J.D. POWER

Automated Vehicles and Insurance Pulse Survey

SURVEY QUESTIONNAIRE
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NAMIC
NATIONAL ASSOCIATION OF
MUTUAL INSURANCE COMPANIES
SHAPING OUR MUTUAL FUTURE®

Online survey of 500 auto insurance customers conducted in August 2018.

1. If we define a "fully automated vehicle" as a car in which the occupants have no control, how long do you think it will be until there is a fully automated vehicle on the market? [PROG: SINGLE RESPONSE]

1 Less than 2 years **(18%)**
2 2 to 5 years **(33%)**
3 6 to 10 years **(20%)**
4 Over 10 years **(13%)**
0 There will never be a fully automated vehicle **(15%)**

2. Once there is a fully automated vehicle on the market how many years will it be before you are comfortable riding in one? [PROG: SINGLE RESPONSE]

1 Right away **(7%)**
2 Less than 2 years **(11%)**
3 2 to 5 years **(13%)**
4 6 to 10 years **(13%)**
5 Over 10 years **(13%)**
0 I would not ride in a fully automated vehicle **(42%)**

3. What level of safety testing for a fully automated vehicle would you require before you ride in that vehicle? [PROG: SINGLE RESPONSE]

1. I would be comfortable without any safety testing **(2%)**
2. Less than a 10% error rate **(2%)**
3. Less than a 2% error rate **(14%)**
4. Require 100% safe – 0% error **(45%)**
0. I would not ride in a fully automated vehicle **(38%)**

4. Who would you trust most to perform reliable safety testing for fully automated vehicles? [PROG: SINGLE RESPONSE]

1. The vehicle manufacture **(12%)**
2. The federal government **(9%)**
3. State governments **(4%)**
4. Insurance Institute for Highway Safety **(29%)**
5. Highway Loss Data Institute **(5%)**
97. Other **(1%)**
0. None of the above **(40%)**

3. What is the highest level of risk of injury or death you would be comfortable with before riding in a fully automated vehicle? [PROG: GRID]
[PROG: ROWS]
   a.   Risk to you

 [PROG: COLUMNS]
   1.   I would accept more risk **(9%)**
   2.   The same as an ordinary car **(19%)**
   3.   5% less risk than a normal car **(5%)**
   4.   50% less risk than a normal car **(11%)**
   5.   100% less risk than a normal car **(56%)**

[PROG: ROWS]
   b.   Risk to a family member

 [PROG: COLUMNS]
   6.   I would accept more risk **(9%)**
   7.   The same as an ordinary car **(17%)**
   8.   5% less risk than a normal car **(4%)**
   9.   50% less risk than a normal car **(11%)**
   10. 100% less risk than a normal car **60%)**

[PROG: ROWS]
   c.   Risk of other people (e.g., pedestrians, etc.)

[PROG: COLUMNS]

11. I would accept more risk **(9%)**

12. The same as an ordinary car **(17%)**

13. 5% less risk than a normal car **(5%)**

14. 50% less risk than a normal car **(13%)**

15. 100% less risk than a normal car **(57%)**

[PROG: ROWS]

d. Risk of damage to the vehicle

[PROG: COLUMNS]

16. I would accept more risk **(9%)**

17. The same as an ordinary car **(24%)**

18. 5% less risk than a normal car **(4%)**

19. 50% less risk than a normal car **(14%)**

20. 100% less risk than a normal car **(48%)**

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4. Who would you trust most to objectively determine the following resulting from a fully automated vehicle accident? [PROG: GRID]

[PROG: ROWS]

a. Risk of injury or death to you or a family member

[PROG: COLUMNS]

1. The automated vehicle manufacturer **(11%)**

2. The company making the automated software **(8%)**

3. My insurance company **(20%)**

4. The legal system/courts **(34%)**

5. The U.S. Department of Transportation **(27%)**

[PROG: ROWS]

b. Risk of damage to the fully automated vehicle

[PROG: COLUMNS]

6. The automated vehicle manufacturer **(13%)**

7. The company making the automated software **(11%)**

8. My insurance company **(28%)**

9. The legal system/courts **(21%)**

10. The U.S. Department of Transportation **(27%)**

[PROG: ROWS]

c. Risk of damage to other vehicles

[PROG: COLUMNS]
11. The automated vehicle manufacturer **(12%)**
12. The company making the automated software **(8%)**
13. My insurance company **(30%)**
14. The legal system/courts **(23%)**
15. The U.S. Department of Transportation **(27%)**

[PROG: ROWS]
d. Risk of injury/death to others (e.g., pedestrians)

