availability of Historical Implementation Documentation

The stakeholders participating in the site visit group interview have been involved in DDACTS since its inception in Everett and have a significant knowledge of its implementation and processes. Interviews with these individuals would be a primary source of historical information on the implementation and processes of DDACTS in Everett.

### Availability of Implementation Activities and Documentation Moving Forward

The department has presentations on the results of officer activities completed by each shift. Moving forward, a combination of review of these records, as well as one-on-one interviews, should provide a primary source of implementation and process data moving forward.

### FUTURE OUTCOME/IMPACT EVALUATION FEASIBILITY

The department is willing to participate in an evaluation, and it has much of the data that would be required for one. However, there is some question about the validity of the collision data, because there are many collisions that occur within the jurisdiction that are unable to be included in the department's own analysis, and thus could not be provided to an evaluator through the department. Participation in an evaluation would need to be dependent on access to more complete collision data than is currently available through the police department.

Further, there is some indication that data are being used to confirm intuition about the location of a target area, rather than to identify the area independent of any assumptions or contexts that exist within the department.

## Outcome Data Availability

The Everett Police Department uses a data system developed by a local company. Everett was the first to use this RMS for analysis purposes, and they have a developed a good working relationship with the RMS company. The participants of the group interview explained that this company had wanted to facilitate analysis, so it would be happy to work toward providing access to the data for that purpose. Regardless, for analyses conducted outside the RMS, the department can export data in any format.

The department's analyst estimated that as many as 50 percent of crashes may not be reported to the Everett police, which presents a significant threat to the measurement validity of the department's collision data.

## Activity/Productivity Data Availability

For a scientifically sound evaluation it is critical that changes in traffic enforcement be measured since it is hypothesized that the increase in enforcement will yield the desired crime and traffic crash reductions. Therefore assessing the variations in enforcement activity (i.e., initiative "dosage") is required.

Protocol for reporting incidents during DDACTS time is no different from normal routine. Live feeds of dispatch go into the RMS. Arrest forms have a space to enter a DDACTS number, and through this the arrest report will be electronically linked to the DDACTS report. Department staff can cross-check dispatch reports with written reports.

DDACTS reports track the amount of time officers spend on DDACTS duty. These reports are linked to any outcome activity that may occur during an officer's DDACTS shift.

Additionally, it appears possible that a large proportion of traffic activity is not captured by Everett's records system. Either due to non-reporting or detection by another system, the department estimated that as much as 50 percent of traffic accidents might not get reported.

# Presence of a Comparison Site

There was clear consensus among the interviewees that Malden provided the best comparison site to Everett. Everett respondents believe their jurisdiction is comparable in size, crime types, and traffic flow to that of Malden, which is located directly north of Everett. The Everett chief is interested in convincing Malden to implement DDACTS. Each of the other nearby cities would have issues as a comparison site.



City	Population	Violent crime	Property crime	Violent Crime Rate Per thousand persons	Property Crime Rate Per Thousand Persons	Police Officers
Everett	42,476	170	986	4.00226	23.21311	94
Malden	60,605	280	1,203	4.620081	19.84985	103

The 2012 UCR data (provided in the table above) support the expectation that Malden has comparable crime rates to Everett, even though the population is approximately 50 percent larger.

### **EVALUABILITY ASSESSMENT FINDINGS**

Everett is willing to participate in a DDACTS evaluation and share data. Its implementation of the program is general in the sense that the first zone was determined through an analysis of all Part I crimes, and there was little specification regarding officers' goals during DDACTS shifts. These aspects might be specified further during a second wave, which the site hopes to implement before the end of the year. Problems with the first wave of analysis might make it difficult to use the first wave for an evaluation, although it is also indicative of the wide range of interpretation allowed by the DDACTS model. Everett has a feasible comparison site in Malden, although it is possible that Malden might also implement the program.

The site made the recommendation that any evaluation include resources for the crime analyst's time, as it will require a substantial amount of time to work with the researchers to provide the necessary data and other information.

#### ASSESSMENT SUMMARY AND RECOMMENDATIONS

Depending on the nature of the second iteration of DDACTS, as well as the timing of Malden's adoption of DDACTS, Everett is a potentially promising site for evaluation. The chief is willing to participate in a DDACTS evaluation, and although Everett has a fairly low number of traffic incidents, it is not so low that the site should be excluded from an evaluation. However, further information about future developments will be required before the site can be recommended for inclusion in an evaluation.

It is therefore recommended that Everett be reassessed as an evaluation site closer to the time of the evaluation to determine whether and how relevant evaluability criteria have developed. Based on the information gathered during the evaluability assessment site visit, it is not clear that all the necessary conditions for an evaluation will be present at the time of a potential future evaluation.

## FARGO, NORTH DAKOTA

## Fargo, ND Police Department

November 11, 2013

### SITE CHARACTERISTICS

Fargo is the largest city in North Dakota, with a 2012 population of 109,813 (FBI, 2012). The city covers 48.82 square miles and had a 2010 population density of 2,162.0 persons per square mile. It is one of four jurisdictions that make up the ND-MN Metropolitan Statistical Area, the others being West Fargo, North Dakota as well as Moorhead, Minnesota and Dilworth, Minnesota. Fargo's population in 2010 was 89.0 percent white, 2.7 percent black, 2.2 percent Latino, 3.0 percent Asian, and 2.1 percent two or more races. 2008–12 estimates indicate median household income was \$44,304, with 16.0 percent of the population living below the poverty line, and 39.0 percent of persons 25 and older had a bachelor's degree or higher.

#### Transit Profile

Interstate 94 and US-10 run through Fargo from east to west, and also connect the city to surrounding West Fargo, Moorhead, and Dilworth. Interstate 29 also runs through the city from north to south, and US-75 runs from north to south just to the east of the city. The department indicated that Fargo has more traffic than its adjacent communities. The site reported that it is approaching a sixth straight year in collision reductions. Typically, it has 4,000–4,500 collisions per year, with three to five fatalities. At the time of the site visit, the site had had 3,200 crashes during the year, with no fatalities. Agency representatives also reported that the site has had 900–1,000 impaired driving incidents, and that it is very aggressive about this issue.



#### Crime Profile

Fargo had moderate rates of crime in 2012 compared to the other sites under study, both for violent crime (3.6 per thousand persons, 394 total) and property crime (25.8 per thousand persons, 2,835 total) (FBI, 2012).

### **Unique Site Characteristics**

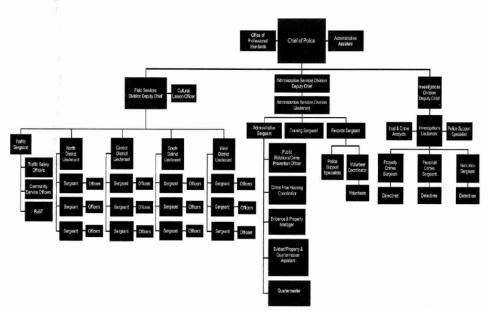
As the biggest city in a rural state, Fargo more closely resembles some of the suburban DDACTS sites than the urban ones in the makeup of its downtown area. It is home to North Dakota State University, a midsize university with about 14,500 students. Fargo and its immediate surrounding areas make up a metropolitan statistical area, all of which share a records management system (RMS). The RMS is not restricted to police agencies, as the jails and courthouses have access as well.

#### DEPARTMENT CHARACTERISTICS AND KEY LOCAL PERSONNEL

The department had 141 full-time officers in 2012 (FBI, 2012), and a FY2012 budget of \$7,492,710.11 Department representatives participating in interviews included the chief of police, deputy chief of the Field Services Division, one analyst, one patrol lieutenant, and one traffic sergeant. These, as well as most command staff, are essential to COMPSTAT and DDACTS operations, and line officers will likely take a larger role in the near future. The chief is a DDACTS SME.

<sup>&</sup>lt;sup>11</sup> <a href="http://www.ci.fargo.nd.us/attachments/af87f214-5e4e-47f9-ab3b-10154a648949/2012%20City%20of%20Fargo,%20North%20Dakota%20CAFR%20-%20FINAL.pdf">http://www.ci.fargo.nd.us/attachments/af87f214-5e4e-47f9-ab3b-10154a648949/2012%20City%20of%20Fargo,%20North%20Dakota%20CAFR%20-%20FINAL.pdf</a>

#### FARGO POLICE DEPARTMENT ORGANIZATIONAL CHART October 2013



The Field Services Division has divided the jurisdiction into four districts, each of which is further divided into three beats. This division is important for strategic operations, as discussed below.

## Concurrent Law Enforcement Jurisdiction

The Fargo Police Department may work collaboratively with neighboring departments from West Fargo, Moorhead, and Dilworth in some instances. The Cass County Sheriff and North Dakota State Highway Patrol can patrol in Fargo, and the university police at North Dakota State University have primary jurisdiction on campus. Fargo staff estimate that other departments conduct very little proactive activity in Fargo.

### Prior Use of Data and Other Related Programs/Initiatives

Fargo has been engaged in COMPSTAT for 15 years, and was involved in community policing prior to that. As described further below, COMPSTAT is still the primary program driving the department's operations, and DDACTS principles have been incorporated into the pre-existing program.

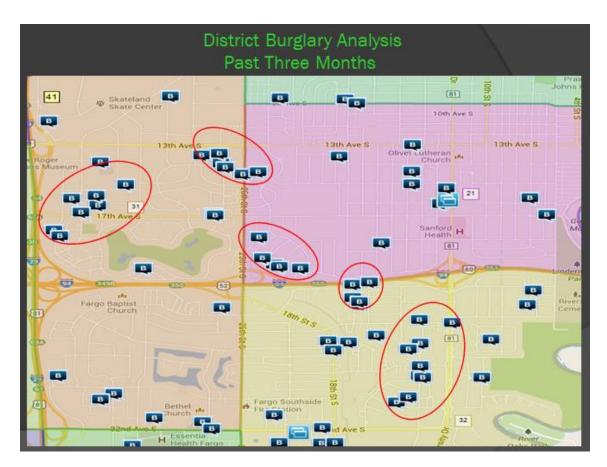
#### DDACTS IMPLEMENTATION SUMMARY

As explained in the body of the full Evaluability Assessment Report, DDACTS is more of an approach than a program. There are a set of common guiding principles that can manifest in different ways to suit the needs of a given jurisdiction. This section is not intended to be any sort of assessment of whether the jurisdiction has "correctly" or "faithfully" implemented DDACTS, but rather to provide a narrative description for the purposes of understanding the nature of implementation in this particular site, and to illustrate the construct available for study.

Fargo attended a DDACTS workshop in 2011 and at that point began integrating aspects of the DDACTS model into its COMPSTAT program. The department holds monthly COMPSTAT meetings in which lieutenants and sergeants present on trends occurring in their jurisdictions, with an emphasis on identifying specific times for occurrences. While the COMPSTAT program began by looking primarily at crime, DDACTS principles elevated the importance of traffic data for both crash and crime reduction. In 2012, the department improved its data-driven approach by purchasing Command Central software, and in the beginning of 2013, hired a professional analyst. One future goal is to incorporate line officers more fully into the COMPSTAT process.

Partners and Stakeholder Participation
There was no discussion of outside stakeholders related to the COMPSTAT or DDACTS programs.
Data Collection
The department focuses on property crimes, primarily thefts, burglaries, and vehicle break-ins. Crashes and DUIs are also important under the DDACTS model.
Data Analysis

The department aims to conduct analysis on a near-instantaneous basis. It would like crime and crash trends to be identified within 24 hours. COMPSTAT meetings are held once a month, at which staff discuss analysis at length. Traffic stops are typically recorded at intersections, although addresses may be given in some instances. The analyst then assigns X, Y coordinates. Specific cases or incidents will have an address.



There is no target area based on long-term analysis. Command staff may identify trends in their jurisdiction and ask the analyst for further information on those trends. Examples of analyses may include incident maps, density maps, or burglary trends. Analysis, therefore, is intended to identify hotspots rather than a target area.

## **Strategic Operations**

Commanders are responsible for developing their own strategic operations, although the process is guided by analyses they request. Lieutenants are responsible for a specific district, and sergeants a specific beat within that district. Command staff are responsible for their areas at all hours, and determine what times it is most appropriate to direct resources there. In other words, the department runs on a location-based model rather than shift-based. There are no hard requirements for the amount of time officers should spend in a target zone, but commanders will often saturate crime and traffic hotspots based on the times shown by data analysis. Command staff instruct officers to be highly visible.

The participants explained that they are not taking the structured approach adopted by other sites, where pre-defined and semi-persistent target areas are identified. Instead, they are taking a more fluid approach, in which data and patterns are reviewed on an ongoing basis.

### Information Sharing and Outreach

The department has made some presentations on COMPSTAT at community events to explain its operations and how citizens can help. The site is interested in finding ways for the public to view crime patterns online in real-time. It also utilizes a community notification system for problems such as burglaries. The traffic division has worked with the city government to fix engineering problems that are causing crashes.

### Monitoring, Evaluation, and Adjustments

Adopting COMPSTAT and DDACTS has been an evolutionary process. As there is no target zone, adjustments do not take place in the same manner as other sites, which evaluate new zones on a regular basis. Fargo has undergone several major changes, such as changing COMPSTAT meetings from bi-weekly to monthly, or revamping its RMS in 2010. As previously mentioned, adoption of DDACTS elevated the importance of traffic within the department. The department also hired a full-time data analyst in 2013.

#### Outcomes

The department provided an example of a district's monthly COMPSTAT report. The report has tables for each beat with crime and crash statistics, comparing the reporting month to the prior month and the analogous month from the previous year. The statistics are also compared to year-to-date totals. Outcomes tracked include aggravated assaults, burglaries, thefts, vehicle thefts, unlawful vehicle entries, DUIs, and traffic accidents, among others. Additionally, the report contains maps showing trends for various crime types.

#### FUTURE IMPLEMENTATION PROCESS EVALUATION FEASIBILITY

Fargo is a very advanced site in terms of its operationalization of DDACTS principles. It has the advantage of being a beta-testing site for crimereports.com's Command Central, which the department has clearly taken full advantage of in order to incorporate data into the day-to-day operations of their entire department. Consequently, Fargo is running what could be considered a more sophisticated version of DDACTS than is being applied in most other sites. As a prime example of this, Fargo does not have traditional target areas. Instead they seem to review trends on a daily basis. While there are aspects of the jurisdiction that could make an outcome evaluation difficult (discussed below), the advanced status of this site suggests that an implementation/process evaluation could provide useful information on how sites could develop in the future.

## Availability of Historical Implementation Documentation

Participants in the group interview were able to provide a clear and comprehensive narrative on the history of their adoption of data-driven programming in their operations. They were able to describe in detail their efforts with COMPSTAT and the connections they made to DDACTS. They were also able to describe the gradual process of their organization's shift to a more place-based approach to policing, and the various structural changes that occurred in their department as part of this process. These individuals are a rich source of data for a historical account of the implementation and processes of DDACTS in Fargo. A majority of the data for such an evaluation would come directly from interviews with these individuals, and could be supplemented through review of annual reports, historical RMS records, and training materials.

## Availability of Implementation Activities and Documentation Moving Forward

In addition to ongoing interviews and observations, as well as review of reported data, it would be productive to observe several of the monthly COMPSTAT meetings to get a sense of developments in the jurisdiction. Similarly, it would also be productive to observe the beginning of each shift, and how officers use the Command Central module to gather information about prior activities in their geographic areas of responsibility and operationalize that information into their patrol activities.

## FUTURE OUTCOME/IMPACT EVALUATION FEASIBILITY

A variety of issues would make it challenging to perform an outcome evaluation of DDACTS in Fargo. Department staff suggest that baseline levels of crime in Fargo are low, which would make it difficult to discern the effects of a DDACTS program (although it is worth noting that, according to UCR data, Fargo appears to have a moderate crime rate compared to other sites under study). The jurisdiction reportedly also does not have high areas of crash/crime overlay, which is essential to the DDACTS model. Furthermore, construct validity may pose a problem because Fargo's implementation of DDACTS is very unique compared to other sites under study, over and above the typical variation between DDACTS sites. The site is willing to participate in an evaluation, and it has a solid data infrastructure in place, along with a professional crime analyst on staff. However, the above barriers serve as significant challenges to an evaluation.

## Outcome Data Availability

The site makes extensive use of crimereports.com's Command Central module. This program mines the department's RMS data nightly to produce timely representations of activity and analyses. It is important to note that crimereports.com is using Fargo as a beta-testing site, so it is receiving a level of technical service that is likely above and beyond what the company typically makes available to other jurisdictions.

In addition to the analysis used by officers through the Command Central module, the department's crime analyst completes more sophisticated analyses and predictions and shares those with the officers as he develops them, rather than waiting for the monthly COMPSTAT meeting to share his findings.

The department has independent data systems for crime and traffic activity, though there is overlap between the systems because officer-initiated activities and dispatched calls are both recorded in the CAD system. Detailed records are entered into the department's traffic data system, and then portions of those reports, along with records from non-traffic-related officer activity, are loaded into the RMS. The data crimereports.com uses are downloaded nightly from the department's CAD system.

The site began using a new RMS in March of 2011. The participants explained that the transition from their old, internally-developed system to the new RMS was challenging. They are pleased with their new system, which integrates data from their jail management system, the fire department, and two other jurisdictions (including one that is across state lines).

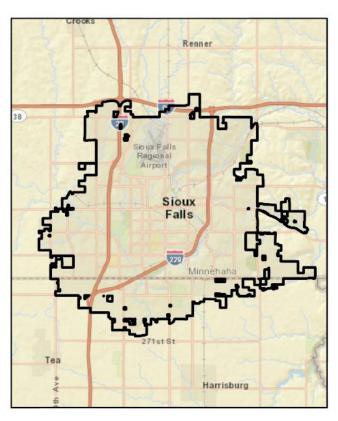
# Activity/Productivity Data Availability

For a scientifically sound evaluation it is critical that changes in traffic enforcement be measured since it is hypothesized that the increase in enforcement will yield the desired crime and traffic crash reductions. Therefore assessing the variations in enforcement activity (i.e., initiative "dosage") is required.

As previously mentioned, Fargo is not engaged in what might be considered a common model of DDACTS. Rather than defining specific target areas, it is reviewing patterns and trends on a day-to-day basis and responding accordingly. Because all officers are applying the DDACTS principles through the entire city, one could interpret any officer's activity as DDACTS activity. Therefore, the records contained in the CAD, RMS, and traffic database systems are effectively monitoring officer activity. Additionally, the department has in-car GPS tracking capability. From the Command Central module, the participants were able to show us the location and movement of every on-duty patrol car in the city, in real-time. They told us that they used data to identify areas they expect officers to patrol, and then monitor to see if officers are actually going to those areas.

# Presence of a Comparison Site

Fargo, North Dakota and Sioux Falls, South Dakota are both the biggest cities in their respective and primarily rural states. It is expected that they therefore share a variety of common characteristics.



City	Population	Violent crime	Property crime	Crime Rate Per	Thousand	Police Officers
				persons	Persons	

Fargo	109,813	394	2,835	3.587918	25.81662	141	
Sioux	158,354	631	5,041	3.984743	31.83374	229	
Falls							

The participants explained that Sioux Falls would be a reasonable comparison site, though they believe Sioux Falls is currently engaged in COMPSTAT. Given that the formulation of DDACTS in Fargo is closely associated with COMPSTAT, Sioux Falls' potential use of COMPSTAT raises questions of construct validity and the nature of the type of intervention that would be assessed. It is not clear that Fargo's hybrid of DDACTS and COMPSTAT varies enough from the typical COMPSTAT model that another COMPSTAT site could serve as a comparison. A comparison site that has not implemented DDACTS or COMPSTAT would likely be more appropriate. This issue of construct validity raises another barrier to recommending Fargo as an evaluation site.

