



OFFICE OF **INSPECTOR GENERAL**

UNITED STATES POSTAL SERVICE

Summary Report: Public Perception of Self-Driving Technology for Long-Haul Trucking and Last-Mile Delivery

RARC Report

Report Number
RARC-WP-17-011

September 5, 2017



EXECUTIVE SUMMARY

The world's biggest automakers are investing billions of dollars in to the development of self-driving vehicles, as are tech giants like Google and Uber. They are each vying for a piece of a market that is predicted to explode in the coming decades — and no wonder. The business case for self-driving vehicles — fewer accidents, less traffic, greater fuel efficiency, and more free time for commuters — is undeniable.

Despite these advantages, the public has been far more ambivalent about self-driving vehicles than the corporate world. This should be of concern not only to automakers, but also to the commercial fleet operators. They see automation as a means to achieve enormous cost savings, but are also subject to the whims of public opinion. How will people react to driverless long-haul trucks traveling 70 mph on busy highways? Will they be comfortable sharing neighborhood streets with self-driving delivery trucks? If other drivers do not want to share the road with their vehicles, a company's brand could be hurt or regulatory approval could be slowed.

In order to understand how the public might react to self-driving postal vehicles, the U.S. Postal Service Office of Inspector General (OIG) administered an online survey targeting a nationally representative sample of 18-75 year-old residents in all 50 states and the District of Columbia in April 2017. The goal of the survey was to gauge public perception of driverless technology for two different applications:

1. Self-driving long-haul trucks transporting mail and packages over highways.
2. Self-driving delivery vehicles performing last-mile delivery.

The survey tested the overall appeal of the technology, the believability of claims about its potential benefits, the public's expected timeframe for implementation, and many of their potential concerns. The survey also asked participants who they most trust to implement the technology among four key players: USPS, FedEx, UPS, or Amazon.

Analysis of the results yielded several key findings, including:

- A shallow awareness: While a large majority of Americans are aware of the idea of

self-driving cars, far fewer know about their possible use for trucking or last-mile delivery. Even fewer are convinced of the potential benefits that they might receive from companies implementing them in the supply chain.

- Coming down the road: After learning about the idea, a large majority of Americans say they believe self-driving cars will be used for delivery and transportation within the next 10 years.
- A mixed reception: About as many Americans like the long-haul and delivery concepts as dislike them, but many are still unsure.
- Afraid to give up the wheel: The public is very concerned about the safety of self-driving vehicles, with many fearing that the technology could malfunction and injure people.
- Different groups, different perspectives: Millennials and urban residents like the idea of self-driving trucks more than their older or rural counterparts.
- Knowledge drives enthusiasm and comfort: Exposure to information about self-driving vehicles links closely with both greater liking of the idea and with increased belief in its potential safety benefits.
- Good for the U.S. Postal Service brand — but with caution: USPS can enhance its brand positivity and image as an innovative organization by implementing self-driving technology. However, the public lacks faith that USPS could successfully deploy the technology.

Given its potential benefits, the Postal Service may someday incorporate self-driving vehicles into its operations, and will want to perform the usual feasibility assessments that would come along with such an idea. Since the American Public is the Postal Service's customer base, however, it would be advisable for the organization to keep a close eye on how public opinion regarding this new technology evolves over time.

HOW TO READ THIS REPORT

The U.S. Postal Service Office of Inspector General's (OIG) public opinion research projects are different from other OIG products in that they are designed to be useful to a general audience while also meeting the technical disclosure standards required by the field of survey research.

The content of this survey's reporting is divided across three separate products. Each product has been designed to be readable as a stand-alone report, and can be accessed through the links below:

- Those with interest in national findings on the research topic should focus on the [Summary Report](#).
- Those with interest in in-depth reporting for several relevant subgroups should also review the [Detailed Subgroup Findings Report](#).
- Those interested in the technical details surrounding the collection of the data used for this project should review the [Methodology Report](#).

Most of the slides in the reporting for this survey are designed so that they can be consumed on their own. This way, if someone takes out one slide and shares it, they can understand the findings presented without needing to see the entire report. For that reason, the footnotes found on each slide include important details that might be different from what a general audience is used to seeing, such as notes about any statistical testing that was performed, or the full text of any question whose results are reported on the slide.

General audience members will be most interested in the findings presented at the top of each page of a report. As you move down any given slide, the information presented gets more detailed and technical.

Please see Appendix A for additional guidance on interpreting the detailed data visualizations that are presented throughout this report.

Note: Throughout this report, Amazon.com, UPS, and FedEx are used to identify companies about which survey data was collected. Amazon.com is the registered trademark of Amazon.com, Inc. UPS is the registered trademark of United Parcel Service of America, Inc. FedEx is the registered trademark of Federal Express Corporation. These trademarks and their respective logos are used for identification purposes only and their use is not meant to imply in any way that the registered holders of the trademarks sponsor or endorse this report or the services of the U.S. Postal Service.

METHODOLOGY

The U.S. Postal Service Office of Inspector General (OIG) fielded a confidential online survey targeting a nationally representative sample of 18-75 year-old residents of the 50 United States and the District of Columbia. Respondents were selected from an opt-in Internet panel, solicited by email, and incentivized to complete the survey on the OIG's online survey platform by the sampling services provider Research Now, per their standard sampling procedures. The survey was conducted in English.

Quota sampling procedures were employed during the survey field period in order to improve the representativeness of the data collected. Quotas were employed on age, gender, nativity within ethnicity, race, education, geographic subregion, and ecommerce participation.

With the exception of ecommerce participation, data were weighted prior to analysis according to U.S. Bureau of the Census population estimates on all quota variables, as well as on income and employment status. Ecommerce participation was weighted to reflect a national general population probability telephone survey's results regarding the proportion of Americans that had purchased something online in the previous month. All data and sample sizes in this research's reports are weighted.

Field Dates: April 24 – April 30, 2017

Total Respondents: 2,830

Median Interview Length: 14 minutes 48 seconds

95% confidence interval (National Sample): +/- 1.8%*

Please see the Methodology Report for this project for detailed information regarding the methodology employed for this research.

*This interval is being provided as a benchmark. +/- 1.8% is the size of the confidence interval that would be calculated from a probability sample of n=2,830. Like most online research, this study uses a non-probability sample. The actual interval is likely to be somewhat larger, as other sources of error may also impact findings.

