

APPENDIX J: QUESTIONNAIRES

This collection of information is voluntary and will be used to determine whether there is sufficient evidence on the feasibility of using ALPRs for traffic safety to justify a future quantitative study on the use of ALPRs as a state highway safety countermeasure. A federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a current valid OMB Control Number. The OMB Control Number for this information collection is 2127-XXXX. Public reporting for this collection of information is estimated to be approximately 40 minutes per response, including the time for reviewing instructions, completing and reviewing the collection of information. All responses to this collection of information are voluntary. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to: Information Collection Clearance Officer, National Highway Traffic Safety Administration, 1200 New Jersey Ave, S.E., Washington, DC, 20590

THERE IS A DISTINCT QUESTIONNAIRE FOR EACH RESPONDENT GROUP, AS DESCRIBED BELOW.

Users

Users are defined as law enforcement agents who primarily use the ALPR technology for traffic purposes only. Others who are considered users are non-certified personnel who work as an extension of the law enforcement agency acting in the capacity of traffic enforcement. Questions for users focus on the use of the ALPR technology in a field setting and how the use of the technology impacts the user's ability to better enhance traffic safety.

Managers

Managers are defined as law enforcement agents who hold a mid-level supervisory role in managing field personnel users. Managers monitor the cumulative use of ALPR technology for improving traffic safety within certain areas of a community. Managers do not include Chiefs of Police but do include Sergeants, Lieutenants and Captains. They also include supervisors who are not certified law enforcement agents but are instead those who are responsible for the oversight of non-certified traffic enforcement personnel who act in this capacity for a law enforcement agency.

Questions for managers address how ALPR technology is managed at the field and user levels with emphasis on the impact that ALPR has on improving traffic safety. Because these individuals deal with mediation between the field activities that occur between users and the

community, several questions will be posed to better understand the relationship between community concerns with regard to using ALPR technology for traffic safety purposes.

Administrators

Administrators are heads of law enforcement agencies and include Majors, Assistant Chiefs and Chiefs of Police. While administrators may not have hands-on experience with ALPR use, they are intricately involved due to the strategic use of the technology as a treatment to improve traffic safety. Administrators have a significant role in the decision making process of how, when, where, and why ALPR technology is deployed and how it is used.

Administrators also provide the data based reasoning behind the decision to use ALPR for the betterment of the community as a whole and how the use of ALPR ties into the community's overall safety plan. They also justify the use of ALPR to community leaders and external stakeholders, providing them with evidence that the use of the technology is proper for its intended purpose and not violating the rights of individuals.

QUESTIONNAIRE1: USERS

This section contains the questionnaire that the research investigator will use when conducting interviews with personnel defined as front-line users of the technology.

Good morning (afternoon) and thank you for participating in this interview. I am (name here) and I am investigating the use of ALPR technology and its impact on improving traffic safety. As part of this interview, I will be asking a series of questions that pertain specifically to you and your agency's use of ALPR for traffic safety purposes. Let's first begin with some introductory questions that cover your position and its associated activities that are connected with using ALPR. If you agree to answer my questions we will move forward, ok?

1. What key functions does your job involve?
 - o Probe on how long interviewee has performed these functions
2. What activities do you perform related to ALPRs?

Now that I have a better understanding of your position and job responsibilities, I would like to ask you some specific questions that pertain to your use of ALPRs for traffic safety purposes. You may not have an answer for each question, and that is ok. You can answer, I don't know, and we'll go on to the next question. First question is:

3. For which purposes do you *personally* use ALPR in general?
4. For which traffic safety purposes do you use ALPR technology?
 - o If not mentioned, probe on use for detecting drivers who have suspended, revoked, or restricted licenses.
5. Generally what proportion of your use of ALPR technology targets drivers of personal vehicles versus commercial vehicle operators?
6. Generally, what percent of your use of ALPR technology involves traffic safety purposes?
7. How long have you used ALPR technology for traffic safety purposes?

