



Research Findings

Few Would be Comfortable with Flying on Pilotless Airliners, And Most Would Not Consider This Even if Airfare was up to 30% Cheaper

Air Transportation Least Likely to be Rated as Best Suited for Automated, “Self-Driving” Technology

Washington, DC, July 31, 2018 — When it comes to different modes of transportation, Americans rate air transportation (e.g., commercial airline flights) as being among the safest ways to travel (89%), including nearly half (46%) who rate this form of travel as being *very safe*. Similar proportions also perceive road (88%, e.g., cars, buses) and rail transportation (88%, e.g., trains, subways) as being very/somewhat safe, though fewer feel these are *very safe* compared to air transportation (31% and 39%, respectively). Water transportation (e.g., ferries, cruise ships) is least likely to be rated as being safe, though eight in ten nevertheless feel this way (79%).

- Those most likely to perceive air transportation as being safe include older adults (93% of those age 55+ vs. 87% of those under the age of 55), the more affluent (92% of those earning at least \$50,000 annually vs. 83% of those earning less), those in the Midwest (93%) / West (92% vs. 83% of those in the Northeast), and those with a college degree (94% vs. 85% of those with no degree).

According to a recent online study conducted by Ipsos on behalf of the Air Line Pilots Association, International (ALPA) Americans are much less likely to feel safe when it comes to automated air transportation, with only 15% saying that they would be comfortable as an airline passenger on an airplane that was completely pilotless (versus 81% who say that they would be not very/not at all comfortable with this). Women (88% vs. 75% of men), older adults (92% of those age 55+ vs. 65% of those age 18-34), and those living in the West (88% vs. 75% of those living in the Northeast) are especially likely to be uncomfortable with the idea of being an airline passenger on an airplane with no pilots.

In fact, the majority would refuse to fly on an airplane whose planes were automated (e.g., pilotless) instead of an airline with pilots in the cockpit even if their airfare was 10% (77%), 20% (71%), or 30% (66%) cheaper – and this is especially true for women, adults over the age of 55, and those with no children living at home.

When it comes to which modes of transportation are seen as being best suited to be equipped with self-driving technology, Americans are most likely to feel rail transportation is a good fit for automation (82%, rated 1,2). Just over half believe that water transportation (e.g., ferries, cruise ships) is best suited for automation technology to allow a "self-driving" mode to carry passengers (57%), while two in five say the same thing of road transportation (43%). Americans are least likely to believe that air transportation is best suited to be equipped with such automation technology (19%).

- Men (26%) and younger adults (28% of those age 18-34) are significantly more likely to believe that air transportation is best suited to be equipped with automation technology to allow a "self-driving" mode to carry passengers compared to women (13%) and those over the age of 35 (15%) who say the same thing.

Address: 2020 K Street NW, Suite 410
Washington, DC 20006
Tel: +1 202 463-7300

Contact: **Chris Jackson**
Vice President, U.S., Ipsos Public Affairs
Email: chris.jackson@ipsos.com
Tel: +1 202 420-2025



Research Findings

More than eight in ten Americans believe that that two pilots working together is the best option when it comes to solving problems, troubleshooting system issues, and/or making split-second decisions during a flight/when dealing with an emergency (80%). On the other hand, only 8% think that a single pilot is best suited to deal with these types of situations, while fewer believe that an on-board computer (7%) or remote flying technology (5%) would be best for solving problems/trouble shooting system issues.

Funding a Pilotless Future

Three quarters of Americans (75%) believe that airlines should be responsible for funding the research that looks at using computers to fly airliners, given that it is airlines that are interested in removing pilots from the cockpit of passenger and cargo planes to save money. On the other hand, one in four (25%) believe instead that this funding should be provided by the Federal Government.

- Whereas men (82%), adults aged 55 and over (80%), those earning at least \$50,000 annually (79%), and those with a college degree (81%) are more likely to believe that airlines should be responsible for funding research that looks to use computers to fly airplanes, women (30%), adults under the age of 35 (30%), the less affluent (30%), and those with no college degree (29%) are significantly more likely to believe the Federal Government should be responsible.

