Traffic Enforcement: Calculating the Benefits to the Community
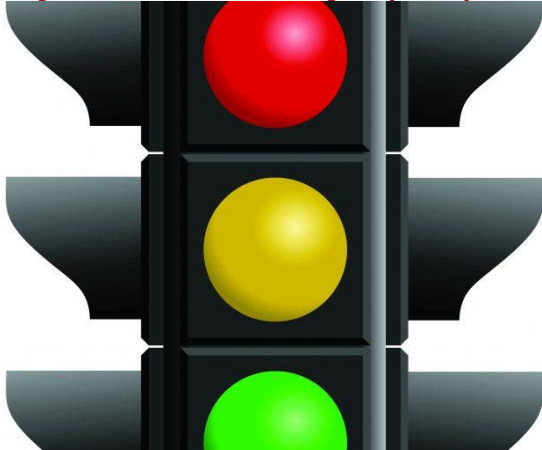
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Law enforcement recruits and new officers are often asked the same question repeatedly during their application process and time at the training academy—why do you want to become an officer? Most reply that they want to save lives and help their communities. As they progress through their careers and enter leadership positions, the core answer doesn't change, but the role of the individual in achieving those goals does. Often, law enforcement leaders direct the work of others instead of (or in addition to) performing day-to-day police work. In this role, leaders have the opportunity—and obligation—to direct their agency's limited resources to tasks and activities that positively affect their communities.

Local police chiefs, state troopers, and sheriffs are all faced with numerous, competing demands that include dealing with very significant issues like increasing violent crime, homegrown extremism, and opioid addiction. Given the seriousness and complexity of these problems, it is not hard to see why traffic safety sometimes takes a back seat. However, it's important to consider the extent to which traffic safety impacts the overall safety of communities. In 2015, there were 35,092 people killed in the United States in traffic crashes (a 7.2 percent increase from 2014); in comparison, 15,696 people were victims of homicide.[1] The number of victims in both of these categories is far too high, but the number of crash victims is more than double the number of homicide victims. In many communities, the odds of being killed or injured in a crash are far higher than suffering a similar outcome from a violent crime.

People want to live in safe communities. Often, safety is judged based on crime, particularly homicide. Many people consider large cities, where homicides occur in higher numbers, to be more dangerous than other places. In 2002, an article in Governing argued that safety is a broader issue than violent crime, based on research by William Lucy, an urban planning professor from the University of Virginia. Lucy's research posed an unusual question:

What if, instead of being measured by itself, homicides were to be measured along with other forms of violent fatality—specifically, automobile accidents, the second major category of violent death in the United States?[2]

Lucy found that the most dangerous parts of metropolitan areas are likely to be rural or exurban communities simply because the fatal crash rates are much higher in those regions. Lucy combined the figures for homicides committed by strangers and traffic fatalities from Houston, Texas, in 2000, and calculated a death rate of 1.5 in 10,000 population. Using the same calculation, he found that the rate in Montgomery County, Texas, which borders Houston, was 2.5 per 10,000—almost double the rate.[3] This was due to the much higher rate of traffic fatalities in the less urban Montgomery County. The point is that while violent crime makes the news, traffic crashes often present a greater threat. While there are some exceptions, most agencies could do more to improve the overall safety of their communities by ensuring that traffic safety is a continuous priority.

The safety of officers, troopers, and deputies is a high priority for law enforcement leaders and agencies. Law enforcement officers drive millions of miles every year and are thus frequently and continually exposed to all the dangers associated with traffic crashes. A review of the Officer Down Memorial Page shows that traffic-related incidents are one of the leading causes of line-of-duty deaths.[4] Additionally, many law enforcement personnel are injured in traffic incidents. Consistently enforcing traffic laws and working to reduce crashes not only makes communities safer, it also makes officers safer!

In addition to the risks they pose to people's safety, the economic costs of traffic crashes are tremendous. The following are some interesting—and disturbing—findings from a 2010 publication of the National Highway Traffic Safety Administration (NHTSA):

•The economic cost of motor vehicle crashes that occurred in 2010 totaled $242 billion. This is equivalent to approximately $784 for every person living in the United States and 1.6 percent of the U.S. gross domestic product.

•The lifetime economic cost to society for each fatality is $1.4 million. Over 90 percent of this amount is attributable to lost workplace and household productivity and legal costs.

•Each critically injured survivor costs an average of $1 million. Medical costs and lost productivity accounted for 82 percent of the cost for this most serious level of nonfatal injury.

