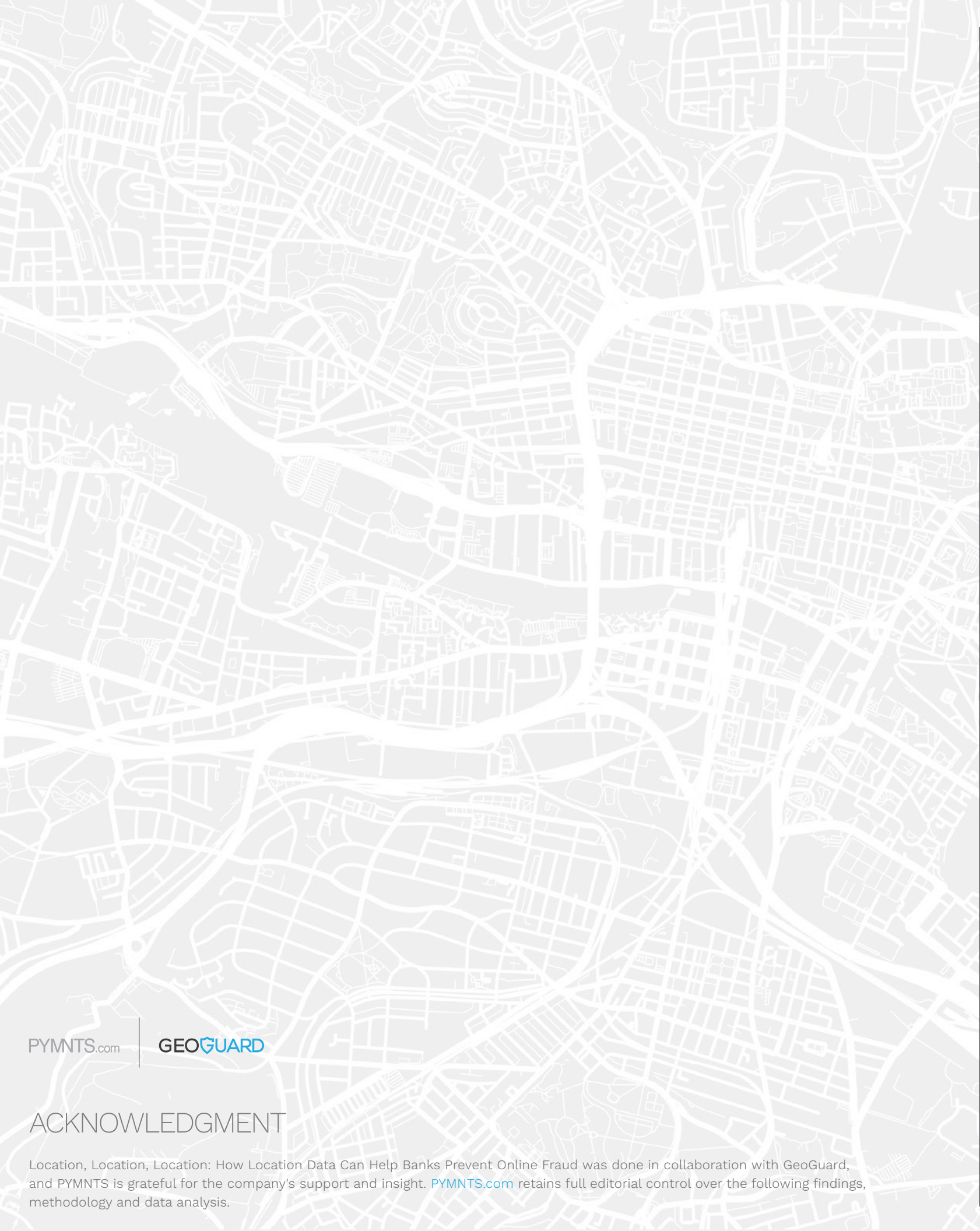


# LOCATION, LOCATION, LOCATION

HOW LOCATION DATA CAN HELP BANKS PREVENT ONLINE FRAUD

**Location, Location, Location: How Location Data Can Help Banks Prevent Online Fraud**, A PYMNTS and GeoGuard collaboration, is based on an online survey of 2,141 U.S. consumers who have mobile devices and regularly use a credit or debit card. The report assesses consumers' attitudes toward location sharing with their card-issuing banks when transacting online and their interest in switching to financial institutions that offer such capabilities.