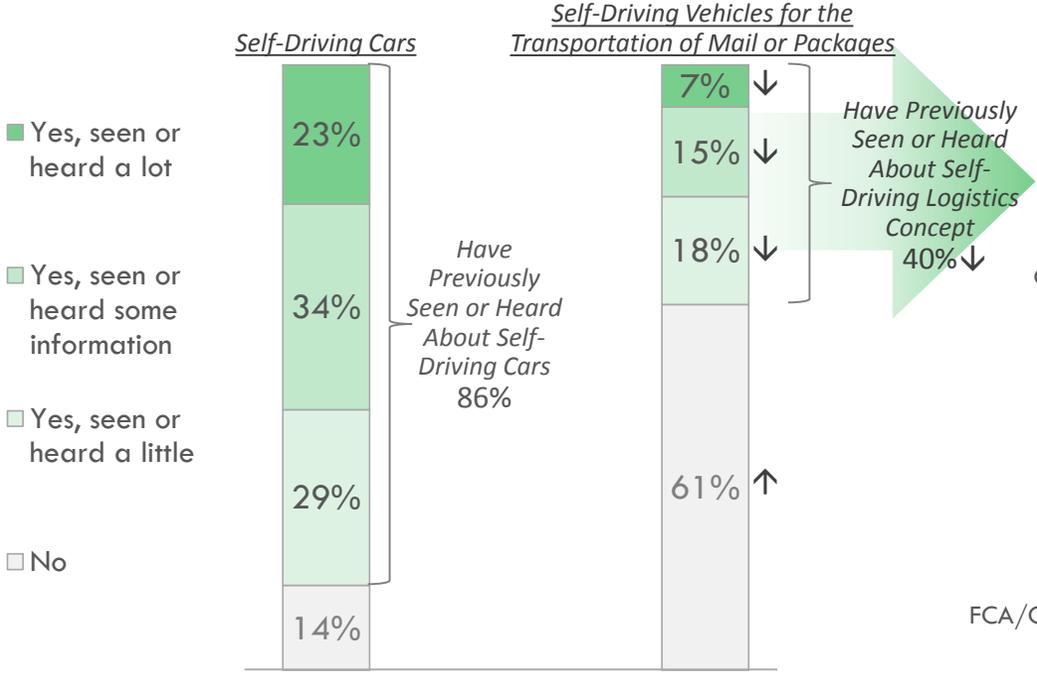
National Sample Findings



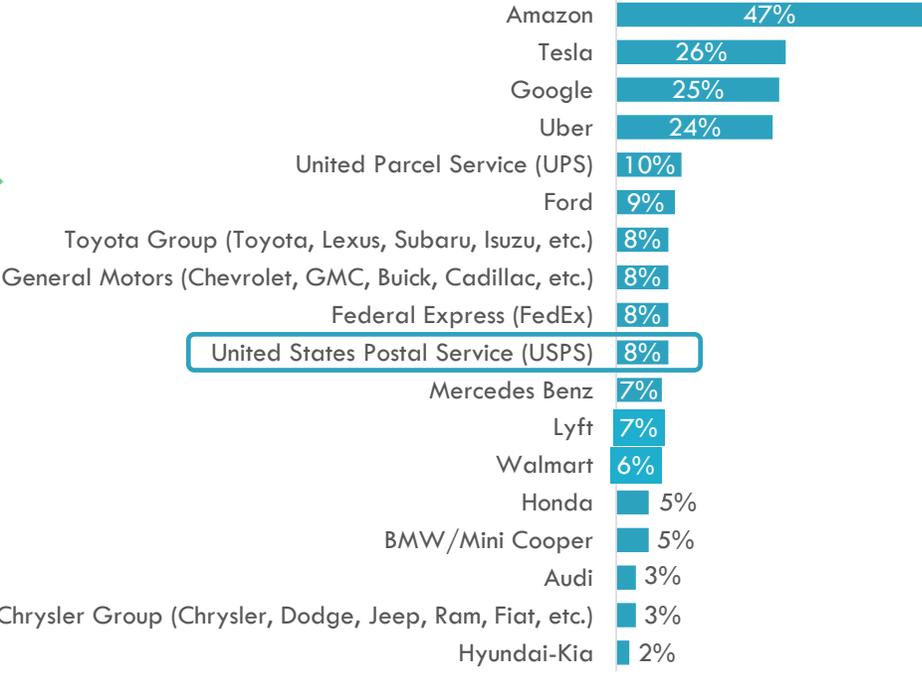
A large majority of Americans have seen or heard about self-driving cars, but far fewer have seen or heard about their potential use for the transportation of mail or packages.

- Among those who have previously seen or heard about the idea, only a few brands are strongly associated with the concept. Less than 1 in 10 of those aware of the concept cite USPS as a brand considering pursuing the concept.

Seen or heard about the concept of...
(Among National Sample, n=2,830)



Brand Associated with Self-Driving Vehicles in Logistics*
(Among aware of Concept, n=1,107)

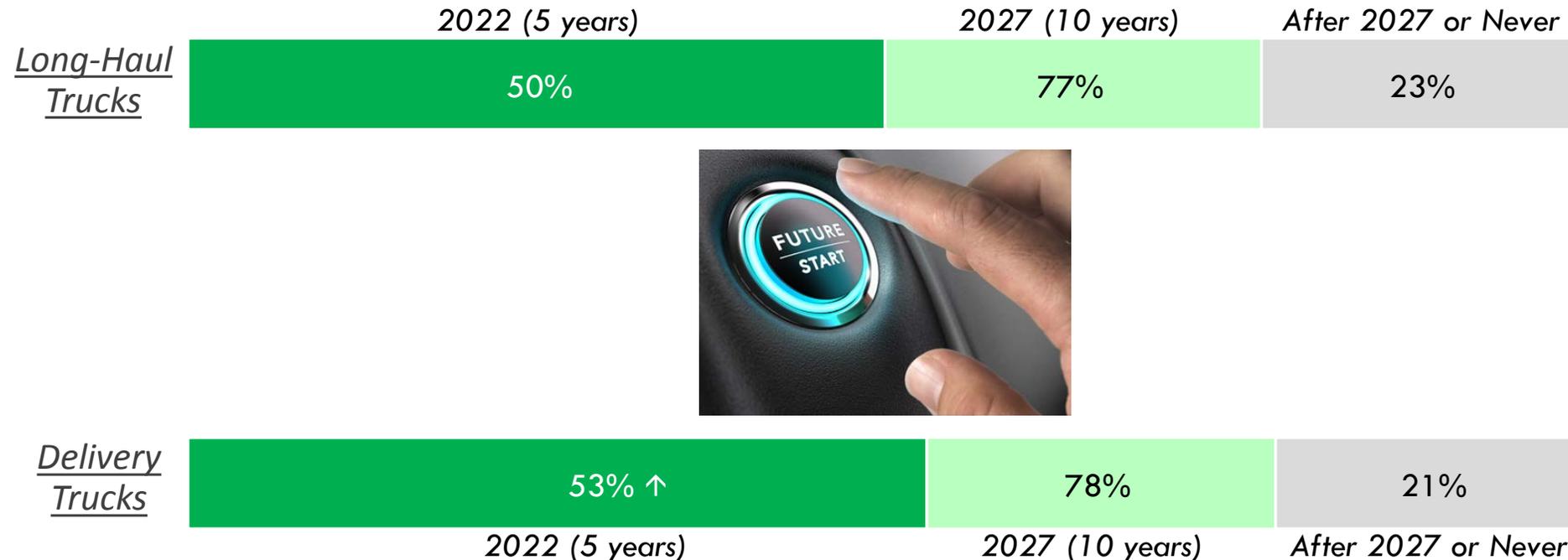


*Findings presented based on those who reported to have heard of self-driving vehicles for logistics applications at Q19. | All questions asked prior to exposure to descriptions of self-driving long-haul/delivery truck concepts. | Q13/19. Have you seen or heard anything about organizations [developing self-driving cars/considering the use of self-driving vehicles for the transportation of mail or packages in the future]? | Q20/21. According to what you have seen or heard, which, if any, of the following [automakers/non-automaker organizations] are considering the use of self-driving vehicles for the transportation of mail or packages in the future? | 95% confidence interval (National Sample): +/- 1.8%. | ↑ / ↓: Significantly higher/lower than Self-Driving Cars measure at 95% c.i.

Coming down the road: After learning about possible logistics applications, a large majority of Americans reported that they believe self-driving cars will be used for logistics applications within the next 10 years.

- About half believe the technology will be used within the next five years.

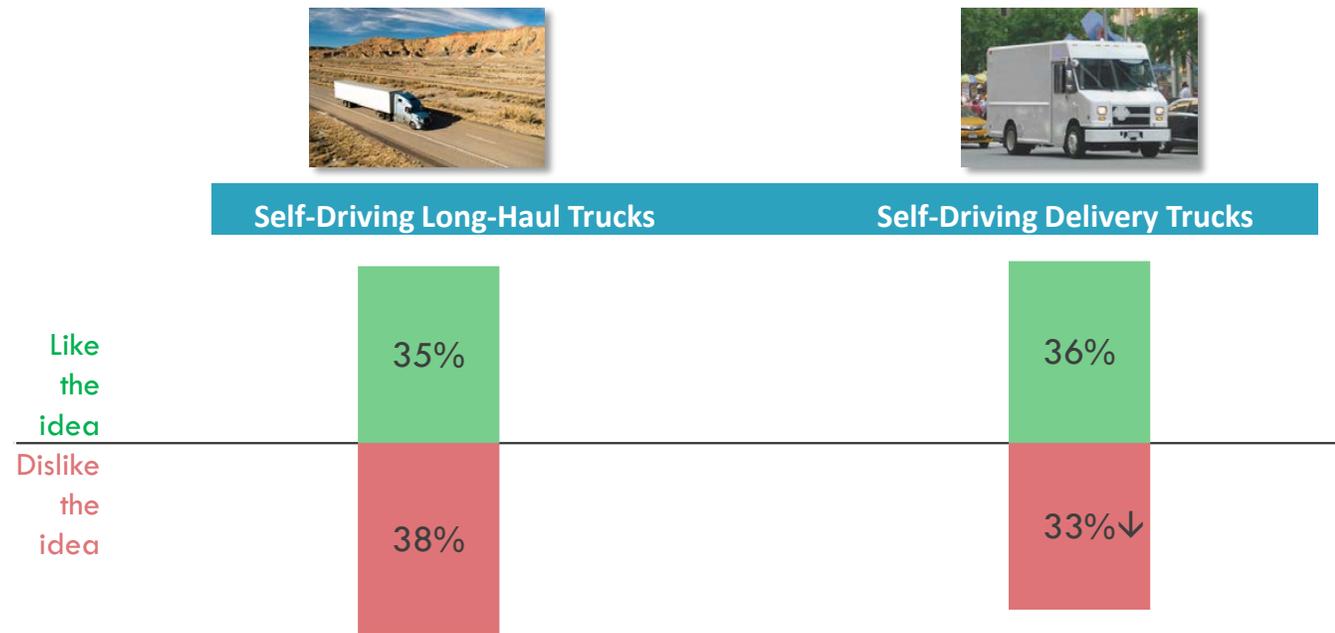
Percent Believing Self-Driving Concept will be in use by...



