

National Highway Traffic Safety Administration TRAFFIC TECH Technology Transfer Series

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Determining the Effectiveness of Flexible Checkpoints

Background

Checkpoint operations are highly visible and are often used for Driving While Intoxicated (DWI) countermeasure enforcement efforts. However, checkpoints can be resource-intensive, so it is often difficult to generate as much use of that tactic as is desired. There are alternative enforcement methods and tactics to increase the scope of traditional checkpoints.

Flexible checkpoints, sometimes referred to as "phantom," "mobile awareness," "public awareness," or "mock" checkpoints, are a lower cost, low-staffing checkpoint method to augment traditional checkpoints. This checkpoint strategy involves staging—but not fully staffing—the checkpoint. Instead, the appearance of setting up a checkpoint is created with, for example, a small number of officers setting out signs, and parking one or more patrol vehicles with flashing lights and a mobile breath testing facility or other DWI enforcement vehicle on the side of the road. The "checkpoint" can then be moved to other locations during the evening. No drivers are stopped and no arrests are made, unless some provocation occurs by drivers passing by the flexible checkpoint. However, a main objective of a checkpoint-awareness-is accomplished by the number of drivers observing and, in theory, telling others about the law enforcement activity.

Flexible checkpoints, however, should not be used in isolation. Instead, they should be used to supplement other DWI enforcement countermeasure activity employed in the jurisdiction, either concurrently, or within a short period of time of those other activities.

The main objectives for this project were to:

- Determine the extent that flexible checkpoints are being used in the United States;
- Identify four agencies that use flexible checkpoints, document problems or concerns that have arisen in those agencies, and to determine and document any solutions developed that could be used by other interested agencies that may want to implement flexible checkpoints; and
- Conduct a study to determine the effectiveness of flexible checkpoints in one site.

Methods

The extent of flexible checkpoint use was studied by networking through the National Highway Traffic Safety Administration regional offices and State Highway Safety Offices. Six States were identified where flexible checkpoints were being conducted. Telephone discussions were held with law enforcement supervisors to gain an understanding of how flexible checkpoints were employed in those jurisdictions, if any problems were encountered and, if so, any solutions that were developed to minimize or eliminate the problems.

A field test of the effectiveness of flexible checkpoints was conducted by the Illinois State Police (ISP) in Madison County, with Winnebago County serving as a comparison site. Checkpoint activities, termed Roadside Safety Checks (RSCs) in Illinois, were conducted monthly at both sites during 2009, with flexible checkpoints augmenting the RSCs in Madison County.

Results

The use of flexible checkpoints is gaining acceptance with law enforcement agencies. From discussions with law enforcement agencies, the researchers identified three general approaches to flexible checkpoints (see Table 1). The agencies contacted had not encountered any adverse publicity and believed that flexible checkpoints were useful and economical, and expanded the general deterrence reach of their other DWI countermeasure enforcement strategies.

The evaluation of the use of flexible checkpoints to augment traditional roadside safety checks in Illinois did not show a significant reduction in the odds of a single vehicle nighttime crash in the test community. The results of a public survey conducted at driver licensing agencies in Illinois did not produce an increase in public awareness of checkpoint activity. Although more survey respondents in the test community reported driving after drinking less often at the end of 2009 than in 2008 before the monthly RSCs and flexible checkpoints were implemented, this finding was not statistically significant.

Approach	Description of Location Variant	Intent
Auxiliary mobile flexible checkpoint	 located in the general area of an active traditional checkpoint; 	Broaden the general deterrence effect of the active checkpoint
	• the location of the flexible checkpoint is moved several times during the period the active checkpoint is underway	
Directional flexible checkpoint	 located on roadways that lead to an active, traditional checkpoint 	Funnel drivers attempting to avoid the enforcement activity into an active checkpoint
	• stationary	
Stand alone flexible checkpoint (public awareness checkpoint)	 located in the same area that traditional checkpoints are most often deployed stationary or mobile 	Increase public awareness of enforcement activities when budgets and staffing do not permit active checkpoints

Table 1. Approaches to Staging Flexible Checkpoint Locations

Conclusions and Recommendations

Flexible checkpoints are a versatile, low-cost tool that virtually any size law enforcement agency can adapt to enhance enforcement and increase public awareness of enforcement efforts. The reviews of flexible checkpoint activity across the country, and the evaluation of flexible RSCs in Illinois, demonstrated that implementation of flexible checkpoints is readily accomplished, economical, and supported by law enforcement in general. While no adverse effects resulting from the implementation of flexible checkpoints were identified, the positive effects that can be attributed to flexible checkpoints have not been definitively proven.

The researchers recommend that law enforcement agencies implement flexible checkpoints as a potential means of enhancing the effectiveness of other DWI countermeasure enforcement strategies at minimal cost. Different applications of flexible checkpoints could be considered both operationally and in the context of an evaluation. These include:

Possibly employing multiple flexible checkpoints in conjunction with a single, traditional enforcement effort (e.g., traditional checkpoint, saturation, or roving patrol).

- Encouraging law enforcement agencies to take the adaptability of flexible checkpoints into account and vary their use to meet the needs of their communities, sometimes employing multiple variations (enforcement enhancement and public awareness) as needed.
- Employing flexible checkpoints in the early evening, from 6 to 9 p.m. for example (when more drivers are on the road), in combination with other effective DWI countermeasures, (such as a standard checkpoint, saturation, or roving patrol in the later hours when impaired driving fatalities are more likely to occur), maximizes the visibility and productivity of the law enforcement activity and the likelihood of encountering and detecting impaired drivers.

It should be recognized that the many potential variations for employing flexible checkpoints may make it difficult to test for the specific effectiveness of a single implementation strategy. Any future studies need to carefully document the flexible checkpoint methods implemented, and must work closely with the associated law enforcement agencies to capture the nuances of that implementation.

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