This collection of information is voluntary and will be used for formative purposes only so that we may develop vehicle safety programs designed to reduce the number of traffic-related injuries and deaths. 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 twenty-five 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

**Final CAS Technology Questionnaire**

**Questionnaire**

Collision Mitigation Technologies are safety systems that alert drivers to unfolding conflicts and automatically take action if the driver does not respond to unfolding conflicts. Please answer the following questions **based your opinions and any past experiences with CAS technology.** To answer, **check only one box** for each statement that best expresses your answer (unless indicated otherwise). The questionnaire will take about 25 minutes to complete.

**General Use of the Collision Mitigation Technology**

1. Based on your opinions and experiences, please indicate how much you agree with the following statements

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | Strongly Agree | Agree | Slightly Agree | Neutral | Slightly Disagree | Disagree | Strongly Disagree |
| * 1. Collision mitigation technology makes drivers safer
 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 |
| * 1. Collision mitigation technology makes driving easier
 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 |
| * 1. I’m less distracted and make fewer errors while using collision mitigation technology
 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 |
| * 1. I rely on collision mitigation technology to alert me to potential accidents
 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 |
| * 1. False alerts negatively affect my performance
 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 |
| * 1. I find the technology easy to understand
 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 |
| * 1. Collision mitigation technology is useful in bad weather or traffic
 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 |
| * 1. Collision mitigation technology works properly in bad weather or traffic
 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 |
| * 1. Collision mitigation technology should be installed as standard equipment in commercial vehicles
 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 |
| * 1. The technology gives alerts too early
 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 |
| * 1. I would recommend collision mitigation technology to drivers at other companies
 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 |

**Following Distance Alert**

The collision mitigation technology has a following distance alert that beeps when the distance between the truck and the vehicle ahead is closing. The alert beeps faster as the distance closes. The following questions ask about this alert.

1. Based on your opinions and experiences, the **following distance** alert…

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | Strongly Agree | Agree | Slightly Agree | Neutral | Slightly Disagree | Disagree | Strongly Disagree |
| * 1. …is easy to hear in all situations
 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 |
| * 1. …is good at getting a drivers’ attention back to driving
 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 |
| * 1. …helps drivers avoid a crash
 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 |
| * 1. …distracts or annoys drivers
 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 |
| * 1. …works properly in all weather conditions
 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 |
| * 1. …works properly in all traffic conditions
 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 |
| * 1. …encourages drivers to pass slow lead vehicles
 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 |
| * 1. …works well on curved roads
 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 |
| * 1. …causes drivers to pay less attention to the road
 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 |

1. What percentage of following distance alerts do you think were false alerts (that is, alerts in response to objects that are not in the path of the vehicle)?

\_\_\_\_\_\_\_\_%

1. What percentage of following distance alerts do you think were safety-critical (that is, alert drivers to a potential collision)?

\_\_\_\_\_\_\_\_%

1. What are the top three things you liked about the following distance alert?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. What are the top three things you disliked about the following distance alert?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Stationary Object Alert**

The collision mitigation technology has a stationary object alert that beeps when a stationary object on the road is detected. The following questions ask about this alert.

1. Based on your opinions and experiences, the **stationary object alert**…

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | Strongly Agree | Agree | Slightly Agree | Neutral | Slightly Disagree | Disagree | Strongly Disagree |
| * 1. …is easy to hear in all situations
 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 |
| * 1. …is good at getting drivers’ attention back to driving
 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 |
| * 1. …helps drivers avoid a crash
 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 |
| * 1. …distracts or annoys drivers
 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 |
| * 1. …works properly in all weather and traffic conditions
 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 |
| * 1. …works properly in all traffic and traffic conditions
 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 |
| * 1. …works well on curved roads
 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 |
| * 1. …causes drivers to pay less attention to the road
 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 |

1. What percentage of stationary object alerts do you think were false alerts (that is, alerts that activate in response to objects that are not valid threats, such as overpasses and guard rails)?

\_\_\_\_\_\_\_\_%

1. What percentage of stationary object alerts do you think were safety-critical (that is, alert drivers to a potential collision)?

\_\_\_\_\_\_\_\_%

1. What are the top three things you liked about the stationary object alert?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. What are the top three things you disliked about the stationary object alert?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Impact Alert**

The collision mitigation technology has an impact alert that presents lights on the dash, rapidly beeps to alert you to an imminent collision. The following questions ask about this alert.

1. Based on your opinions and experiences, the **impact alert** …

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | Strongly Agree | Agree | Slightly Agree | Neutral | Slightly Disagree | Disagree | Strongly Disagree |
| * 1. …is easy to hear in all situations
 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 |
| * 1. …is good at getting drivers’ attention back to driving
 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 |
| * 1. …helps drivers avoid a crash
 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 |
| * 1. …distracts or annoys drivers
 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 |
| * 1. …works in all weather conditions
 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 |
| * 1. …works in all traffic conditions
 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 |
| * 1. …works well on curved roads
 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 |
| * 1. …causes drivers to pay less attention to the road
 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 |

1. What percentage of impact alerts do you think were false alerts (that is, alerts that activate in response to objects that are not valid threats, such as vehicles in a different lane)?

\_\_\_\_\_\_\_\_%

1. What percentage of impact alerts do you think were safety-critical (that is, alert drivers to a potential collision)?

\_\_\_\_\_\_\_\_%

1. What are the top three things you liked about the impact alert?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. What are the top three things you disliked about the impact alert?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 **Automatic Emergency Braking (AEB)**

The collision mitigation technology can apply the truck’s brakes to help you avoid an imminent collision. The following questions ask about this activation.