Findings presented are based on the National Sample (n=2,830). The data shown combines scale points for clarity of presentation. | All questions asked following exposure to descriptions of self-driving long-haul/delivery truck concepts. | A/B5. When, if ever, do you expect that companies might start to use self-driving trucks as we just described for the [highway portion of the long trips between warehouses/delivery of mail or packages to their final destinations]? (Scale: Within the next year; Within the next 3 years, but not the next year; Within the next 5 years, but not the next 3 years; Within the next 10 years, but not the next 5 years; Within the next 20 years, but not the next 10 years; More than 20 years; Never). | 95% confidence interval (National Sample): +/- 1.8%. | ↑ / ↓: Significantly higher/lower than Long-Haul Trucks measure at 95% c.i.

A mixed reception — but also a level playing field — for both concepts.

- About as many Americans like the concept of self-driving vehicles as dislike it, whether posed as a concept for the highway portion of trips between warehouses or for the delivery of mail and packages to their final destination.

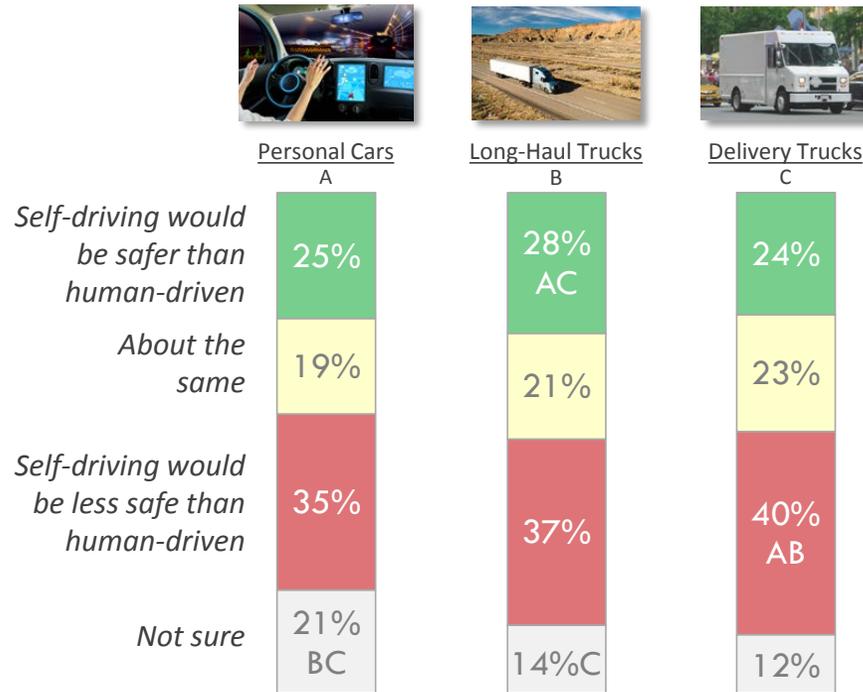


Findings presented are based on the National Sample (n=2,830). The data shown combines scale points for clarity of presentation. | All questions asked following exposure to descriptions of self-driving long-haul/delivery truck concepts. | A/B3. How much do you like or dislike the idea of organizations using self-driving trucks as we just described for the [highway portion of the long trips between warehouses/delivery of mail or packages to their final destinations]? (Scale: I like the idea very much; I like the idea somewhat; I neither dislike nor like the idea (omitted from graph); I dislike the idea somewhat; I dislike the idea very much). | 95% confidence interval (National Sample): +/- 1.8%. | ↑ / ↓: Significantly higher/lower than assessment of long-haul trucks.

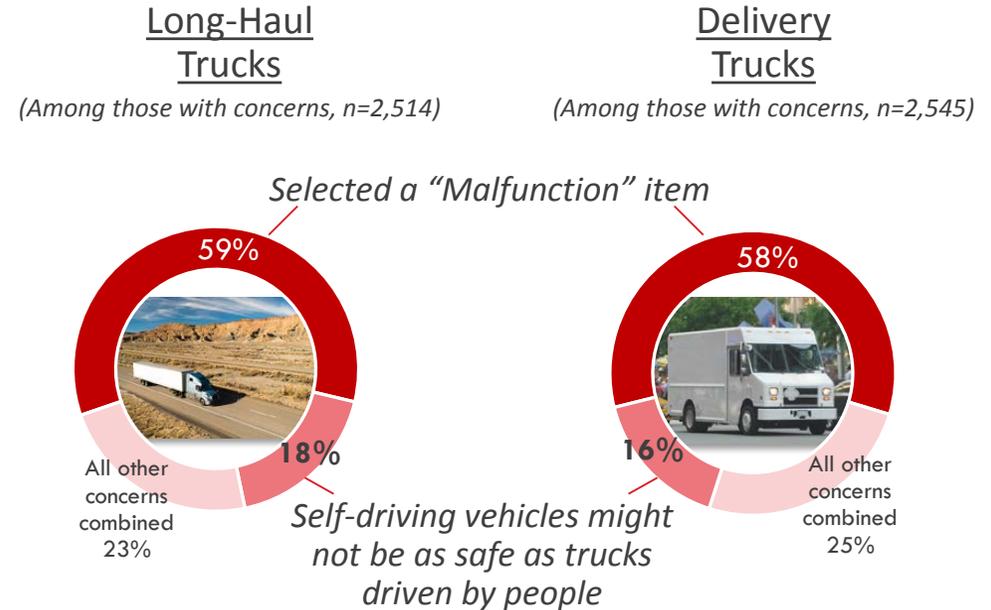
Safety and trust are the concepts' biggest issues: Compared to human-driven vehicles, the public is not convinced that self-driving vehicles would be safe, regardless of their use.

- Malfunction is the public's primary concern, closely followed by safety, compared to current methods.

Safety vs. Human-Driven Vehicles



Primary Concern*



Findings presented are based on the National Sample (n=2,830). The data shown combines scale points for clarity of presentation. | Q18 asked prior to exposure to descriptions of self-driving long-haul/delivery truck concepts, A/B9 and A/B11 asked following concept exposure. | Q18. Based on any information that you have seen or heard, how safe or unsafe do you feel self-driven cars would be compared to cars driven by people?. | A/B9. How safe or unsafe do you feel self-driven [long-haul/delivery] trucks would be compared to [long-haul/delivery] trucks driven by people? (Scale: Self-driven [long-haul/delivery] trucks would be much more safe; Somewhat more safe; About the same; Somewhat less safe; Self-driven cars would be much less safe; Not sure/not informed enough to say). | *Findings based on those with at least one concern with the concept. | A/B11. And which of the following would you be most concerned about if a company were to use self-driven trucks for the [highway portion of the long trips between warehouses/delivery of mail or packages to their final destinations]? Malfunction answer choices: might malfunction and damage property/might malfunction and damage the mail or packages that it's carrying/might malfunction and injure someone; All other concerns combined: might lead to an increase in traffic on the roads/might be intentionally used to injure people or property/might be damaged by others/the truck and/or the mail or packages it's carrying might be stolen/might navigate itself to the wrong address/Other | 95% confidence interval (National Sample): +/- 1.8%. | ↑ / ↓: Significantly higher/lower than primary concern for long-haul trucks at 95% c.i. | A,B,C: Significantly higher than corresponding group.

Knowledge drives enthusiasm for the idea of self-driving vehicles in logistics.

- Exposure to information about the concept of self-driving vehicles correlates with greater liking of the idea.

Concept Liking: Self-Driving Long-Haul Trucks



Long-Haul Trucks

A

*Had not previously seen or heard anything about self-driving vehicles or their use in logistics**
(n=274)

Dislike the idea Like the idea

43% 20%

28%↓ 52%↑

*Had previously seen or heard a lot about either self-driving cars or their use in logistics***
(n=695)

Concept Liking: Self-Driving Delivery Trucks



Delivery Trucks

B

*Had not previously seen or heard anything about self-driving vehicles or their use in logistics**
(n=274)

Dislike the idea Like the idea

41% 18%

21%↓ 54%↑

*Had previously seen or heard a lot about either self-driving cars or their use in logistics***
(n=695)

The data shown combines scale points for clarity of presentation. | *Findings based on those who reported not having previously seen or heard anything about self-driving vehicles at Q13, or about their use in logistics at Q19. | **Findings based on those who reported having previously seen or heard a lot about either self-driving cars at Q13, or about their use in logistics at Q19. | Q13/19 asked prior to exposure to descriptions of self-driving long-haul/delivery truck concepts, A/B3 asked following concept exposure. | Q13/19. Have you seen or heard anything about organizations [developing self-driving cars/considering the use of self-driving vehicles for the transportation of mail or packages in the future]? | A/B3. How much do you like or dislike the idea of organizations using self-driving trucks as we just described for the [highway portion of the long trips between warehouses/delivery of mail or packages to their final destinations]? (Scale: I like the idea very much; I like the idea somewhat; I neither dislike nor like the idea (omitted from graph); I dislike the idea somewhat; I dislike the idea very much). | ↑ / ↓: Significantly higher/lower than “had heard of the concept” at 95% c.l. | A,B: Significantly higher than corresponding group.