However, Fargo staff also suggested the following jurisdictions as alternative comparison sites: Duluth, Minnesota; Billings, Montana; Rochester, Minnesota; and, Arvada, Colorado.

### **EVALUABILITY ASSESSMENT FINDINGS**

Given the nature of the DDACTS program currently in operation in Fargo, it is not possible to determine an evaluation design that could sufficiently isolate the site's DDACTS activities from the rest of its operations. It would be necessary to find a comparison site with sufficiently similar crime and traffic patterns, as well as a form of programming that is highly similar to the operations used in Fargo except for any specific elements considered unique to DDACTS. However, it is not possible to distinguish DDACTS-specific activities from the rest of the operations currently underway in the site. Aside from this issue of construct validity, Fargo has an impressive data infrastructure and would otherwise provide a strong site for evaluation.

### ASSESSMENT SUMMARY AND RECOMMENDATIONS

Given the nature of DDACTS as implemented in Fargo, North Dakota, it is unlikely an evaluation could be designed that could effectively isolate the DDACTS-specific outcomes from the outcomes produced or influenced by the other program activities currently underway in the site. While it may be possible to conduct an assessment of the DDACTS components through an observational design with careful identification of comparison sites, this provides a much less rigorous approach, and one that would require prohibitively challenging determinations of which actions are DDACTS and which are not. As such, the recommendation concerning inclusion of Fargo in an evaluation of DDACTS is pending an assessment of the specific construct to be evaluated. If it is a general application of DDACTS, then it is not recommended that Fargo be included in an evaluation. If DDACTS is conceptualized as a set of specific program components, then it could be possible to isolate Fargo's activities in a manner that allows for identification of DDACTS-specific activities and those that can be attributed to other features of the department's operations.

## GILBERT, ARIZONA

### Gilbert, AZ Police Department

August 5, 2013

### SITE CHARACTERISTICS

Gilbert is a suburban town in the southeast portion of the Phoenix Metropolitan Area, occupying 67.96 square miles. Like other Metro Phoenix jurisdictions, Gilbert is among of the fastest growing municipalities in the country, with a 2013 population estimate of 229,972 up from 208,414 in 2010. Gilbert's 2010 population density was 3,067.2 persons per square mile. While the city used to be agricultural, the current economy is largely commercial. The population was 72.9 percent white, 3.4 percent black, 14.9 percent Latino, 5.8 percent Asian and 3.5 percent two or more races. 2008–12 estimates indicate median household income was \$80,121, with 6.4 percent of the population living below the poverty line, and 38.6 percent of persons 25 and older have a bachelor's degree or higher.

#### Transit Profile

There are several major thoroughfares passing through Gilbert. Arizona 87 runs north to south slightly west of the town, and US Route 60 runs east to west slightly to the north. Arizona 202 also runs east to west through the center of the town. All of these roads feed into other highways that lead into the city of Phoenix. Many Phoenix commuters pass through or reside in Gilbert.



### Crime Profile

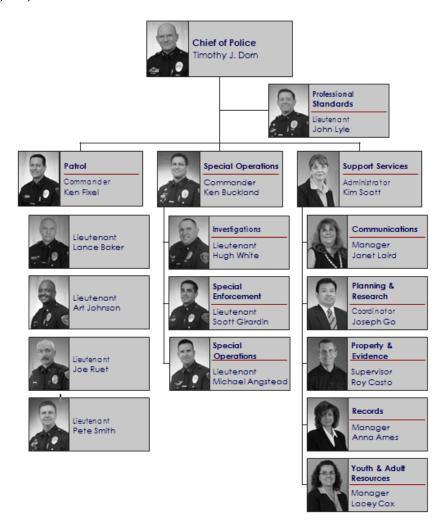
Out of the sites under study, Gilbert has the second lowest rates of violent crime (1.0 per thousand persons, 205 total) and property crime (15.8 per thousand persons, 3,386 total) (FBI, 2012).

# **Unique Site Characteristics**

As discussed in more detail below, there is a very low ratio of officers to citizens in Gilbert. Additionally, many officers from other jurisdictions reside in Gilbert. However, the department estimates this has a very limited impact on law and traffic enforcement in its jurisdiction. Gilbert is also the second most affluent community in the Phoenix Metropolitan Area, with low crime rates. Staff stated that there are only four to six homicides per year.

### DEPARTMENT CHARACTERISTICS AND KEY LOCAL PERSONNEL

The police department had 222 full time officers in 2012 (FBI, 2012), and its operating budget for FY2013 is \$32,414,421.  $^{12}$ 



 $<sup>^{12}\,\</sup>underline{\text{http://www.gilbertaz.gov/budget/pdf/2012-13\%20BUDGET\%20DOC\%20-\%20WEBfinal.pdf}}$ 

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The core DDACTS team consists of one commander, one lieutenant, one intelligence sergeant, and a crime analyst. Each of these individuals was present and participated in the group interview during the site visit to Gilbert. Arizona.

Gilbert is a very flat organization. Staffing is 1.1 officer/1000 citizens, which is a much lower ratio than other departments in nearby areas or the rest of the country. For this reason, it has to rely on data as a force multiplier to increase efficiency. There are three divisions: (1) Administration, (2) Patrol, and (3) Special Operations. The department also has Crime Suppression Officers (CSOs), who address various specialized problems such as graffiti or gangs. These officers have been incorporated into the DDACTS program.

### Concurrent Law Enforcement Jurisdiction

**Arizona State Highway Patrol** - The Arizona State Highway Patrol conducts very little activity in Gilbert. It will investigate crashes that occur on the state freeway running through Gilbert, but not crimes.

**Maricopa County Sheriff** - The Maricopa County Sheriff patrols unincorporated areas in the county, and may sometimes ask for Gilbert PD support in these areas. They typically do not police within Gilbert's jurisdiction.

**Other Arizona Police** - Many cops from different jurisdictions live in Gilbert, and they may make stops in Gilbert because Arizona officers are authorized to make stops anywhere in the state. Such stops would go unreported in Gilbert's data, but Gilbert staff expect that this is a very small number of stops that would not significantly affect the data.

## Prior Use of Data and Other Related Programs/Initiatives

Prior to DDACTS, Gilbert hired a crime analyst and also worked with a National Guard crime analyst. The department implemented COMPSTAT and reviewed data on a monthly cycle. Such analyses focused on short-term problems or sprees, rather than considering long-term, persistent issues. The analyst used mapping to identify crime hotspots as part of the department's COMPSTAT efforts, but it was looking at crime and traffic separately. Prior to DDACTS, the department was already issuing monthly crime report cards under COMPSTAT.

#### DDACTS IMPLEMENTATION SUMMARY

As explained in the body of the full Evaluability Assessment Report, DDACTS is more of an approach than a program. There are a set of common guiding principles that can manifest in different ways to suit the needs of a given jurisdiction. This section is not intended to be any sort of assessment of whether the jurisdiction has "correctly" or "faithfully" implemented DDACTS, but rather to provide a narrative description for the purposes of understanding the nature of implementation in this particular site, and to illustrate the construct available for study.

Gilbert staff attended a DDACTS training in July 2011 and launched the program in April 2012. While the department had already been implementing COMPSTAT, command staff liked DDACTS because of the added component of analyzing traffic crashes with crime, as well as the focus on long-term problems. They initially experienced some community pushback (described below), but

appear to have been successful in advocating for the program. After one year, Gilbert reportedly saw successes in the DDACTS zone and has been continually evaluating to determine if a second zone is necessary. At the time of the visit, there were no plans to implement a new zone. The department is approaching the end of its second annual iteration of DDACTS. Staff report that their initial goals for the second year were overly ambitious, and that revised second year targets were more realistic.

## Partners and Stakeholder Participation

Gilbert PD received community pushback in the early stages of DDACTS. Gilbert is a very safe city, so several of the small business representatives on the city council initially viewed the program as unnecessary. Additionally, the proposed DDACTS target zone was near the Gilbert Chamber of Commerce and other government subcommittees, whose members feared that labeling the area a target zone would give a false perception that it was dangerous. However, through outreach, the department was able to convince the necessary stakeholders about the merits of the program, and now DDACTS has strong support.

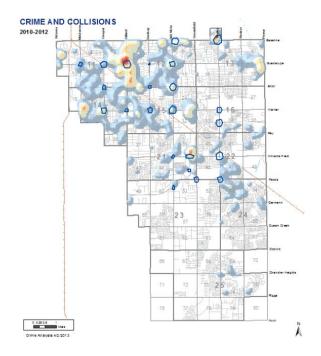
#### Data Collection

DDACTS in Gilbert primarily focuses on property crimes such as vehicular burglary, residential burglary, commercial burglary, and vehicle thefts. Violent stranger crime was also a factor in determining the DDACTS zone, while violent non-stranger crimes like domestic violence were excluded because staff expected DDACTS would not affect such crime types. Separate maps of property crimes, violent stranger crimes, and crashes all resulted in the same three square-mile area as the problem zone.

DDACTS analysis considers reportable collisions, which means crashes on public roadways, in excess of \$1000 of damage, or involving an injury. Moving violations and DUIs were not included.

#### Data Analysis

The analysts mapped three years' worth of data in ARC-GIS, using kernel density analysis to identify the zones. The density maps used addresses and cross streets, as opposed to X, Y coordinates.



The DDACTS target zone consists of the two square miles from Baseline Road to Elliot Road and Burk Street to Neely Road in downtown Gilbert. The intersection of Gilbert Road and Guadalupe Road has the highest activity in the zone. Department staff already had a sense that the intersection would be a target area, but the whole zone has a significant overlap.

# Strategic Operations

As a result of DDACTS, Gilbert shifted from a "beat deployment and patrol model" to a "zone deployment and patrol model." Traffic officers, CSOs, and patrol officers all work on DDACTS duty, although only traffic officers are mandated to dedicate two hours each day to the DDACTS zone. DDACTS teams are separated into day and night shifts. During DDACTS duty, officers are more vigilant about making stops for speeding, with a goal of increasing zone contacts by 20 percent. This strategy involves issuing increased warnings instead of citations to avoid public backlash to the program. With DDACTS, the department also reinstated bike teams on a limited basis, which present differently to the public than officers in cars.

### **Information Sharing and Outreach**

There is a heavy outreach component to Gilbert's DDACTS. The department has communicated with bars and liquor store owners so those individuals are aware of the program and do not believe they are being singled out. The department related a story about the owner of a popular restaurant who was particularly receptive to its outreach.

The Gilbert Police Department has also created a mobile web application specifically for sharing DDACTS performance data with the community. Other community outreach includes flyer distribution about the program. As previously mentioned, the bike patrol and written warnings were also used as community outreach strategies.

## Monitoring, Evaluation, and Adjustments

The primary shift from the first year of DDACTS to the second was in goal setting. After seeing its figures for the first year, the department felt it could set more realistic goals in terms of number of officer contacts, as well as crime and crash decreases in the DDACTS zone. It additionally became aware of design problems with the zone's main intersection and has reached out to city engineering about the issue.

### Outcomes

The department provided an example of a monthly DDACTS report card, which gives monthly numbers for major DDACTS indicators as well as percent changes from the monthly three-year average. Indicators include traffic stops, violent crimes, burglaries, vehicle crimes, collisions, arrests by type, and calls-for-service by type. The department also provided annual and semi-annual reports that compare focus crime and crash reductions to three-year averages and compare goals to actual figures.

#### FUTURE IMPLEMENTATION PROCESS EVALUATION FEASIBILITY

Gilbert represents a promising site for an implementation assessment, and the relevant stakeholders are willing to participate in one. The department posts regular reports on the progress of its DDACTS activities, which are available on the department's website. The core DDACTS staff in the jurisdiction have been involved in the effort since its inception, and are therefore knowledgeable about all aspects of the program's implementation.

Therefore, Gilbert, Arizona is highly recommended as a productive site for an implementation assessment.

### Availability of Historical Implementation Documentation

The site maintains reports on yearly progress, as well as extensive online records of performance data. It can also provide its DDACTS training documentation.

Availability of Implementation Activities and Documentation Moving Forward

The site is willing to participate and appears committed to continuing to provide their DDACTS data online.

## FUTURE OUTCOME/IMPACT EVALUATION FEASIBILITY

Gilbert is willing to participate in an outcome evaluation. The department already makes a significant amount of data publicly available through its website and its DDACTS app. These data,

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<sup>13</sup> http://www.gilbertaz.gov/ddacts/

largely a result of Gilbert's experience with COMPSTAT, would facilitate an outcome evaluation. Furthermore, the site has implemented a variety of unique outreach strategies that could also be incorporated into an evaluation. An MOU would need to be approved by a city attorney, and staff believe this could take up to three months. Additional concerns include a relatively low rate of crime and collisions in the jurisdiction and the difficulty of finding an appropriate comparison site, but these are not insurmountable obstacles.

## Outcome Data Availability

The department collects outcome data extensively and makes much of it publicly available through its website and mobile application. These data are collected as part of the site's COMPSTAT efforts, and collection of identical measures both precedes and follows implementation of DDACTS in the site. Monthly COMPSTAT report cards will continue to be available. The data for those reports are extracted from an Access database that could be utilized for an evaluation in the future. Many of the department's reports are now automated, which will make them easy to track in an evaluation.

It may also be possible to access the social media data generated between the site and the community to develop metrics of community engagement and support for the department's activities.

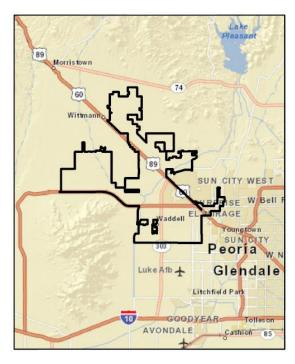
## Activity/Productivity Data Availability

For a scientifically sound evaluation it is critical that changes in traffic enforcement be measured since it is hypothesized that the increase in enforcement will yield the desired crime and traffic crash reductions. Therefore assessing the variations in enforcement activity (i.e., the initiative "dosage") is required.

In addition to outcome data, the department also collects activity data that includes traffic stops, subject stops, arrests, and calls-for-service. These data are collected as part of the site's COMPSTAT efforts, and collection of identical measures both precedes and follows implementation of DDACTS in the site.

### Presence of a Comparison Site

The commander indicated that he does not think that there is a nearby site that is highly comparable to Gilbert. However, he suggested that Surprise, Arizona, located on the opposite side of Phoenix, is similar to Gilbert in many ways.



	Population	Violent Crime	Property Crime	Violent Rate	Property Rate	Officers
Gilbert	214,264	205	3,386	0.956764	15.80293	222
Surprise	120,793	162	2,488	1.341137	20.59722	129

Based on UCR data (presented in the table above), there are noticeable differences in the populations and crime rates between these two jurisdictions. Additionally, the Urban research team does not have any information on Surprise's data systems, data availability, or willingness to participate in an evaluation.

### **EVALUABILITY ASSESSMENT FINDINGS**

A pre-post comparison group design would be feasible and most productive in Gilbert. While the low incidence of crime and traffic problems is a data limitation, the length of Gilbert's operations and the ready availability of its data mitigate that as a shortcoming. An evaluator could also evaluate Gilbert and nearby Mesa in a multi-site evaluation to further strengthen the analysis.

### ASSESSMENT SUMMARY AND RECOMMENDATIONS

Overall, Gilbert, Arizona is implementing a version of DDACTS that could be evaluated. It maintains a wealth of readily available data. While the low incidence of crime and traffic issues could present a limitation, the length of Gilbert's implementation of the program should provide a sufficient amount of data for evaluation given proper statistical procedures. Additionally, Gilbert's close proximity to Mesa, Arizona, another possible site to include in an evaluation, offers the opportunity to make efficient use of resources by evaluating both sites simultaneously.

## LAFOURCHE PARISH, LOUISIANA

Lafourche Parish Sheriff's Office, LA

December 5, 2013

### SITE CHARACTERISTICS

Lafourche Parish is a rural county in Louisiana, west of New Orleans. It had a 2013 population estimate of 97,141, and 2010 population density of 90.2 persons per square mile. It occupies 1,068.21 square miles. The 2012 population was 77.6 percent white, 13.4 percent black, 4.1 percent Latino, 0.8 percent Asian, and 1.7 percent two or more races. 2008–12 estimates indicate median household income was \$50,574, with 14.5 percent of the population living below the poverty line, and 15.0 percent of persons 25 and older had a bachelor's degree or higher.

#### Transit Profile

Staff at the sheriff's office described LA-1/LA-308 as the "primary artery" of the Parish, traversing the entire area from northwest to southeast. US-90 also goes through the northern portion of the Parish from east to west. There are a variety of other state roads, including 304, 20, 307, 652 and 654. Many individuals from throughout the parish commute into New Orleans.



### Crime Profile

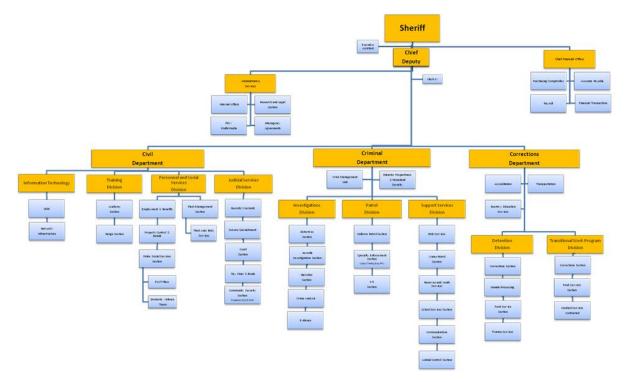
Compared to other sites under study, the parish has low rates of violent crime (1.2 per thousand persons, 112 total) and property crime (19.0 per thousand persons, 1,848 total) (FBI, 2012).

## Unique Site Characteristics

Lafourche Parish is one of two sites under study at the county level. The parish encompasses three incorporated areas (including Thibodaux, also a DDACTS site) and therefore is relatively diverse in terms of land use. Some parts are very rural, some industrial, others mostly residential. The industrial port on the Gulf of Mexico, for instance, is very significant to the local economy.

#### DEPARTMENT CHARACTERISTICS AND KEY LOCAL PERSONNEL

The sheriff's office has 257 full-time officers (FBI, 2012), and a FY2013 budget of \$33,789,787.



During the site visit, interviews were conducted with the patrol captain, lieutenant, and crime analyst who make up the core DDACTS team.

The sheriff's office upgraded its records management system (RMS) in August 2009, and then expanded it to the other incorporated police departments in the parish (Thibodaux, Lockport, and Golden Meadows), as well as other agencies such as the parish courthouse.

### Concurrent Law Enforcement Jurisdiction

Constitutionally, the sheriff's office has final say in incorporated areas such as Thibodaux. However, the office primarily enforces in rural areas. State police do patrol on parish highways, but that is the extent of their enforcement in the area. Activity conducted by state police is not included in the sheriff's system.

## 88 - Lafourche Parish, Louisiana

## Prior Use of Data and Other Related Programs/Initiatives

Prior to DDACTS, any use of data involved paper records. The office implemented DDACTS and COMPSTAT around the same time, although DDACTS became the primary program for data-driven operations.

#### DDACTS IMPLEMENTATION SUMMARY

As explained in the body of the full Evaluability Assessment Report, DDACTS is more of an approach than a program. There are a set of common guiding principles that can manifest in different ways to suit the needs of a given jurisdiction. This section is not intended to be any sort of assessment of whether the jurisdiction has "correctly" or "faithfully" implemented DDACTS, but rather to provide a narrative description for the purposes of understanding the nature of implementation in this particular site, and to illustrate the construct available for study.

