NATIONAL HIGHWAY TRAFIC SAFETY ADMINISTRATION Automated Speed Enforcement Census

The majority of questions included in this questionnaire were derived from a review of the National Highway Traffic Safety Administration (NHTSA) Automated Speed Enforcement (ASE) guidelines published in March 2008. NHTSA is interested in determining if and to what extent law enforcement agencies nationwide are operating their ASE programs as recommended in those guidelines.

This NHTSA Automated Speed Enforcement (ASE) census consists of two separate but very similar questionnaires. One questionnaire will be sent to law enforcement agencies currently using ASE and the other to law enforcement agencies that have recently discontinued the use of ASE in their communities. The primary difference between the questionnaires is the use of present tense for the current ASE agencies and past tense for the discontinued ASE agencies. There are also a few specific questions that are included in one questionnaire and not the other regarding current ASE activities in agencies with active programs and questions about discontinuing the ASE program at agencies that stopped using ASE. Separate Question by Question Justifications are provided for the two questionnaires. The two justifications are largely identical. Places where they differ per different questions asked (other than possible tense differences per current and discontinued programs) are highlighted in gray for easy identification of the reviewer. We have also included Attachment H – Questionnaire Item Comparison, which provides a side-by-side comparison of items in the two questionnaires.

The questionnaires use a combination of close-ended and open-ended questions to maximize the information returned. Agencies are also asked to provide copies of certain ASE related documents from their jurisdictions along with the completed questionnaires, if they are available. The additional documents requested from agencies that discontinued their ASE programs are:

- > ASE equipment checklist for each mobile ASE enforcement deployment
- Sample ASE violation notice
- > Evaluation of the effects of ASE on crashes,
- > Evaluation of the <u>effects</u> of ASE on <u>traffic speeds</u>
- Evaluation of <u>public acceptance of ASE</u>

Most of the questions are, in some way, aimed at determining factors that may differentiate successful and unsuccessful programs, with the goal of gathering information that can be used to improve NHTSA's guidelines. Most of the focus is on this rationale; however, gaining descriptive information on what is being done in ASE jurisdictions is another important goal of the study. Virtually all questions will provide important descriptive information.

The question by question justification below is organized by questionnaire sections and question numbers and they appear in the order the questions occur in the questionnaires.

Section A. General Considerations and Planning

This section establishes when and how ASE was established in the community. It also addresses what motivated the establishment of the ASE program as well as whether or not the community reviewed and incorporated the NHTSA ASE guidelines into their program at any level. Several other issues dealing with whether the agency practice is consistent with the NHTSA ASE guidelines are also queried through questions dealing with the legal review, ASE site locations, etc. This section also determines whether automated red light enforcement, another automated enforcement strategy directed at speeders, is also used in the community.

A1 Year of implementation

This question provides the year the ASE program was implemented. This has significance in terms of the maturity of the program as well as the likelihood of whether the NHTSA ASE guidelines, published in 2008, may have influenced program development and implementation.

A2 – Year of termination

In the questionnaire for the agencies with discontinued ASE programs, the agency is asked what year their program was terminated. This is a confirmatory question to determine if existing records of the termination date are accurate. In conjunction with question A1, it also provides a measure of the longevity of the program prior to termination.

A3 - A4 Awareness of NHTSA ASE Guidelines

Question A3 provides information regarding respondent awareness of the NHTSA ASE guidelines. NHTSA is interested in how many agencies know about the guidelines. It also provides a key categorical measure for analysis of other questions drawn from the ASE guidelines and will enable us to determine how many agencies did or did not conduct their programs in a manner that corresponds to various guidelines relative to their knowledge of the actual guidelines. A3 also has a skip to A5 if respondents were not aware of the NHTSA ASE guidelines.

For discontinued programs still in operation after the NHTSA ASE guidelines were implemented (March 2008), Question A4 asks whether those guidelines were used in attempts to keep their ASE programs going, and if yes, how they were used..

