

Americans are worried about unregulated drone delivery services

June 2024

Introduction

As part of a June 2024 survey, the Vanderbilt Policy Accelerator for Political Economy and Regulation (VPA) polled 1,031 U.S. adults ages 18 or older to identify attitudes toward drone delivery services, which may soon be much more common due to changes in the regulations governing them.

Our polling reveals that Americans are deeply concerned about the possibility of neighborhood disturbances, privacy violations, and abuses of power by the large corporations poised to dominate drone delivery, including Amazon, Google, and Walmart. Moreover, we find overwhelming bipartisan support for the regulation of drone delivery services. When Americans learn about policy options to curtail the drawbacks of drone delivery, they respond positively to the government taking action. Specifically:

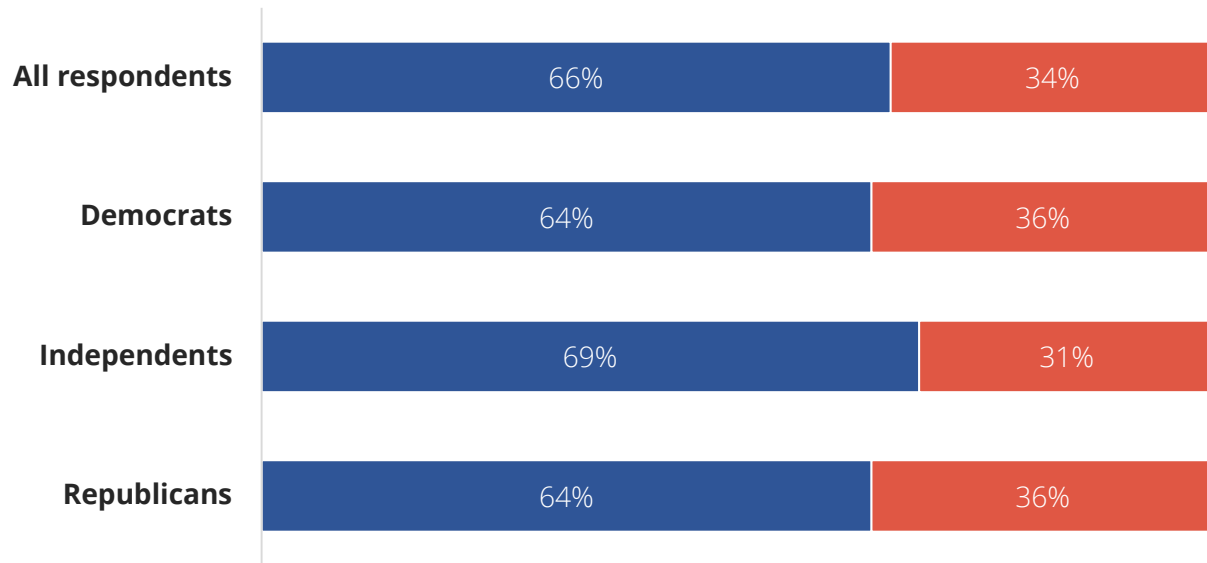
- Most Americans (66%) oppose drones taking videos or images of their homes.
- 70% of Americans are concerned that drones will disturb their neighborhoods and may be unsafe, compared to only 30% that prefer frequent package delivery.
- 75% of Americans are at least a little concerned about consolidation in the drone delivery industry.
- Nearly 3 in 4 Americans (74%) are worried about traditional delivery workers losing their jobs due to drone delivery.
- Over half of Americans (51%) would oppose legislation to expand U.S. airspace for delivery drones.
- 78% of Americans believe drone corporations should not price discriminate and 73% support a federal ban on price discrimination.
- 77% of Americans oppose preemption of state and local laws governing drone delivery and want state and local governments to be allowed to adopt stricter rules governing drone delivery services than the federal government.

These results point toward the need for regulations to govern drone delivery, which are discussed in VPA's paper, *Regulating Drone Delivery*. Concerns regarding neighborhood disturbances and public safety can be addressed by a comprehensive licensing regime, which would limit the number of drones allowed in the sky and subject licensed operators to strict obligations to serve in the public interest in accordance with the needs and preferences of local communities. Concerns about consolidation and abuses of economic power, such as discrimination against small businesses and customers, can be addressed by conditioning licenses on a nondiscrimination mandate to offer similarly situated customers the same prices and terms. And a Report on Last-Mile Delivery and a drone delivery service operated by the U.S. Postal Service could help ensure that the adoption of drone delivery is widely beneficial.