DDACTS in Lafourche Parish began in April 2008. The sheriff's office was one of the first DDACTS pilot sites, following communication with other sites that were conducting crime and traffic programs, such as Baltimore County and Nashville. NHTSA then bound these programs together and formed DDACTS. The parish upgraded its RMS in 2009, thus improving its capabilities for data collection and analysis. In 2013, the office simultaneously began using crimereports.com as a medium for data that could be utilized by officers and the public. The program is structured so that analysis and strategic operations can be fluid. The data analyst releases points-of-interest reports to shift lieutenants and sergeants every two to three days, and these are used for short-term patrol direction. If problem spots persist, the office may determine to turn the area into a long-term zone.

## Partners and Stakeholder Participation

In the past, the sheriff's office has patrolled a joint hotspot with the Thibodaux Police Department. As a result of DDACTS, the office has brought attention to many traffic design issues, and the office works frequently with the Louisiana State University and the South Central Planning and Development Commission. Meetings with these partners occur two to three times per month, and the sheriff's office has been recognized as being a particularly active partner for traffic engineering.

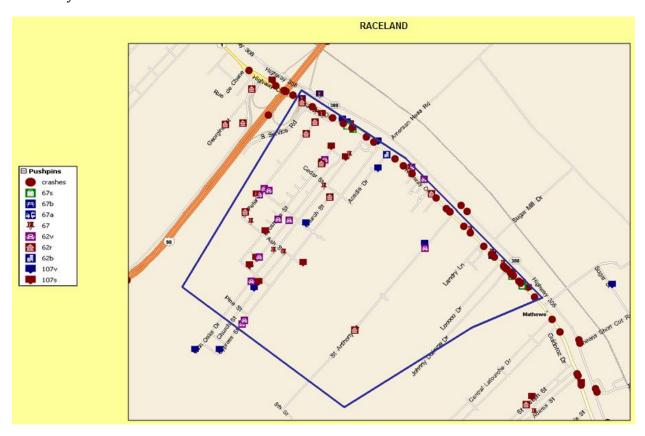
#### Data Collection

The program focuses on alcohol-related crimes such as fights and DWIs, as well as property crimes that are often drug related, such as thefts and burglaries. Crashes are distinguished by combinations of alcohol involvement, injury, and fatality. There is an institutional scrubbing process that occurs after reporting crashes to the state. The Louisiana Department of Transportation and Louisiana State University scrub crash data and post it on their own websites.

#### Data Analysis

The process for data analysis is semi-fluid, based on the needs of the department and whether it thinks a certain spot requires extra attention. Short-term hotspots are identified multiple times per week based on shift schedules. If the office decides to create a long-term hotspot, the exact timing may vary. Hotspots are sometimes based on four to eight weeks of data, and a maximum of two to

three months of data. Zones will end when crime and crash indicators have gone down, although the zones are wound down gradually. The department will return to a former zone later if necessary.



At the time of the group interview, there were two target areas. One consists of the bridges of Raceland, which is a persistent problem spot with Section 8 housing and a high level of drug-related crimes. The other zone is on the border of Thibodaux. The zones are not frequently hotspots for both traffic and crime, as most of the crashes in the parish occur on highways where there is no crime.

### **Strategic Operations**

The crime analyst will identifies a two- to three-hour window in DDACTS zones when it is best to patrol the area. Command staff then determine the best times in the window to send officers to the spots, and they are expected to be highly visible. In general, the captain prefers to keep the timing flexible so that offenders do not know exactly when police will be in particular areas. For the same reason, officers from non-patrol units are sometimes assigned to DDACTS, but this is rare. DDACTS is primarily the responsibility of patrol. The analyst identifies separate times for day shift as well as night shift, so collaboration among shifts is important. The office tracks the number of verbal warnings given, which is generally double the number of tickets. All officer activity, including contacts, citations, and tickets, is recorded as well.

## Information Sharing and Outreach

The sheriff talks on two different radio stations twice a month, and senior staff attend community meetings to stay in contact with the public. The office also sends out periodic surveys to the community. Facebook, Twitter, and informational videos are resources as well. Office staff mention DDACTS in all such appearances. The general community knows about the program, and The South Central Planning and Development Commission has offered a class about DDACTS. Some other agencies have reached out to Lafourche Parish about the program.

## Monitoring, Evaluation, and Adjustments

The DDACTS program is intentionally flexible so that evaluation and adjustments can occur on an ongoing basis. The participants explained that they thought it was important to continuously review their data, rather than collect and analyze six months of data. While they have identified a persistent area of crime and traffic activity, they have also identified temporary areas, and the office is attempting to remain responsive to those areas as well.

#### Outcomes

The office provided the Urban research team with an example of a year-end DDACTS report, which contains total counts for the target areas in the six-month period before DDACTS implementation, as well as the first six months of DDACTS implementation. Crimes reported include burglaries (residential, business, vehicle) and thefts (total, motor vehicle, bicycle). Other measures include crashes, suspicious subjects or vehicles, traffic stops, warnings, citations, FICs, warrant arrests, and DDACTS hours.

#### FUTURE IMPLEMENTATION PROCESS EVALUATION FEASIBILITY

The site is willing to participate in an implementation assessment, and stakeholders were very forthcoming with information about the program. The available documented records, in addition to interviews with key stakeholders involved in DDACTS implementation and development, will be sufficient to support an implementation/process evaluation in this site.

### Availability of Historical Implementation Documentation

The program in Lafourche Parish Sheriff's Office was implemented by the individual who is now the chief of the nearby Thibodaux Police Department. Between interviews with this individual and the stakeholders currently operating DDACTS in Lafourche Parish, there should be sufficient information available to complete an implementation and process evaluation. These data can be supplemented through historical records contained in the office's CAD/RMS (which it shares with several nearby jurisdictions), and three years' worth of records it has uploaded to crimereports.com.

## Availability of Implementation Activities and Documentation Moving Forward

The site reported that data will continue to be uploaded into the crimereports.com system, and that command staff have plans to increase its use by officers and the public in the future.

Additionally, the sheriff participates in a regional radio broadcast program. Moving forward, implementation and process information could be gathered through review of the content discussed and sentiments expressed during the sheriff's descriptions of office activities and conversations with the public in response to their questions.

### FUTURE OUTCOME/IMPACT EVALUATION FEASIBILITY

The site expressed its willingness to participate in an outcome evaluation. It has a significant amount of data available through its inter-departmental CAD/RMS and is in the process of making such data available through crimereports.com.

### Outcome Data Availability

The site has adopted a sophisticated CAD/RMS, which is also used by several other local agencies (including the Thibodaux Police Department). This more sophisticated system allows for advanced data-sharing between jurisdictions, as well as detailed data collection on activities within their own jurisdictions. Like many other jurisdictions, Lafourche Parish is also contracting with crimereports.com to provide the public and its officers access to the data in a more user-friendly manner.

It may also be possible to access the social media data generated between the site and the community to develop metrics of community engagement and support for the office's activities. Further, collision data can be made available through the statewide reporting system LACRASH. Through this system, data is sent to Louisiana State University where it is further enriched and then provided to departments through the Louisiana Transportation Research Center's Local Technical Assistance Program (LTAP) database. These data could also be accessed and utilized for evaluation.

As with implementation data, an evaluation could also potentially develop outcome data based on the content of the sheriff's radio appearances.

### Activity/Productivity Data Availability

For a scientifically sound evaluation it is critical that changes in traffic enforcement be measured since it is hypothesized that the increase in enforcement will yield the desired crime and traffic crash reductions. Therefore assessing the variations in enforcement activity (i.e., the initiative "dosage") is required.

Between the inter-departmental CAD/RMS and the data provided to crimereports.com, there are extensive data available on officer activities. Additionally, officers maintain a supplemental record of their DDACTS-specific activities in the target areas.

Concerning traffic stops, Louisiana does not allow officers to issue written warnings. The only records of such stops are contained in the inter-departmental CAD/RMS. However, the office has

access to collisions data through statewide systems that are supplemented by researchers at Louisiana State University.

# Presence of a Comparison Site

The participants in the group interview suggested that Terrebonne Parish would make a good nearby comparison site, as the two parishes share a border and are similar in size. However, Terrebonne recently transitioned to a new sheriff, and the related turnover and changes in operations could make it challenging for them to productively collaborate with an evaluation as a comparison site.



City	Population	Violent crime	Property crime	Violent Crime Rate Per thousand persons	Property Crime Rate Per Thousand Persons	Police Officers		
Lafourche								
Parish	97,029*	112	1,848	1.154294077	19.04585227	257		
Terrebonne								
Parish	111,893*	221	2,625	1.975101213	23.4599126			
UCR data does not provide police officer data for Terrebonne Parish.								
*UCR does not provide population data for county agencies. Population figures are								
based off of Census 2012 estimates.								

It is important to note that Lafourche Parish surrounds the Thibodaux Police Department, which is also implementing DDACTS. These two jurisdictions could be evaluated together, along with their respective comparison sites, to provide data that would allow for greater control of department-specific factors, while also making efficient use of available evaluation resources.

### **EVALUABILITY ASSESSMENT FINDINGS**

Lafourche has sufficient data and the research infrastructure to support an evaluation, as well as a clearly defined DDACTS program. The relevant stakeholders are also willing to participate in an evaluation. Combining several sites into a single evaluation could be accomplished by using statistical controls to address any moderate differences between sites. This may be a viable option because the Lafourche Parish Sheriff's Office and Thibodaux Police Department are very near one another, using the same data systems, and operating similar forms of DDACTS.

Provided that a sufficient number of comparable sites can be identified, a multi-site pre-post comparison group design would be appropriate for evaluating the effect of DDACTS in this site. Grouping the comparison sites close to the two DDACTS jurisdictions would have the added benefit of allowing for an assessment of the perceived displacement of offenders that the site believes is occurring.

#### ASSESSMENT SUMMARY AND RECOMMENDATIONS

Lafourche Parish is a recommended evaluation site. While the site could support an evaluation on its own, its proximity to another productive DDACTS location provides the opportunity to make efficient use of resources by evaluating two sites at once, while also providing the opportunity to control for more departmental variation than could be achieved through a single-site evaluation.

# LANSING, MICHIGAN

Lansing Police Department, MI

June 26, 2013

### SITE CHARACTERISTICS

Lansing is the capital of the state of Michigan. It encompasses 36.05 square miles within Ingham County in the south central portion of the state and shares its eastern border with East Lansing, home to Michigan State University. Lansing is roughly one hour on either side from Michigan's other major cities. The city has a downtown area with government buildings, restaurants, stores and residences. The city is roughly divided into four sections, each with diverse residential neighborhoods. The estimated population was 114,688 in 2012 (FBI, 2012), with a 2011 population density of 3,170.6 persons per square mile. The 2010 population is 55.5 percent white, 23.7 percent black, 12.5 percent Latino, 3.7 percent Asian, and 6.2 percent two or more races. 2008–12 estimates indicate median household income was \$37,128, with 27.1 percent living below the poverty line, and 24.5 percent of those ages 25 and older had a bachelor's degree or higher.

#### Transit Profile

The city is surrounded by major highways on all sides. US 127 borders its northeast side, I-496 borders its southeast side and runs through the downtown of the city, I-96 borders the south and southeast, and I-69 is close to the northeast and north. There are also major north-south and east-west multi-lane thoroughfares crisscrossing the city. The Capital Area Transportation Authority provides bus service throughout Lansing and East Lansing. In addition to normal commuter traffic, Lansing draws large crowds associated with its status as the state capital and also gets spillover traffic from large events hosted by Michigan State University, most notably college football games.



### Crime Profile

Among the sites under study, Lansing has the second highest rate of violent crime (9.4 per thousand persons, 1,078 total) and a medium-high rate of property crime (32.9 per thousand persons, 3,774 total) (FBI, 2012).

## **Unique Site Characteristics**

Along with Philadelphia and Everett, Lansing is an urban DDACTS site. Its position as the state capital, as well its proximity to a large university, distinguishes it from other sites and other nearby cities. Department staff noted that, for this reason, there was unlikely to be another city that could serve as a good comparison site.

### DEPARTMENT CHARACTERISTICS AND KEY LOCAL PERSONNEL

The agency is larger than many of the other agencies under study, with 190 total officers in 2012 (FBI, 2012), and a budget of \$33,513,551 in Fiscal Year 2013.<sup>14</sup>

The primary point of contact for DDACTS in Lansing is currently the interim chief of police, having been promoted from his position as a patrol captain, where he was instrumental in the development and implementation of DDACTS in the city. Operationally, DDACTS is currently overseen by a coordinating patrol sergeant and supported by two crime analysts.

### Concurrent Law Enforcement Jurisdiction

<sup>&</sup>lt;sup>14</sup> http://www.lansingmi.gov/Lansing/finance/FY13AdoptedBudgetBook.pdf

The Lansing Police Department has primary jurisdiction over the area but works closely with the sheriff's department and the Michigan State Police, as well as surrounding jurisdictions.

# Prior Use of Data and Other Related Programs/Initiatives

Lansing has a strong commitment to community policing, and some of its programs include gun buybacks and a Citizen Police Academy. The department did not provide information on its use of data prior to the implementation of DDACTS.

#### DDACTS IMPLEMENTATION SUMMARY

As explained in the body of the full Evaluability Assessment Report, DDACTS is more of an approach than a program. There are a set of common guiding principles that can manifest in different ways to suit the needs of a given jurisdiction. This section is not intended to be any sort of assessment of whether the jurisdiction has "correctly" or "faithfully" implemented DDACTS, but rather to provide a narrative description for the purposes of understanding the nature of implementation in this particular site, and to illustrate the construct available for study.

DDACTS is a relatively new initiative, having been initiated in October 2012. Its implementation closely mirrors the core components of the DDACTS model presented to the department in its IADLEST workshop. The department identified a target area based upon the analysis of the colocation of what are called Type A crimes and crashes. Current plans call for expansion of DDACTS to a second site in the city.

## Partners and Stakeholder Participation

The Lansing mayor and city council are enthusiastic about the program, and partnerships have been established through outreach to local businesses and residents in the area, as well as the media and other law enforcement agencies having concurrent jurisdiction. The department provided the Urban research team with a DDACTS operational plan indicating that program partners would include the AFL-CIO and the city's traffic engineering department.

#### Data Collection

DDACTS in Lansing focuses on Type A crimes, which include sexual assault, robbery, aggravated assault, arson, burglary, larceny, motor vehicle theft, and damage to property.

#### Data Analysis

The DDACTS zone was determined using crime and traffic analysis for the entire year of 2011.



The targeted area is centered in the area of South Martin Luther King (MLK) Boulevard and West Holmes Road. MLK is a major north-south thoroughfare in the east-central part of the city. The area is a mixture of both small businesses and residential areas and the crash problems observed at baseline were mostly minor and associated with limited visibility, speeding, or vehicles making turns off of MLK into adjacent locations. Department staff felt that the speed limit set by the state was too high and also contributed to the high levels of accidents.

### Strategic Operations

Proactive traffic enforcement by patrol officers is an essential enforcement tool of DDACTS. There is a separate traffic unit of four officers, but most traffic is handled by patrol. Enhanced traffic enforcement in the DDACTS area is accomplished through meeting specific enforcement objectives in the area, and the department's chain of command maintains accountability to these objectives. Specifically, the crime analysts produce hourly windows and months with the highest crash/crime density, and teams from various shifts are directed to the DDACTS area accordingly. A variety of enforcement tactics are utilized, ranging from radar, LIDAR, license plate readers, bike patrols, and community police officer deployments. Additional dedicated DDACTS time for officers is enhanced through grant-funded overtime.

# Information Sharing and Outreach

The coordinating sergeant works with the city's Transportation and Traffic Engineering Department to solve crash problems related to traffic light configuration, signs, and pavement markings. "ALERT, High Traffic Crash Area" signs have been created as a means of educating drivers.

### Monitoring, Evaluation, and Adjustments

The coordinating sergeant works with the department's crime analyst to make monthly hotspot maps, and regularly reports to the captain with recommendations for adjusting strategy, location, and resources.

### Outcomes

Lansing PD provided examples of a monthly DDACTS summary, which compares monthly statistics with year-to-date totals for traffic stops, investigative stops, misdemeanor and felony arrests, contact cards, warnings, firearms, and hours spent in the DDACTS zone, among others. It also compares monthly crashes with crashes from the same month the previous year, separated by intersection.

## FUTURE IMPLEMENTATION PROCESS EVALUATION FEASIBILITY

Ample data are available to conduct a process evaluation, and site staff involved in the initiative reported that they would readily participate in such an evaluation by engaging in interviews, coordinating observations, scheduling meetings with key partners, and other important process evaluation tasks.

# Availability of Historical Implementation Documentation

The implementation of DDACTS to date has been extensively documented. The site provided a flash drive of materials that include briefing slides and additional initiative summaries. Capturing activity and short-term outcome data is an ongoing process, and these data are updated by the DDACTS operations sergeant on a monthly basis.

# Availability of Implementation Activities and Documentation Moving Forward

Current plans call for expansion of DDACTS to a second site in the city and documentation of its implementation and outcomes are planned for the future.

# FUTURE OUTCOME/IMPACT EVALUATION FEASIBILITY

Senior management of the department enthusiastically stated their willingness to participate in a future evaluation. The department is able and willing to share its implementation, activity, and outcome data with external evaluators and would welcome an independent examination of an initiative that it feels has had significant results, based upon its limited analysis of outcomes.

## Outcome Data Availability

Lansing maintains an up-to-date automated records management system (RMS) composed of both crime incident and calls-for-service records. These data have been utilized by its crime analysis section for analytic purposes and those interviewed report being not only familiar with pre-post crime and calls analyses, as well as mapping, but can readily extract flat files for external researcher analysis when requested.

The department does not maintain its own automated records for traffic crash incidents, other than the records captured in its calls-for-service data. However, traffic accident reports are readily available from the state of Michigan in automated form through two inter-related systems. One is a monthly and yearly aggregate reporting system of the basic incident numbers and types, which is regularly accessed online by the department. More detailed records concerning individual crashes are also available online, although this is a relatively new, state-operated reporting system. The department also reported that data extracts are available from the state for additional analyses, and while the department does not routinely request or analyze these records, it did describe them as thorough and timely.

Crime data can be readily analyzed spatially (Lansing uses ArcMap). Crash data can also be mapped, although some geocoding may be required for certain incidents. However, this was reported to be a relatively simple task for the department's crime analysis section.

# Activity/Productivity Data Availability

To capture the traffic enforcement activities in the DDACTS area, Lansing has instituted an activity log for officers working on directed DDACTS patrols and other tasks. This form includes traffic stops, investigative stops, arrests, contact cards issued, reports made, citations issued, warnings issued, and other activities. The data from the paper logs are routinely reviewed by the DDACTS operations sergeant and entered into a DDACTS activity database (either Access or Excel). DDACTS activities are summarized on a monthly basis using these data and the results are widely disseminated both within the department and to external agencies.

It should be noted, however, that as is common when asking patrol officers to fill out paper reports on activities, there were some concerns expressed about the reliability of the data collected. Specifically, some participants felt that certain activities might be underreported because of the burden on officers in filling out the forms. But to counter this possibility, the department has held in-house educational training sessions devoted to the importance of DDACTS and completing the forms regularly and thoroughly.

## Presence of a Comparison Site

Lansing has also established two relatively similar comparison areas. Because of this, a sound prepost comparison group design can easily be implemented. It does not appear that a sufficient number of high crime/crash locations exist in the city for random assignment and the unique characteristics of the city would seem to suggest finding a comparison location elsewhere would be challenging.





## **EVALUABILITY ASSESSMENT FINDINGS**

It appears that Lansing would be an ideal site for a future DDACTS evaluation. It has extensively documented its implementation of DDACTS and is willing and able to continue doing so as it seeks to expand the initiative to other sites in the future. Adequate dosage and outcome data are available in easily accessible electronic formats. Management and supervisory staff are supportive of an external evaluation and voiced their willingness to provide extensive support to insure its success.