8. How do decisions get made on how / how much to use ALPR technology for traffic safety?
9. Do you have any latitude in terms of how ALPR is used for addressing traffic safety?
10. What do you believe are the motivators for law enforcement personnel like yourself to use ALPRs as tools for improving traffic safety?
11. How much training did you receive on overall use ALPR?
 - o How much training was specific to ALPR use for traffic safety purposes?
 - o Is the training on-going or was it one-time only?

Now I would like to ask a couple of questions about the databases or HOT lists that you use in conjunction with ALPR use.

12. What ALPR databases or HOT lists do you work with?
 - o How are/were they developed?
 - o How are they maintained?
13. What issues do you have, if any, with the databases or Hot lists specific to using them for detecting drivers with suspended, revoked, or restricted licenses?

Now I'd like to ask you a few questions your opinion of the effectiveness of using ALPRs for traffic safety purposes.

14. How would you characterize the effectiveness of using ALPRs as a traffic safety treatment?
 - o Specifically, how effective is ALPR in detecting drivers who have suspended, revoked, or restricted licenses?
 - o Can you provide some specific examples of its effectiveness (or not) for that purpose?
15. Based on your agency's experience, how would you characterize the quality of the ALPR systems?
16. Has your agency experienced situations in which the accuracy of the systems has negatively influenced the effectiveness of the system?
17. What is the process for challenging violations?
18. What has been your agency's experience with persons challenging a violation?
19. Do you believe that your agency has received a good return on investment in terms of using ALPR as a traffic safety treatment?
20. Can you provide some specific examples of the benefit or value of using ALPR for traffic safety purposes?

Next I'll move on to challenges you may have in using ALPR for traffic safety purposes.

21. What challenges do you face in using ALPR technology for traffic safety purposes?
 - o Probe for specific challenges: technical, operational, institutional

22. [IF APPLICABLE] What about challenges in using ALPR specifically to detect drivers with suspended or revoked licenses?

o How do you as a user respond to those challenges?

23. Have these challenges changed in the past year or so?

o If yes: To what do you attribute those changes?

Now, I would like to ask you about your agency's acceptance of ALPR technology for improving traffic safety.

24. Overall, how do you feel about using ALPR for traffic safety purposes- as compared to using ALPR for other enforcement type purposes?

25. To the best of your knowledge, how do other law enforcement agents in your agency feel about using ALPR for traffic safety purposes- as compared to using ALPR for other enforcement type purposes?

26. Has department policy changed in the past year or so regarding use of ALPR?

o If yes: In what ways?

o Probe on policy changes regarding ALPR use specifically for traffic safety purposes.

I'm curious about how the community views the use of ALPR technology for the specific purpose of traffic enforcement and safety.

27. Have you received any feedback from the community regarding the use of ALPRs for traffic safety purposes?

o If yes: Has the feedback been positive, negative, or both? Please explain.

28. Have you or the agency received community feedback on the use of ALPR for drivers with suspended, revoked, or restricted licenses?

o If yes: What concerns if any have been raised and how have the concerns been addressed?

Privacy issues are a concern when it comes to ALPR use in some communities. My next questions explore this topic.

29. Has your agency run into any privacy issues with regard to using ALPR for traffic safety purposes?

o If yes: Please tell me about how your agency managed those issues.

o What steps does your agency take to ensure that privacy of ALPR data is protected?

30. Who has access to review the ALPR data that is stored at your agency?

o Does your agency allow the public or a civilian review of the stored ALPR data at your agency?

o Is the review of the ALPR data all access or is it provided in a "dashboard" format?

Are there any issues or topics that we did not cover, OR do you have any final thoughts you would like to share? Thank you for participating in this interview. Your

participation has helped us to better understand how your use ALPR technology for improving traffic safety in your community.