VPA's polling was conducted by SSRS from June 7 to June 10, 2024, with a sample of 1,031 respondents. The margin of error is +/-3.5% at the 95% confidence interval. SSRS is a member of the American Association for Public Opinion Research's Transparency Initiative.

Most Americans (66%) oppose delivery drones taking videos or images of their homes.

- *I don't want drone delivery companies taking videos or images of my home.*
- *I'm okay with drone delivery companies taking videos or images of my home.*



June 7-10, 2024, survey of 1,031 U.S. adults ages 18 or older

Base: Total Respondents

Table 001

The survey provided respondents with the following context and then the two statements:

Drone delivery services use drones—flying robots—to deliver things to people's homes. To work, drones use cameras to navigate—and in the process look at people's property, homes, yards, and streets. Some people are worried that companies will keep and use images, video, and data about people's homes and yards. Others trust companies not to abuse their privacy when collecting this data. Which is closer to your view?

70% of Americans are worried that more drones will disturb their neighborhoods and may be unsafe.

- *I'm concerned that many drones will disturb my neighborhood and may be unsafe.*
- *I am not worried about more drones and prefer frequent package delivery.*



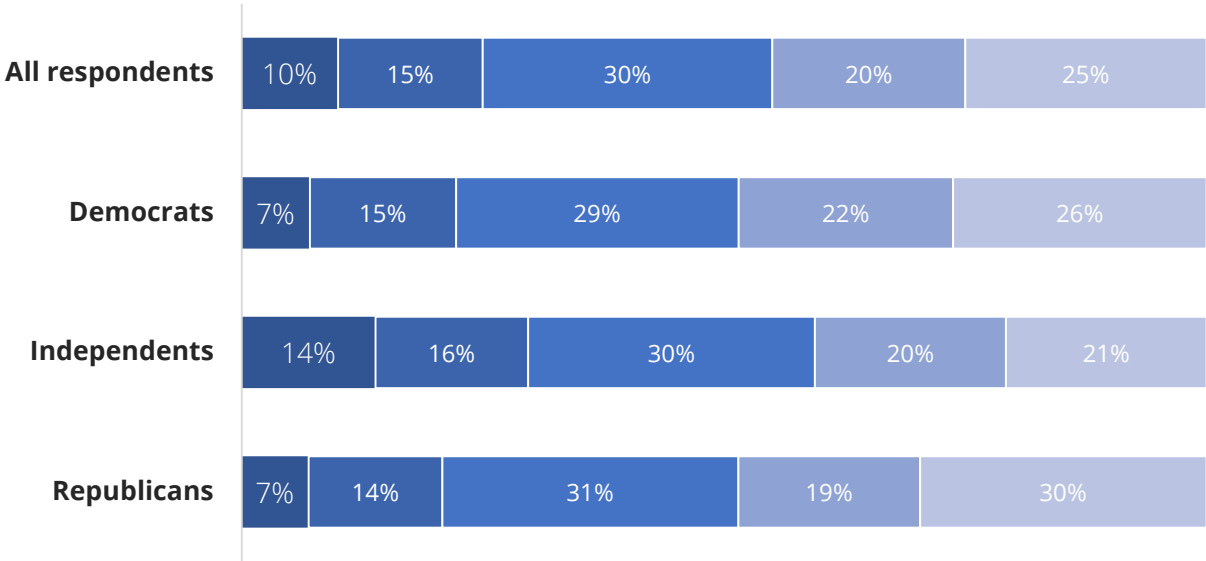
June 7-10, 2024, survey of 1,031 U.S. adults ages 18 or older
Base: Total Respondents
Table 002

The survey provided respondents with the following context and then the two statements.

For drone delivery services to work, companies will need to deploy large fleets of drones in neighborhoods. Which is closer to your view, even if neither is exactly right?

75% of Americans are at least a little worried about consolidation in the drone delivery industry.