Given that a pre-post comparison group methodology has already been largely instituted in Lansing, and that the required data are generally available and in readily analyzable formats, a relatively short-term evaluation could be instituted quickly and results obtained within a year, with few anticipated obstacles.

## ASSESSMENT SUMMARY AND RECOMMENDATIONS

It is recommended that Lansing be considered as a site for a future evaluation. A strong comparison group design could be instituted in the very near future and the probability of obstacles arising to successfully conducting both a process and outcome evaluation appears to be quite low.

# MESA, ARIZONA

# Mesa Police Department, Arizona

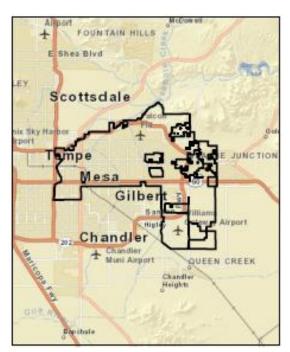
November 13, 2013

## SITE CHARACTERISTICS

Mesa is the third largest city in Arizona, located in Maricopa County slightly east of Phoenix. Mesa is part of the Phoenix metropolitan area, along with neighboring suburbs such as Gilbert and Scottsdale. It occupies 136.45 square miles, had a 2012 population of 451,391 (FBI, 2012), and a 2010 population density of 3,217.5 persons per square mile. The 2010 population was 64.3 percent white, 3.5 percent black, 26.4 percent Latino, 1.9 percent Asian, and 3.4 percent two or more races. 2008–12 estimates indicate median household income was \$49,233, with 14.8 percent of individuals living below the poverty line, and 24.2 percent of persons age 25 and older had a bachelor's degree or higher.

## Transit Profile

Mesa has several major roads and thoroughfares. Arizona 202 runs along the city's northern and eastern border. US-60 goes through the city from east to west and leads to Phoenix. Arizona 87 also goes through the city from north to south.



## Crime Profile

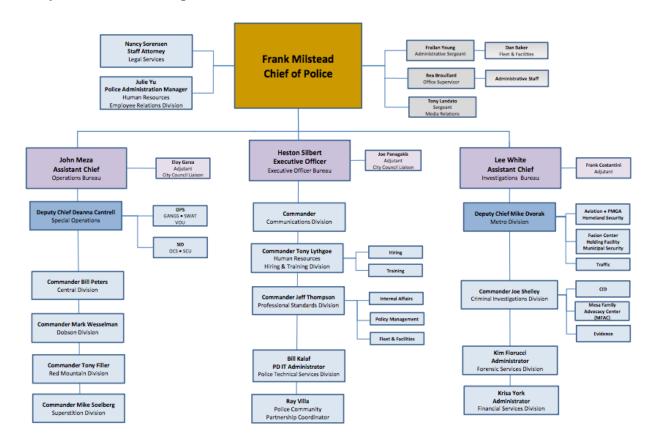
Among the sites under study, in 2012 Mesa had medium rates of both violent crime (4.0 per thousand persons, 1,804 total) and property crime (31.3 per thousand persons, 14,140 total) (FBI, 2012).

# **Unique Site Characteristics**

Due to its size, the Mesa Police Department more closely resembles a big-city agency like Philadelphia than do many of the other sites (discussed in further detail below). Mesa also has a large Hispanic population, and charges of profiling may be a concern for the police department when making stops.

## DEPARTMENT CHARACTERISTICS AND KEY LOCAL PERSONNEL

Mesa is among the largest police agencies under study, with 780 full-time officers in 2012 (FBI, 2012) and an FY2013 budget of \$152,281,940.15



The key DDACTS staff who participated in the site visit include the lieutenant for traffic, the analyst from the Metropolitan Division, one commander, a crime intelligence officer, and the Fiesta District analyst. The assistant chief of police was also present and is involved in the DDACTS process.

and do not necessarily reflect the official position or policies of the U.S. Department of Justice.

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http://www.mesaaz.gov/budget/Documents/PreliminaryBudget/PreliminaryExecutiveBook2012\_2013.pdf

The department shares many characteristics with other city police agencies. For instance, the city is broken up into four districts, each of which has its own staff and its own data analyst. For this reason, DDACTS has not yet been implemented citywide, and is currently being tested in the two western districts.

## Concurrent Law Enforcement Jurisdiction

Police from the Maricopa County Sheriff's Office and state-certified officers from other police agencies have jurisdiction within Mesa, but Mesa's staff report that these officers conduct little activity in the area.

# Prior Use of Data and Other Related Programs/Initiatives

Mesa has been using COMPSTAT for six years, and it is still the major driving force of operations within the department. Staff report that the transition to COMPSTAT largely resulted in a culture change in which data-driven operations became accepted. The department has one data analyst for each of the four districts, as well as an overarching analyst for the whole department. Prior to the implementation of COMPSTAT, data analysis consisted of monthly scorecards that compared crime rates from month to month. Staff also credit COMPSTAT with increasing communication between divisions within the department.

#### DDACTS IMPLEMENTATION SUMMARY

As explained in the body of the full Evaluability Assessment Report, DDACTS is more of an approach than a program. There are a set of common guiding principles that can manifest in different ways to suit the needs of a given jurisdiction. This section is not intended to be any sort of assessment of whether the jurisdiction has "correctly" or "faithfully" implemented DDACTS, but rather to provide a narrative description for the purposes of understanding the nature of implementation in this particular site, and to illustrate the construct available for study.

The lieutenant of the traffic division became interested in DDACTS because the city's overall collision rate was relatively low, and he wanted traffic officers to be more involved in crime operations so that they would be more strategic and come in contact with would-be offenders. A selection of staff attended a DDACTS training in Scottsdale in 2010, and Mesa began the program in the traffic division only. The department tested different iterations of a DDACTS model, including one that had different zones based on the season. The department recently decided that for the program to work, it must also incorporate patrol officers. It is currently implementing a six-month trial in the two western districts (Central and Fiesta) that will end in January 2014. Staff anticipate that the program will stay in the western districts, and it may expand to eastern districts following trial. Convincing the patrol divisions to buy into a traffic-focused program has been a challenge in this new implementation.

## Partners and Stakeholder Participation

At the present time, there is no major effort to bring in outside stakeholders, as the department is more concerned with buy-in among the patrol divisions. Patrol officers were skeptical about dedicating time to traffic, and patrol commanders felt they were already short on staff and did not

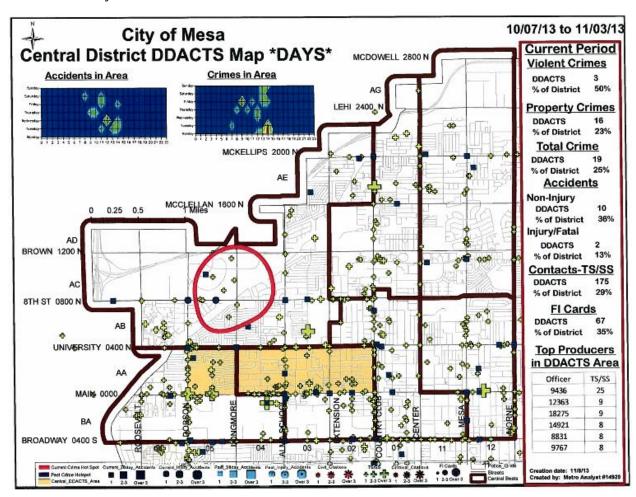
want to take officers away from calls-for-service. Much of the current program structure regarding strategic operations has been determined based on what resources patrol sergeants would allow to go toward the program.

## **Data Collection**

The DDACTS zone is determined by looking at total collisions, injury collisions, total crimes, and total stops. Minor collisions are unlikely to be reported as crashes.

## Data Analysis

Analysis of the DDACTS zone is conducted on a monthly basis, and more generally, there is data evaluation every 24 hours for COMPSTAT.



The target zone (denoted by the orange shading in the figure above) is the same for all patrol shifts (day, swing, and graves), and consists of the high-activity area between Mesa's Main Street and University Drive.

# **Strategic Operations**

Every shift dedicates two officers to the DDACTS zone for an hour of the shift. During this time, officers do not receive calls-for-service, and they are responsible for being visible in the zone and hotspot areas, as well as making stops. Officers indicate DDACTS duty in the database by marking DZ (Discretionary Zone), and all citations and stops during the time period can be linked to DDACTS. As an incentive for DDACTS, officers who complete a DDACTS shift will also receive two hours of discretionary time. The crime intelligence officer position helps facilitate communication between officers and the analyst, and ensures that hotspot data is being utilized by the correct individuals. The analyst would eventually like to have operations at a point where she can direct what times officers should be at certain locations. However, under the current time constraints of the department, this is not part of the program.

# Information Sharing and Outreach

As stated above, the DDACTS program currently does not have an outreach component. Officers may occasionally explain the program when they make stops, so citizens understand why they are being stopped. However, officers are not explicitly required to do this. The department does have a crime prevention officer whose job is to make contacts in the community. Although this position is not tied to DDACTS, it shows that the department's future iteration of DDACTS could have a robust outreach component.

# Monitoring, Evaluation, and Adjustments

The DDACTS program has already been through several iterations. It has shifted from a program for traffic officers to one that involves patrol as well. There was also an iteration that involved separate zones for different seasons of the year. After the current trial period, the data analyst may reevaluate the data in the western districts to determine if they should switch zones. If the department implements the program in the eastern districts, it may provide an opportunity to make further adjustments.

# Outcomes

The department provided an example of a monthly breakdown of officers with the most contacts and addresses with the most activity. There is also an outcome document that compares monthly DDACTS outcomes with the 3-year monthly average for all shifts. Outcomes measured are total collisions, injury collisions, total crimes, traffic stops, and arrests.

#### FUTURE IMPLEMENTATION PROCESS EVALUATION FEASIBILITY

It would be possible to complete an implementation and process evaluation in Mesa, Arizona. The participants in the group interview have been involved in the implementation and development of DDACTS in the jurisdiction since its inception. They are currently in the process of piloting the effort in one part of the jurisdiction, and hope to produce evidence of success that will facilitate expansion of the program to the other parts of the department's jurisdiction.

This could provide a valuable opportunity for an implementation assessment, as an evaluator could observe the implementation process in the new districts as it occurs. It is important to note, however, that the expansion is dependent on the success of the program in the Fiesta district. While the stakeholders in the Fiesta district are cautiously optimistic that they will be able to demonstrate sufficient success to expand the program, this has not yet been accomplished. It is not guaranteed the department will expand the program into new districts or continue the program in its current districts, although stakeholders do not believe discontinuing the program is likely.

A significant part of the incorporation of DDACTS into the department was facilitated by the previous transition to COMPSTAT, which appears to have been much more challenging, as 80 percent of command staff left during that transition. Following the change in culture that took place during the transition to COMPSTAT, the changes necessary to facilitate the implementation of DDACTS were minimal. The lieutenant who participated in the group interview explained that there was a culture change required within the traffic division to rethink their role and approach to the objectives of the department.

Overall, command staff in the jurisdiction indicated that they would be willing to participate in an evaluation.

## Availability of Historical Implementation Documentation

Records of activity in the DDACTS zones are documented by adding "DZ" to the reporting code used to document officer activity in the patrol logs. This was done to minimize the imposition on officers by not requiring them to fill out any additional reports on their activities in the DDACTS zones. The crime analysts at the group interview explained that officers are getting better about using these codes. There might not be complete records of all activities occurring in the DDACTS zones because these codes were not universally and completely utilized from the beginning of the program. However, the codes do provide a record of some officer activity in the target areas, and they should become more complete over time.

It is important to note that the program only began in the patrol division a few months prior to our site visit. The site is currently engaging in a pilot period to demonstrate a positive effect and encourage the other divisions to begin implementing the program.

# Availability of Implementation Activities and Documentation Moving Forward

DDACTS has been readily incorporated into COMPSTAT in Mesa. Therefore, a fair bit of DDACTS-relevant information is made available and discussed during the COPMPSTAT meetings, which take place every two weeks. Periodic attendance and observation of these meetings could provide useful and productive access to implementation and process data.

# FUTURE OUTCOME/IMPACT EVALUATION FEASIBILITY

It should be possible to conduct an outcome/impact evaluation in Mesa, Arizona, provided that it continues the program. As previously mentioned, the site is currently engaged in a six-month trial of DDACTS to demonstrate the program's value to the department. Assuming that the program continues or expands in Mesa, it would make a strong site for evaluation. The stakeholders involved

in this site place a strong emphasis on and have an understanding of the distinctions between outputs and outcomes, and they are using that distinction to help increase officer buy-in to the program. Specifically, they are attempting to get officers to implement the program with the promise that a 10 percent reduction in crime results in an increase of two hours of proactive policing time per shift. The department is already collecting documentation of these promised effects to demonstrate the benefits to officers.

# Outcome Data Availability

The department recently had a major upgrade to their records management system (RMS). It did not acquire a new system provider, but the provider's software went through a significant upgrade. The changes were retroactive, so the department has retained its data as far back as 1998.

The site reports that it makes its COMPSTAT data available online, though it appears that it is making its data available through links to its UCR data and additional incident reports depicted through crimereports.com.

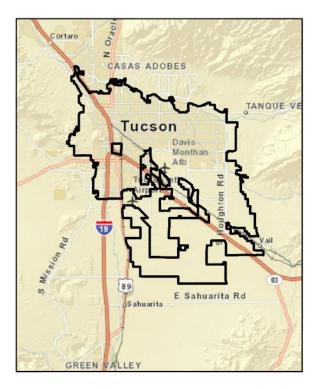
# Activity/Productivity Data Availability

For a scientifically sound evaluation it is critical that changes in traffic enforcement be measured since it is hypothesized that the increase in enforcement will yield the desired crime and traffic crash reductions. Therefore assessing the variations in enforcement activity (i.e., the initiative "dosage") is required.

Officers record their activity in the DDACTS zone by including the letters "DZ" in their reporting code on their officer logs. The crime analysts use this designation to identify and distinguish DDACTS-specific activities from other activities occurring in the DDACTS zones and throughout the rest of the city.

# Presence of a Comparison Site

Mesa and Tucson share characteristics of large cities that are not major American cities. Both are the next largest cities in Arizona following Phoenix. Mesa department staff noted that, because Tucson is closer to the US border with Mexico, it likely has a higher rate of drug-related violence.



City	Population	Violent crime	Property crime*	Violent Crime Rate Per thousand persons	Property Crime* Rate Per Thousand Persons	Police Officers			
Mesa	451,391	1,804	3,568	3.996535	7.90445	780			
Tucson	531,535	3,851	7,520	7.245054	14.14770	955			
	*UCR determined that Tucson did not meet criteria for reporting larceny-theft, so this figure was re-calculated for both cities to only include burglary and motor vehicle theft.								

While the site stakeholders identified Tucson as a comparable site, the sites are not highly equivalent based on the available crime statistics. However, they are relatively comparable, and inclusion of several sites would allow for a more complete evaluation of DDACTS, independent of unique departmental characteristics.

## **EVALUABILITY ASSESSMENT FINDINGS**

Mesa should be a good site for evaluation. The department is a focused site, with a history of successful adoption of COMPSTAT prior to implementation of DDACTS. The stakeholders involved in the implementation of the program have a clear vision of the role of data in the department as a mechanism for improving officer performance. As previously mentioned, however, the exact form Mesa's DDACTS program will take in the future is uncertain.

As with the other sites, a pre-post comparison group design is likely the most productive approach for an evaluation in this site. Additionally, nearby Gilbert is also implementing DDACTS. Should both sites be selected for an evaluation, an evaluator could combine the data from these two

jurisdictions and their respective comparison sites to control for outcome differences that are attributable to inter-jurisdictional differences rather than the DDACTS program itself.

## ASSESSMENT SUMMARY AND RECOMMENDATIONS

An evaluation of DDACTS should be possible in Mesa, Arizona, though the recommendation for including this site is dependent on developing information about the continuation and expansion of the program. Following the completion of the six-month trial period, the department should have more information about its plans to continue and possibly expand the program.

It is also worth noting that Mesa could provide a complementary evaluation site to nearby Gilbert, Arizona, which is also implementing the program. By evaluating both of these sites and their respective comparison sites, an evaluator should be able to make more efficient use of resources, as well as collect data to allow for statistical analyses that can control for some inter-jurisdictional differences.

# PHILADELPHIA, PENNSYLVANIA

## Philadelphia, PA Police Department

October 9, 2013

## SITE CHARACTERISTICS

Philadelphia, Pennsylvania is the fifth largest city in the United States. It occupies 134.10 square miles, had a 2012 population of 1,538,957 (FBI, 2012), and a 2010 population density of 11,379.5 persons per square mile. The 2012 population was 36.6 percent white, 44.3 percent black, 13.0 percent Latino, 6.8 percent Asian, and 2.3 percent two or more races. 2008–12 estimates indicate median household income was \$37,016, with 26.2 percent of the population living below the poverty line, and 23.2 percent persons 25 and older had a bachelor's degree or higher.

## Transit Profile

Philadelphia's central business district is located in the southern portion of the city's boundaries and is surrounded by major interstate expressways. However, DDACTS in Philadelphia is primarily implemented in the 25<sup>th</sup> police district, a high-crime area located in North Philadelphia. The 25<sup>th</sup> district is accessible by US-13 and US-1 on its northern border, and Philadelphia-611 on its eastern border. It is a high drug trafficking area, with local activity as well as some traffic coming in from Philadelphia suburbs to buy drugs. The area itself consists of many narrow, one-way streets that facilitate traffic congestion.



#### Crime Profile

As a major US city, Philadelphia has very high crime and a large police agency. In 2012 it had the highest rate of violent crime for the sites under study (11.6 per thousand persons, 17,853 total) and the third highest rate of property crime (37.0 per thousand persons, 56,997 total) (FBI, 2012). The

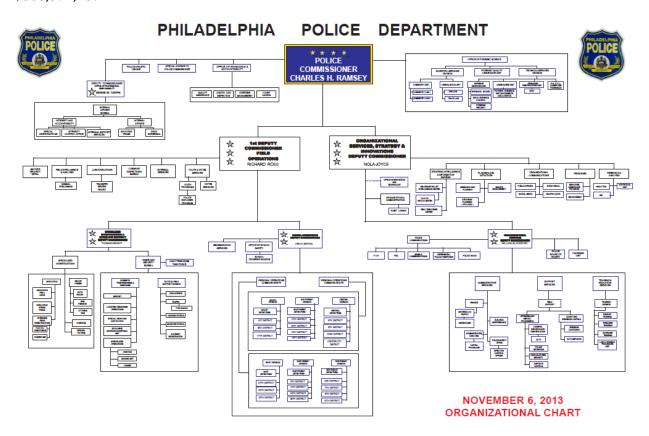
department noted that the 25<sup>th</sup> police district in particular was among the areas with the largest illegal drug markets in the country and experiences high social harm.

# **Unique Site Characteristics**

As already noted, Philadelphia is the only major US city under study. This creates a unique context for DDACTS implementation. DDACTS in Philadelphia is currently only being implemented in the 25<sup>th</sup> police district, although there are some other district offices that may adopt it as well. Other related challenges will be described in more detail below, but include high calls-for-service activity and many concurrent law enforcement jurisdictions.

## DEPARTMENT CHARACTERISTICS AND KEY LOCAL PERSONNEL

The department had 6,526 full-time officers in 2012 (FBI, 2011) and a FY13 budget of \$603,397,469.



Interviews conducted with Philadelphia's DDACTS representatives included a captain in the 25<sup>th</sup> district; the DDACTS analyst, who is also an SME; a shift lieutenant in the 25<sup>th</sup> district; as well as several other department representatives. Not present, but important to the DDACTS project, was one inspector who was largely responsible for bringing the program to Philadelphia (also an SME).