QUESTIONNAIRE 2: MANAGERS

This section contains the questionnaire that the researcher investigator will use when conducting interviews with manager respondents.

Good morning (afternoon) and thank you for participating in this interview. I am (name here) and I am investigating the use of ALPR technology and its impact on improving traffic safety. As part of this interview, I will be asking a series of questions that pertain specifically to you and your agency's use of ALPR for traffic safety purposes. Let's first begin with some introductory questions that cover your management role and the associated activities that are connected with operator supervision of ALPRs. If you agree to answer my questions we will move forward, ok?

1. What key functions does your job as a manager involve?
 - o Probe on how long the interviewee has served as a manager
2. What activities do you perform related to ALPRs?

Now that I have a better understanding of your position and job responsibilities, I would like to ask you some specific questions that pertain to your agency's use of ALPRs for traffic safety purposes. You may not have an answer for each question, and that is ok. You can answer, I don't know, and we'll go on to the next question. First question is:

3. For which purposes does your agency use ALPR technology in general?
4. For which traffic safety purposes does your agency use ALPR technology?
 - o If not mentioned, probe on use for detecting drivers with suspended, revoked, or restricted licenses.
5. Generally, what percent of your agency's ALPR use involves traffic safety purposes?
6. How long have you been involved in managing users of ALPR technology specifically for traffic safety purposes?
7. How do the decisions get made on how/ how much to use ALPR technology for traffic safety?
8. Do you have any latitude in terms of how ALPR is used for addressing traffic safety?
9. Are you responsible for training on use of ALPR for traffic safety purposes? If no: Who within the agency is responsible for training?
 - o Can you describe that training?
10. Has the training officers receive on use of ALPR for traffic safety changed in the past year?
 - o If yes: In what ways?
 - o If yes: To what do you attribute the changes?

Now I would like to ask a couple of questions about the databases or Hot lists that you and your agency manage in conjunction with ALPR use.

11. Do you develop or maintain databases or Hot lists for the agency?
12. Which ALPR databases or Hot lists do you work with?
 - o How are those databases developed?
 - o How are they maintained?
13. How often is data uploaded to the database or Hot lists?
14. How often is the updated data provided to users in the field?
15. [IF APPLICABLE] What issues do you have, if any, with the databases or Hot lists specific to using them for detecting drivers with suspended, revoked, or restricted licenses?
16. Does your agency share ALPR data/databases with other agencies?
 - o If yes: With what other agencies do you share data?
 - o If yes: How has this sharing of data proven to be effective in improving traffic safety?
17. Are you familiar with your agency's data retention and storage practices?
 - o If yes: How is the ALPR data that is collected for traffic safety purposes retained and stored?
 - o If yes: How long does your agency store ALPR data that is collected?
 - o If yes: If your agency purges data, how often is the data purged?

Now I'd like to ask you a few questions about the effectiveness of ALPRs for traffic safety purposes and the impact that ALPRs have in the community.

18. How would you characterize the effectiveness of ALPRs as a traffic safety treatment?
19. [IF APPLICABLE] Specifically, how effective is ALPR in detecting drivers who have suspended, revoked, or restricted licenses?
 - o Can you provide some specific examples of its effectiveness (or not) for that purpose?
20. Based on your agency's experience, how would you characterize the quality of the ALPR systems?
21. Has your agency experienced situations in which the accuracy of the systems has negatively influenced the effectiveness of the system?
22. What is the process for challenging violations?
23. What has been your agency's experience with persons challenging a violation?
24. Do you believe that your agency has received good return on the investment in terms of ALPR as a traffic safety treatment?
 - o Can you provide some specific examples of the benefit or value of using ALPR for traffic safety purposes?

Now I want to move on to questions about challenges in using the technology.

25. What challenges does your agency face in the use of ALPR technology for traffic safety purposes?
 - o Probe for specific challenges: technical, operational, institutional
26. {IF APPLICABLE} What about challenges in managing your ALPR program to detect drivers with suspended or revoked licenses?
 - o How do you as a manager respond to those challenges?
27. Have these challenges changed in the past year or so?
 - o If yes: To what do you attribute those changes?