■ *Extremely worried*
 ■ *Very worried*
 ■ *Moderately worried*
■ *A little worried*
 ■ *Not worried at all*



June 7-10, 2024, survey of 1,031 U.S. adults ages 18 or older

Base: Total Respondents

Table 003

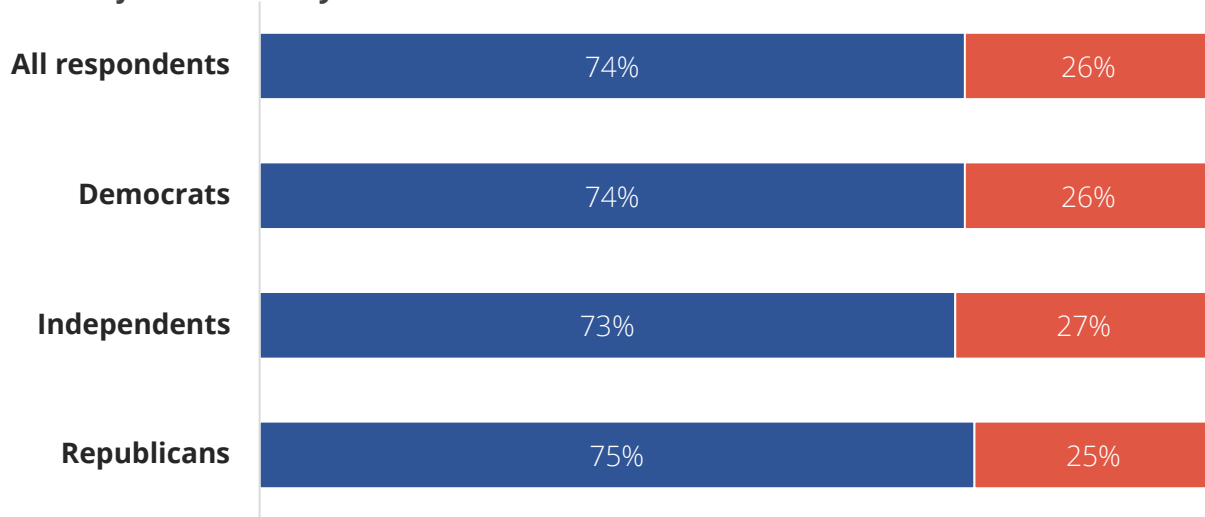
The survey provided respondents with this context:

“A small number of big corporations are likely to dominate drone delivery including Amazon, Google, and Walmart. How worried, if at all, are you that a small number of big corporations—including tech companies—will dominate drone delivery?”

74% of Americans are concerned about traditional delivery workers losing their jobs due to drone delivery.

■ *I'm concerned about traditional delivery workers losing their jobs because of drone delivery.*

■ *I'm not concerned about traditional delivery workers losing their job because of drone delivery.*