•Lost workplace productivity costs totaled $57.6 billion, equaling 24 percent of the total costs. Lost household productivity totaled $19.7 billion, representing 8 percent of the total economic costs.

•Property damage costs for all crash types (fatal, injury, and property damage only) totaled $76.1 billion and accounted for 31 percent of all economic costs.

•Congestion costs, including travel delay, added fuel usage, and adverse environmental impacts cost $28 billion, or 12 percent of total economic crash costs.

Approximately 7 percent of all motor vehicle crash costs are paid from public revenues. Private insurers pay approximately 54 percent of all costs. Individual crash victims pay approximately 23 percent, while third parties such as uninvolved motorists delayed in traffic, charities, and health care providers pay about 16 percent. Overall, those not directly involved in crashes pay for over three-quarters of all crash costs, primarily through insurance premiums, taxes, and congestion-related costs such as travel delay, excess fuel consumption, and increased environmental impacts. In 2010, these costs, borne by society rather than by crash victims, totaled over $187 billion.[5]

Law enforcement leaders should also consider the amount of resources that their agencies devote to responding to crashes. If crashes, much like crime, can be prevented, doing so would not only reduce the number of victims in their communities, but also allow agencies to re-allocate limited resources to other activities.

Keeping community roadways safe is a multidisciplinary task that requires participation from law enforcement personnel, engineers, emergency medical personnel, elected officials, advocacy groups, and the general public. The roles of these groups include designing and maintaining roads in accordance with safety standards, developing effective laws and rules of the road, implementing response protocols to mitigate damage and injury when incidents do occur, and ensuring comprehensive public awareness. Many of these overlap, but there is one task that only law enforcement can perform—

traffic enforcement. Officers are sworn to enforce the laws, including traffic laws, and are given the authority to do so. In fact, law enforcement is the only profession that is granted this authority. It is incumbent upon officers, therefore, to ensure that traffic laws are vigorously enforced to promote safe roadways.

With this information in mind, the traffic stop is arguably one of the most valuable self-initiated activities that a police officer, deputy, or trooper can perform. A single traffic stop provides five separate benefits related to public safety.

Return on Investment

Specific Deterrence-Traffic: The most basic reason for stopping a vehicle is a traffic violation. The purpose of the stop is to identify the driver responsible for the violation and to take the appropriate enforcement action. Traffic citations and the penalties that can result are intended to change driver behavior. Even minor violations can result in hefty fines, higher insurance, and points against a driver's license. If necessary, repeat offenders may have their licenses suspended or revoked by motor vehicle authorities who use conviction data to monitor the behavior of the drivers they license. This monitoring is particularly important for commercial vehicle drivers who operate the largest vehicles on the roadways, often across many states.

Studies have shown that highly visible traffic enforcement leads to reductions in traffic crashes and changes in driver behavior. For example, a study of the Click It or Ticket Program in Massachusetts found that "tickets significantly reduce accidents and non-fatal injuries."[6] This, of course, is one of the primary reasons for conducting enforcement in the first place.

General Deterrence to Traffic Violations: The visibility of a traffic stop gets the attention of other drivers and has the potential to change their behaviors as well. Passing drivers are likely to assume that a traffic stop is resulting in a citation for the other driver. That memory might help to change that driver's behavior, particularly if the enforcement efforts are sustained over time.

A study sponsored by NHTSA found that

the most important difference between the high and low belt use states is enforcement, not demographic characteristics or dollars spent on media... enforcement was much more vigorous in the high belt use states, as shown by an average of twice as many seat belt law citations per capita.[7]

A number of case studies document the effectiveness of high-visibility enforcement on impaired driving offenses. For instance, a formal evaluation of

the Checkpoint Strikeforce program indicated a 7 percent decrease in drunk drivers in fatal crashes associated with the overall program. The participating states of Maryland and Virginia and the District of Columbia all have maintained low fatality rates as the program has continued.[8]

Specific Deterrence to Crime: Traffic stops often lead to the apprehension of criminal suspects. Whether the offender is as notorious as the Oklahoma City Bomber or simply a wanted subject on a misdemeanor warrant, the violator contact can frequently lead to a criminal subject being arrested or the recovery of evidence, contraband, or illegal weapons. Any officer that develops the skill to look beyond the initial cause of the traffic stop will consistently produce significant criminal arrests. For example, the Grand Prairie, Texas, Police Department determined that traffic enforcement was responsible for 37 percent of all arrests in 1994. It was also determined that 47 percent of the arrests made by traffic enforcement officers were for serious criminal offenses.[9] This makes the traffic stop a very effective tool in areas experiencing patterns or trends of criminal activity.