Exposure increases comfort with the concept of self-driving vehicles being used for long-haul trucking or delivery.

- Those with previous exposure to self-driving vehicle concepts are more likely to believe the concept would be safe.



Long-Haul Trucks
A

Had not previously seen or heard anything about self-driving vehicles or their use in logistics (n=274)*

Agree or Disagree that Self-Driving Long-Haul Trucks Would be Safe



*Had previously seen or heard a lot about either self-driving cars or their use in logistics** (n=695)*



Delivery Trucks
B

Had not previously seen or heard anything about self-driving vehicles or their use in logistics (n=274)*

Agree or Disagree that Self-Driving Delivery Trucks Would be Safe



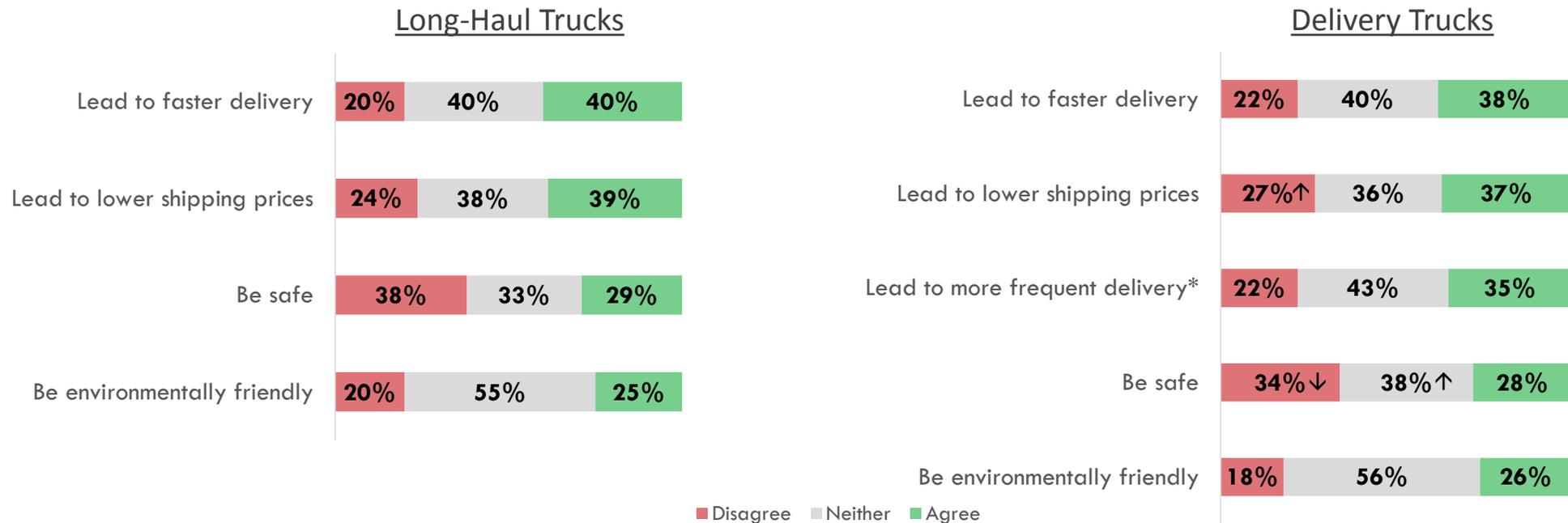
*Had previously seen or heard a lot about either self-driving cars or their use in logistics** (n=695)*

The data shown combines scale points for clarity of presentation. | *Findings based on those who reported not having previously seen or heard anything about self-driving vehicles at Q13, or about their use in logistics at Q19. | **Findings based on those who reported having previously seen or heard a lot about either self-driving cars at Q13, or about their use in logistics at Q19. | Q13/19 asked prior to exposure to descriptions of self-driving long-haul/delivery truck concepts, A/B4 asked following concept exposure. | Q13/19. Have you seen or heard anything about organizations [developing self-driving cars/considering the use of self-driving vehicles for the transportation of mail or packages in the future]? | A/B4. To what extent do you agree or disagree with the following statements about using self-driving trucks as we just described for the [highway portion of the long trips between warehouses/delivery of mail or packages to their final destinations]? The concept would be safe (Scale: Strongly agree; Somewhat agree; Neither agree nor disagree (omitted from graph); Somewhat disagree; Strongly disagree). | ↑ / ↓: Significantly higher/lower than “had heard of the concept” at 95% c.I. | A,B: Significantly higher than corresponding group.

The public is unsure of the benefits that self-driving vehicles might provide for their delivery experience.

- Faster delivery and lowered shipping prices are the technology’s most believable benefits, but even these do not have the public convinced.

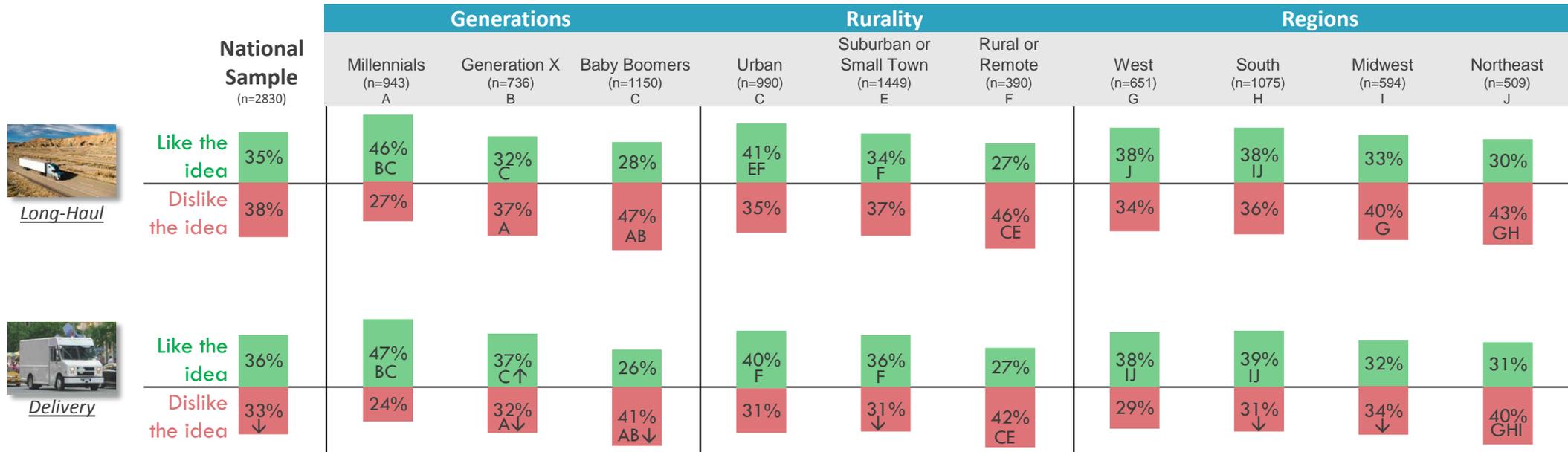
Do You Agree or Disagree that Self-Driving Vehicles Would...



Findings presented are based on the National Sample (n=2,830). The data shown combines scale points for clarity of presentation. | All questions asked following exposure to descriptions of self-driving long-haul/delivery truck concepts. | A/B4. To what extent do you agree or disagree with the following statements about using self-driving trucks as we just described for the [highway portion of the long trips between warehouses/delivery of mail or packages to their final destinations]? (Scale: Strongly agree; Somewhat agree; Neither agree nor disagree; Somewhat disagree; Strongly disagree) | *Lead to more frequent delivery statement was only asked at B4 for delivery trucks. | 95% confidence interval (National Sample): +/- 1.8%. | ↑ / ↓: Significantly higher/lower than assessment of long-haul trucks at 95% c.I.

Different groups have different views on the idea of using self-driving vehicles for logistics applications.

- Liking of both concepts is highest among younger groups, as well as among urban respondents.



The data shown combines scale points for clarity of presentation. | Generations defined based on responses to the question “S5. What is your age in years?” Millennials were defined as being aged 18-34, Generation X as being aged 35-49, Baby Boomers as being aged 50-75. | Rurality based on responses to the question “S3. Which of the following best describes the area where you live?” Respondents classified as Urban answered “A city or urban area.” Respondents classified as Suburban answered “A town or suburban area” or “A small town.” Respondents classified as Rural answered “A rural area” or “A remote area with few other nearby residents.” | Regions defined per Census definitions by responses to “S2. Which state do you live in?” | All questions asked following exposure to descriptions of self-driving long-haul/delivery truck concepts. | A/B3. How much do you like or dislike the idea of organizations using self-driving trucks as we just described for the [highway portion of the long trips between warehouses/delivery of mail or packages to their final destinations]? (Scale: I like the idea very much; I like the idea somewhat; I neither dislike nor like the idea (omitted from graph); I dislike the idea somewhat; I dislike the idea very much). | 95% confidence interval (National Sample): +/- 1.8%. | A, B, C, D, E, F, G, H, I, J: Significantly higher than corresponding group. | ↑ / ↓: Significantly higher/lower than assessment of long-haul trucks.