June 7-10, 2024, survey of 1,031 U.S. adults ages 18 or older

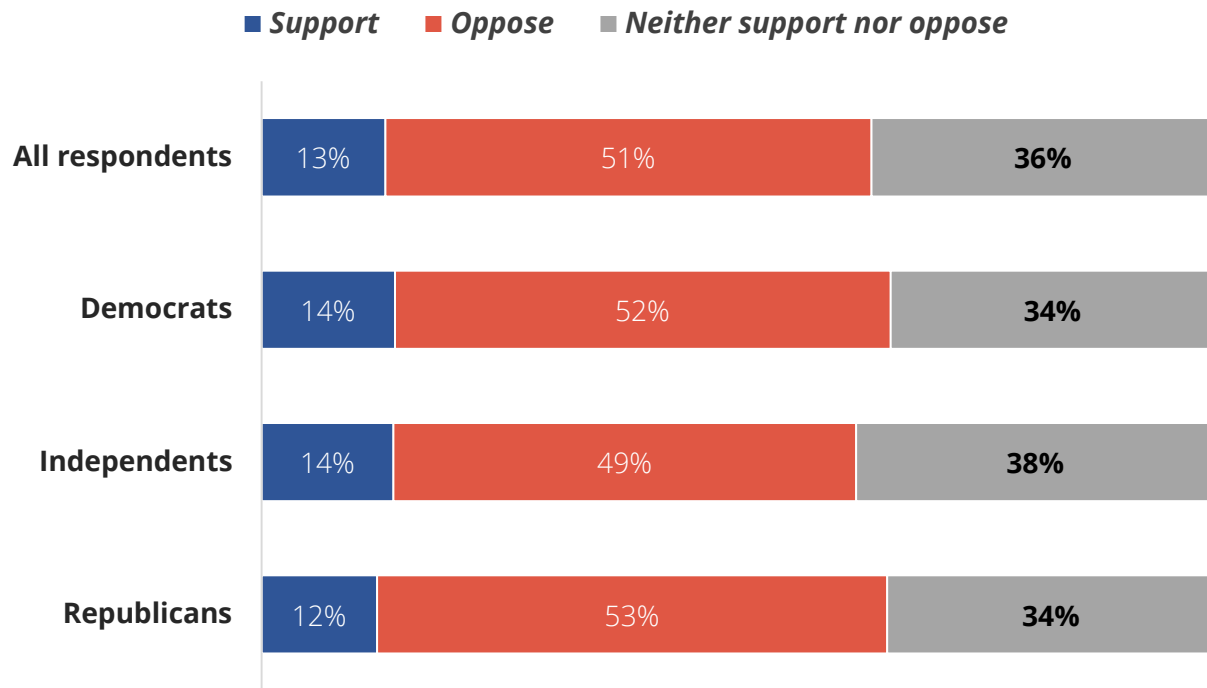
Base: Total Respondents

Table 004

The survey provided respondents with the following context and then the two statements:

“Drone delivery services may replace the jobs of traditional delivery workers—like postal workers or UPS delivery people. Which is closer to your view?”

More than 50% of Americans would oppose legislation to expand U.S. airspace for delivery drones.



June 7-10, 2024, survey of 1,031 U.S. adults ages 18 or older

Base: Total Respondents

Table 005

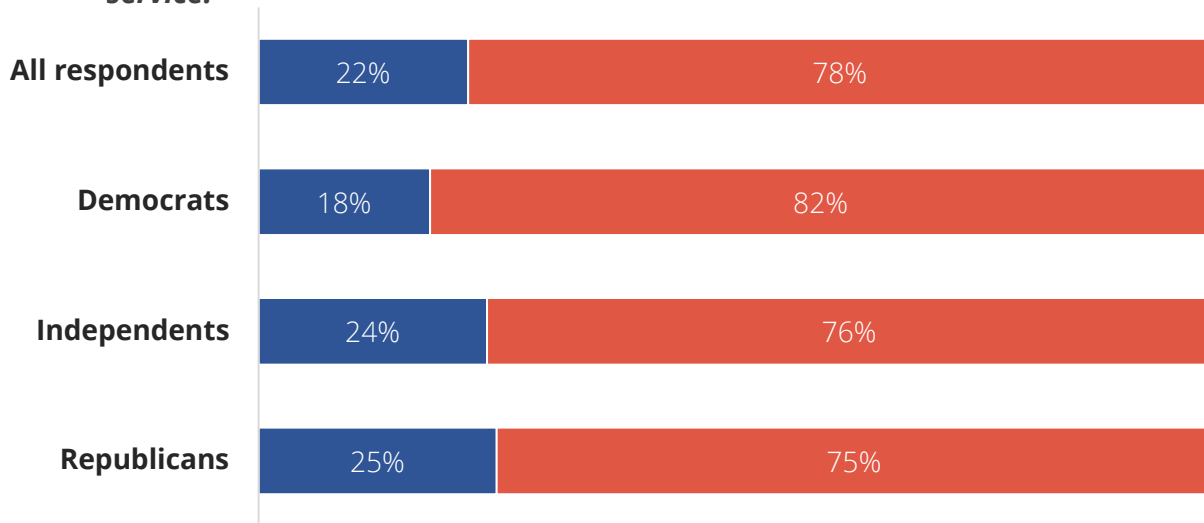
The survey provided respondents with this context:

“Currently, delivery drones are not permitted to fly in most neighborhoods. One bill in Congress would allow a significant increase in the number of drones permitted to fly under federal regulations. Some support the bill, saying that it may allow the aviation industry to grow and compete with other countries. Others oppose it, saying that having lots of drones flying around may threaten safety, privacy, and be a nuisance to neighborhoods. Would you support, oppose, or neither support nor oppose legislation to expand the number of delivery drones allowed to fly in U.S. airspace?”

78% of Americans believe drone corporations should not price discriminate.

■ *They should be able to charge different prices for the same service.*

■ *They should have to charge the same prices to businesses if it's for the same service.*