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<sup>16</sup> http://www.phila.gov/finance/pdfs/FY%2013%20Budget%20Detail%20Sect%2026-44.pdf

As mentioned above and discussed further below, Philadelphia's size and the way that its geographic scope and high crime rate affects its organizational structure is key to understanding its DDACTS program.

## Concurrent Law Enforcement Jurisdiction

The 25<sup>th</sup> district unit and traffic unit in the Philadelphia Police Department are the primary implementers of DDACTS. However, other units, both inside and outside Philadelphia PD, may conduct activity in the district. Philadelphia Highway Patrol is somewhat involved in DDACTS operations, and any activity it conducts in the area will show up in the department's records management system (RMS). In certain instances, the narcotics unit may ask other units to freeze activity so it can conduct an operation. Other potential overlap may occur with taxi enforcement, liquor control enforcement, housing police, Southeastern Pennsylvania Transportation Authority Transit Police, or university police from Temple University or the University of Pennsylvania.

# Prior Use of Data and Other Related Programs/Initiatives

The use of data and data analysis is a large part of everyday operations within the entire police department. Philadelphia's deputy mayor invested heavily in the city's location-based data infrastructure, and the department's data operations are comparable to other large cities such as New York. There are currently ten data analysts department-wide, although the agency plans to have one for each of the 21 police districts in the near future. Philadelphia implemented COMPSTAT in 1998, as well as its own data-driven program called GunStat.

#### DDACTS IMPLEMENTATION SUMMARY

As explained in the body of the full Evaluability Assessment Report, DDACTS is more of an approach than a program. There is a set of common guiding principles that can manifest in different ways to suit the needs of a given jurisdiction. This section is not intended to be any sort of assessment of whether the jurisdiction has "correctly" or "faithfully" implemented DDACTS, but rather to provide a narrative description for the purposes of understanding the nature of implementation in this particular site, and illustrate the construct available for study.

Representatives from Philadelphia PD attended DDACTS training in the summer of 2011. This included roughly 17 supervisors and officers from a variety of police districts. An inspector was the biggest proponent of the program and determined that the  $25^{th}$  district was a suitable zone due to high overlap in crashes and crime. After seeing this overlay, command staff from the  $25^{th}$  district agreed to participate.

As will be discussed in further detail below, two aspects of Philadelphia's DDACTS implementation pose challenges for an evaluation. First, because of the department-wide importance of data, differences in practice between a DDACTS district and non-DDACTS district are difficult to distinguish. In addition, high volumes of calls-for-service make it difficult for the department to consistently dedicate resources to DDACTS implementation.

# Partners and Stakeholder Participation

In order for DDACTS to function within the 25<sup>th</sup> district, officers have to coordinate with other Philadelphia PD offices and separate law enforcement agencies that may need to conduct enforcement activities in the district.

#### **Data Collection**

In terms of crime, Philadelphia DDACTS focuses on reducing overall violent crimes, particularly homicide. Other measures related to social harm are included as well, such as number of firearms confiscated.

Traffic data includes crashes and other related information, such as number of DUIs given at checkpoints. One analyst estimated that only a third of crashes are recorded, as individuals are unlikely to report minor collisions coinciding with more serious crimes, such as a drug deal involving violence.

## Data Analysis

## **Crash Hotspots and Violent Crime Hotspots**





As part of the department's routine operations, districts are already broken down into smaller Police Service Areas (PSAs), each of which has its own monthly "action plan." The target area in the city is a crime and crash hotspot within the 25th district, which presented a clear overlap between crime and collisions.

# **Strategic Operations**

Because the 25<sup>th</sup> district is an area of high drug traffic, officer visibility is very important to DDACTS implementation. Officers from the 25<sup>th</sup> district are assigned DDACTS duty in two-person shifts. Officers are instructed to focus on traffic laws, make stops, and issue warnings. Command staff report that such visibility is very noticeable to drug dealers on the streets. The traffic unit also participates in the program in four-hour time blocks when possible, although they are responsible for traffic enforcement for the entire city. Ideally, officers on DDACTS duty are free from responding to calls-for-service. However, there is a limited time frame when this actually occurs, as officers are

frequently needed for emergency calls. "Dark nights" without sporting events are times when DDACTS is likely to remain uninterrupted, and these occur most frequently in non-summer months.

One analyst noted that other districts are implementing strategies similar to DDACTS, as traffic enforcement and data-driven policing strategies are being encouraged department-wide.

# Information Sharing and Outreach

The district staff report that local businesses appreciate the increased police presence resulting from DDACTS. DDACTS reportedly led the 25<sup>th</sup> district captain to implement a new policy of mailing citations to the parents of suburban youth who enter the district to buy drugs. The department has even received notes from parents thanking the agency for implementing this policy.

## Monitoring, Evaluation, and Adjustments

The district office experienced initial issues with DDACTS implementation that required adjustment. They report that protests related to the Occupy Movement<sup>17</sup> made implementation difficult. Additionally, it took time to determine what level of manpower would be realistic to dedicate to DDACTS, given other needs around the city. The agency has also made adjustments in what indicators it measures, such as ensuring that tickets, citations, and community contacts were being tracked.

#### Outcomes

The department provided Urban with a PowerPoint summarizing its DDACTS program and providing some data comparing the  $25^{th}$  district's levels of violent crime, traffic crashes, enforcement, impounded vehicles, and DUIs in 2012 with the 3-year average. The PowerPoint also provides baseline data for the  $25^{th}$  district on violent crime and crashes by month, as well as an example of a weekly crime report that gives compiled statistics for violent crimes and property crimes by crime type.

#### FUTURE IMPLEMENTATION PROCESS EVALUATION FEASIBILITY

Philadelphia is unlike any other site visited and considered in this assessment. Aside from being the largest urban location, the site has very high crime rates, as well as a strong pre-existing reliance on data in decision-making. Additionally, the actual extent of implementation of DDACTS activities appears to be limited.

The site visit associated with this assessment report revealed ample information about the operations of the Philadelphia Police Department, its use of data, and the history of incorporating DDACTS into a segment of the department. This was all interesting and important information to document, but it became apparent that much of the information was only tangentially related to DDACTS, and most of the department's DDACTS activities were slight revisions or developments of extensive, existing data-driven actions.

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<sup>&</sup>lt;sup>17</sup> The occupy movement was an expression of dissatisfaction with economic conditions and structures. The movement was characterized by large and persistent public protests in cities across the United States, beginning in 2011.

Given that there is only a small application of DDACTS in the site at this time, and that it was only a slight change from pre-existing practices, it does not appear that Philadelphia would be a productive sight for developing an implementation/process evaluation of DDACTS. Moreover, given the large number of other similar programs operating in the site it would be very difficult to isolate the effects of DDACTS alone.

# Availability of Historical Implementation Documentation

Many of the officers and other participants in the department have a clear recollection of their implementation efforts. In particular, the crime analyst demonstrated a significant understanding of the implementation from the beginning of the program to its current state. Additionally, the inspector who was largely responsible for bringing DDACTS to the site was not available during the site visit, but would be available for an interview during an implementation/process evaluation.

# Availability of Implementation Activities and Documentation Moving Forward

In addition to the extensive use and recording of data already underway in the site, it should also be possible to collect further process information through interviews and observations in the future. It is important to note, however, that the department has not conducted many ride-alongs since a shooting took place during one several years ago. With that said, Urban staff were allowed to go on a ride-along through the target area, after signing waivers and agreeing to wear bullet-proof vests. The ride-along occurred mid-day during the middle of the week. Based upon observations during the ride-along, it appears that the department may be reluctant to allow researchers to participate in a ride-along during an entire DDACTS patrol, as these would be taking place during a much more active time.

## FUTURE OUTCOME/IMPACT EVALUATION FEASIBILITY

Philadelphia has an extensive history of working with researchers. They also have an impressive data infrastructure that could support an evaluation (and has done so in the past). However, the nature of the DDACTS program that is currently being implemented in Philadelphia is so limited that there may not be a way to capitalize on the current data infrastructure to support an outcome evaluation of the program at this time.

## Outcome Data Availability

Philadelphia has an extensive data system it already uses for regular decision-making and collaboration with researchers. The agency has developed an extensive flow-chart documenting data inputs and outputs as they flow through the system.

## Activity/Productivity Data Availability

For a scientifically sound evaluation it is critical that changes in traffic enforcement be measured since it is hypothesized that the increase in enforcement will yield the desired crime and traffic crash reductions. Therefore assessing the variations in enforcement activity (i.e., the initiative "dosage") is required.

While DDACTS respondents did not share the existence of a DDACTS-assignment specific record, one could be easily derived from the extensive records available through the site's current data systems. Importantly, however, not all activity of an officer assigned to a DDACTS patrol can be attributed to DDACTS, as the participants explained that the officer on a DDACTS-assigned patrol is one of the first to be called in to support a robust call load in the site. Therefore, officer activity records will include activities other than DDACTS patrol activities.

# Presence of a Comparison Site

Identifying a comparison site is a challenge for Philadelphia. The nature of the drug markets in the jurisdiction, as well as the agency's already highly sophisticated use of data in day-to-day operations, sets them apart from many other locations. The most feasible comparison site might be one located within the city itself. The police department has the capacity to identify potential DDACTS target zones throughout the city, which would theoretically make it possible to use random assignment of DDACTS to selected target zones within the city. In reality, however, the site representatives have expressed that it is not likely that random assignment would be feasible, and significant spillover would occur in the control locations given the data-driven nature of the department.

Although the data exist to identify other viable target zones within the city, there are unique characteristics of the current target area (in particular, very high drug activity) and a relatively low level of dosage in this site that would make a meaningful comparison challenging.

Participants in the group interview explained that they would like to expand DDACTS to other locations. If this were to occur, and the dosage was higher, the data infrastructure is certainly available in the site to support an evaluation. The challenge would be implementing DDACTS in a way that would allow an evaluator to measure and distinguish the effects of DDACTS from the many other similar activities and programs currently underway in Philadelphia.

#### **EVALUABILITY ASSESSMENT FINDINGS**

Given the unique nature of the site, it seems that the most suitable form of evaluation would be a randomized controlled trial within the boundaries of the city. However, this is not likely to be a viable option. The current DDACTS zone is markedly different from the rest of the city, which in turn is markedly different from surrounding areas and the rest of the country. In some ways, the site is a victim of its own success, in that it has developed a strong data infrastructure that it relies on heavily in its day-to-day decision-making. Philadelphia did not face the implementation challenges experienced by many sites that were incorporating data-driven decision-making into department operations for the first time.

#### ASSESSMENT SUMMARY AND RECOMMENDATIONS

Philadelphia is not a recommended DDACTS evaluation site. The department is a leader in data-driven operations and has a very sophisticated data system. However, numerous factors would make Philadelphia's DDACTS program difficult to evaluate, either on its own or in congruence with other sites under study. Philadelphia is the largest urban site under study, and consequently is a highly active jurisdiction with the one of the most extensive open air drug markets in the country.

The DDACTS program does not appear to have high enough dosage for an evaluation, as officers can only perform DDACTS duty on "dark nights," and even in this case, they are likely to be called to emergencies in other parts of the city. Furthermore, developing a comparison site within the city boundaries would be difficult, as the department routinely uses data in all aspects of its enforcement activities. Overall, department personnel were enthusiastic about an evaluation, but unfortunately the specific circumstances of the site are not supportive of one.

# SHAWNEE, KANSAS

Shawnee, KS Police Department

September 3, 2013

#### SITE CHARACTERISTICS

Shawnee is a city in the Kansas City metropolitan area, near the eastern border of Kansas. It is roughly ten miles southwest of Kansas City and occupies 41.85 square miles. Shawnee is traditionally agricultural, but in recent decades has undergone new residential and commercial development. The city had a 2012 population of 63,542 in 2012 (FBI, 2012) and a 2010 population density of 1,486.4 persons per square mile. The 2010 population was 81.8 percent white, 5.3 percent black, 7.5 percent Latino, 3.0 percent Asian, and 2.6 percent two or more races. 2008–12 estimates indicate median household income was \$73,341, with 6.8 percent of the population living below the poverty line, and 41.3 percent of persons 25 and older had a bachelor's degree or higher.

#### Transit Profile

Shawnee is surrounded by major highways and expressways, many of which feed into Kansas City. Kansas Route 7 runs through the west side of the city from north to south, and I-435 runs through the center of the city from north to south. The city is also bordered by Kansas 10 to the south, Kansas 32 to the north, as well as US-56, US-169, US-69, and I-35 to the east. I-35 leads to Kansas City, as do I-70 and I-635, both nearby. A substantial portion of the population commutes to Kansas City for work.



#### Crime Profile

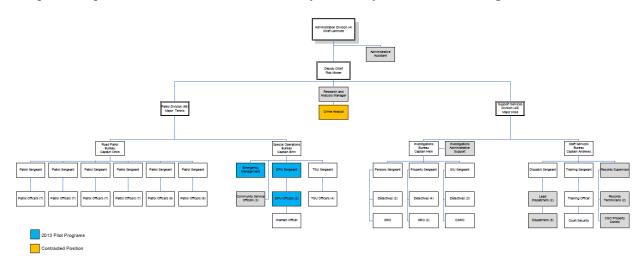
Compared to other sites under study, Shawnee has low rates of both violent crime (1.3 per thousand persons, 85 total) and property crime (16.7 per thousand persons, 1,060 total) (FBI, 2012).

## Unique Site Characteristics

Shawnee is the smallest of the DDACTS SME sites. It was also the first non-pilot site to receive DDACTS training. Participants in the group interview describe the town as a small "bedroom community," although there has been tension since the 1980s as commercial interests began to develop in the area. Newer housing complexes in the western part of the city are notably more expensive than apartments in other parts of town, which affects crime and traffic patterns. One officer noted that the dynamic of the downtown area changes following the close of the business day, after individuals from the more affluent areas have gone home, increasing the likelihood of crime.

## DEPARTMENT CHARACTERISTICS AND KEY LOCAL PERSONNEL

The police department has 88 full-time officers (FBI, 2012) and a FY2013 budget of \$12,757,100.<sup>18</sup>



Key DDACTS staff consists of the deputy chief of police, the patrol division commander, the captain overseeing the traffic unit and tactical unit, two patrol sergeants, the manager of research and analysis, and the crime analyst who is a contractor with BAIR Analytics. One of the patrol sergeants is a DDACTS SME. Six patrol officers, two traffic safety officers, and a DOJ-funded research partner were also present at the meeting.

The patrol officers are divided up into six districts, each of which is given different assignments for DDACTS. Shawnee is the only site in which all officers (patrol, traffic, and the Directed Patrol Unit) are heavily involved in the DDACTS program.

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120 - Shawnee, Kansas

<sup>18</sup> http://gsh.cityofshawnee.org/pdf/finance/2013\_budget.pdf

Shawnee shares jurisdiction on the highways with Kansas State Highway Patrol, meaning both departments may investigate crashes on the highway. The Johnson County Sheriff's Office has jurisdiction within Shawnee, but reportedly does not patrol in the city.

# Prior Use of Data and Other Related Programs/Initiatives

Shawnee's data analyst is a contractor with BAIR Analytics. She participated in a network of local crime analysts and, prior to DDACTS, would issue reports on her findings to the police department at monthly meetings. These data were not being used in a programmatic sense, and following complaints that officers felt they were simply being retold a summary of their own work, these meetings were discontinued.

#### DDACTS IMPLEMENTATION SUMMARY

As explained in the body of the full Evaluability Assessment Report, DDACTS is more of an approach than a program. There are a set of common guiding principles that can manifest in different ways to suit the needs of a given jurisdiction. This section is not intended to be any sort of assessment of whether the jurisdiction has "correctly" or "faithfully" implemented DDACTS, but rather to provide a narrative description for the purposes of understanding the nature of implementation in this particular site, and to illustrate the construct available for study.

DDACTS has been operational in Shawnee since July 6, 2010, following a training that June. The program has gone through several phases of operation, with all individuals reporting that the initial implementation had numerous problems. In particular, officers were not invested in the program and not meeting the goals set by leadership. The department's solution was to implement DDACTS focus groups beginning in January 2012. In these groups, officers could give their input so data analysis could better incorporate their knowledge of facts on the ground. In the program's third year of operation, the department expanded its DDACTS program to a second target area.

# Partners and Stakeholder Participation

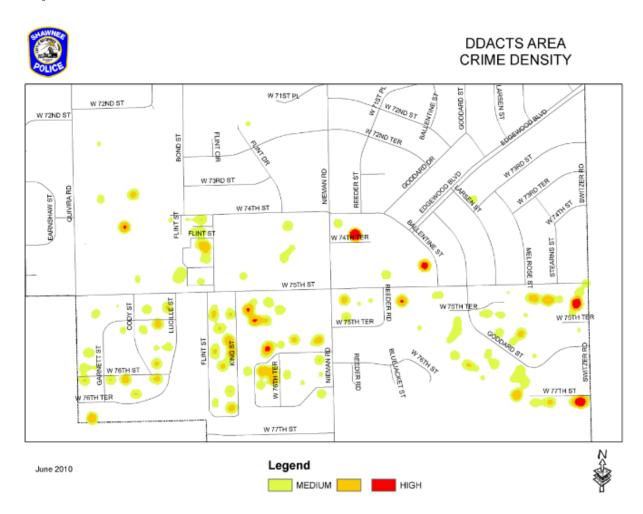
Regarding program buy-in, the primary problem for Shawnee has been determining how to best involve officers in the program. However, the department reports that it has surveyed businesses and the community about DDACTS, and responses have generally been positive.

## **Data Collection**

DDACTS in Shawnee focuses on stranger crime, based on the reasoning that these types of crime would be most affected by highly visible traffic enforcement. The department keeps records of all crashes, although in reports to the state a crash must involve an injury, incur damage over \$1000, be a hit-and-run, involve alcohol, or occur on a public street. Traffic enforcement has limited powers on private property, so the department may not be aware of collisions if they do not occur on public roads. However, staff indicated that members of the community are likely to report minor collisions.

#### Data Analysis

As a site, Shawnee emphasized the challenges and importance of blending the quantitative and qualitative components of the analyses to define the target areas. As mentioned below, the site began periodic focus group meetings where the analyst's work on the data could be blended with and interpreted by the line officers who were working in these areas to better develop a strategic plan. Importantly, the analysis in Shawnee was influenced by the officer understandings and interpretations of the results.



The original DDACTS zone is the 75<sup>th</sup> Street corridor, a major shopping area on the southern border of the jurisdiction. In the third year of operation, the department added a second zone they refer to as the North End.

## **Strategic Operations**

DDACTS operational plans will likely span several months, over the course of which each district is given a DDACTS assignment. Data analysis yields hourly time windows for particular days of the week. Districts may be instructed to dedicate one hour per shift to the DDACTS zone or to self-direct to the zone. Each subdivision (patrol, traffic, Directed Patrol Unit) sets its own goals for hours per week and contacts per hour for both DDACTS zones. During DDACTS patrol, officers are instructed to be highly visible and make stops at a lower discretionary level than is traditionally accepted. As a whole, the department is reportedly averaging 35 DDACTS hours per week per zone.

# Information Sharing and Outreach

When officers make stops in a DDACTS zone, they are expected to explain the general concept of DDACTS so the public understands why there are more stops. The department also has surveyed local businesses and residences regarding the program and reports that the community has been generally receptive. Shawnee's DDACTS has been receiving quite a bit of publicity. For example, the deputy chief went to a Smart Policing Initiative in Ohio to talk about the program, and the program has been featured in many national articles.