Amazon consistently ranks the highest, and USPS the lowest, as a trusted brand for implementing driverless vehicles for logistics.

- When asked to rank four organizations from “most trusted” (1) to “least trusted” (4) for implementing a self-driving vehicle concept, the other tested brands consistently rank higher than USPS.

Average Ranking as Trusted Brand for Implementing Self-Driving Vehicles

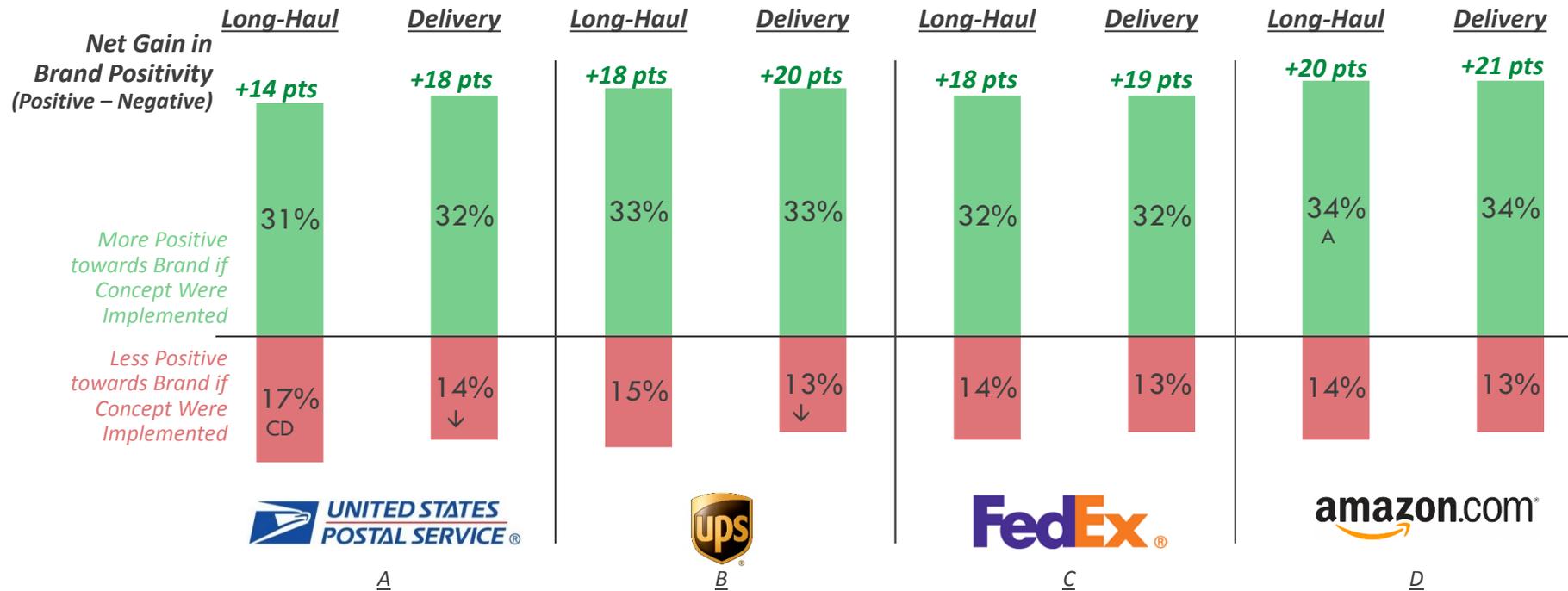


Findings presented are based on respondents slightly familiar or more with all brands at Q1. How familiar are you with the following organizations? (n=2,682). | All questions asked following exposure to descriptions of self-driving long-haul/delivery truck concepts. | A/B6. Please rank the following organizations from 1 to 4, where 1 is the organization you would most trust to use self-driving trucks for the [highway portion of the long trips between warehouses/delivery of mail or packages to their final destinations], and 4 is the organization you would least trust to use self-driving trucks for the [highway portion of the long trips between warehouses/delivery of mail or packages to their final destinations]. | A,B,C,D: Average rank significantly higher than the corresponding group at the 95% c.l.

The implementation of self-driving vehicles for logistics applications would lead to a net increase in brand positivity for any of the organizations tested.

- The public has a similar reaction to the implementation of either self-driving long-haul and self-driving delivery trucks.

Effect of Driverless Vehicle Delivery on Brand Positivity

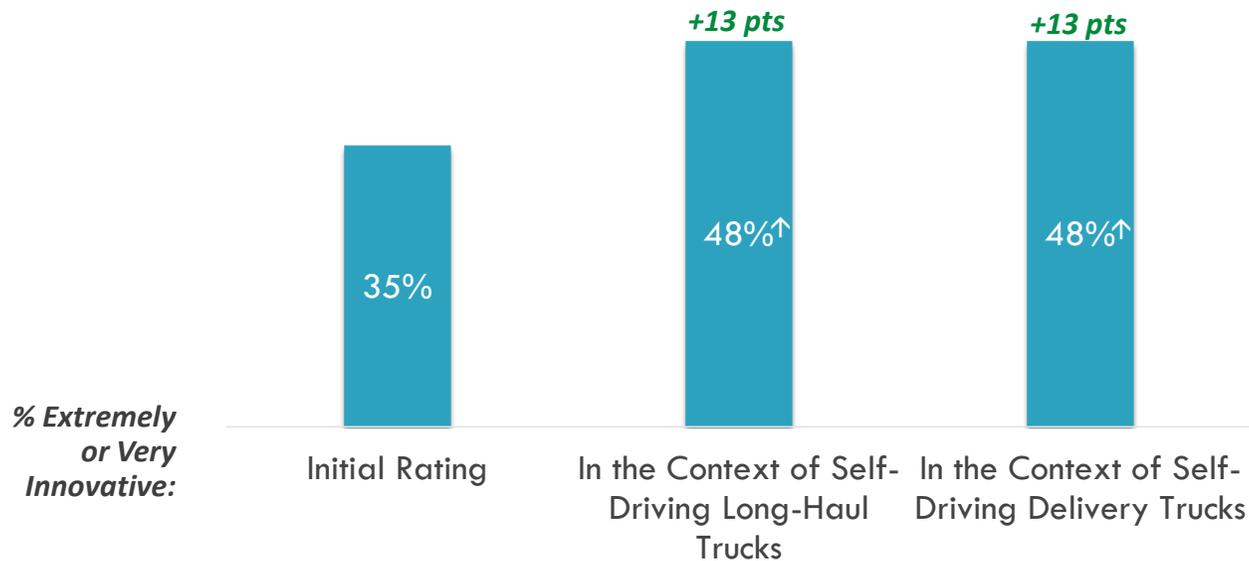


Findings presented are based on respondents slightly familiar or more with all brands at Q1. How familiar are you with the following organizations? (n=2,682). The data shown combines scale points for clarity of presentation. | All questions asked following exposure to descriptions of self-driving long-haul/delivery truck concepts. | A/B7. Would your overall impression of the following organizations be more or less positive if you knew that they would be using self-driving trucks for the [highway portion of the long trips between warehouses/delivery of mail or packages to their final destinations]? (Scale: Much more positive, Somewhat more positive, About the same (omitted from the graph), Somewhat less positive, Much less positive). | ↑ / ↓: Significantly higher/lower than assessment of long-haul trucks. | A,B,C,D: Increase is significantly higher than the corresponding group at the 95% c.i.

The implementation of self-driving vehicles for logistics applications would improve USPS' image as an innovative company.

- The self-driving long-haul and self-driving delivery concepts lead to similar positive impacts for USPS.

Effect of Self-Driving Vehicles on “Innovative Company”



Findings presented are based on respondents slightly familiar or more with all brands at Q1. How familiar are you with the following organizations? (n=2,682). Data shown combines data points for clarity of presentation. | Q3 asked prior to exposure to descriptions of self-driving long-haul/delivery truck concepts, A/B8 asked following concept exposure. | Q3. Overall, how innovative do you feel the following organizations are? (Scale: Extremely innovative, Very innovative, Moderately innovative (omitted from graph), Slightly innovative (omitted from graph), Not at all innovative (omitted from graph)) | A/B8. How innovative would you feel that the following organizations were if you knew that they would be using self-driving trucks for the [highway portion of the long trips between warehouses/delivery of mail or packages to their final destinations]? | ↑ / ↓: Significantly higher/lower than initial rating.