June 7-10, 2024, survey of 1,031 U.S. adults ages 18 or older

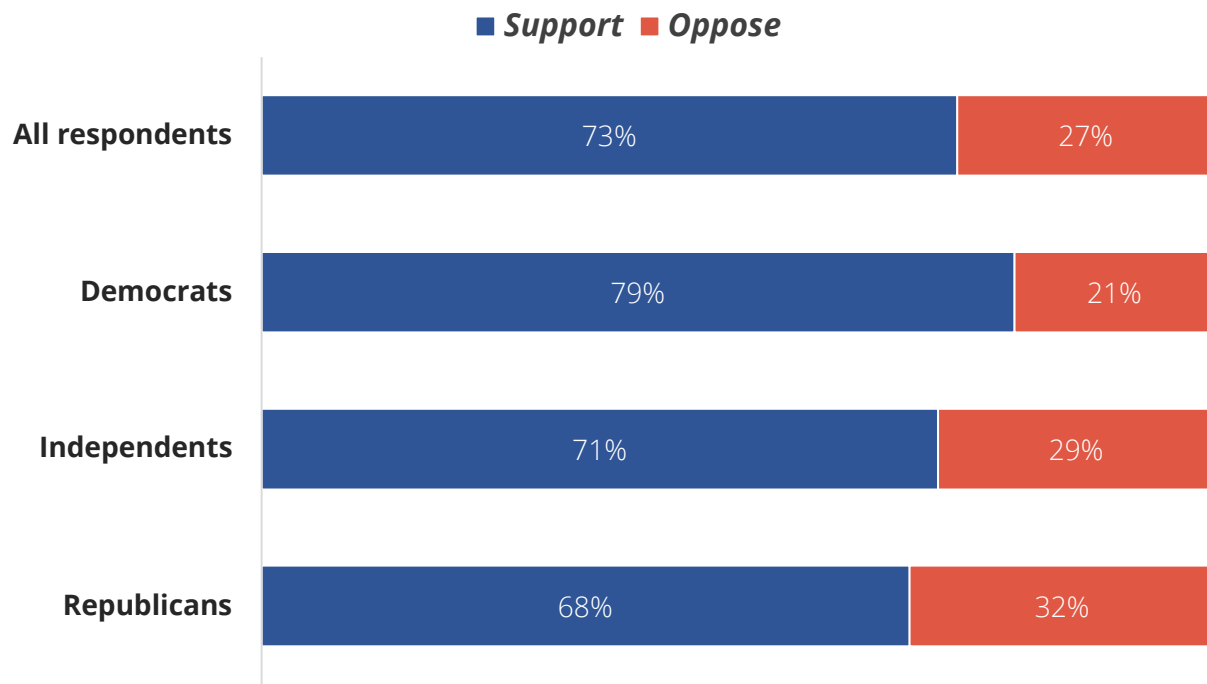
Base: Total Respondents

Table 006

The survey provided respondents with this context:

“Corporations that offer drone delivery may be able to charge different prices to different retail businesses that use their drones. Some people are worried that drone companies might pick and choose winners and losers, for example by charging higher prices to some businesses over others, for the same services. In your view, should drone corporations be able to charge different prices to different businesses for the same services or should they have to charge the same prices to all customers?”

73% of Americans would support the Department of Transportation banning drone delivery companies from price discrimination against small businesses.



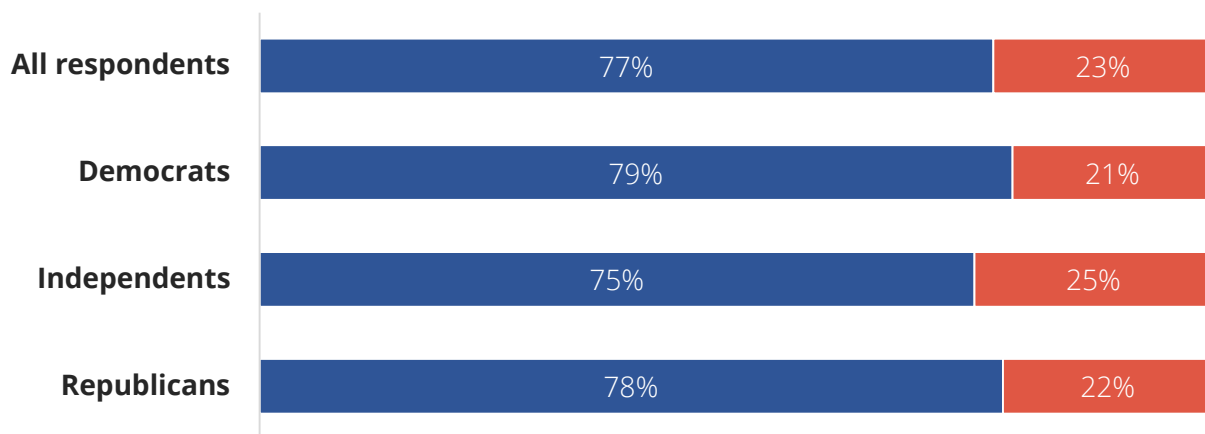
June 7-10, 2024, survey of 1,031 U.S. adults ages 18 or older
Base: Total Respondents
Table 007

The survey provided respondents with this context:

“The Department of Transportation (DOT) has the authority to define and ban 'unfair methods of competition' within drone delivery. Some argue that DOT should use this authority to make sure drone delivery companies can't discriminate against small businesses that use their services. Others argue that DOT should not use this authority, and that companies should be allowed to set whatever prices they want, for any business. Would you support or oppose the Department of Transportation using its authority to ban drone delivery companies from discriminating against small businesses?”