A5 Advocates for the implementation of ASE

The use of advocates in the implementation of an ASE program is an important strategy include in the NHTSA ASE guidelines. Question A5 provides information on what types of advocates were involved in the implementation of the respondents' ASE programs. This is useful for the analysis with regard to program success. NHTSA is very interested in determining exactly which parties in a community were most responsible for ASE implementation. The overall success of ASE programs may be related to the cast of advocates. This information will be very useful for future revisions of the guidelines.

A6 Automated red light enforcement

Question A6 asks whether or not there is automated <u>red light</u> enforcement in the community. This information is important because the overall acceptance of automated speed cameras may be related to whether or not red light cameras are also a part of the community's automated enforcement package. For agencies that have red light cameras, the question includes a follow up asking how many intersections are monitored with red light cameras. This provides information on the extent to which red light cameras are used.

A7 - A9 Legal authority for use of ASE, existence of a speed management strategic plan, and selection of ASE locations

As the NHTSA ASE Guidelines point out, overall acceptance of ASE may hinge on the legal basis for implementing the program, whether or not a jurisdiction has an overall strategic plan for speed management, and who actually selects the locations where ASE takes place in a community. These three questions gather some basic information on those issues. Question A7 asks about legal review of the ASE program prior to implementation. Question A8 asks if there was a written strategic plan to reduce speeding violations. Question A9 asks who recommends locations for deployment of ASE enforcement. This information is important is the analysis of how closely respondent agency practices match the guidelines as well as in assessing how important these fators are on program success.

A10 Factors in the termination of ASE program

Question A10 only appears on the questionnaire for agencies with discontinued ASE programs. It explores the reasons that the ASE program was terminated. It is important to be able to document the reasons, so agencies with programs and jurisdictions planning to start programs can take steps to avoid similar issues.

Section B. Program Startup / Implementation

This section poses specific questions about the program start up phase, as well as some of the ASE implementation philosophies that the agencies may have embraced at the beginning of their programs. The level of citizen involvement, types of photographic images captured, sanctions levied, types of ASE devices used, and site locations are all relevant issues. NHTSA will use this information to revise its guidelines and provide more evidence-based advice to states and localities. Of special importance, several questions are asked regarding who has responsibility for and ownership of the deployed ASE equipment. The section ends with a series of questions dealing with how the ASE program was introduced and explained to the public, a critical phase of any ASE deployment plan.

B1 Factors used to determine ASE deployment sites

Question B1 is an open-ended question that asks about specific factors (e.g., crash data, engineering data) that were considered when determining where to deploy ASE equipment. The question will yield information on what non-revenue, and possibly revenue, factors were considered. This is important information because public acceptance and success of ASE programs is often related to whether or not it is designed and carried out to maximize traffic safety as opposed to used to generate revenue.

B2 ASE committee or task force of stakeholders

Question B2 addresses whether or not the community as a whole was involved in the design and implementation of the ASE program. This is important information to collect because the level of community involvement is thought to be related to whether ASE programs are successful and acceptable to the public.

B3 - B6 ASE images captured and sanctions applied

Questions B3 – B6 ask what violator information was captured by the ASE devices used, and what sanctions were applied for violations. There are a variety of methods for image capture (violator face and registration plate, license plate only, etc.) used in the U.S. B3 provides information on which image(s) are collected by the respondent agency. The sanctions applied to ASE violations range from small civil fines to heavy fines and associated driver "points" against a driver's license. NHTSA wants to document actual practices and determine which of these options may be most accepted and effective in ASE programs. B4 collects information on sanctions authorized by State law. B5 collects information on what the community actually did

in terms of sanctions for ASE violations. Question B6 asks whether or not the images captured were used for violations other than speed (e.g. invalid registration plates, seatbelt violations, etc.). NHTSA is very interested in determining to what degree this option is being pursued in the U.S.