Appendix A

Guide to Interpreting the Detailed Data Visualizations in this Report



VISUAL ELEMENTS INCLUDED WHEN PRESENTING DETAILED DATA

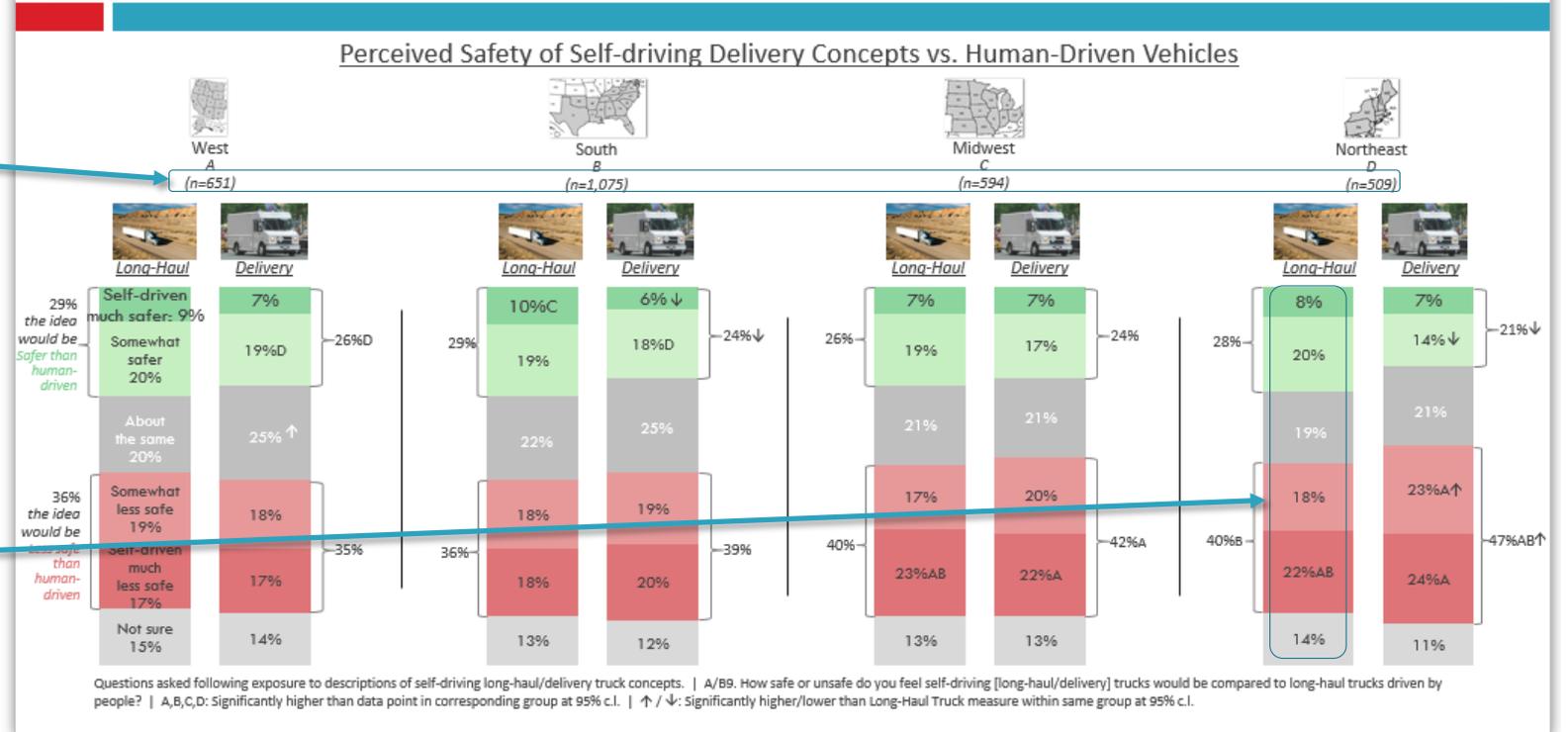
- Findings are presented at the top of each slide and are written in a way that should be understandable for non-technical audiences.

Both driverless concepts are viewed as less safe than driven vehicles, regardless of the region. The delivery concept is perceived to be less safe than the long-haul concept in the South and Northeast, where the public is particularly skeptical about the safety of the idea.

- The number of respondents — shown as “(n=)” — is included for all groups.

- The numbers shown in certain charts may not add up to 100 percent, which is due to rounding.

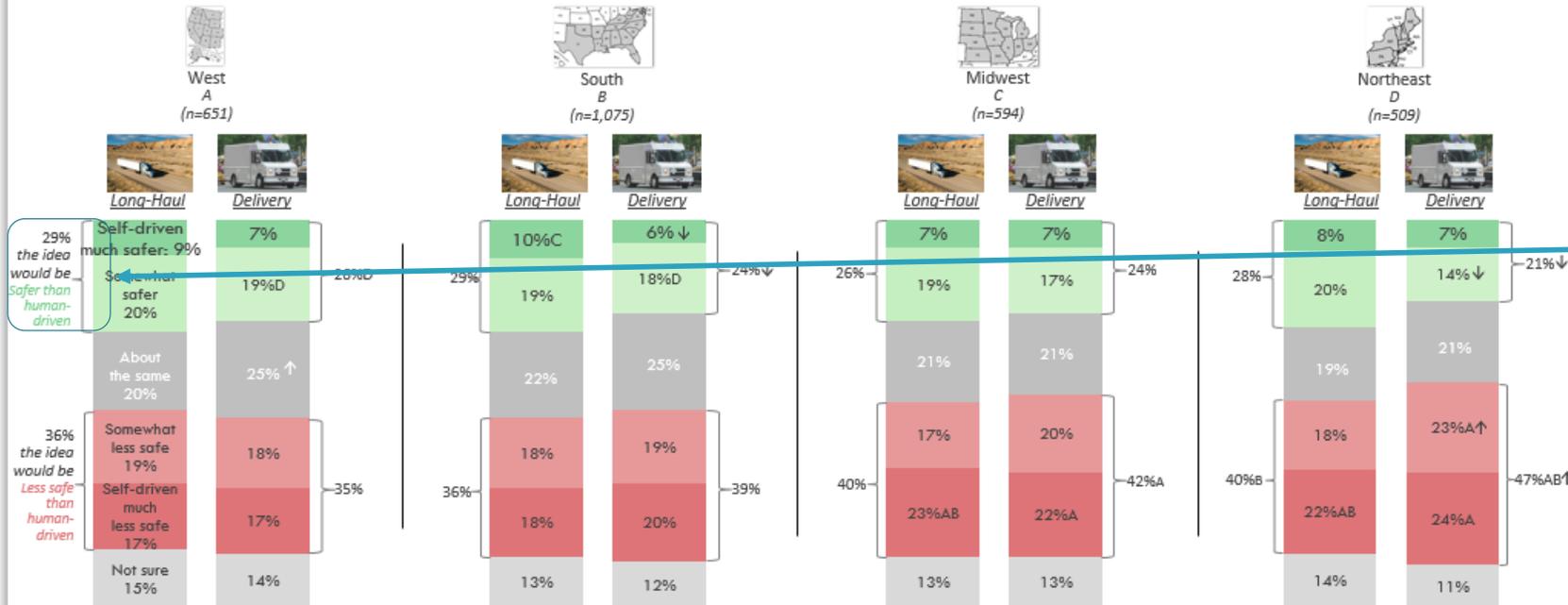
- For example, the numbers presented here sum to 101 percent (8% + 20% + 19% + 18% + 22% + 14%).



UNDERSTANDING “NETTED” DATA

Both driverless concepts are viewed as less safe than driven vehicles, regardless of the region. The delivery concept is perceived to be less safe than the long-haul concept in the South and Northeast, where the public is particularly skeptical about the safety of the idea.

Perceived Safety of Self-driving Delivery Concepts vs. Human-Driven Vehicles



Questions asked following exposure to descriptions of self-driving long-haul/delivery truck concepts. | A/B9. How safe or unsafe do you feel self-driving [long-haul/delivery] trucks would be compared to long-haul trucks driven by people? | A,B,C,D: Significantly higher than data point in corresponding group at 95% c.l. | ↑ / ↓: Significantly higher/lower than Long-Haul Truck measure within same group at 95% c.l.

- On many slides, data are presented in “nets,” where respondents’ selection of any combination of response items within an overarching category is counted as one selection when calculating the percentage of people who selected the “netted” category.

For example, respondents that reported that they believed self-driving vehicles would be “much” or “somewhat” safer than human-driven vehicles were combined here to show that 29 percent of those in the West feel that self-driving long-haul trucks would be safer than human-driven vehicles.

- Note: Netted data is presented in several ways. It might be shown next to a bracket, as in this example slide, or the netted items might be boxed within a graph, or a net might be included on its own row at the top of a graph.

AN OVERVIEW OF INTERPRETING STATISTICAL SIGNIFICANCE

Numbers, such as percentages, that are derived from a sample can only provide estimates of the true number that exists in a population. Differences in opinion between two reported groups might be due to random variation, or might be due to a true difference of opinion between the groups.