# Monitoring, Evaluation, and Adjustments

Shawnee's implementation of the DDACTS focus group was a major adjustment for the program. Additionally, the department reports that stranger crime and crashes have gone down 25 percent in the 75th Street corridor. At the time of the visit, staff were debating whether they should accordingly reduce hours in that zone or leave hours unchanged to ensure that crime and crashes do not increase again. As previously stated, the department also added a second DDACTS zone in 2013.

#### Outcomes

The department provided an example of a Weekly Review Report, which summarizes data on DDACTS outcomes. Outcomes are broken down by target zone and unit. Weekly statistics are compared to year-to-date averages for hours in zone, contacts, arrests, citations, warnings, and field interview cards (FICs) during DDACTS shifts.

# FUTURE IMPLEMENTATION PROCESS EVALUATION FEASIBILITY

Shawnee would be an important implementation study site, as the jurisdiction appears to typify multiple themes that emerged in other jurisdictions as well. The site is very forthcoming about the challenges and failures it experienced during early implementation, as well as its efforts to recover and correct the implementation of its DDACTS program.

Shawnee has a strong institutional commitment to the program, and would agree to participate in an evaluation.

## Availability of Historical Implementation Documentation

Many of the officers and other participants in the department have a clear recollection of their implementation efforts. In particular, one SME working in the site explained that he describes the story of Shawnee's troubled implementation when he attends DDACTS trainings.

DDACTs focus group meetings were a recent development that could be recalled by staff for an evaluation. The group interview during the site visit represented the fifth focus group meeting the site has conducted.

# Availability of Implementation Activities and Documentation Moving Forward

The members of the group reported that they have found a great benefit in the focus group meetings, and they are committed to continuing these meetings in the future. As described above, these meetings would provide a rich source of implementation data in Shawnee, which could be productively augmented by one-on-one follow-up interviews and other direct observations.

# FUTURE OUTCOME/IMPACT EVALUATION FEASIBILITY

An outcome evaluation should be possible in Shawnee. The combination of accessible data systems and experienced research support infrastructure suggest that data collection issues could be more easily addressed in Shawnee than in other sites. The participants in the group interview anticipate they would be willing to participate in an evaluation, though they would want to confirm the details of their participation with the chief before committing to participating.

## Outcome Data Availability

Several years ago, the department migrated to a more sophisticated records management system (RMS). Historical data is included in the new system, but not at the level of detail possible in the upgraded system. The data collected in the RMS is already being exported and used for analysis, and the analyst uses software to further enrich the data (e.g., by converting addresses into X, Y coordinates).

The department has a history of working with researchers, and it is currently hosting a researcher through the SMART Policing grant program. Currently, the police analyst does the actual analysis and the researcher interprets the data output. The department indicated it would be willing to share the data with an outside evaluator so the evaluator could work with the department's data directly. However, the department would need to strip the data of sensitive information prior to releasing it. Shawnee has never collaborated with a researcher through the use of an MOU before.

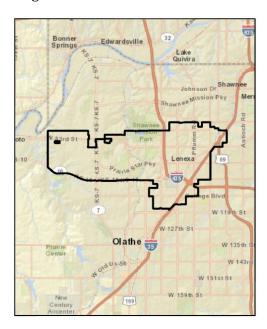
# Activity/Productivity Data Availability

For a scientifically sound evaluation it is critical that changes in traffic enforcement be measured since it is hypothesized that the increase in enforcement will yield the desired crime and traffic crash reductions. Therefore assessing the variations in enforcement activity (i.e., the initiative "dosage") is required.

The department collects more detailed activity records for officers' actions in the DDACTS target area. These data are reviewed and quality-controlled weekly and they also track enforcement. These records supplement the analyses that are already completed on officer activity data collected through the RMS and analyzed by their contracted analyst.

# Presence of a Comparison Site

There was a fairly strong consensus among the many participants at the group interview that Lenexa is a good comparison site for Shawnee. These two sites share a border and are both traditionally rural cities undergoing similar demographic changes. As such, they have many new, affluent housing complexes as well as less affluent apartment buildings. Shawnee department staff stated that Lenexa may have a larger industrial sector.



City	Population	Violent crime	Property crime	Violent Crime Rate Per thousand persons	Property Crime Rate Per Thousand Persons	Police Officers
Shawnee	63,542	85	1,060	1.337697901	16.6818797	88
Lenexa	49,222	58	944	1.178334891	19.17841616	87

The UCR data (presented in the table above) support the suggestion of the group interview participants that Lenexa is a fairly equivalent comparison site for Shawnee.

## **EVALUABILITY ASSESSMENT FINDINGS**

A pre-post comparison group design should be possible in this site. Its strong research infrastructure and experience should be able to provide sufficient support to an outside evaluator and help to facilitate the research process.

An implementation assessment should also be productive in Shawnee. The members of the group interview were upfront about challenges they experienced during implementation, and have clearly developed and implemented plans based on consideration of those challenges. In combination with observations of the periodic focus groups, Shawnee should be able to provide valuable lessons on the implementation of DDACTS.

#### ASSESSMENT SUMMARY AND RECOMMENDATIONS

Shawnee is a recommended site for evaluation. It is an enthusiastic site with a strong commitment and infrastructure to support research (including a dedicated research manager who oversees the analyst, as well as a partnership with a Ph.D. through the SMART Policing program). Although it had implementation problems in the beginning, it addressed these challenges with large focus group meetings where the line officers and managers discuss objectives, set goals, and essentially instill buy-in among the line officers. Between the data systems, site commitment and support, and the presence of reasonable comparison site nearby, Shawnee could be a viable candidate for evaluation.

# STATE COLLEGE, PENNSYLVANIA

State College Police Department, Pennsylvania

August 27, 2013

#### SITE CHARACTERISTICS

State College is a small college town occupying 4.56 square miles and is home to Pennsylvania State University. The borough is located in Centre County in the middle of Pennsylvania, far removed from either Philadelphia or Pittsburg, and is surrounded by four largely rural townships. State College's estimated population was 57,020 in 2012 (FBI, 2012), with a 2010 population density of 9,224.1 persons per square mile. There is a very high student population in the jurisdiction, with an estimated 71.4 percent of the population between the ages of 15–24 in 2010. The total population in 2010 was 80.7 percent white, 9.8 percent Asian, 3.9 percent Latino and 3.8 percent black. Although an estimated 52.0 percent of the population lived below the poverty line from 2008–12, this is likely due to the large student population.

#### Transit Profile

The borough's road system is made up of streets serving the university and its surrounding businesses and residences, as well as several major roads. The Mount Nittany Expressway, comprising Interstate 99, US Route 220, and US Route 320, surrounds State College on the north and northeast. US Route 320 Business runs through the area from east to west while Pennsylvania 26 runs through from north to south. Interstate 80 and Pennsylvania 45 are also nearby. Public bus routes are provided by the Centre Area Transportation Authority. University life and major events have a large effect on traffic patterns, as described below. The amount of student driving traffic is very low.



## Crime Profile

Of the sites under study, State College had the lowest rates of violent crime (.9 per thousand persons, 53 total) and property crime (13.8 per thousand persons, 787 total) in 2012 (FBI, 2012). As described below, DDACTS target crimes are significantly tied to student drinking events. Many factors could contribute to crime levels and the amount of drinking. In addition to football games in the fall, the beginning of spring typically corresponds with an uptick in partying and incidents, especially events related to Saint Patrick's Day.

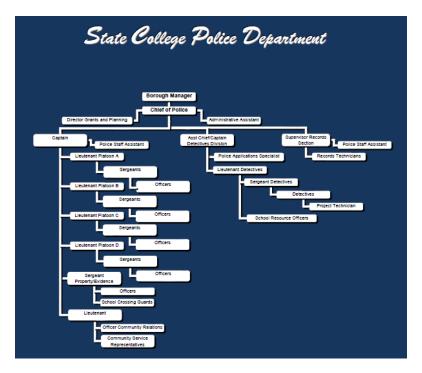
## **Unique Site Characteristics**

State College's population is very transient due to the many students and visitors, and the amount of resources dedicated to that is very high. State College is also a destination spot for art fairs, as well as football, which brings in approximately 1.5–2 million visitors per year (approximately 100,000 visitors on a football weekend).

The student population turns over every year, and department staff report that incoming classes need to be educated about the community. Members from the department also said that student riots have occurred in the past, the most recent occurrence being a mild incident following the firing of Penn State's football coach, Joe Paterno.

#### DEPARTMENT CHARACTERISTICS AND KEY LOCAL PERSONNEL

The police department has 64 full time officers and its annual operating budget in FY2013 was \$9,425,158.19



During our site visit, we met with a captain, a sergeant in charge of the patrol division, the department's IT specialist (also serving as the department's *de facto* crime analyst), and the records management specialist. With the exception of the IT specialist, all the meeting attendees had attended the DDACTS training on March 7, 2013.

## Concurrent Law Enforcement Jurisdiction

**Pennsylvania State University Police Department** - Penn State Police rarely take incidents in State College's jurisdiction, but they have the authority to travel 100 yards into that jurisdiction. Conversely, State College PD has the authority to operate on Penn State's campus, but they rarely do as a matter of practice.

**State Police** – The State Police have jurisdiction within State College, but rarely conduct any sort of enforcement off the highways.

## Prior Use of Data and Other Related Programs/Initiatives

DDACTS is the department's first data-driven initiative. The department partners with the university and campus police on a variety of programs, many of which are intended to increase community engagement and decrease student drinking and related incidents. These collaborations include:

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<sup>&</sup>lt;sup>19</sup> http://www.statecollegepa.us/DocumentCenter/View/7087

**Source Investigation Project -** The departments investigate the alcohol provider in incidents involving alcohol provision to minors.

**Neighborhood Enforcement Alcohol Team** – State College PD deploys two officers teamed up with campus police officers in the neighborhoods adjacent to the downtown area. This team is dedicated to Penn State's fraternity area.

**Neighborhood Safety Improvement Program** – A program in which the department hires students as auxiliary officers to provide support.

**The Lion Walk** - Members of the department join the university president and other university leadership to greet students and visit residents.

#### DDACTS IMPLEMENTATION SUMMARY

As explained in the body of the full Evaluability Assessment Report, DDACTS is more of an approach than a program. There are a set of common guiding principles that can manifest in different ways to suit the needs of a given jurisdiction. This section is not intended to be any sort of assessment of whether the jurisdiction has "correctly" or "faithfully" implemented DDACTS, but rather to provide a narrative description for the purposes of understanding the nature of implementation in this particular site, and to illustrate the construct available for study.

State College is still in the "fledgling stages" of implementing DDACTS in its jurisdiction. It has experienced multiple issues that have slowed implementation more than expected, including some personnel matters. The site began the DDACTS analysis with an expectation of where the problem areas would emerge. Problems related to college drinking are the dominant concern of the community, and the department already had a sense of the location and timeframe of such incidents. Given the parameters set by the department, DDACTS analyses affirmed the pre-existing focus on targeted enforcement in the borough's downtown area. Furthermore, given the nature of the student population, foot traffic is a bigger concern than automobile traffic. It is possible that State College does not experience enough traffic crashes for DDACTS to be a useful program. The staff explained that they are not sure the conditions of their jurisdiction are conducive to DDACTS and are not necessarily committed to implementing the program as they understand it.

## Partners and Stakeholder Participation

Given the current state of the DDACTS program, the department has not sought stakeholder participation specifically for DDACTS. More generally, the university has been the department's primary partner for many years, and the university often provides resources. Student riots in the late 1990s led to many of the current initiatives. These initiatives were under the direction of the police chief. Penn State also has the Office of Student Conduct, which ensures that students who get a citation also receive student sanctions.

The department also regularly engages with the business community to address issues related to student drinking.

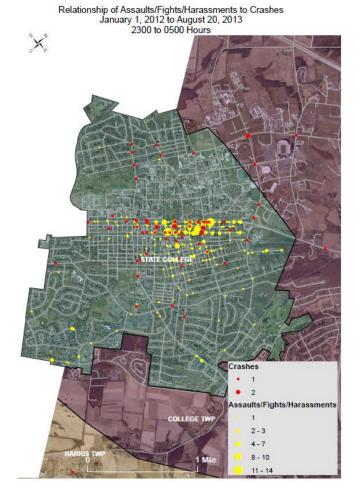
## **Data Collection**

State College DDACTS focuses on assaults stemming from college drinking because these are a dominant concern of the community. This measure includes incidents of disorderly conduct and harassment, in addition to assaults with a clear instigator, injury, or hospitalization. Problems related to drinking are particularly concerning to non-student residents who live near the university. The department noted numerous other community effects of assaults, such as consuming police and hospital resources.

Foot traffic is a generally a higher concern for the department than vehicle traffic. Vehicle traffic resulting from large university events such as football games falls under the jurisdiction of university police. As evidence of its lack of crashes, the department pointed to certain major party events that resulted in large upticks in assaults, but no upticks in crashes. Crashes are all recorded, if there is any contact, and citizens call for most incidents. For crashes that do not meet Pennsylvania's reporting requirements, the department has a separate non-reportable crash report. Unlike in a larger urban area, where minor crashes might not be a police matter, department staff report that they will likely be called for all crashes.

# **Data Analysis**

The DDACTS zone was determined from analysis of roughly 18 months of crime and crash data broken down by hour. The department conducts ongoing analysis to determine if the zones can be narrowed further.



The DDACTS zone is a ten-block strip along Beaver Avenue and College Avenue, which constitutes the main downtown area. This zone is dense with bars, and the peak times for assaults are between 11 P.M. and 5 A.M. on Thursday, Friday and Saturday nights. This timeframe is somewhat dependent on the university's football schedule.

## **Strategic Operations**

The DDACTS analysis has not led the department to change its operations in any significant way. They report that as part of regular operations, the zone is typically saturated with highly visible officers at peak times. Prior to the analysis, the department was already aware of the downtown area as a significant zone of activity.

# Information Sharing and Outreach

The department does not conduct DDACTS-specific outreach. However, command staff does meet with businesses and bar owners regarding drinking issues.

State College's data are drawn from their records management system (RMS), which the department explained is a shared system that other jurisdictions in the Centre County region can access.

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# Monitoring, Evaluation, and Adjustments

At the time of the visit, the department was conducting ongoing analysis to determine if incoming crime data would help further specify the target zone.

#### Outcomes

Regarding DDACTS outcomes, the department provided Urban with various maps of the target zone, which displayed crashes and assaults over differing time windows. This document also compares the number of crimes, ordinances, and crashes across all special events during the 2012–13 school year. Regarding general outcomes, the department provided its annual report and a neighborhood sustainability plan that includes student and non-student survey data. The 2012 Report to the Community can be accessed online.<sup>20</sup>

#### FUTURE IMPLEMENTATION PROCESS EVALUATION FEASIBILITY

DDACTS personnel were hesitant about participating in a future process evaluation. While they have extensive knowledge of the issues in the community and could describe the department's experience with DDACTS, overall enthusiasm for the program appears low. DDACTS has been implemented minimally to this point, and the department may determine that it is not a useful program for its needs, as it already have a good sense of the location and time frame of drinking-related assaults. A process evaluation could provide a useful case study of reasons DDACTS may not fit a jurisdiction, but overall, there seems to be little commitment to such an effort.

# Availability of Historical Implementation Documentation

The individuals in the group interview were very knowledgeable about the limited history of DDACTS in the jurisdiction. In-person interviews should be able to provide sufficient information on the history of implementation. Additionally, activity records are collected through officer-completed reports detailing hours, areas covered, and numbers of citations issued.

## Availability of Implementation Activities and Documentation Moving Forward

Availability and extent of data collection on implementation activities would be dependent on the conditions of the site's agreement to participate.

## FUTURE OUTCOME/IMPACT EVALUATION FEASIBILITY

While the site has data on some outcomes of interest and the data capacity to support an evaluation, the leadership seemed to exhibit signs of reservation and hesitation. The fact that the site appears to have few of the underlying conditions that are meant to be addressed by DDACTS (e.g., traffic crashes) seems to suggest that an evaluation of the site would produce null findings. Furthermore, the department has been involved in numerous initiatives aimed at reducing student drinking, and it would thus be difficult to attribute any outcomes specifically to DDACTS.

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<sup>&</sup>lt;sup>20</sup> http://www.statecollegepa.us/DocumentCenter/View/8000

# Outcome Data Availability

The department has a CAD/RMS that runs on a semi-automated system. When an individual calls into dispatch, the address for the crime will be entered into the system automatically. Officers then fill in details later on, often in the computers available in the police cars. In some cases, the location dispatch receives is not precise, and mistakes may be corrected by officers or the records department.

The department has done a major export of RMS data to researchers in the past, and there have not been major changes to the data system since then. Some paperwork would be involved with an export, as researchers would have to submit an official request.

While the data system appears to fit the needs of an evaluation, the participants told us that the department is considering a transition to a new data system in 2014. This could affect the nature and extent of the data available, as some data may be lost in the transition. Additionally, it is difficult to predict exactly which data will be available in the future.

# Activity/Productivity Data Availability

For a scientifically sound evaluation it is critical that changes in traffic enforcement be measured since it is hypothesized that the increase in enforcement will yield the desired crime and traffic crash reductions. Therefore assessing the variations in enforcement activity (i.e., the initiative "dosage") is required.

The department tracks metrics on officer activity. On daily reports, officers will mark their total hours, locations covered, citations, cases, and home visits. Records department staff enter this data manually into Microsoft Access, and the data can be exported.

# Presence of a Comparison Site

A viable comparison site does not exist, as State College is unique in the area due to the presence of the university. In some ways, the university campus could be a promising comparison site. The campus is directly north of State College's downtown area, and students moving from the bars onto campus fall under the jurisdiction of the campus police rather than the State College PD. Additionally, both departments use the same RMS, thus facilitating record collection. However, the campus would not serve as a viable comparison for changes in assaults if assaults from the bars were being displaced to the campus. Furthermore, vehicles are not allowed to drive on the campus, so there is not a strong comparison site for collisions, as none can take place on campus.

## **EVALUABILITY ASSESSMENT FINDINGS**

It is not recommended that State College be included in a full evaluation. Aside from a very low incidence of traffic crashes, there is not an obvious comparison site. Further, the site has extremely unique characteristics (e.g., huge fluctuations in population with special events) that make it unlike many other jurisdictions in the United States. Further still, the jurisdiction is also engaged in a wide variety of other interventions that could interfere with the measurement of the impact of DDACTS.

However, the site did note some interesting jurisdictional characteristics that should be considered in evaluations of other sites. In particular, the issue of variations in weather was an important consideration. Specifically, the members of the department explained that there are fewer incidents during the winter and when it is rainy, because these conditions typically force individuals to get home quickly, rather than linger and engage in conflicts.

## ASSESSMENT SUMMARY AND RECOMMENDATIONS

Conducting an outcome evaluation in this site is not recommended. Due to the presence of the university and its attendant influences of a strong football culture and a history of being nationally ranked as a top "party school," the jurisdiction has a very unique set of circumstances that does not seem to lend itself to DDACTS. There are large fluctuations in the population based on the academic and football schedules, the number of crashes is very low, and there is no viable comparison site. Additionally, the department is currently participating in a many different programs that would make it difficult to isolate the effects of DDACTS.

# THIBODAUX, LOUISIANA

Thibodaux Police Department, LA

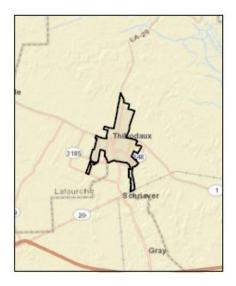
December 4, 2013

## SITE CHARACTERISTICS

Thibodaux is a small city occupying 6.03 square miles in Lafourche Parish, Louisiana, roughly 60 miles west of New Orleans. The area immediately surrounding Thibodaux is very rural, but the city itself is substantially residential, and has a variety of unique characteristics described below. Thibodaux had a 2012 population of 14,701 (FBI, 2012) and a 2010 population density of 2,417.2. The 2010 population was 62.6 percent white, 32.8 percent black, 2.0 percent Latino, 1.0 percent Asian, and 1.3 percent two or more races. 2008–12 estimates indicate median household income was \$42,435, with 19.3 percent of the population living below the poverty line, and 23.5 percent of persons 25 and older had a bachelor's degree or higher.