B7 - B8 Types of ASE devices used and where used

Questions B7 and B8 collect information on the type of ASE equipment used (e.g. fixed installations, mobile units, red light "speed on green" (red light activated speed monitoring at signalized intersections), etc.), the number of locations, and the kind of roadways on which they are deployed. NHTSA is very committed to documenting the types of equipment used and where it is deployed to determine whether one option (or combination of options) is more effective than the others.

B9 ASE strategies used

Question B9 collects information on the signage used to identify an ASE program in general, as well the level of markings at specific sites and on mobile ASE units. NHTSA believes that success (crash reductions) depends on programs being well publicized and specific locations and equipment being identified. Openness may help programs avoid the public perception that they are primarily used for revenue generation. Collecting this information is necessary to be able to examine this factor with regard to program success and other aspects of ASE programs.

B10 Rationally set speed limits

Whether or not a community's ASE program involved a review of the posted speed limits before implementation is of great importance to NHTSA. Having speed cameras at locations where speed limits are set too low is believed to undermine public acceptance. Question B10 provides information on whether or not a traffic engineer was involved in that process, as recommended in the ASE guidelines.

B11 Other speed management measures besides ASE considered

Question B11 asks whether or not the law enforcement agency attempted to resolve speed management problems through other countermeasures, such as re-engineering the road in question or a public information program, etc. NHTSA is interested in whether other options were considered first and, if so, what they were. In general, programs that neglect these types of steps may be more likely to encounter public opposition.

B12 - B14 Ownership and maintenance of ASE equipment and data

These questions collect information on who owns the ASE equipment and associated data / records. B12 asks who owns the ASE equipment. B13 asks who is responsible for maintaining the ASE equipment. B14 asks who owns the data and records associated with the equipment. NHTSA is interested in determining if communities that own and operate the ASE equipment and the data experience greater success and public acceptance than systems owned by an ASE vendor.

B15 ASE agency relationship with courts

Question B15 asks respondent ASE agencies about their working relationship with the courts that adjudicate their ASE violations. It is important to collect this information because the strength of the relationship may contribute to the overall success of ASE in the community.

B16 Electronic encryption of ASE data

The NHTSA ASE guidelines recommend that data be electronically encrypted at the capture point and placed on a secure server. Question B16 collects information on whether or not this important procedure is done in actual practice.

B17 - B20 ASE public information and education campaign

Questions B17 to B20 investigate the level of public communication regarding the ASE program. B17 asks whether or not a public information and education campaign was conducted prior to launching the ASE program. If respondents answer "no" or "I don't know," there is a skip instruction to Question B21. B18 asks what was communicated regarding the ASE program. B19 asks if the public information and education campaign has been sustained since the intial campaign. B20 asks about the mechanisms used to communicate with the public. Again, NHTSA believes that openness and clear communication is a critical factor in public acceptance and program success; these questions explore whether that is indeed the case.

B21 ASE publicized warning period

Question B21 asks whether or not the ASE program was preceded by a period in which only warning violations were issued. This is important information to collect because community acceptance of ASE is often linked to whether such a warning period was provided.

Section C. Operations

This section provides information on the day-to-day ASE deployment decisions that a law enforcement agency makes, including publicizing ASE locations and times, the enforcement threshold, ASE staffing and scheduling, ASE unit management, and other operational issues.

C1 - C2 Communication of ASE deployments

Question C1 asks whether or not an ASE agency notified the public of the ASE deployment sites and C2 asks about public notification of the schedule of enforcement. The collection of this information is important because it is included in the guidelines. Also, because actively communicating where and when ASE deployment is occurring is thought to promote greater acceptance of ASE by the public, this information will help us examine that relationship.

C3 ASE enforcement speed threshold

Question C3 collects information on the enforcement speed threshold for the various types of roadways for which ASE can be deployed. These thresholds are known to vary by type of roadway and have not been thoroughly documented in other studies, so it is important to document them here. It is also important to collect this information because the threshold itself (e.g., 5 MPH over the speed limit, 10 MPH over the speed limit, etc.) may have an impact on the acceptance of ASE in the community.