1. Based on your opinions and experiences, the **automatic emergency braking** applied at the last moment…

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | Strongly Agree | Agree | Slightly Agree | Neutral | Slightly Disagree | Disagree | Strongly Disagree |
| * 1. …is beneficial
 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 |
| * 1. …is the most appropriate action for the vehicle to take
 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 |
| * 1. …works well in all weather conditions
 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 |
| * 1. …works well in all traffic conditions
 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 |
| * 1. …is good at getting drivers’ attention back to driving
 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 |
| * 1. …helps drivers avoid a crash
 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 |
| * 1. …distracts or annoys drivers
 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 |
| * 1. …works well on curved roads
 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 |
| * 1. …causes drivers to pay less attention to the road
 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 |

1. What percentage of AEB activations do you think were false activations (that is, activations in response to objects that are not valid threats, such as vehicles in a different lane)?

\_\_\_\_\_\_\_\_%

1. What percentage of the AEB activations do you think were safety-critical (that is, activations in response to a potential collision)?

\_\_\_\_\_\_\_\_%

1. What are the top three things you liked about the automatic braking?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. What are the top three things you disliked about the automatic braking?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Adaptive Cruise Control (ACC)**

When engaged, the adaptive cruise control maintains a constant headway to a slowing lead vehicle by reducing throttle, applying the engine retarder, and applying the truck’s brakes when needed. The following questions ask about this feature.

1. Based on your opinions and experiences, please rate the statements about **adaptive cruise control** below.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | Strongly Agree | Agree | Slightly Agree | Neutral | Slightly Disagree | Disagree | Strongly Disagree |
| * 1. It is clear when ACC has detected a lead vehicle
 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 |
| * 1. ACC’s de-throttling is helpful in keeping a safe distance
 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 |
| * 1. ACC’s engaging the engine retarder is helpful in keeping a safe distance
 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 |
| * 1. ACC’s braking helps keep a safe distance
 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 |
| * 1. ACC automatically slowing the truck when lead traffic slows is annoying to drivers
 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 |
| * 1. ACC works properly in all weather conditions
 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 |
| * 1. The ACC works properly in all traffic conditions
 |  |  |  |  |  |  |  |
| * 1. ACC applies a sufficient amount of braking
 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 |
| * 1. ACC works on curved roads
 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 |
| * 1. Drivers know when they need to start braking because ACC isn’t sufficient
 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 |
| * 1. Drivers pay less attention to the road when using ACC
 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 |

1. What percentage of the times ACC slowed the vehicle automatically do you think were false alerts (that is, slowing in response to objects that are not valid threats, such as vehicles in a different lane)?

\_\_\_\_\_\_\_\_%

1. What percentage of the times ACC slowed the vehicle do you think were safety-critical (that is, slowing in response to a potential collision)?

\_\_\_\_\_\_\_\_%

1. What are the top three things you liked about the ACC feature?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. What are the top three things you disliked about the ACC feature?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Lane Departure Alert**

The collision mitigation technology has a lane departure alert that beeps when the truck crosses a lane marking when the turn signal is not activated. The following questions ask about this alert.

1. Based on your opinions and experiences, the **lane departure alert**…

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | Strongly Agree | Agree | Slightly Agree | Neutral | Slightly Disagree | Disagree | Strongly Disagree |
| * 1. …is easy to hear in all situations
 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 |
| * 1. …is good at getting drivers’ attention back to driving
 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 |
| * 1. …helps drivers avoid a crash
 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 |
| * 1. …distracts or annoys drivers
 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 |
| * 1. …works well, assuming lane markings are in good condition
 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 |
| * 1. …works properly in all weather conditions
 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 |
| * 1. …works properly in all traffic conditions
 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 |
| * 1. …works properly in all lighting conditions
 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 |
| * 1. …works well on curved roads
 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 |
| * 1. …causes drivers to pay less attention to the road
 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 | 🗆 |

1. What percentage of lane departure alerts do you think were false alerts (for example, alerts that activate in response to faded lane markings in construction zones)?

\_\_\_\_\_\_\_\_%

1. What percentage of lane departure alerts do you think were safety-critical (that is, helps correct an unintentional lane drift)?

\_\_\_\_\_\_\_\_%

1. What are the top three things you liked about the lane departure warning?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. What are the top three things you disliked about the lane departure warning?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Please rank which technologies work best for you, from 1 (Best) to 6 (Worst).

\_\_\_\_ Following Distance Alert

\_\_\_\_ Stationary Vehicle Alert

\_\_\_\_ Impact Alert

\_\_\_\_ Adaptive Cruise Control

\_\_\_\_ Lane Departure Warning
\_\_\_\_ Automatic Emergency Braking

1. Which kinds of alerts do you prefer? (Please check all that apply)

\_\_\_\_ Audio alerts

\_\_\_\_ Visual alerts

\_\_\_\_ Vibration or haptic alerts

1. Have your opinions on collision mitigation technology changed over the last 3 months? If so, how?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Have you had any issues with maintenance or calibration of the technology? For example, dirt, bugs, rain, ice, sunlight glare, bumps, or vibration?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Do you have any suggestions on how to improve collision mitigation technology?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Have you seen any unintended consequences from using collision mitigation technology?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Thank you for participating in this questionnaire.**