I have a couple of questions about legal issues.

28. Has your agency run into any legal issues with regard to using ALPR for traffic safety purposes?
 - o If yes: What were they and how did your agency manage those issues?

Now I would like to ask you about how the law enforcement community views the use of ALPR technology for addressing traffic safety within communities.

29. Overall, how do you feel about using ALPR for traffic safety purposes – as compared to using it for other enforcement activities?
30. To the best of your knowledge, do law enforcement officers within your agency support the use of ALPRs for traffic safety purposes?
 - o Probe on difference in the way managers vs. officers feel about the use of ALPRs for traffic safety purposes.
31. How would you characterize your agency administration's support for using ALPRs for traffic safety purposes?
32. Has department policy changed in the past year or so regarding use of ALPR?
 - o If yes: In what ways?
 - o Probe on any policy changes regarding ALPR use specifically for traffic safety purposes.

I would like to ask you about how the community views the use of ALPR technology for the specific purpose of traffic enforcement and safety.

33. Have you received any feedback from the community regarding the use of ALPRs for traffic safety purposes?
 - o If yes: Has the feedback been positive, negative, or both? Please explain.
34. [IF APPLICABLE] Have you or the agency received community feedback on the use of ALPR for drivers with suspended, revoked, or restricted licenses?
 - o If yes: What concerns if any have been raised and how have the concerns been addressed?

Privacy issues are a concern when it comes to ALPR use in some communities. My next questions explore this topic.

35. Has your agency run into any privacy issues with regard to using ALPR for traffic safety purposes?

- o If yes: Please tell me about how your agency managed those issues.
 - o What steps does your agency take to ensure that privacy of ALPR data is protected?

36. Who has access to review the ALPR data that is stored at your agency?

- o Does your agency allow the public or a civilian review of the stored ALPR data at your agency?
- o Is the review of the ALPR data all access or is it provided in a “dashboard” format?

Are there any issues or topics that we did not cover, OR do you have any final thoughts you would like to share? Thank you for participating in this interview. Your participation has helped us to better understand how you manage users of ALPR technology for improving traffic safety in your community.

QUESTIONNAIRE 3: ADMINISTRATORS

This section contains the questionnaire that the researcher investigator will use when conducting interviews with administrators.

Good morning (afternoon) and thank you for participating in this interview. I am (name here) and I am investigating the use of ALPR technology and its impact on improving traffic safety. As part of this interview, I will be asking a series of questions that pertain specifically to you and your agency's use of ALPR for traffic safety purposes. Let's first begin with some introductory questions that cover your administrative role and the associated activities that are connected with ALPRs. If you agree to answer my questions we will move forward, ok?

1. What key functions does your job as agency administrator involve?
 - o Probe on how long interviewee has served as agency administrator
2. What activities do you perform related to ALPRs

Now I would like to ask you some specific questions that pertain directly to the extent that your agency uses ALPRs as a community treatment for traffic safety. You may not have an answer for each question, and that is ok. You can answer, I don't know, and we'll go on to the next question. First question is:

3. For which purposes does your agency use ALPR in general?
4. For which traffic safety purposes does your agency use ALPR technology?
 - o If not mentioned, probe on use for detecting drivers with suspended, revoked, or restricted licenses.
5. Generally, what percent of your agency's ALPR use involves traffic safety purposes?
6. How long have you been involved in administering the oversight of ALPR technology for traffic safety purposes for your agency and community?
7. Do you know why your agency first became involved in applying ALPR technology for improving traffic safety?
8. Does your agency generate reports from collected data and pass that information along to field units for proactive traffic enforcement activities?
 - o What type of traffic safety activities, if any, do these reports address at the management and field user levels?
9. Does your agency use data collected with ALPR technology to perform predictive analytics such as temporal and spatial based traffic enforcement?