General Deterrence to Crime: Many criminals commit their crimes in areas where they are comfortable. This might be near their homes or places of work or recreation. The crime can be easier to execute since the offender is familiar with the area, the people, and potential escape routes. If law enforcement can make an area uncomfortable for a potential criminal, the likelihood of a crime being committed might be reduced. What could be more uncomfortable than a police car with lights flashing in the area of the potential crime?
Studies have shown that a visible police presence has an impact on crime in targeted areas. Two studies in the 1970s and 1980s demonstrated that communities with higher levels of traffic enforcement also experienced lower rates of robbery.[10] In the mid-1990s, the Peoria, Illinois, Police Department dramatically increased its traffic enforcement and self-initiated activity. These actions resulted in large reductions in reported crimes, as well as in traffic collisions.[11]

Since 2008, agencies around the United States have been using the Data-Driven Approaches to Crime and Traffic Safety (DDACTS) model to maximize the use of resources to target both crime and crash problems. NHTSA summarizes the model's dual benefits as follows:

By identifying areas through temporal and spatial analysis that have high incidences of crashes and crime, DDACTS employs highly visible, targeted traffic enforcement to affect these areas. This model affords communities the dual benefit

of reducing traffic crashes and crime, thus reducing overall social harm. Drawing on the deterrent value of highly visible traffic enforcement and the knowledge that crimes often involve the use of motor vehicles, the goal of DDACTS is to reduce the incidence of crashes, crime, and social harm in communities across the country.[12]

Research suggests that the DDACTS approach has been successful. A study of the Shawnee, Kansas, Police Department's use of DDACTS found reductions in robbery, auto theft, and auto burglary with total reductions in targeted crimes of almost 40 percent over a three-year period. Overall crashes were also reduced by 24 percent.[13]

Intelligence: Perhaps the most valuable benefit of the traffic stop is the information that it generates. Gone are the days when citations and warnings were simply filed away. Modern records management systems allow law enforcement agencies to collect information about who is stopped, what they were driving, where the stop occurred, and when it happened. This information can be extremely valuable to the investigation of crimes that might not have been discovered at the time of the stop. Crime analysts and investigators use this information to develop suspects and leads that might result in the clearance of criminal incidents.

All of this results in a tremendous return on investment from a single traffic stop carried out by uniformed patrol personnel. For these reasons, law enforcement leaders should be doing everything possible to encourage traffic stops in their communities.

A simple way to start a discussion about traffic stops with enforcement personnel is to talk about tolerance; in other words, under what circumstances do officers routinely stop vehicles? Ask this question in a room full of officers and the answers will vary greatly, ranging from hazardous violations and suspected crimes to administrative violations (e.g., expired tags). While officers have always had, and will continue to have, discretion in terms of stopping vehicles, law enforcement leaders should encourage stops for all these things.

Photos courtesy of Roanoke County, Virginia, Police Department.

The discussion changes when the topic of speed tolerance is introduced. Very rarely will an officer admit to stopping a speeding vehicle for less than 10 to 20 miles per hour over the limit. This begs the question of why drivers are permitted to routinely violate established speed limits by this margin, particularly in residential areas, school zones, or high crash areas. Law enforcement leaders should be working to lower this officer tolerance to enhance the safety of roadways, possibly by pointing out that the mere stopping of a vehicle does not necessitate charges being placed.

While the authors strongly advocate for traffic enforcement, they do not suggest that it should be done in a random or arbitrary manner. It should be purpose-driven and directed at social harms affecting communities.

Enforcement Done Right

The fact is that communities expect their law enforcement agencies to keep them safe and keep the roadways safe. In other words, they expect (and sometimes demand) traffic enforcement. Any law enforcement official who works with residential communities can recount the numerous, and sometimes vociferous, complaints of speeding and other local traffic violations that are brought to law enforcement's attention by citizens. These citizens rightly expect that, when complaints are valid, the agency will take action. They also expect that their children can travel safely to and from school and that their daily commutes (and those of their family and friends) can be completed in a timely and safe manner. While enforcement practices in some areas have led to criticism, the fact remains that a strong traffic safety program is integral to community policing.