C4-C8 Mobile ASE unit staffing, equipment checklists, scheduling, deployment periods,

Questions C4 to C8 are directed at agencies that deploy ASE mobile units. C4 collects information on who staffs the mobile ASE units. If no mobile ASE units are used, there is a skip instruction to go to C9. Question C5 asks if the agency uses a checklist to ensure ASE mobile equipment is operating properly. If they do, the respondent agency is asked to include a copy of the checklist with their returned questionnaire. C6 collects information on the typical days of the week and time of day that the mobile ASE units are in operation. C7 asks what the typical number of hours is for a daily ASE deployment. C8 asks who has primary oversight over the mobile deployment. These operational questions will provide NHTSA with a better picture of the day-to-day activities involving ASE. All are areas addressed in the guidelines and all are important to help determine the way mobile ASE is used at each site.

C9 Immediate feedback to drivers

Question C9 asks if the ASE equipment used by respondent agencies provides immediate feedback to drivers indicating they just committed a violation. The most frequent form of feedback is a camera "flash," however; there are other options that NHTSA needs to document here. The nature of the real-time feedback to drivers who have been identified as speed violators is important in how drivers view being cited.for a violation and is thought to be important in how ASE programs are viewed by the driving public. This question provides information that will help explore this relationship.

C10 Traditional traffic enforcement at or near ASE sites?

Question C10 collects information on whether or not agencies using ASE also deploy traditional speed management options at or near ASE sites. NHTSA is interested in the impact that the presence of traditional traffic enforcement at or near ASE sites may play in the success of ASE programs.

C11 Review of ASE data and/or crash data

Question C11 investigates whether or not agencies using ASE review speed and crash data to determine if speeding and crashes at ASE locations are sufficient to justify continued enforcement. Assuming that ASE locations were chosen because of problems with speeding or crashes at the location, if speeding or crashes are reduced at the location, moving equipment to a new location that has a bigger problem may be warranted. Ideally, ASE programs should not consider ASE sites to be permanent. This is addressed in the guidelines and whether or not respondent agencies are doing this is important information to collect.

C12 When no ASE driver image is captured

Many ASE agencies are prevented by law from capturing a driver image. Question C12 collects information on what protocols are in place to identify the actual driver of the vehicle and how the citation may be resolved if the driver cannot be identified. It is important to know what the agencies do in these cases and how it may impact their ASE programs.

C13 Person in authority assigned to all ASE activities

Question C13 asks whether or not one person has authority over the ASE program (as recommended in the guidelines) and, if so, the identity of that person. It is important to know if the respondent agencies are following this guideline.

Section D. Violation Processing, Delivery and Adjudication

This section investigates the ASE violation processing and adjudication protocols for the agencies included in this information collection. Quality control, processing time, who is control of the process, who appears in court on ASE violations, as well as quantitative measures of ASE in terms of total citations issued and revenues gained are all addressed.

At the beginning of Section D, the respondent is asked to include a sample violation notice with the questionnaire when they send it in top the research team.

D1-D2 Quality control procedures

Questions D1 and D2 explore how the agency reviews ASE violations before they are forwarded by mail to the alleged violator. NHTSA guidelines state that multiple persons should be involved in the review process. This is addressed in D1. Question D2 specifically asks what images and image standards are employed in this quality review. This is important information to collect

regarding whether or not agencies are following guidelines, and the information will also help us determine how this impacts overall program success.

D3 Maximum processing time

Question D3 is an open-ended question designed to gather specific information to assess the length of time from when an ASE citation is issued to when the alleged violator receives the citation. NHTSA believes an open ended format is appropriate due to the anticipated variety of protocols among ASE agencies. This is important information for this collection. NHTSA now recommends a maximum of ten business days and knowing the range in actual practice may help NHTSA refine that recommendation.