Let's shift to how ALPR data are shared and stored at your agency and who has access to it.

10. Does your agency share ALPR data/databases with other agencies?
 - o If yes: With what other agencies do you share data?

- o If yes: How has this sharing of data proven to be effective in improving traffic safety?
11. Are you familiar with your agency's ALPR data retention and storage practices?
 - o If yes: How is the ALPR data that is collected for traffic safety purposes retained and stored?
 - o If yes: How long does your agency store ALPR data that is collected?
 - o If yes: If your agency purges data, how often is data purged?
 12. Does your agency have any type of data sharing or inter-agency agreements with other law enforcement agencies? If yes, please explain?
 13. What is your agency's policy on how the collected ALPR data can be linked to state and national criminal and traffic safety database?

Now I'd like to ask you a few questions about how effective ALPRs are as a traffic safety treatment.

14. How do you characterize the effectiveness of using ALPRs as a traffic safety treatment?
15. [IF APPLICABLE] Specifically, how effective is ALPR in detecting drivers who have suspended, revoked, or restricted licenses?
 - o Can you provide some specific examples of its effectiveness (or not) for that purpose?
16. How does the agency measure success/effectiveness of ALPR technology for addressing traffic safety?
 - o What are some specific indicators or metrics that your agency uses to measure success of using ALPRs for traffic safety purposes?

Now I have a few questions about challenges of using ALPR for traffic safety purposes.

17. What challenges do you or your agency face in using ALPR technology for traffic safety purposes?
 - o Probe for specific challenges: technical, operational, institutional
18. [IF APPLICABLE] What about challenges in using ALPR to detect drivers with suspended, revoked or restricted licenses?
 - o Were those challenges internal to the agency or external from the community?
 - o How did you as an administrator respond to the challenges or limitations?
19. Have these challenges changed in the past year or so?
 - o If yes: To what do you attribute those changes?

I have a couple of questions about legal issues.

20. Has your agency run into any legal issues with regard to using ALPR for traffic safety purposes?

o If yes: What were they and how did your agency manage those issues.

Now I would like to ask you about how the law enforcement community views the use of ALPR technology for addressing traffic safety within communities.

21. How do you feel about using ALPR for traffic safety purposes – as compared to using it for other enforcement activities?

22. How do your law enforcement personnel feel about using ALPRs for traffic safety purposes, relative to other purposes?

23. Has department policy changed in the past year regarding use of ALPR?

o If yes: In what ways?

o Probe on any policy changes regarding ALPR use specifically for traffic safety purposes?

I would like to ask you about community support for the use of ALPR technology for the specific purpose of traffic enforcement and safety.

24. Do you believe your agency has community support for using ALPR as a traffic safety treatment?

25. Have you received any feedback from the community regarding the use of ALPRs for traffic safety purposes?

o If yes: Was the feedback been positive, negative, or both?

26. [IF APPLICABLE] Have you or the agency received community feedback on the use of ALPR for detecting drivers with suspended, revoked, or restricted licenses?

o If yes: What concerns if any have been raised and how has the concerns been addressed?

Privacy issues are a concern when it comes to ALPR use in some communities. My next questions explore this topic.

27. Has your agency run into any privacy issues with regard to using ALPR for traffic safety purposes?

o If yes: Please tell me about how your agency managed those issues.

o What steps does your agency take to ensure that privacy of ALPR data is protected?

28. Who has access to review the ALPR data that is stored at your agency?

o Does your agency allow the public or a civilian review of the stored ALPR data at your agency?

o Is the review of the ALPR data all access or is it provided in a “dashboard” format?

Are there any issues or topics that we did not cover, OR do you have any final thoughts you would like to share? Thank you for participating in this interview. Your participation has helped us to better understand how you and your agency commission the use of ALPR technology for improving traffic safety in your community.