The return on investment from the traffic stop becomes especially significant when the activity is deployed properly. Enforcement should be purpose driven, that is, it should be directed at a specific issue that is occurring in a community. For the most part, these problems will relate to traffic crashes, crime, or other social harms. It is important to understand where problems are occurring, as research has shown that a large percentage of criminal incidents occur in relatively small geographical areas. The first major study to arrive at this conclusion was conducted in Minneapolis, Minnesota, in the 1980s. It found that 3.5 percent of the addresses in that city produced about 50 percent of crime-related calls. Another study in Seattle, Washington, found that 86 street segments out of over 29,000 examined accounted for one-third of juvenile crime in that city.[14] Observations would suggest that this incident localization is also applicable to traffic crashes, as state highway safety offices and law enforcement agencies routinely analyze the locations of crashes and

identify areas and intersections with particularly high numbers of incidents. Deploying enforcement to the places where problems occur is the first step toward mitigating the dangerous effects of traffic violations. Of course, narrowing this further to target the days and times when a problem is most likely to occur will also increase the effectiveness of enforcement activities. Officers engaged in targeted enforcement should understand what they are doing and why. While it is appropriate to expect that officers will enforce violations that they observe while on routine patrol, there should be a reason for targeted enforcement and officers should understand it. It's even better when officers communicate that reason to persons being stopped. A data-driven, place-based, and purpose-driven approach is appropriate and provides the information necessary not only to justify actions—but to share with communities to promote understanding.

To be accepted by communities, enforcement must not only be data driven and place based, it must also be conducted in a legally sound, fair, and impartial manner.

To be accepted by communities, enforcement must not only be data driven and place based, it must also be conducted in a legally sound, fair, and impartial manner. Simply driving in a high-crime or high-crash area is not, by itself, a reason for a stop. Over the years, many court decisions have defined what is required for a stop to comply with U.S. constitutional principles. Generally, the totality of the circumstances must lead to "a particularized and objective basis for suspecting the particular person stopped of criminal activity."[15] This is the basis for reasonable suspicion, which is necessary before a stop is made. Fortunately, most traffic stops are made for observed violations of traffic laws and far exceed the criteria established by the U.S. Supreme Court. However, officers should be cautioned: initiating a stop for suspected criminal activity may require a more specific articulation of facts. Fairness and consistency are critical parts of any enforcement program. The notion of fairness is embedded in the principles of procedural justice. Leading researchers on this topic have identified several dimensions of fairness:

•*Voice*—perception that an individual's side of the story has been heard
•*Respect*—perception that system players treat the person with dignity and respect
•*Neutrality*—perception that the decision-making process is unbiased and trustworthy
•*Understanding*—comprehension of the process and how decisions are made
•*Helpfulness*—perception that system players are interested in the individual's personal situation to the extent that the law allows[16]

Most of these dimensions can be achieved through communications with the person being stopped. Although it might not be possible to change the perception of some individuals who simply refuse to understand the role of police, the overwhelming majority of people will respond positively to officers who provide an explanation for the stop and what will happen as a result.

Fairness is particularly important as it relates to the disposition of a stop. Violators should be treated as similarly as possible based on the seriousness of the offense. Officers have the discretion to use enforcement options that range from physical arrest to warnings. The option used should be proportional to the offense, with more serious and hazardous violations resulting in more severe enforcement actions.

Fairness naturally leads to the need for consistency. Agencies should consider policies and training that define enforcement options and their suggested uses. In general, officers have the following options:

Physical Arrest—Physical arrest is the most severe enforcement option available and is appropriate for serious violations, which are generally prescribed in the laws of each state. Significant traffic violations, such as impaired driving, often result in arrest. Examples of criminal violations that might be revealed during a traffic stop include outstanding warrants or possession of illegal weapons or controlled substances.

Citation—Citations, normally resulting in a monetary fine and points against a driver's license, might be the most common form of traffic enforcement activity. This enforcement action is appropriate for hazardous traffic violations, particularly those that are contributing to traffic crashes in targeted areas. Other appropriate uses of citations include significant administrative violations such as the lack of a license or suspended driving privilege, driving without insurance, and significant registration issues. One other area where citations are almost always appropriate is occupant protection. Seat belt use has been

mandatory in most U.S. states for many years. Those who violate these administrative or safety laws are likely to be doing so intentionally; therefore, enforcement is appropriate.

Written Warning—Many agencies use or have recently implemented written warning systems. These are based on the premise that the appropriate response to a violation is not always a formal enforcement action. Violations that are minor in nature or are newly enacted may be handled more effectively as an educational opportunity for the motorist. The purpose of a written warning is to document the nature of the stop and maximize the benefits that have previously been discussed. Appropriate uses of this tool include minor or less-hazardous moving violations, administrative issues such as expired tags, and speeding violations where the motorist is only slightly above the posted limit.