# LOCATION, LOCATION, LOCATION

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### ACKNOWLEDGMENT

Location, Location, Location: How Location Data Can Help Banks Prevent Online Fraud was done in collaboration with GeoGuard, and PYMNTS is grateful for the company's support and insight. [PYMNTS.com](http://PYMNTS.com) retains full editorial control over the following findings, methodology and data analysis.

# INTRODUCTION

**J**ames Bond movies have long captured the public's imagination with their depiction of sophisticated technology that is way ahead of its time. In 1964's "Goldfinger," Bond engages gold magnate Auric Goldfinger in a high-speed car chase with the aid of a real-time map built into his silver birch Aston Martin. Map usage and location sharing now define almost every aspect of consumers' connected lives. These technologies do more than help consumers drive from one place to another — they power services such as grocery deliveries and allow individuals to hail Uber rides.

The benefits of location sharing extend far beyond these on-demand

use cases. The technology has significant potential to protect consumers from the ever-present threat of online fraud, especially as shopping and paying with connected devices become ingrained aspects of individuals' day-to-day lives. Real-time access to the true geographic location of a connected device that is making a transaction can significantly improve financial institutions' (FIs') abilities to accurately authenticate transactions and prevent fraud.

Some consumers are as comfortable sharing location details with FIs as other consumers are sharing it with navigation or food delivery apps. Others are on the fence about providing this information to their banks.

PYMNTS' research shows that 28 percent of consumers currently share their location data with their debit or credit card-issuing banks because they believe access to such information could help their FIs fight fraud. Another 32 percent, however, are not willing to allow their banks to access location data, and 36 percent of them do not understand why FIs would need this information. Raising awareness about how access to such data can bolster FIs' fraud prevention efforts is therefore a crucial first step to easing consumers' worries.

Having the assurance that their banks will keep their location data private is also important to customers. Nearly a

third of consumers think that ensuring that their location data will not be shared with third parties is the most important action that banks can take to increase their willingness to share location information.

These are some of the key findings from our research, a PYMNTS and GeoGuard collaboration. We surveyed more than 2,000 U.S. consumers who own internet-connected devices and use credit or debit cards at least once a month, and we examined their willingness to share location information with their card-issuing banks as well as their interest in switching to FIs that use geolocation technologies to prevent fraud.

This is what we found.

01

**138 million U.S. consumers already share their location data with mobile apps. Less than half of them, however, share their location data with their mobile banking apps.**

Our research shows that 55 percent of consumers (138 million people) share location data with at least one app, and another 35 percent are “very” or “extremely” likely to do so. These consumers commonly share their location data with social media apps (61 percent), communication apps (55 percent) and weather apps (51 percent).

Fewer consumers (43 percent) currently share their location with mobile banking apps despite the various benefits, and just 9 percent are “very” or “extremely” likely to share it.

APPS THAT CONSUMERS COMMONLY SHARE THEIR LOCATION DATA WITH:

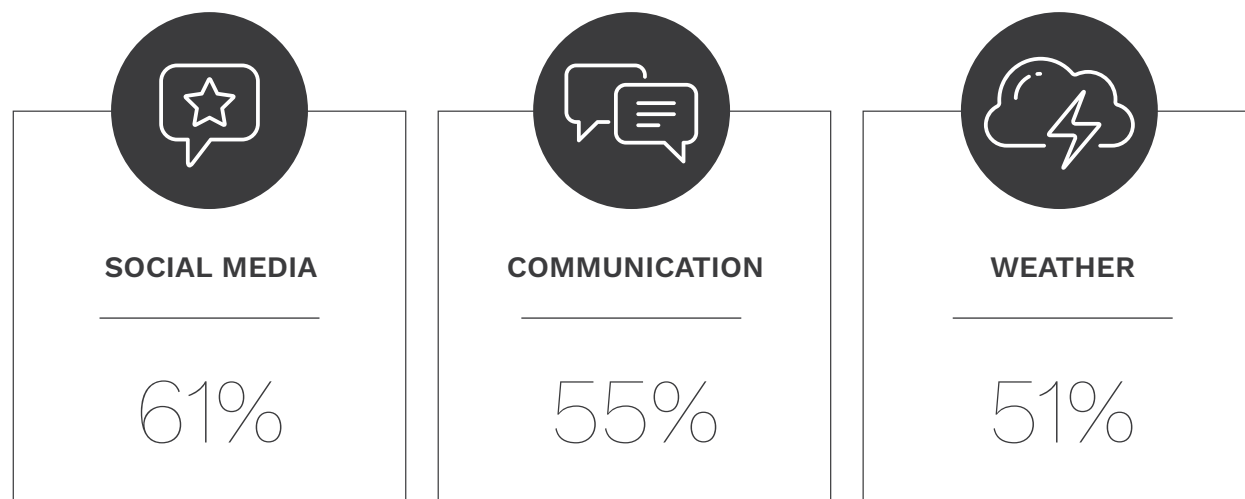


TABLE 1:

**Consumers’ preferences for location sharing with select apps**

Share of consumers who currently share or would be “very” or “extremely” likely to share their location data with select apps

	App usage		Location sharing		TOTAL
	TOTAL	At least once per week	Currently sharing location	“Very” or “extremely” likely to share	
• Any apps	100.0%	79.8%	54.5%	35.1%	89.6%
• Social media	63.9%	60.8%	20.0%	7.1%	27.1%
• Map	59.5%	35.8%	37.0%	13.0%	50.0%
• Communication	56.9%	55.0%	20.8%	7.5%	28.2%
• Weather	54.9%	51.3%	30.5%	11.9%	42.5%
• Mobile banking	54.7%	43.1%	20.9%	8.5%	29.5%
• Shopping	52.9%	35.4%	18.8%	8.5%	27.3%
• Media streaming	46.2%	38.8%	12.9%	7.1%	20.1%
• Games	36.6%	32.8%	10.3%	5.1%	15.5%
• P2P payments	28.9%	13.3%	8.0%	4.3%	12.3%
• Nonbanking credit card	27.7%	18.7%	9.4%	5.0%	14.3%
• Rewards	26.3%	20.2%	8.8%	4.5%	13.3%
• Food delivery	25.9%	14.2%	15.9%	6.1%	22.0%
• Rideshares	23.5%	6.4%	14.0%	4.6%	18.7%
• Travel	19.4%	5.7%	7.4%	4.7%	12.1%
• Other	2.9%	0.4%	0.2%	0.0%	0.3%