In order to help interpret the numbers reported from a sample, it is common to perform “statistical significance testing” to determine the probability that the difference between two percentages observed in the sample would have occurred by chance if the population proportions were equal.

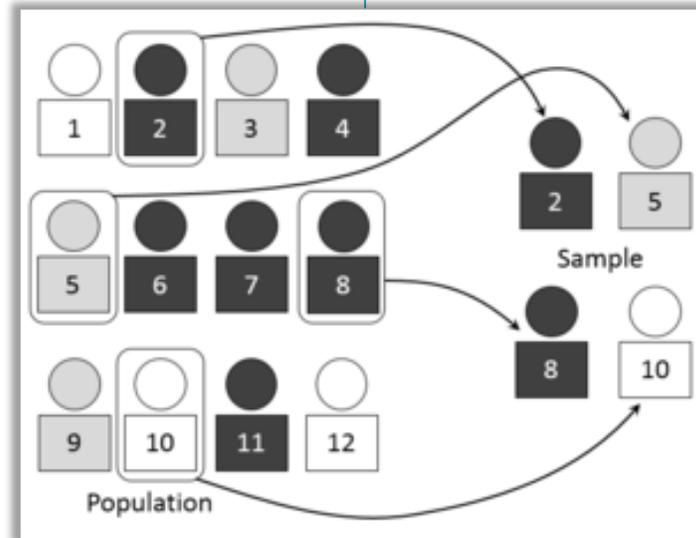
Statistical significance is calculated using “confidence levels,” referred to as “c.l.” throughout this report. Higher

confidence levels provide analysts with greater certainty about the conclusions drawn from data. Data in this report use a 95 percent confidence level, which is commonly used in academic and government survey research.

When two numbers are different at the confidence threshold that was used, they are said to be “significantly different.”

While it is still possible that the differences between two tested numbers could be due to chance, or due to the other issues that are

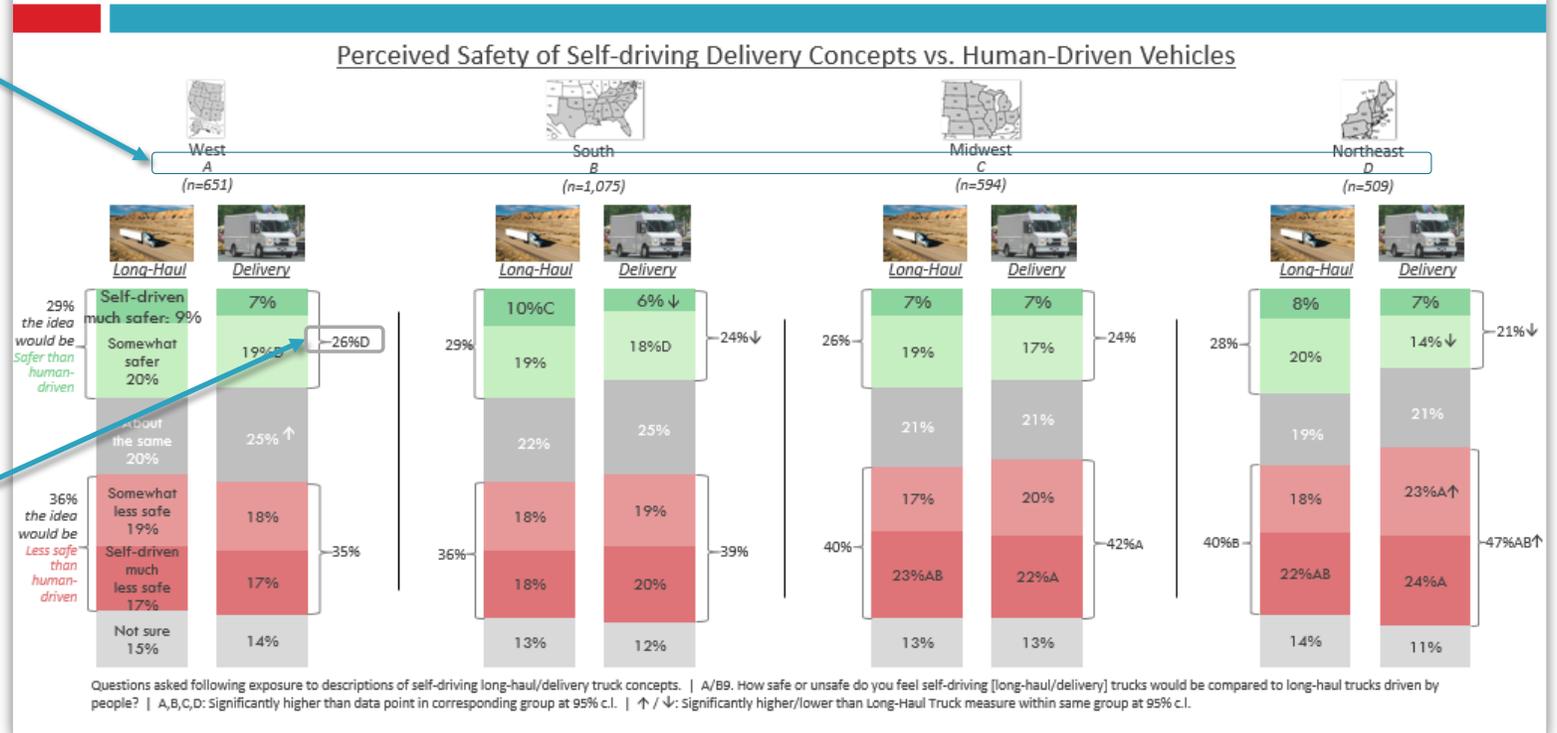
discussed in Appendix B of this report, differences of opinion between groups whose results are “significantly different” meet a higher, more credible standard than differences that do not pass significance testing.



UNDERSTANDING STATISTICAL SIGNIFICANCE AS REPORTED WITH LETTER NOTATION

- When tests were employed in order to determine whether the difference between two numbers was statistically significant, visual elements, such as the letter notations (A,B,C) shown in this example slide, are assigned to the groups whose results were being reported.
- In cases where the difference between two numbers is statistically significant, a letter is placed next to the larger of the two numbers.
 - For example, the “D” shown here indicates that the 26 percent of those in the West that think self-driving delivery trucks would be safer than human-driven delivery trucks is “significantly higher” than the 21 percent reported among those in the Northeast.

Both driverless concepts are viewed as less safe than driven vehicles, regardless of the region. The delivery concept is perceived to be less safe than the long-haul concept in the South and Northeast, where the public is particularly skeptical about the safety of the idea.

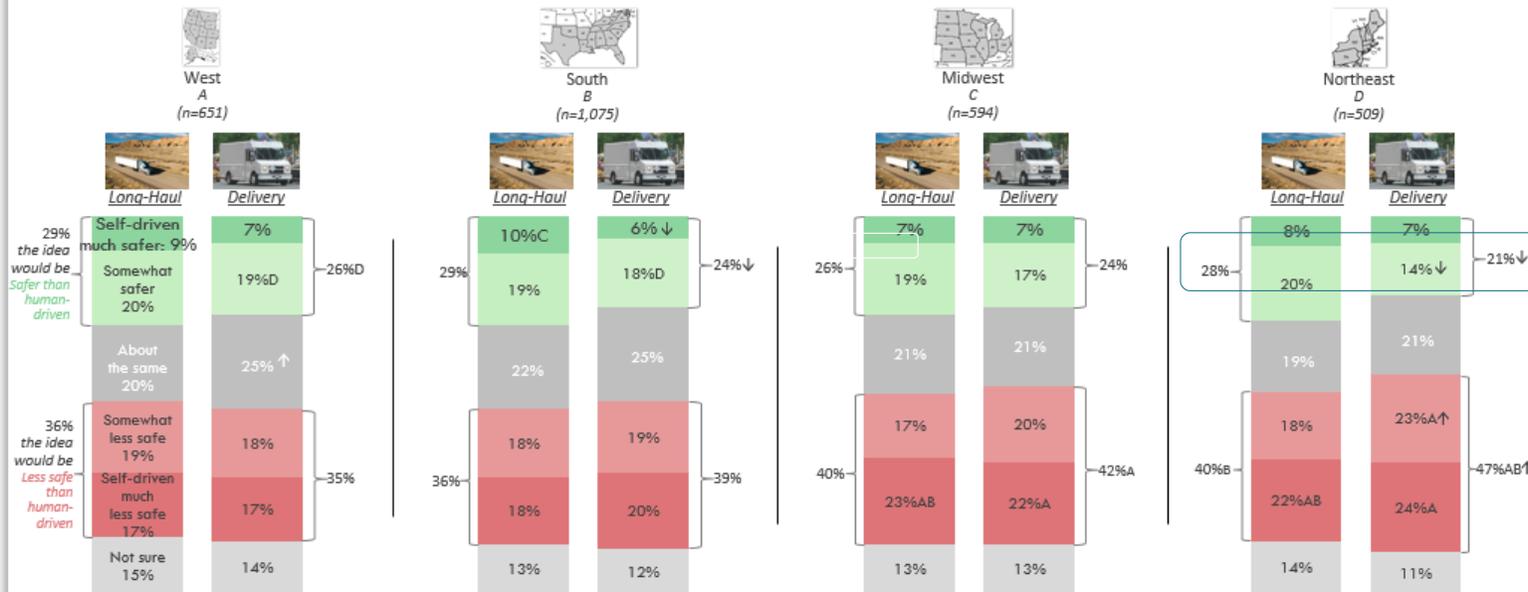


UNDERSTANDING STATISTICAL SIGNIFICANCE AS REPORTED WITH ARROWS

Both driverless concepts are viewed as less safe than driven vehicles, regardless of the region. The delivery concept is perceived to be less safe than the long-haul concept in the South and Northeast, where the public is particularly skeptical about the safety of the idea.

