

Under the Paperwork Reduction Act, a Federal agency may not conduct or sponsor, and a person is not required to respond to 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 2127-0756 (expiration date: MM/DD/YYYY). The National Highway Traffic Safety Administration (NHTSA) has proposed to perform research involving the collection of information from the public as part of a multi-year effort to learn about drivers’ use of camera-based rear visibility systems as compared to their use of traditional vehicle outside mirrors. This research will support NHTSA in evaluating whether to pursue a regulation modification that would permit technologies other than mirrors, such as camera-based visibility systems (sometimes referred to as camera monitor systems (CMS)), for compliance with FMVSS No. 111. The average amount of time to complete the survey is 10 minutes. All responses to this collection of information are voluntary. If you have comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden send them to Information Collection Clearance Officer, National Highway Traffic Safety Administration, 1200 New Jersey Ave, S.E., Washington, DC, 20590.

Post-drive Questionnaire: Drive with Mirrors

Answer the following questions thinking about the rear visibility technology that you just experienced. For each question, please respond using the rating of a scale of 1 to 7, in which 1 = Strongly Disagree and 7 = Strongly Agree.

1. It was easy to use the mirrors while driving.

1	2	3	4	5	6	7
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Strongly Disagree	Moderately Disagree	Somewhat Disagree	Neither Disagree nor Agree	Somewhat Agree	Moderately Agree	Strongly Agree

2. I was comfortable with the physical location of the mirrors.

1	2	3	4	5	6	7
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Strongly Disagree	Moderately Disagree	Somewhat Disagree	Neither Disagree nor Agree	Somewhat Agree	Moderately Agree	Strongly Agree

3. The size of the field of view displayed by the mirror was acceptable.

1	2	3	4	5	6	7
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Strongly Disagree	Moderately Disagree	Somewhat Disagree	Neither Disagree nor Agree	Somewhat Agree	Moderately Agree	Strongly Agree

3a. If the size of the visible area (field of view) was not acceptable, what was wrong with it, (e.g., was it too large, too small, showing the wrong area)?

- | | | | | | | |
|---------------|----------------------|--------------------|---------------------------------|--------------------|----------------------|---------------|
| 1
 | 2
 | 3
 | 4
 | 5
 | 6
 | 7
 |
| Far too small | Moderately too small | Slightly too small | Neither too small nor too large | Slightly too large | Moderately too large | Far too large |

4. It was easy to incorporate the mirrors into my normal driving eye glance patterns.

- | | | | | | | |
|-------------------|---------------------|-------------------|----------------------------|----------------|------------------|----------------|
| 1
 | 2
 | 3
 | 4
 | 5
 | 6
 | 7
 |
| Strongly Disagree | Moderately Disagree | Somewhat Disagree | Neither Disagree nor Agree | Somewhat Agree | Moderately Agree | Strongly Agree |

5. The image displayed (image quality) by the mirrors was clear.

- | | | | | | | |
|-------------------|---------------------|-------------------|----------------------------|----------------|------------------|----------------|
| 1
 | 2
 | 3
 | 4
 | 5
 | 6
 | 7
 |
| Strongly Disagree | Moderately Disagree | Somewhat Disagree | Neither Disagree nor Agree | Somewhat Agree | Moderately Agree | Strongly Agree |

6. Objects in the mirrors appeared distorted.

- | | | | | | | |
|-------------------|---------------------|-------------------|----------------------------|----------------|------------------|----------------|
| 1
 | 2
 | 3
 | 4
 | 5
 | 6
 | 7
 |
| Strongly Disagree | Moderately Disagree | Somewhat Disagree | Neither Disagree nor Agree | Somewhat Agree | Moderately Agree | Strongly Agree |

7. I could easily visually focus on objects displayed by the mirrors.

- | | | | | | | |
|-------------------|---------------------|-------------------|----------------------------|----------------|------------------|----------------|
| 1
 | 2
 | 3
 | 4
 | 5
 | 6
 | 7
 |
| Strongly Disagree | Moderately Disagree | Somewhat Disagree | Neither Disagree nor Agree | Somewhat Agree | Moderately Agree | Strongly Agree |

8. I could *easily* discern other vehicles using the mirrors.

- | | | | | | | |
|-------------------|---------------------|-------------------|----------------------------|----------------|------------------|----------------|
| 1
 | 2
 | 3
 | 4
 | 5
 | 6
 | 7
 |
| Strongly Disagree | Moderately Disagree | Somewhat Disagree | Neither Disagree nor Agree | Somewhat Agree | Moderately Agree | Strongly Agree |

9. I was comfortable with the brightness of the image displayed in the mirrors.

1	2	3	4	5	6	7
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Strongly Disagree	Moderately Disagree	Somewhat Disagree	Neither Disagree nor Agree	Somewhat Agree	Moderately Agree	Strongly Agree

10. Outside light conditions negatively affected the quality of the image displayed by the mirrors.

1	2	3	4	5	6	7
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Strongly Disagree	Moderately Disagree	Somewhat Disagree	Neither Disagree nor Agree	Somewhat Agree	Moderately Agree	Strongly Agree

11. Environmental conditions (e.g., sun, clouds) made it difficult to use the rear visibility technology.

1	2	3	4	5	6	7
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Strongly Disagree	Moderately Disagree	Somewhat Disagree	Neither Disagree nor Agree	Somewhat Agree	Moderately Agree	Strongly Agree

12. I felt comfortable using the mirrors to make lane changes to the left.

1	2	3	4	5	6	7
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Strongly Disagree	Moderately Disagree	Somewhat Disagree	Neither Disagree nor Agree	Somewhat Agree	Moderately Agree	Strongly Agree

13. I felt comfortable using the mirrors to make lane changes to the right.

1	2	3	4	5	6	7
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Strongly Disagree	Moderately Disagree	Somewhat Disagree	Neither Disagree nor Agree	Somewhat Agree	Moderately Agree	Strongly Agree

14. I could accurately judge the distance to objects behind me on the left using the mirrors.

1	2	3	4	5	6	7
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Strongly Disagree	Moderately Disagree	Somewhat Disagree	Neither Disagree nor Agree	Somewhat Agree	Moderately Agree	Strongly Agree

15. I could accurately judge the distance to objects behind me on the right using the mirrors.

- 1

☐

Strongly Disagree
- 2

☐

Moderately Disagree
- 3

☐

Somewhat Disagree
- 4

☐

Neither Disagree nor Agree
- 5

☐

Somewhat Agree
- 6

☐

Moderately Agree
- 7

☐

Strongly Agree

16. I felt safe using the mirrors when changing lanes.

- 1

☐

Strongly Disagree
- 2

☐

Moderately Disagree
- 3

☐

Somewhat Disagree
- 4

☐

Neither Disagree nor Agree
- 5

☐

Somewhat Agree
- 6

☐

Moderately Agree
- 7

☐

Strongly Agree