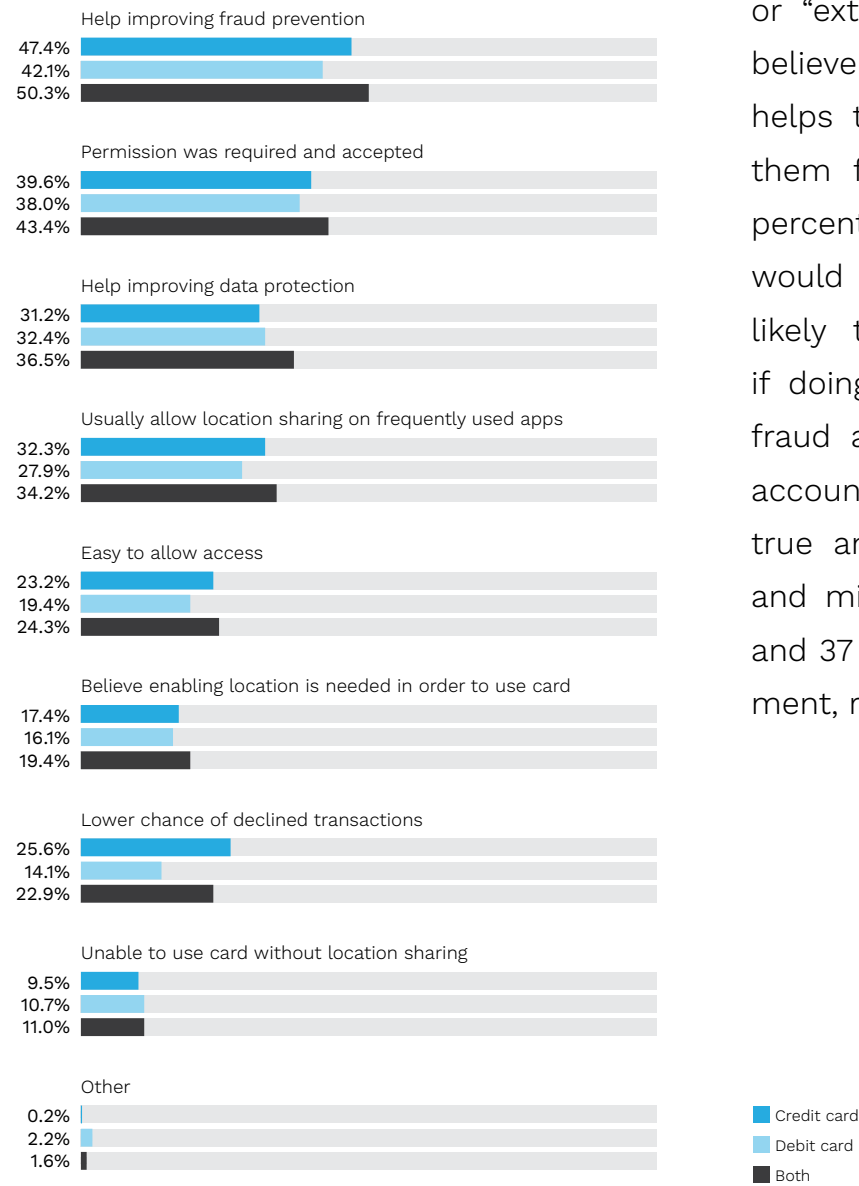
Source: PYMNTS.com

## 02

### Most consumers who share their location data with their banks do so to help prevent fraud.

**FIGURE 1:**  
**Reasons for sharing location data with card-issuing banks**

Share of consumers indicating select reasons that indicate why they agreed to share or that would make them “very” or “extremely” likely to share location data



Source: PYMNTS.com

PYMNTS’ research shows that 50 percent of credit or debit card users who currently share location data or are “very” or “extremely” likely to do so believe that sharing this data helps the bank better protect them from fraud. Thirty-three percent of consumers say they would be “very” or “extremely” likely to share location data if doing so could help reduce fraud and better protect their accounts. This is particularly true among bridge millennials and millennials, as 38 percent and 37 percent share the sentiment, respectively.