D4 Final responsibility for reviewing ASE violations

Question D4 asks who had ultimate authority in deciding to issue ASE citations. NHTSA is very interested in determining whether or not this is a member of the law enforcement agency or some other party, as this may affect public acceptance.

D5 Personal service for ASE violations

Question D5 asks whether or not ASE agencies follow up with a personal service of an ASE citation when no response is received based on the mailed citation. Data is needed on this follow-up process to help determine its impact on overall effectiveness of the program; if the perception is that drivers can avoid sanctions by simply not responding, that would undermine the program.

D6 - D7 Contested court appearances

These questions investigate who appears on behalf of the agency in court cases involving contested ASE violations of all types. D6 collects information on who appears in the case of mobile ASE violations. D7 collects information on who appears in court for fixed ASE unit violations. It is important to determine whether law enforcement or ASE vendors have responsibility for this important task.

D8 Vehicles owned by a government agency or a business

Question D8 asks if the ASE agency addresses the issue of who is driving a government or business vehicle at the time of a violation. Whether or not the agency pursues these violations is of importance because it can negatively impact public acceptance if government vehicle violations are not pursued.

D9 Calls from citizens

Question D9 is a quality control question designed to determine if the ASE agency follows up on citizen calls citing concerns over their ASE program. It is important to collect this information because it is believed that agencies that are responsive to citizens receive greater public support than unresponsive agencies.

D10-11 Total ASE violations forwarded and adjudicated

For ASE agencies in operation more than one year, these questions seek to quantify how many violations were issued and completely adjudicated. D10 asks for a total number of violation citation sent to violators. D11 asks how many of these actually paid a fine. This information will help quantify the rate of fines paid to violations cited and this may impact ASE programs.

D12 Fines assessed for ASE violations

NHTSA knows that some jurisdictions have different fines for different kinds of roadways. The level of fines may be related to public support, and thus program success. Different fines may be assessed for ASE violations. Question D12 quantifies these fines for different kinds of roadways. It is important to obtain this information to see what various agencies have for fines in different road situations and how this might impact ASE programs.

D13 Revenue generated from ASE

Question D13 addresses how the fines generated from ASE programs are distributed. Public acceptance of ASE appears to often be predicated on how the fines are distributed. By collecting estimates of how percentages of revenue are distributed, important information on how this is handled by various agencies will be available for the first time. This information can then be examined with regard to how it impacts program success.

D14 Approximate percentage of <u>all</u> speeding violations to ASE violations?

Question D14 provides an estimate of what percentage of all speeding violations issued by the agency included in this information collection involved ASE. This is important information because NHTSA guidelines indicate that it is important that ASE only constitute one component of the overall speed management strategy.

Section E. Program Evaluation

This section explores to what degree ASE agencies have evaluated their own programs. There are some examples of rigorous evaluations in the US and abroad. NHTSA is interested in determining the extent to which ASE programs have been evaluated and wants to examine evaluations that have been done, including evaluations that have not been published.

E1 - E3 Evaluation of ASE on crashes, traffic speeds and public acceptance of ASE

These questions determine whether agencies have conducted formal evaluations and, if so, requests that they provide NHTSA with copies of the study reports. E1 asks about evaluations conducted on the effects of ASE on traffic crashes. E2 asks about evaluations of the effects of ASE on traffic speeds. E3 asks about evaluations on the public acceptance of the ASE program. If any of these evaluations are available, the responding agency is asked to include copies with their questionnaire when they mail it back to the research team.

NHTSA is particularly interested in whether agencies have evaluated impact on crashes, speeding, and public acceptance. NHTSA will carefully review these studies to ascertain if they are valid, unbiased and could be useful for other law enforcement agencies.

E4 Other comments

A final open question is included to give respondents the opportunity to provide information on anything they think may be pertinent or important that has not been addressed elsewhere in the questionnaire.

The questionnaire then provides a reminder about the attachments requested and concludes with a place to insert any relevant contact information for follow-up contacts.