#### Transit Profile

There are three major roads that go in and out of Thibodaux. LA-1 and LA-308 run parallel to each other from east to west, while LA-20/LA-24 goes from north to south. There is a city bus route that drives to nearby commercial areas, which began approximately one year prior to Urban's site visit. Many workers commute into Thibodaux due to unique factors described below. Department staff estimate that during daytime hours the city's population more than doubles to roughly 40,000.



## Crime Profile

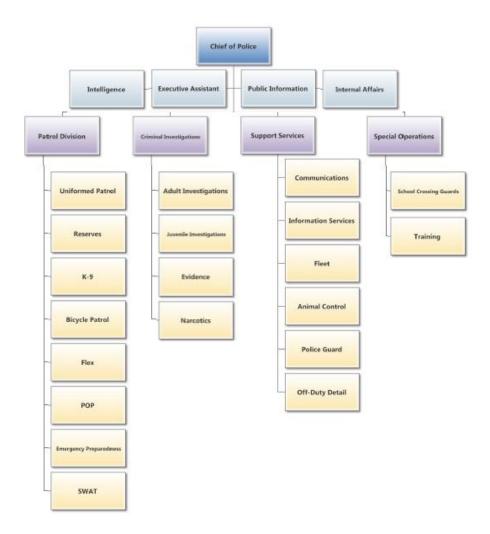
Of the sites under study, Thibodaux has medium rates of violent crime (4.4 per thousand persons, 65 total) and the second highest rate of property crime (39.5 per thousand persons, 581 total) (FBI, 2012).

# **Unique Site Characteristics**

Thibodaux has several unique factors that make it a local commuter city. Located within the city are a large John Deer industrial facility, a hospital, and Nicholas State University. The university has roughly 7,000 students enrolled and affects Thibodaux Police Department due to increased traffic activity during sporting events and the need for increased drinking enforcement. The university is also host to the Manning Passing Academy, an annual program that brings college football recruits from all over the country into Thibodaux. Thibodaux is the parish seat, so Lafourche Parish court houses are located in the jurisdiction. Thibodaux's residential areas are mixed, with blocks of Section 8 housing adjacent to higher income blocks, which affects crime patterns in the city.

## DEPARTMENT CHARACTERISTICS AND KEY LOCAL PERSONNEL

The department has 64 full-time officers (FBI, 2012) and in FY2014 will have a budget of \$6,581,889.<sup>21</sup>



<sup>&</sup>lt;sup>21</sup> http://www.ci.thibodaux.la.us/departments/finance/files/2014%20Original%20Budget.pdf

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The core DDACTS team includes the chief of police, intelligence analyst, a patrol captain, and patrol lieutenant. All except the patrol captain are DDACTS SMEs. Thibodaux uses the Resource Management System (RMS) developed by the Lafourche Parish Sheriff's Office and shared with the Parish's four incorporated police departments. The department also has a Problem Oriented Policing squad with the responsibility of addressing rising trends, such as burglaries or drug trends. While these officers do not participate in DDACTS, the initiative shows the department's focus on proactive enforcement.

## Concurrent Law Enforcement Jurisdiction

The Lafourche Parish Sheriff's Office and the Louisiana State Police also have jurisdiction in Thibodaux, but the Thibodaux Police Department is the primary law enforcement agency, and Thibodaux staff says the others do very little enforcement within city. If there is a fleet crash, Thibodaux may call the sheriff's office for assistance. If another agency witnesses any activity that requires reporting, it will alert Thibodaux. There is also a University Police Department at Nicholas State University that enforces laws on campus.

# Prior Use of Data and Other Related Programs/Initiatives

DDACTS is the department's first data-driven initiative. Staff report that there may have been some informal "pin-map" crime mapping prior to DDACTS, but nothing that was functionally equivalent to current operations. The group interview participants explained that prior to DDACTS the department was completely reactive, and now it uses data systematically to become more proactive.

## DDACTS IMPLEMENTATION SUMMARY

As explained in the body of the full Evaluability Assessment Report, DDACTS is more of an approach than a program. There are a set of common guiding principles that can manifest in different ways to suit the needs of a given jurisdiction. This section is not intended to be any sort of assessment of whether the jurisdiction has "correctly" or "faithfully" implemented DDACTS, but rather to provide a narrative description for the purposes of understanding the nature of implementation in this particular site to illustrate the construct available for study.

The Thibodaux chief was previously a captain at the sheriff's office, and he helped develop the pilot DDACTS program there. When he became chief at Thibodaux, it was a natural transition to implement the program. Thibodaux held a training in February 2011, and launched the program in March of that year. DDACTS and data-driven operations are the "cornerstone" of the department. Department leadership expect that even non-DDACTS patrols will be based on hotspots, with patrol teams using Crime Reports to make decisions regarding where patrols take place. The office is also equipped with visible computer maps to highlight the importance of data. The program has had three iterations of the DDACTS hotspot zone, and the department plans to reevaluate the current hotspots in the near future.

# Partners and Stakeholder Participation

In the past, Thibodaux has policed a joint DDACTS hotspot with the Lafourche Parish Sherriff's Office. The department will also work with Department of Transportation engineers on consistent traffic problems resulting from design flaws, such as problematic roundabouts or areas that need better signage.

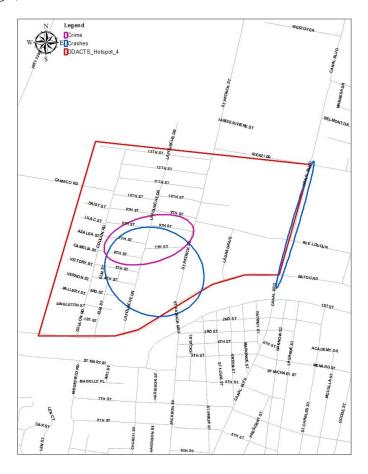
#### Data Collection

Traditionally, crimes of focus have been thefts from retail stores and home burglaries.

Crashes are distinguished between regular crashes, those occurring on private property, and hitand-runs. Louisiana law requires that any crash resulting in \$500 of damage or more be reported. For this reason, the department estimates that most crashes are reported. If the department is called for a crash and decides not to report it, the officer will still document it in department records. There is also a formal system for reporting crashes to the state.

## Data Analysis

There have been several DDACTS zones based on longitudinal data. The span of the data has varied based on the spot—one was using 6 months of data, one using 3 years, and one using 5 years. This data is mapped using X,Y coordinates in ArcGIS.



In the current zone, the key time period is 11am–1pm on Wednesdays through Saturdays. During non-DDACTS times, patrols are also intended to be based on short-term hotspots identified in Crime Reports.

# **Strategic Operations**

During the target periods, it is expected at least one officer will be highly visible in the DDACTS zone. All activity during DDACTS time is recorded in a separate log that tracks traffic stops, field interview cards, total contacts, tickets, and foot patrols. Officers in Louisiana cannot give written warnings, but Thibodaux has implemented equipment violations that allow citizens one week to fix car problems without a ticket. These, as well as compliance citations, are tracked, and the warning to ticket ratio is generally 3 to 1. In one recent week, 88 percent of stops resulted in warnings or equipment violations.

# Information Sharing and Outreach

Officers are trained to explain the DDACTS zone to the driver when they make a stop. Additionally, the chief often makes television and radio appearances in Baton Rouge and the New Orleans area. The department also has a presence at local meetings. In all public appearances, it mentions DDACTS, and the community is reportedly very familiar with the program. The department makes sanitized versions of its data available to the public through crimereports.com. The department also has numerous non-DDACTS related outreach mechanisms. Individuals can submit anonymous tips online, and the department has a mobile web application. Another similar communication program is "Tweet in a Beat."

# Monitoring, Evaluation, and Adjustments

The department has adjusted the DDACTS zone several times and will do so again soon. Patrol commanders are involved in this process, ensuring that the analyst includes the perspectives of officers on the ground.

#### Outcomes

The department provided an example of a weekly DDACTS report that provides a variety of metrics. The report shows a percentage breakdown of weekly DDACTS activity by traffic stops, warrant checks, warrant arrests, and FIC stops, as well as well as a percentage breakdown of traffic stops by citations, compliance citations, and warnings. The document compares a yearly rolling average to the 3-year average for crashes, burglaries, thefts, and property damage, and provides weekly comparisons for other metrics. The document also contains weekly maps for crime, crashes, and officer activity.

#### FUTURE IMPLEMENTATION PROCESS EVALUATION FEASIBILITY

As with many other jurisdictions, a culture change appears to have taken place in Thibodaux as part of DDACTS implementation efforts. However, unlike many of the other jurisdictions, the chief arrived in the jurisdiction with a clear vision and significant experience working with the program.

He instituted the program with a grassroots focus that prioritized "showing" the officers the problem through the data, rather than "telling" them about the problems and expecting them to simply do what they were told. This distinction alone makes Thibodaux a prime candidate for an implementation/process evaluation. Relatedly, new data systems and other organizational changes were occurring at the same time DDACTS was being adopted by the jurisdiction. The results of these changes, guided by a police chief with significant experience with DDACTS, further suggest that this site is an excellent candidate for a productive implementation assessment.

# Availability of Historical Implementation Documentation

Officers complete activity sheets to document their actions while in the DDACTS zone. They complete these reports by hand and provide them to the analyst, who then compiles officer activities. The analyst has a record of activity that goes back to the beginning of the program, so these records can be used to determine historical changes in program implementation.

# Availability of Implementation Activities and Documentation Moving Forward

In addition to ongoing records of activity completed by the officers, it may also be possible to monitor social media interactions with the community for additional information of the state of the program. Further, attending community meetings to observe interactions between the public and the department while it reports on DDACTS activities would reveal more information about the program.

# FUTURE OUTCOME/IMPACT EVALUATION FEASIBILITY

The site explained that it is willing to participate in an evaluation, and that it should not be a problem to get a MOU in order to share data with an evaluator. The mayor would need to sign the MOU document, but department staff anticipate the entire MOU process could be completed within a month. Furthermore, Thibodaux has the appropriate data infrastructure to support an outcome evaluation.

## Outcome Data Availability

The site has adopted a sophisticated CAD/RMS, which is also used by several other local agencies (including the Lafourche Parish Sheriff's Office). This more sophisticated system allows for superior data sharing between jurisdictions, as well as more detailed data collection on activities within jurisdictions. Like many other jurisdictions, Thibodaux is also contracting with CrimeReports.com to provide the public and department officers' access to the data in a more user-friendly manner.

It may also be possible to access the social media data generated between the site and the community to develop metrics of community engagement and support for the department's activities. Further, collision data can be made available through the statewide reporting system "LA Crash." Through this system, data feeds to Louisiana State University where it is further enriched and then provided to departments through the Louisiana Transportation Research Center's Local Technical Assistance Program (LTAP) database. These data could also be accessed and utilized for evaluation.

# Activity/Productivity Data Availability

For a scientifically sound evaluation it is critical that changes in traffic enforcement be measured since it is hypothesized that the increase in enforcement will yield the desired crime and traffic crash reductions. Therefore assessing the variations in enforcement activity (initiative "dosage") is required.

Officers complete activity sheets to document their actions while in the DDACTS zone. They complete these reports by hand and provide them to the analyst, who then compiles officer activities. The analyst has a record of activity that goes back to the beginning of the program.

# Presence of a Comparison Site

The site suggested Morgan City might be a productive comparison site, but went on to explain that there is not really another city like Thibodaux. Due to the site's unique characteristics as a local commuter city, the department suggested it might be difficult to find an adequate comparison site. However, it did provide a table of possible sites. Of those, Morgan City was the closest to Thibodaux in terms of population and crime patterns. Given the circumstances, it might be best to conduct a multi-site group design.



City	Population	Violent crime	Property crime	Violent Crime Rate Per thousand persons	Property Crime Rate Per Thousand Persons	Police Officers					
Thibodaux	14701	65	581	4.421467927	39.52112101	64					
Morgan											
City	12376	46	387	3.716871364	31.27020039						
UCR does not provide police officer data for Morgan City.											

#### **EVALUABILITY ASSESSMENT FINDINGS**

Thibodaux has sufficient data, a clearly defined DDACTS program, and the research infrastructure to support an evaluation. The site also expressed a willingness to participate in an evaluation. Finding a sufficiently similar comparison site could prove to be problematic, but combining several sites into a single evaluation might allow for statistical controls to address any moderate differences between site. This may be a viable option since Thibodaux and Lafourche Parish are next to one another, use the same data systems, and operate a similar form of DDACTS.

Provided that a sufficient number of comparable sites can be identified, a multi-site pre-post comparison group design would be appropriate for evaluating the effect of DDACTS in this site. Grouping the comparison sites as close around the two DDACTS jurisdictions would have the added benefit of allowing for an assessment of the perceived displacement of offenders that the site believes is occurring.

#### ASSESSMENT SUMMARY AND RECOMMENDATIONS

Urban recommends Thibodaux as an evaluation site, but urges future evaluators to consider grouping several treatment and comparison sites together in order to provide an opportunity to assess offender displacement.

## **VERMONT**

#### Vermont State Police

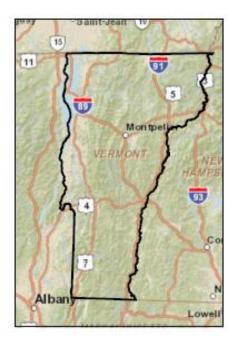
November 18, 2013

## SITE CHARACTERISTICS

The Vermont State Police is the only site under study that is a state police agency, which poses unique challenges for DDACTS implementation as well as comparing characteristics across sites. The state had a total population of 626,011 in 2012 (FBI, 2012) with a 2011 population density of 67.9 persons per square mile. The 2012 population was 94.0 percent white, 1.1 percent black, 1.6 percent Latino, 1.4 percent Asian, and 1.7 percent two or more races. 2008–12 estimates indicate median household income was \$54,168, with 11.6 percent of the population living below the poverty line, and 34.2 percent of persons 25 and older had a bachelor's degree or higher.

## Transit Profile

Vermont's major roads are Interstates 89 and 91, both of which run north to south through the state. Burlington is Vermont's largest city, located on the western border in the center of the state, and attracts large traffic. Vermont also has several ski resort towns, such as Killington, which attract traffic during winter months.



#### Crime Profile

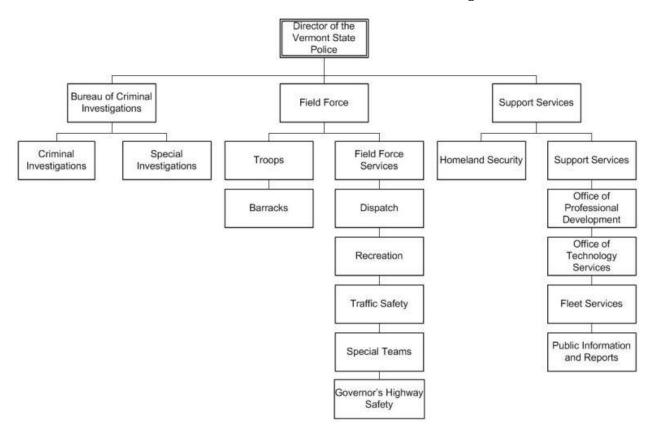
Crime rates for the state are lower than for the other jurisdictions under study for violent crime (1.4 per thousand persons, 893 total) and medium for property crime (24.0 per thousand persons, 15,016 total) (FBI, 2012).

# **Unique Site Characteristics**

As a state agency, implementation of DDACTS has been difficult because the program has primarily been utilized by smaller jurisdictions. Also unique is that, as a ski destination, crime and crash rates tend to be higher in the winter months when more tourists come into the state.

#### DEPARTMENT CHARACTERISTICS AND KEY LOCAL PERSONNEL

The Vermont State Police have 344 full-time officers<sup>22</sup> and a FY2013 budget of \$60,577,463.<sup>23</sup>



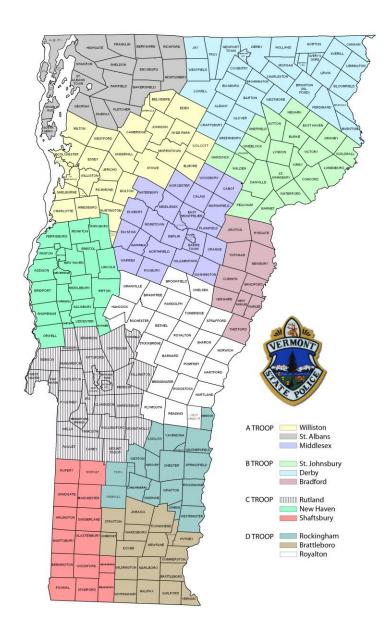
Urban met with a lieutenant who was also director of the Fusion Center, a sergeant, the lead and supervisory analyst, and the analyst for state highway safety.

These personnel all work in the Fusion Center, the central location from which statewide operations are directed. The state is then broken up into four troops (A, B, C, and D), each of which has three barracks, or stations.

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<sup>&</sup>lt;sup>22</sup> This number for all other agencies came from UCR, but it didn't have the figure for state agencies, so this one is from budget.

<sup>&</sup>lt;sup>23</sup>http://finance.vermont.gov/sites/finance/files/pdf/state%20budget/FY2013%20Executive%20Budget%20Recommendations.pdf



## Concurrent Law Enforcement Jurisdiction

State police barracks typically occupy one or two counties, so state police jurisdiction overlaps with both local departments and county sheriffs' offices. A sheriff's office is sometimes contracted by a local department to be responsible for the jurisdiction on certain days, meaning that the sheriff may be responsible for dispatch on certain days of the week and state police on other days. In general, the state police's jurisdiction is not limited to highways.

## Prior Use of Data and Other Related Programs/Initiatives

DDACTS is the first data-driven program the department has tried to implement. Prior to DDACTS, there was no other attempt at integrating data analysis into operations.

#### DDACTS IMPLEMENTATION SUMMARY

As explained in the body of the full Evaluability Assessment Report, DDACTS is more of an approach than a program. There are a set of common guiding principles that can manifest in different ways to suit the needs of a given jurisdiction. This section is not intended to be any sort of assessment of whether the jurisdiction has "correctly" or "faithfully" implemented DDACTS, but rather to provide a narrative description for the purposes of understanding the nature of implementation in this particular site to illustrate the construct available for study.

The department implemented a DDACTS pilot program in 2008 in its A Troop, in partnership with the Saint Alban's Police Department and the Franklin County Sheriff. Representatives from the department attended a DDACTS training in Maryland. This program lasted for slightly less than a year and was discontinued. The department purchased a CrimeReports.com license in 2010, and some barracks have chosen to use hotspot mapping for tactical purposes. In recent months the Fusion Center has also sent weekly crime and traffic reports to barrack offices. Among command staff there is general interest in pursuing DDACTS, and there will be a new training in May 2014. The department added an analyst for highway safety in June 2013. In general, staff feel that for a DDACTS program to be successful in the future, it must be more clearly defined and be tested in a specific locality, involving all law enforcement agencies in that area.