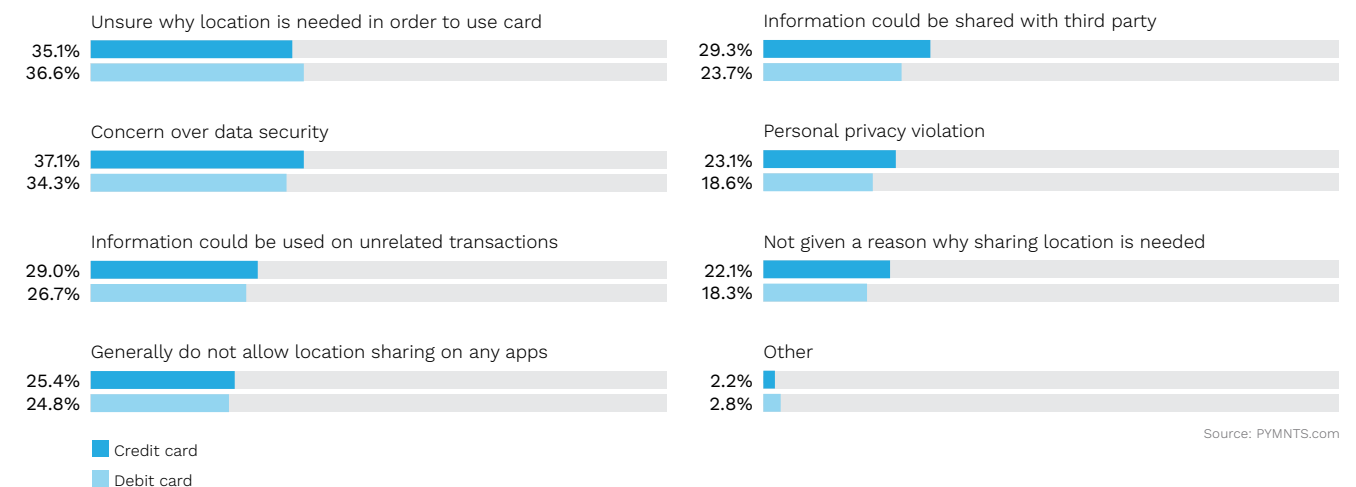
## 03

### Consumers who choose not to share location data with their banks do not know why the information is needed.

Nearly a third of consumers — 82 million — are not willing to share location data with their card-issuing banks. This is especially true for credit card users: 38 percent of them choose not to share their location data, as do 30 percent of debit card users. More than 35 percent of these consumers are unaware of the reasons their banks would need the information, and 36 percent cite security concerns as a reason for not sharing their location data. A smaller share of consumers (20 percent) say their bank does not explain why the information is needed when they are asked for it.

**FIGURE 2:**  
**Why consumers chose not to share location data with card-issuing banks**

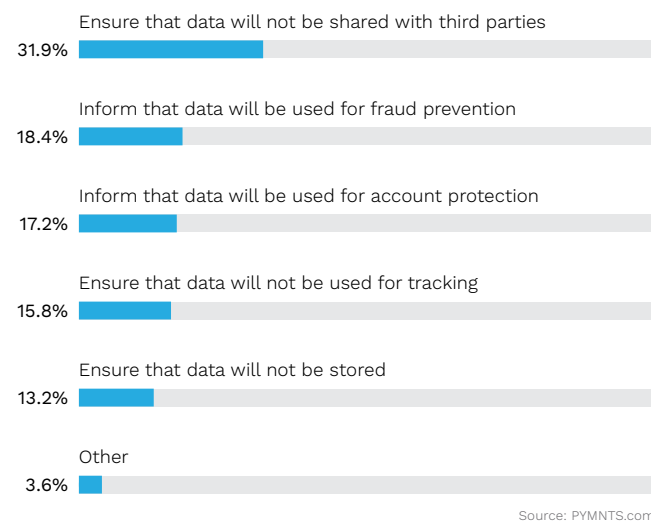
Share of consumers citing select reasons, by type of card owned



Source: PYMNTS.com

## 04 Nearly half of consumers would be willing to share their location data if it did not compromise their privacy and helped protect their accounts.

**FIGURE 3:**  
**What financial institutions can do to increase consumers' willingness to share location data**  
 Share of consumers citing select FI actions that would make them more willing to share location data with their banks