77% of Americans oppose federal preemption and believe state and local governments should be allowed to have stricter rules regarding drone delivery services.

- *State and local governments should be allowed to have stricter rules.*
- *State and local governments should not be allowed to have stricter rules.*



June 7-10, 2024, survey of 1,031 U.S. adults ages 18 or older

Base: Total Respondents

Table 008

The survey provided respondents with this context:

“Some people argue that state and local governments should be prevented from making their own rules on drone delivery, so that the rules are consistent across the country. Others argue that the states and cities should be able to make stricter rules for drone delivery because they have different needs and some places might want to have fewer drones than others. Do you think state and local governments should or should not be allowed to add their own stricter rules regarding drone delivery services, on top of existing federal regulations?”

Survey Questions

TABLE 001 — *Drone delivery services use drones—flying robots—to deliver things to people's homes. To work, drones use cameras to navigate—and in the process look at people's property, homes, yards, and streets. Some people are worried that companies will keep and use images, video, and data about people's homes and yards. Others trust companies not to abuse their privacy when collecting this data. Which is closer to your view?*

- I don't want drone delivery companies taking videos or images of my home.
- I'm okay with drone delivery companies taking videos or images of my home.

TABLE 002 — *For drone delivery services to work, companies will need to deploy large fleets of drones in neighborhoods. Which is closer to your view, even if neither is exactly right?*

- I'm concerned that many drones will disturb my neighborhood and may be unsafe.
- I am not worried about more drones and prefer frequent package delivery.

TABLE 003 — *A small number of big corporations are likely to dominate drone delivery including Amazon, Google, and Walmart. How worried, if at all, are you that a small number of big corporations—including tech companies—will dominate drone delivery?*

- Extremely worried
- Very worried
- Moderately worried
- A little worried
- Not worried at all

TABLE 004 — *Drone delivery services may replace the jobs of traditional delivery workers—like postal workers or UPS delivery people. Which is closer to your view?"*

- I'm concerned about traditional delivery workers losing their jobs because of drone delivery.
- I'm not concerned about traditional delivery workers losing their job because of drone delivery.

TABLE 005 — *Currently, delivery drones are not permitted to fly in most neighborhoods. One bill in Congress would allow a significant increase in the number of drones permitted to fly under federal regulations. Some support the bill, saying that it may allow the aviation industry to grow and compete with other countries. Others oppose it, saying that having lots of drones flying around may threaten safety, privacy, and be a nuisance to neighborhoods. Would you support, oppose, or neither support nor oppose legislation to expand the number of delivery drones allowed to fly in U.S. airspace?*

- Support
- Oppose
- Neither support nor oppose

TABLE 006 — *Corporations that offer drone delivery may be able to charge different prices to different retail businesses that use their drones. Some people are worried that drone companies might pick and choose winners and losers, for example by charging higher prices to some businesses over others, for the same services. In your view, should drone corporations be able to charge different prices to different businesses for the same services or should they have to charge the same prices to all customers?*

- They should be able to charge different prices for the same service.
- They should have to charge the same prices to businesses if it's for the same service.

TABLE 007 — *The Department of Transportation (DOT) has the authority to define and ban 'unfair methods of competition' within drone delivery. Some argue that DOT should use this authority to make sure drone delivery companies can't discriminate against small businesses that use their services. Others argue that DOT should not use this authority, and that companies should be allowed to set whatever prices they want, for any business. Would you support or oppose the Department of Transportation using its authority to ban drone delivery companies from discriminating against small businesses?*

- Support
- Oppose

TABLE 008 — *Some people argue that state and local governments should be prevented from making their own rules on drone delivery, so that the rules are consistent across the country. Others argue that the states and cities should be able to make stricter rules for drone delivery because they have different needs and some places might want to have fewer drones than others. Do you think state and local governments should or should not be allowed to add their own stricter rules regarding drone delivery services, on top of existing federal regulations?*

- State and local governments should be allowed to have stricter rules.
- State and local governments should not be allowed to have stricter rules.