Verbal Warning—Verbal warnings have existed for as long as traffic stops. Even in agencies without formal written warnings, verbal warnings are being used. It is simply a function of officers trying to achieve fair outcomes for their enforcement stops. When written warnings are allowed, verbal warnings should be minimized as they don't result in a record of the stop.

It is important that agency leaders take the time to consider policy and training related to the importance of traffic enforcement, procedures for traffic stops, and appropriate outcomes. The New Jersey State Association of Chiefs of Police has developed a model policy entitled "Traffic Enforcement Tolerances & Latitude" that addresses these issues. It discusses a variety of violations and enforcement options to ensure fair and consistent enforcement. It does not, however, supplant an officer's judgement or discretion in dealing with the myriad of issues that can arise from a stop.[17] Many of the external and internal issues that traffic stops have been known to cause could likely be avoided by having simple conversations about these issues. Both officers and communities should understand what a traffic stop entails, why they are performed, and why certain enforcement options might be used. This can be accomplished with a little planning and good communication.

Conclusion

Using traffic enforcement as an effective tool to increase public safety by reducing both traffic crashes and crimes takes time to plan and properly implement. Fortunately, there are numerous resources that can help:

•Every U.S. state has a highway safety office that is responsible for distributing highway safety grant funding. Many of these offices have law enforcement

liaisons and other staff or resources to help agencies implement traffic safety programs. A list of state offices, as well as other highway safety resources, can be found at www.ghsa.org/about/shsos.

•The National Highway Traffic Safety Administration maintains a website with a large amount of information on all aspects of traffic safety.

•The IACP posts a variety of related information and resources on its website.

•Many U.S. state chiefs' and sheriffs' associations can also help agencies. For example, the Virginia Association of Chiefs of Police coordinates the Smart, Safe, and Sober program. The Maryland Chiefs of Police Association, Maryland Sheriff's Association, and the Maryland Highway Safety Office recently coordinated on the publication of the *Law Enforcement Executive's Guide to High Visibility Enforcement*. ♦

Notes:
[1]National Highway Traffic Safety Administration (NHTSA), "Traffic Fatalities Up Sharply in 2015," press release, August 29, 2016; Timothy Williams and Monica Davey, "U.S. Murders Surged in 2015, F.B.I. Finds," *New York Times*, September 26, 2016.
[2]Alan Ehrenhalt, "The Deadly Dangers of Daily Life," *Governing*, August 2002.
[3]Ibid.
[4]Officer Down Memorial Page.
[5]Lawrence Blincoe et al., *The Economic and Societal Impact of Motor Vehicle Crashes,* 2010 (Revised)(Washington, DC: NHTSA, 2015).
[6]Dara N. Luca, "Do Traffic Tickets Reduce Motor Vehicle Accidents? Evidence from a Natural Experiment," *Journal of Policy Analysis and Management* 34, no. 1 (Winter 2015).
[7]James Hedlund et al., *How States Achieve High Seat Belt Use Rates* (Washington, DC: NHTSA, 2008).
[8]James C. Fell, A. Scott McKnight, and Amy Auld-Owens, *Increasing Impaired-Driving Enforcement Visibility: Six Case Studies* (Washington, DC: NHTSA, 2013).
[9]James C. Fell, "The Effects of Increased Traffic Enforcement on Other Crime," *in Proceedings of the 2013 Australasian Road Safety Research, Policing, & Education Conference* (Brisbane, Queensland: August 23–24, 2013).
[10]Ibid.
[11]NHTSA, *The Peoria Experience: Traffic Enforcement and Crime; It Plays in Peoria,* 2013.

[12]NHTSA, *Data-Driven Approaches to Crime and Traffic Safety (DDACTS): Operational Guide* (Washington, DC: NHTSA, 2014), ii.

[13]Kevin M. Bryant, Greg Collins, and Josie Villa, *An Evaluation of Data Driven Approaches to Crime and Traffic Safety in Shawnee, Kansas, 2010– 2013* (Washington, DC: Bureau of Justice Assistance, Smart Policing Initiative, 2014).

[14]David Weisburd, *Place Based Policing*, Ideas in American Policing (Police Foundation, 2008).

[15]*United States v. Cortez*, 449 U.S. 411, 412 (1981).

[16]Emily Gold, "The Case for Procedural Justice: Fairness as a Crime Prevention Tool," *Community Policing Dispatch* 6, no. 9 (September 2013).

[17]New Jersey State Association of Chiefs of Police, "Traffic Enforcement Tolerances & Latitude," model policy (2008).

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