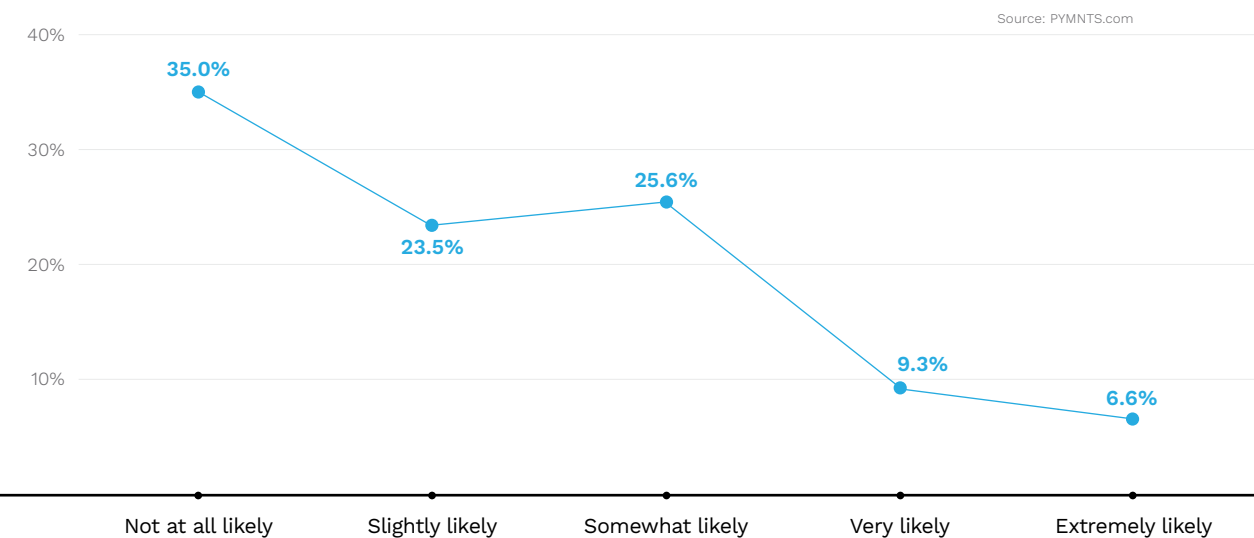


Consumers worry about their privacy and how their FIs might share their location data with third parties. Ensuring that location data will not be shared with third parties and that it will be used to better protect accounts can go a long way toward easing their anxieties, however. Our research shows that approximately 49 percent of consumers would feel more comfortable if they had these assurances. Assurances are especially important to Generation X and millennial consumers, at 37 percent and 36 percent, respectively. We also found that 32 percent of consumers overall would be willing to share their location data if the FI would explain it was seeking location data for fraud reduction and better account protection.

## 05 Forty percent of consumers overall and 55 percent of millennials are willing to switch to a financial institution that uses location data to secure their accounts.

Many consumers prefer not to share their location data so that it is not marketed to third parties, but they accept the practice more when this data is used for fraud protection purposes. Certain consumers would even switch to a financial institution that offers such capabilities: 42 percent of consumers say they would be at least “somewhat” likely to switch to an FI that uses location-tracking capabilities for protecting their customers from fraud. This sentiment is especially strong among consumers from younger generations, as more than 55 percent of Generation Z consumers and millennials and 52 percent of bridge millennials say so. Just 28 percent of baby boomers and seniors and 42 percent of Generation X consumers would likely switch to another FI for accessing such capabilities.

**FIGURE 4:**  
**Consumers' willingness to switch to a financial institution that uses location data to prevent fraud**  
 Share of consumers with select attitudes regarding switching to a financial institution that uses location data



# UNDERSTANDING CONSUMERS' PREFERENCES FOR LOCATION SHARING



**T**oday's digital-first consumers use a wide variety of devices to make purchases on the go — smartphones, laptops, game consoles and even activity trackers. Our research shows that more than 98 percent of consumers regularly use at least one connected device. Smartphones are the most popular device — 88 percent of surveyed consumers use one — followed by laptops and desktop computers, at 70 percent and 45 percent, respectively. The majority of these connected consumers use debit cards (77 percent) or credit cards (76 percent) to pay for their connected commerce purchases.

Connected shopping experiences unlock seamlessness, but they also make consumers more susceptible to online fraud. Our research shows that more than 46 percent of credit or debit card users say that their cards have been used for fraudulent transactions.

Geolocation technology can help. The technology reduces online fraud risks by enabling FIs to prevent nefarious techniques like location spoofing that are used by bad actors to make fraudulent transactions look legitimate. Many consumers identify this as a key benefit.