[PROG: COLUMNS]
16. The automated vehicle manufacturer **(11%)**
17. The company making the automated software **(9%)**
18. My insurance company **(19%)**
19. The legal system/courts **(34%)**
20. The U.S. Department of Transportation **(27%)**

[PROG: ROWS]
e. Guidelines for who was at fault in an accident

[PROG: COLUMNS]
21. The automated vehicle manufacturer **(10%)**
22. The company making the automated software **(8%)**
23. My insurance company **(20%)**
24. The legal system/courts **(31%)**
25. The U.S. Department of Transportation **(30%)**

5. Why do you think **auto manufacturers** are interested in fully automated vehicles? Mark all that apply.
[PROG: MULTIPLE RESPONSE, ORDER=RANDOMIZED]
1. Increase auto safety **(26%)**
2. Create new jobs **(19%)**
3. Promote innovation **(45%)**
4. Sell more cars **(54%)**
5. Sell transportation services **(32%)**
6. Sell web-based content and services **(21%)**
7. Obtain more consumer data **(19%)**
8. Other [PROG: FIXED] **(4%)**
9. None of the above [PROG: FIXED] **(12%)**

6. Why do you think **technology companies** are interested in fully automated vehicles? Mark all that apply.
[PROG: MULTIPLE RESPONSE, ORDER=RANDOMIZED]
1. Increase auto safety **(23%)**
2. Create new jobs **(23%)**
3. Promote innovation **(47%)**
4. Sell more technology **(64%)**
5. Sell transportation services **(36%)**
6. Sell web-based content and services **(36%)**
7. Obtain more consumer data **(27%)**
8. Other [PROG: FIXED] **(4%)**
9. None of the above [PROG: FIXED] **(9%)**

7. Why do you think **insurance companies** are interested in fully automated vehicles? Mark all that apply.
[PROG: MULTIPLE RESPONSE, ORDER=RANDOMIZED]
1. Increase auto safety **(34%)**
2. Create new jobs **(10%)**
3. Promote innovation **(18%)**
4. Sell more insurance **(59%)**
5. Sell transportation services **(15%)**
6. Sell web-based content and services **(14%)**
7. Obtain more consumer data **(24%)**
8. Other [PROG: FIXED] **(3%)**
9. None of the above [PROG: FIXED] **(16%)**

8. Why do you think **the government** is interested in fully automated vehicles? Mark all that apply.
[PROG: MULTIPLE RESPONSE, ORDER=RANDOMIZED]
1. Increase auto safety **(30%)**
2. Create new jobs **(23%)**
3. Promote innovation **(31%)**
4. Increase transportation revenues **(48%)**
5. Provide transportation services **(28%)**
6. Provide web-based content and services **(13%)**
7. Obtain more citizen data **(35%)**
8. Other {PROG: FIXED] **(3%)**
9. None of the above [PROG: FIXED] **(16%)**

9. What do you think is the greatest potential **advantage** of fully automated vehicles?
[PROG: SINGLE RESPONSE, ORDER=RANDOMIZED]
1. Increase auto safety **(19%)**
2. Increase free-time **(7%)**
3. Lower insurance premiums **(4%)**
4. Greater mobility **(9%)**
5. Less dependence on foreign oil **(10%)**
6. Positive impact on the environment **(10%)**
7. I see no advantages to automated vehicles [PROG: FIXED] **(40%)**

10. What do you think is the greatest potential **disadvantage** of fully automated vehicles? [PROG: SINGLE RESPONSE, ORDER=RANDOMIZED]
1. Less safety **(17%)**
2. Less control/freedom **(17%)**
3. More expensive vehicles **(18%)**
4. More expensive insurance **(9%)**
5. More complex transportation system **(8%)**
6. More dependence on technology **(16%)**
7. I see no disadvantages to automated vehicles [PROG: FIXED] **(15%)**

11. Do you use ridesharing services such as Uber and Lyft for transportation? [PROG: SINGLE RESPONSE; ORDER=FIXED]

1 Yes, often (i.e., every 2 weeks or more) **(3%)**
2 Yes, on occasion (i.e., about monthly) **(6%)**
3 Yes but rarely **(9%)**
4 I have tried it but do not consider myself a rider **(6%)**
0 No, I have not used ridesharing **(76%)**

12 How likely would you be to use a driverless fully automated vehicle as a ridesharing option (e.g., instead of Uber/Lyft). [PROG: SINGLE RESPONSE; ORDER=FIXED]

1 Definitely would not **(46%)**
2 Probably would not **(27%)**
3 Probably would **(20%)**
4 Definitely would **(6%)**