If the government announced that a portion of public resources were to be spent on technology developments that would improve airline shipping and travel, Americans are most likely to believe that this money should be spent on improving airports and passenger screening processes to reduce delays (61%) or modernizing air traffic control to shorten flight times/reduce delays (55%). Nearly half believe that the government should prioritize its investments to develop technology that would improve fuel efficiency to reduce emissions and save airlines money (45%), while three in ten believe public resources should be spent on developing technology that would increase travel speed and reduce long-duration flight times (31%). In comparison, only 8% believe that the government should invest public resources to develop technology that would eliminate one or both pilots from the cockpit to save airlines money.

- Using public resources to develop technology that would eliminate one or both pilots from the cockpit to save airlines money is especially likely to be prioritized by men (11% vs. 6% of women), young adults (14% of those age 18-34 vs. 5% of those ages 55+), and those with no college degree (10% vs. 6% of those with a college degree).

When told that the U.S. Congress has pending legislation that would spend tax-dollars to help airlines eliminate a pilot from cargo airlines (e.g., planes operated by FedEx Express and UPS) as a first step to removing all pilots from all airlines, Americans are much more likely to oppose this legislation (69%) than support it (21%). Similarly, 73% would oppose a bill in the U.S. Congress to lower pilot flight-training and qualification requirements (which were increased 5 years ago), versus only 16% who would support reducing training and experience requirements.

About the Study

These are the findings from an Ipsos poll conducted July 19-24, 2018 on behalf of the Air Line Pilots Association. For the survey, a sample of 1,109 adults ages 18 and over from the continental U.S., Alaska and Hawaii was interviewed online, in English. The precision of Ipsos online polls is measured using a credibility interval. In this case, the poll has a credibility interval of ± 3.4 percentage points for all respondents.

The sample for this study was randomly drawn from Ipsos's online panel (see link below for more info on "Access Panels and Recruitment"), partner online panel sources, and "river" sampling (see link below for more info on the Ipsos "Ampario Overview" sample method) and does not rely on a population frame in the traditional sense. Ipsos uses fixed sample targets, unique to each

Address: 2020 K Street NW, Suite 410
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study, in drawing sample. After a sample has been obtained from the Ipsos panel, Ipsos calibrates respondent characteristics to be representative of the U.S. Population using standard procedures such as raking-ratio adjustments. The source of these population targets is U.S. Census 2016 American Community Survey data. The sample drawn for this study reflects fixed sample targets on demographics. Post-hoc weights were made to the population characteristics on gender, age, region, race/ethnicity and income.

Statistical margins of error are not applicable to online nonprobability sampling polls. All sample surveys and polls may be subject to other sources of error, including, but not limited to coverage error and measurement error. Where figures do not sum to 100, this is due to the effects of rounding. Ipsos calculates a design effect (DEFF) for each study based on the variation of the weights, following the formula of Kish (1965). This study had a credibility interval adjusted for design effect of the following (n=1,109 DEFF=1.5, adjusted Confidence Interval=4.9 for all respondents).

For more information about conducting research intended for public release or Ipsos' online polling methodology, please visit our Public Opinion Polling and Communication page where you can download our brochure, see our public release protocol, or contact us.

For more information on this news release, please contact:

Chris Jackson
Vice President, U.S.
Ipsos Public Affairs
+1 202 420-2025
chris.jackson@ipsos.com

Marie-Pierre Lemay
Senior Account Manager, U.S.
Ipsos Public Affairs
+1 613 793-1622
marie.lemay@ipsos.com

About Ipsos

Ipsos is an independent market research company controlled and managed by research professionals. Founded in France in 1975, Ipsos has grown into a worldwide research group with a strong presence in all key markets. Ipsos ranks fourth in the global research industry.

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Ipsos has been listed on the Paris Stock Exchange since 1999 and generated global revenues of €1,782.7 million in 2016.

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www.ipsos.com

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