- In other places, arrows (↑↓) are used to indicate statistically significant differences.
- In these cases, the direction of the arrow indicates whether the number shown is significantly higher or lower than the group against which the presented number is being tested.
- For example, the 21 percent of those in the Northeast that believe that self-driving delivery trucks would be safer than human-driven delivery trucks reported here is “significantly lower” than the 28 percent reported regarding long-haul trucks in the same group.

Perceived Safety of Self-driving Delivery Concepts vs. Human-Driven Vehicles



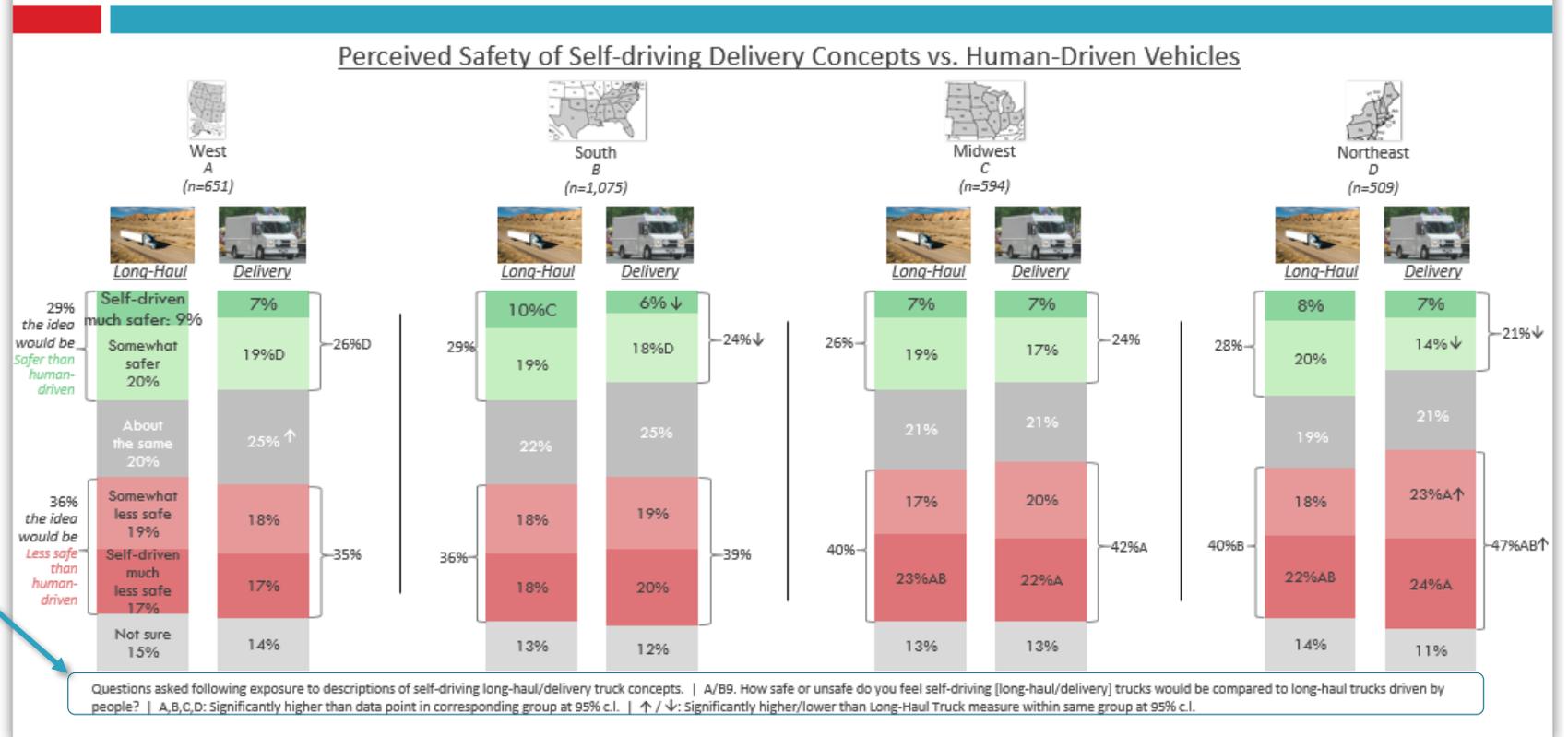
Questions asked following exposure to descriptions of self-driving long-haul/delivery truck concepts. | A/B9. How safe or unsafe do you feel self-driving [long-haul/delivery] trucks would be compared to long-haul trucks driven by people? | A,B,C,D: Significantly higher than data point in corresponding group at 95% c.I. | ↑ / ↓: Significantly higher/lower than Long-Haul Truck measure within same group at 95% c.I.

REPORT FOOTNOTES

- Footnotes are included on all data slides throughout the report. These include important details for both technical and non-technical audiences, such as complete question text, and specifications for any statistical testing performed.

- Footnotes are the first place to look for most of the questions that readers might have about each individual slide.*

Both driverless concepts are viewed as less safe than driven vehicles, regardless of the region. The delivery concept is perceived to be less safe than the long-haul concept in the South and Northeast, where the public is particularly skeptical about the safety of the idea.



Appendix B

Links to Additional Reporting



Links to Additional Reporting

The content of this survey's reporting is divided across three separate products. Each product has been designed to be readable as a stand-alone report, and can be accessed through the links below:

- Those with interest in national findings on the research topic should focus on the [Summary Report](#):
 - <https://www.uspsoidg.gov/sites/default/files/document-library-files/2017/RARC-WP-17-011.pdf>
- Those with interest in in-depth reporting for several relevant subgroups should also review the [Detailed Subgroup Findings Report](#).
 - <https://www.uspsoidg.gov/sites/default/files/document-library-files/2017/RARC-WP-17-011-A.pdf>
- Those interested in the technical details surrounding the collection of the data used for this project should review the [Methodology Report](#).
 - <https://www.uspsoidg.gov/sites/default/files/document-library-files/2017/RARC-WP-17-011-B.pdf>

Appendix C

External Review Certification



Chase H. Harrison Ph.D.
Somerville, MA 02143

United States Postal Service Office of Inspector General (OIG)
Risk Analysis Research Center
1735 N Lynn St
Arlington, VA 22209

July 18, 2017

To Whom It May Concern;

I certify that I have reviewed the survey methodology and reporting for the USPS OIG's paper regarding public perception of the use of self-driving technology for long-haul trucking and last-mile delivery.

I am confident that this report and its underlying methodology meet the professional standards typically employed for online opt-in market and survey research, and that researchers have provided the documentation required by the American Association for Public Opinion Research's guidelines for public disclosure.

Sincerely,

A handwritten signature in black ink, appearing to read 'Chase H. Harrison', written in a cursive style.

Chase H. Harrison, Ph.D.

Appendix D

Management's Comments



KEVIN L. McADAMS
VICE PRESIDENT, DELIVERY OPERATIONS



August 28, 2017

PAOLA PISCIONERI
DIRECTOR, GLOBAL AND DIGITAL
RARC, USPS OIG

SUBJECT: Public Perception of Self-Driving Vehicles for Logistics
(Project Number 2017RARC003)

Thank you for providing the Postal Service with an opportunity to review and comment on this report. The growing activities surrounding autonomous vehicles is very stimulating and as you note may some day provide the ability to incorporate self driving vehicles into our operations.

Your survey and analysis of the public's perception of self driving technology for long-haul trucking and last mile delivery reveals interesting facts about the differences in millennium's, Generation X and Baby Boomers opinions. We are also aware the perception may change over time as this technology expands into different markets and public interation becomes more frequent.

The potential positive effect on the USPS image as an innovative company in every region is intriguing and something to be considered in our future investments as we find ways to deliver our brand.

A handwritten signature in blue ink, appearing to read "Kevin L. McAdams".

Kevin L. McAdams

cc: CARM

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POINTS OF CONTACT

Research Methodology Point of Contact

For any additional information regarding this project's methodology, please contact:

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Risk Analysis Research Center
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Media or General Inquiries Point of Contact

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