# Partners and Stakeholder Participation State police staff indicated that participation of multiple law enforcement agencies will be important to any future implementation of DDACTS. Currently, the May 2014 DDACTS training will only be required for state police staff. However, the department will encourage the involvement of local departments to make the program successful. Data Collection Regular reports include larcenies, burglaries, DUIs, and crashes. Data Analysis Crime and crash reports are provided to barracks on a weekly basis. It is possible that C Troop will be a good test site for a future DDACTS program, due to willingness of staff there. Strategic Operations Troops have discretion in current use of crime mapping software and its effect on operations. One commander has in the past created maps of basic trends and directed officers to specific locations accordingly.

Due to the current state of the program, there has been no attempt to conduct outreach about the DDACTS program.

Information Sharing and Outreach

# Monitoring, Evaluation, and Adjustments

To date there has not been a consistent program, and the department plans to create a more specifically-targeted program in the near future.

#### Outcomes

The department provided a case study report from a pilot program with the Saint Alban's Police Department. This report has outcome comparisons between the pilot program and the four years prior for assaults, burglaries, domestic violence, fraud, sex offenses, theft, and vandalism. There is also data comparing crashes (total, injury crashes, and property damage crashes) by year. The department also provided two examples of monthly operations created by a station commander, which include hotspot maps and time-of-day/day-of-week density maps.

### FUTURE IMPLEMENTATION PROCESS EVALUATION FEASIBILITY

Implementation efforts in Vermont have been fairly limited. While the state served as an early demonstration site, the level of actual activity produced during this period was limited and dissimilar to the DDACTS model. Currently, the different levels of the state-wide organization have received direction to make use of existing data systems to implement DDACTS principles, but there has been limited and fleeting adoption and operationalization. There is currently no application of the DDACTS principles in Vermont for which an implementation/process evaluation could be completed. This may not always be the case, as there is continuous support among the senior command staff in support of the program. But, as of the time of the site visit, there was no program in operation, nor any clear and specific plans to begin such a program that could be evaluated.

#### Availability of Historical Implementation Documentation

The participants in the group interview were able to generally describe the effort of one proactive command-level user who utilized the data infrastructure to develop operations plans. However, that individual has since retired and his approach has not been adopted by his successor.

## Availability of Implementation Activities and Documentation Moving Forward

As there are no clear and specific plans to begin implementation of a DDACTS program in the near future, no information or records of implementation activities will exist moving forward.

## FUTURE OUTCOME/IMPACT EVALUATION FEASIBILITY

A version of DDACTS is not currently being implemented by the state police in Vermont. Therefore, it is not possible to evaluate DDACTS in this site. However, the leadership has expressed a commitment to expand the use of DDACTS programs and principles in the state. It is not unreasonable to believe a barrack within the state police could be operating DDACTS in the near future, but uncertainty around the prospects of this development, as well as other concerns, severely compromise the opportunity to conduct a viable evaluation in the site. For these reasons, Urban does not foresee a reasonable opportunity for evaluation developing in the near future.

# Outcome Data Availability

The crime analyst prepares and distributes weekly data on larceny, burglary, traffic collisions, and DUIs. In addition, CrimeReports.com accesses state police records to produce further synthesis of its data. However, as there is no DDACTS program to speak of, the available outcome data cannot be used to support an evaluation.

# Activity/Productivity Data Availability

For a scientifically sound evaluation it is critical that changes in traffic enforcement be measured since it is hypothesized that the increase in enforcement will yield the desired crime and traffic crash reductions. Therefore assessing the variations in enforcement activity (initiative "dosage") is required.

As there is no program to speak of, any available activity/productivity data could not be used to support an evaluation.

## Presence of a Comparison Site

Given the compartmentalized organization of the state, the most reasonable comparison sites would be the other barracks within the state. However, the directive to use a DDACTS approach has been applied state-wide, and it is therefore very likely that potential comparison sites have adopted program components into their operations.

## **EVALUABILITY ASSESSMENT FINDINGS**

The site is not currently implementing DDACTS, and has no clear and specific plans to do so in the near future. If this were to change, there are still significant issues related to the coordination of state and local activities that would make an evaluation very difficult in this state-wide site.

#### ASSESSMENT SUMMARY AND RECOMMENDATIONS

It would not be productive to include Vermont as an evaluation site. While it would not be impossible to overcome organizational challenges with guaranteeing access to data, such challenges would loom large as a significant barrier to a successful evaluation. Most importantly, however, the current status of implementation of DDACTS in Vermont is partial at best. The state is committed to widespread adoption of the DDACTS approach, but such commitment has been on-going, and it is not clear that a program sufficient enough to evaluate will be in place in the near future.

# WINTER PARK, FLORIDA

Winter Park, FL Police Department

September 25, 2013

## SITE CHARACTERISTICS

Winter Park is an affluent, suburban city in Orange County, Florida, just north of Orlando. It occupies 8.68 square miles. In 2012 it had a population of 28,785 (FBI, 2012) with a 2010 population density of 3,208.4 persons per square mile. The 2010 population was 81.7 percent white, 7.6 percent black, 7.0 percent Latino, 2.3 percent Asian, and 1.8 percent two or more races. 2008–12 estimates indicate median household income was \$58,094, with 13.1 percent of the population living below the poverty line, and 53.2 percent persons 25 and older had a bachelor's degree or higher.

## Transit Profile

Winter Park has many major thoroughfares running through and near it that feed into Orlando. Interstate 4/Florida Route 400 runs from north to south on the city's western border. US 92/Florida Route 15 runs north to south through the western portion of the city, and Florida Routes 527 and 426 run through the southern portion of the city from east to west. Florida Routes 436, 50, 417, and 408 are also nearby. Staff from the department estimate that over 300,000 vehicles pass through Winter Park every day, as there is a lot of transient traffic moving toward Orlando or the University of Central Florida. The department reported the site has approximately 1,200 crashes per year.



#### Crime Profile

Winter Park has moderate rates of violent crime (2.9 per thousand persons, 83 total) and the highest rate of property crime (40.5 per thousand persons, 1,167 total) among the sites under study (FBI, 2012).

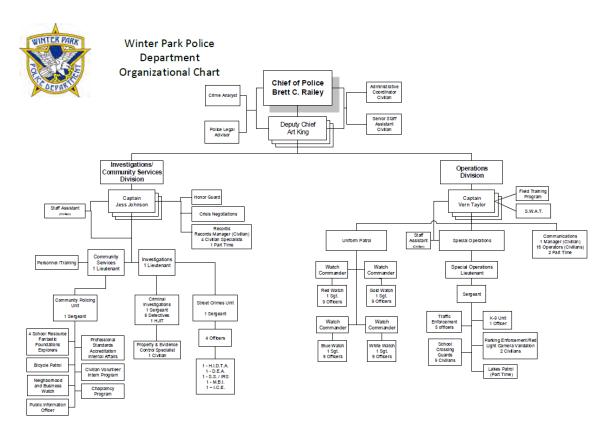
# Unique Site Characteristics

Winter Park is an affluent area, which affects the types of crimes that occur. The most common crimes are property crimes (home burglaries and thefts). Bank frauds are also significant, which is unique among the sites under study. Winter Park is also home to Rollins College, a small and expensive private college with roughly 3,200 students. Many vehicles pass through the area, and the department mentioned that it has had a reputation in the past of being a speed trap. Winter Park is expecting a new commuter line in the community in the near future, which may further increase the number of vehicles in the jurisdiction.

## DEPARTMENT CHARACTERISTICS AND KEY LOCAL PERSONNEL

The police department has a FY2013 budget of \$12,739,143<sup>24</sup> and has 76 full time officers (FBI, 2012).

<sup>&</sup>lt;sup>24</sup> http://cityofwinterpark.org/Docs/Departments/Finance/Budget13.pdf



During the site visit, Urban spoke with the chief (who is also a DDACTS SME), the deputy chief, the current crime analyst, a patrol lieutenant, two patrol sergeants, and two patrol officers (one of whom is also the former crime analyst).

Several factors seem to be amplifying tensions within the department. In 2009, as the department was beginning to unionize, the previous chief left. The combination of these two occurrences caused tensions between the chief, middle management, and line officers, which seem to have affected program implementation in several ways, described below.

## Concurrent Law Enforcement Jurisdiction

**Florida State Highway Patrol** – The highway patrol has jurisdiction on the highways that run through Winter Park. However, the highway patrol has a policy of focusing attention on the unincorporated areas, which excludes areas within the Winter Park Police Department's jurisdiction.

**Orange County Sheriff's Office** – The Orange County Sheriff's Office's jurisdiction also overlaps the Winter Park Police Department's jurisdiction, but the sheriff's office similarly has a policy of focusing attention on the unincorporated areas.

The Winter Park Police Department feels that neither of these organizations conducts substantial law or traffic enforcement activity within its jurisdiction. Further, the department explained that if these two organizations responded to any collisions, that data would still be accessible through the state database systems.

# Prior Use of Data and Other Related Programs/Initiatives

The department had a short-lived and failed attempt to implement a COMPSTAT-style program. The site reports that the initiative was not successful due to limitations of the data system at that time, and the misinterpretation of COMPSTAT as an adversarial process for holding middle management accountable for performance. The department has recently upgraded to a more sophisticated Records Management System (RMS) and hired a highly-regarded professional crime analyst, but COMPSTAT and DDACTS were the first initiatives involving data in the site.

## DDACTS IMPLEMENTATION SUMMARY

As explained in the body of the full Evaluability Assessment Report, DDACTS is more of an approach than a program. There are a set of common guiding principles that can manifest in different ways to suit the needs of a given jurisdiction. This section is not intended to be any sort of assessment of whether the jurisdiction has "correctly" or "faithfully" implemented DDACTS, but rather to provide a narrative description for the purposes of understanding the nature of implementation in this particular site, and to illustrate the construct available for study.

The chief initially organized a DDACTS training with NHTSA in 2010. He heard about the program through the Baltimore County Police Department, and determined that it provided an opportunity to become a proactive agency. Additionally, crashes are a bigger problem in Winter Park than crime. According to all levels of department staff, the initial implementation was done hastily. There was no shared understanding of program goals or implementation mechanisms. Staff also believed that some personal issues led to resistance among officers.

Supervisory staff attended a revamped training in 2011 so that all units would have the same understanding of the program. This, along with improvements to the RMS and the hiring of a professional analyst, brought more consistency to the program. The department reports successes during the first year of DDACTS in response to a rash of home burglaries, although it experienced more difficulties in the second year. In the program's current iteration, sergeants have high discretion in how to direct their patrols based on data analysis.

## Partners and Stakeholder Participation

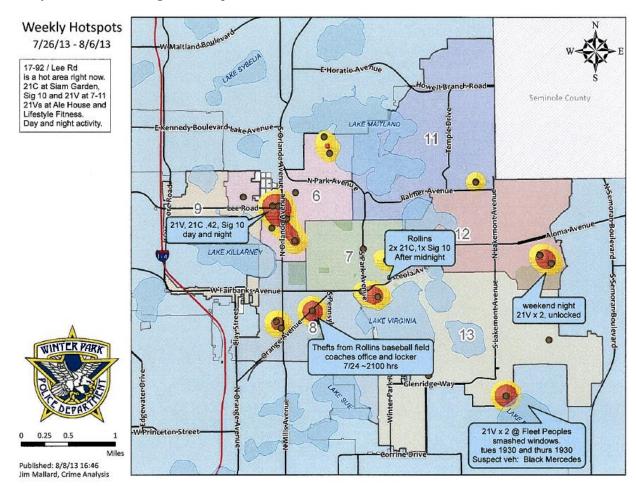
The mayor of Winter Park supports DDACTS, as indicated by a write-up of the program in a city report. Department staff indicated that they communicate semi-regularly with the mayor and city commission about DDACTS.

## Data Collection

No crime is specified by the DDACTS program, but home burglaries and thefts are the most prevalent crimes in the jurisdiction, followed by bank frauds. Crashes are significantly more prevalent than crime. There is not a minimum dollar amount required for a crash to be reportable, and department staff are confident that citizens would call the police for even minor crashes. Unlike the department's old CAD and RMS, its new system allows data to be easily exported.

#### Data Analysis

DDACTS maps are based on hotspots measured in hourly intervals. Due to the high crash to crime ratio, the formula for determining hotspots has to be weighted so that hotspots do not only indicate crash sites. Target areas may be weighted by crime time, or by day and night. The data analyst creates hotspot maps for varying time ranges of data (chronic, bimonthly, and weekly). Incidents are geocoded with the most accurate location information available (in descending order, parcel, intersection, or street center line). The analyst also provides maps to officers that are simplified to clearly show the most significant spots.



Although there is no target area, Winter Park has a main street business district where many of the thefts and bank frauds occur. It is not the clear target area, however, as home burglaries in the residential areas are also a concern.

## **Strategic Operations**

During DDACTS patrol, officers are expected to patrol within a half-mile radius of hotspots. In its current iteration, sergeants are given discretion over how to direct their patrols to the areas. This is partially by design, but the chief would prefer the standard to be that officers spend 15 minutes in DDACTS hotspots per day. There are four sergeants, and they each receive data analysis reports and then decide how to direct their officers accordingly. One directs patrols to hotspots in shifts of multiple hours. Another described a strategy of sending in two officers at a time and avoiding ticket

"cubby-holes." A third sergeant sets requirements for his officers to have a particular number of traffic contacts.

# Information Sharing and Outreach

The chief attributes Winter Park's success with a 2011 burglary outbreak to the principle of information sharing. He publicly disclosed information about the outbreak, while nearby jurisdictions experiencing the same problem did not, and he believes it helped Winter Park stop the burglaries. The department also has a presence at city meetings, rotary clubs, business watch groups, and neighborhood groups, where it advocates for DDACTS. There have been several articles written about Winter Park DDACTS, and the mayor publicized it in a city report.

## Monitoring, Evaluation, and Adjustments

In the new DDACTS, the department has had various phases of adjustment. It experimented with separate hotspots for day and night, and, after some debate, determined this was a good approach. The department also implemented written warnings in order to justify the heavy number of stops in hotspot zones, although there has been some difficulty in transitioning officers to use this tool.

#### Outcomes

The department provided Urban with an example of a monthly crime report that tracks crimes by type and zone. The report is very detailed, breaking crime types into further subcategories, and marking enforcement activity such as traffic stops, area checks, calls-for-service, incident reports, citations, warnings and arrests. The report gives monthly percent changes as comparisons of year-to-date totals. Winter Park also provided weekly and long-term officer performance reports, which show arrests, crashes, reports, traffic citations, and warnings, among other measures.

# FUTURE IMPLEMENTATION PROCESS EVALUATION FEASIBILITY

An implementation/process evaluation would be interesting in this jurisdiction. At present, the site seems to be in the midst of developing buy-in from line officers, and there is a disconnect between apparent enthusiasm for the program among the command staff and the level of commitment of line officers. This presents challenges for an outcome evaluation, but an implementation/process evaluation could produce interesting findings from this site. Further, significant turnover among the command staff may be on the horizon for the department. An implementation/process evaluation of this site could illuminate how the program would weather significant changes in command-level leadership.

#### Availability of Historical Implementation Documentation

Many of the officers and other participants in the department have a clear recollection of their implementation efforts. They provided candid assessments of their successes and failures, and were even more forthcoming with details about challenges when interviewed individually. While there may not be formal documentation of implementation activities, it would be possible to develop a

thorough narrative of the historical implementation process through interviews and a review of the supporting outcome data available.

# Availability of Implementation Activities and Documentation Moving Forward

The site collects a special record of activities in the DDACTS target areas, and intends to continue doing so. However, there is some question about the measurement validity of these records. Ridealongs and one-on-one interviews could be used to capture a more reliable measure of activity in the DDACTS target areas.

## FUTURE OUTCOME/IMPACT EVALUATION FEASIBILITY

While the site is willing to cooperate and it might be possible to complete an outcome evaluation in Winter Park, Florida, the research team has concerns over the measurement validity of some of the data, as well as logistical concerns related to impending leadership turnover and questionable line officer enthusiasm for the program. Together, these issues indicate that an evaluation of Winter Park's DDACTS program would not result in a productive and efficient use of resources at this time.

## Outcome Data Availability

The department currently employs a fulltime, highly-regarded crime analyst. In combination with the new CAD/RMS the department has adopted, there would be strong infrastructure for collecting and providing the necessary data to an evaluator. The site uses a CAD/RMS that is shared by all departments in Seminole County. The site is also part of a regional data sharing system (FINDER).

Further, traffic data can be accessed through F.A.R.S. (Florida Accident Reporting System), which collects and develops detailed data on collisions in the state.

All the data can be easily exported for analysis, and the department expressed willingness to participate in an evaluation, including sharing any data not legally restricted. The department also has an internal legal advisor, as well as access to the city attorney, to review MOUs, and department staff expect that an MOU could be turned around in approximately one week.

## Activity/Productivity Data Availability

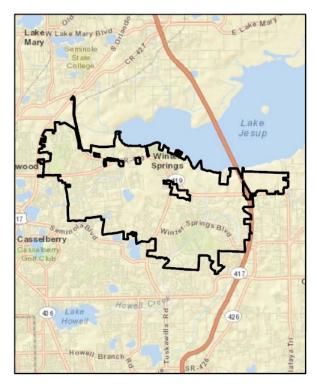
In order to determine whether the increase in enforcement will yield the desired crime and traffic crash reductions, it is critical that changes in traffic enforcement be measured. Therefore, it is necessary to assess the variations in enforcement activity, or "dosage" of the initiative.

Currently, the department collects data for annual performance reviews. However, the chief expressed interest in exploring additional opportunities for collecting standardized measures of officer productivity. The chief was willing to share activity records, and provided totals of the calls responded to for each officer during a three-week span.

The chief also provided an activity log for officer activity in the DDACTS zone. However, the nature of the reporting mechanisms for collecting these data, in combination with questionable enthusiasm for the program within the department, may be creating the opportunity for these records to provide an inaccurate portrait of true activity in the DDACTS target areas.

# Presence of a Comparison Site

Winter Park and Winter Springs are similarly-sized, suburban cities in central Florida. Both sites use the same CAD/RMS, which would improve the data comparability and ease of extraction.



City	Population	Violent crime	Property crime	Violent Crime Rate Per thousand persons	Property Crime Rate Per Thousand Persons	Police Officers
Winter Park	28785	83	1167	2.883446	40.54195	76
Winter Springs	33925	47	348	1.385409	10.25792	65

Though the general consensus among the participants in the group interview was that Winter Springs would provide the most equivalent comparison site, the UCR data show that there are significant differences in the crime rates between the two jurisdictions. However, given that there are multiple surrounding areas using the same data systems, it might be possible to improve the quality of comparison by including multiple jurisdictions and using statistical controls to moderate the effect of variations between sites. While this approach is not as methodologically rigorous, it does provide a reasonable solution to the issue of comparability.

## **EVALUABILITY ASSESSMENT FINDINGS**

While a pre/post comparison group design provides a reasonable methodological approach to evaluating Winter Park's DDACTS program, the current challenges in the site would likely make

application of the model prohibitively difficult at this time and in the near future. Given the number of variables yet to be settled in the site, it is unreasonable to offer a cost estimate of an evaluation in this site.

#### ASSESSMENT SUMMARY AND RECOMMENDATIONS

It is possible that an evaluation (implementation and outcome) could be completed in Winter Park, Florida. However, the cumulative issues in the implementation and operation of the DDACTS program there pose significant challenges for an evaluation. While the site has made efforts to address its initial implementation problems, the turn-around in acceptance has not been as complete as it was in other sites. Relatedly, there are significant morale issues in the department, such as union issues and unpopular changes in leadership positions. Different sources also provided somewhat conflicting information on how the program is actually being implemented and documented by line officers. On the other hand, the department has a relatively new data system and a highly-regarded professional data analyst, factors that lend themselves to an evaluation. While this is an interesting site, it cannot reasonably be included in an evaluation, as these challenges could prove to be insurmountable barriers to the comprehensive evaluation of this particular program at this time.