# 98%

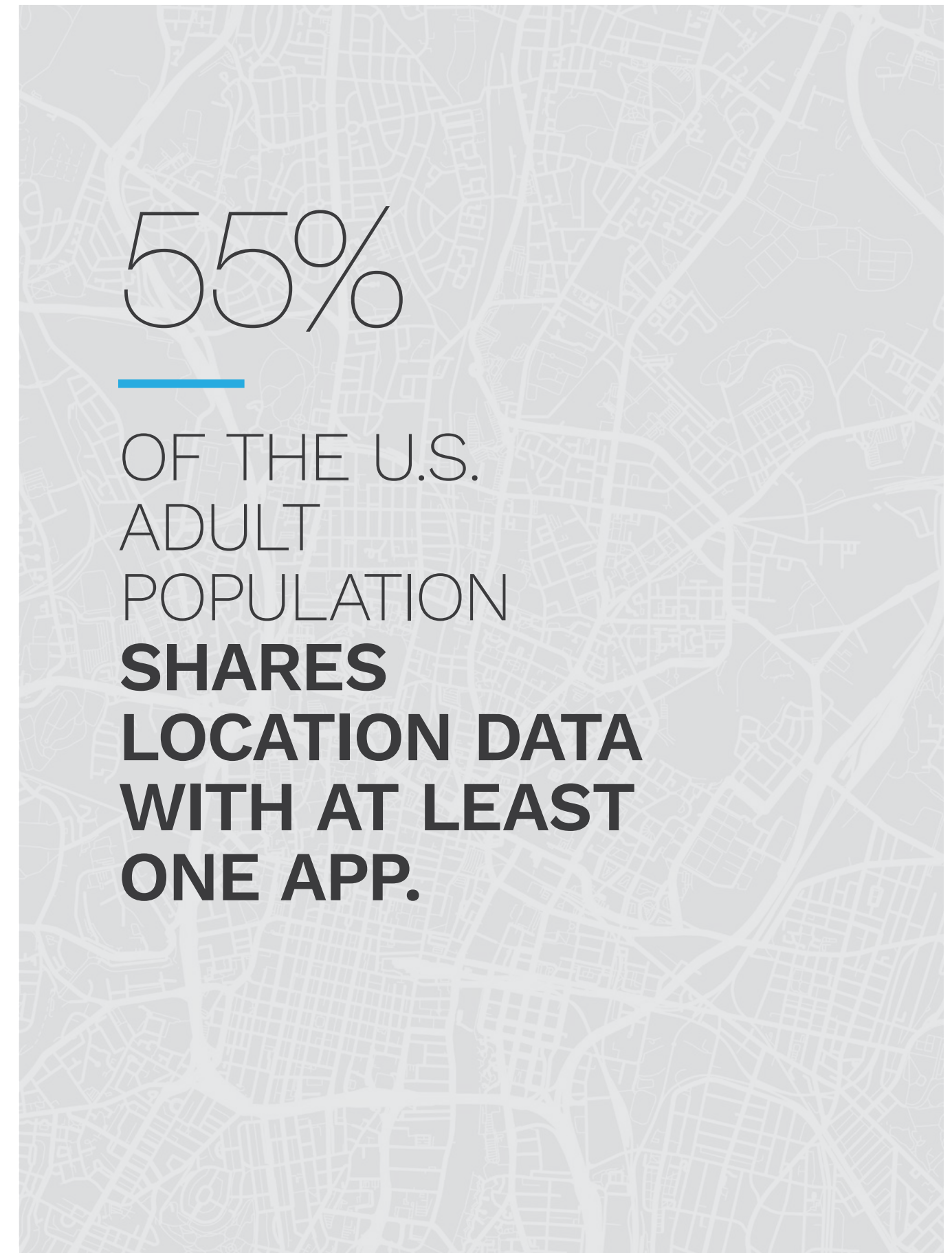
OF CONSUMERS  
REGULARLY USE  
**AT LEAST ONE  
CONNECTED  
DEVICE.**

Our research shows that almost 90 percent of credit or debit users either currently share their location or are willing to share it if they believe that the data can help their FI better protect them against fraud.

Location sharing with apps is already fairly common among consumers. Fifty-five percent of the U.S. adult population (roughly 138 million consumers) share their location data with at least one app. Thirty-seven percent of consumers who use navigation apps such as Google Maps report sharing their location data, and 31 percent of those who use a weather app report sharing their location data.

Mobile banking apps come in a distant third place, as 21 percent of consumers (nearly 53 million people) share their location data with their mobile banking apps, and an additional 9 percent (22 million consumers) would be “very” or “extremely” likely to do so. These two groups account for 55 percent of mobile banking users.

A significant share of consumers are still wary about sharing locations with certain apps, however. We found that 46 percent of gaming app users and 45 percent of social media app users say they are “slightly” or “not at all” willing to share their location data with these apps. The top reasons consumers cite for not wanting to share their locations with certain apps relate to security and data privacy: 56 percent of consumers who are “slightly” or “not at all” likely to share location are concerned that their information would be used for purposes unrelated to the app, and 55 percent are concerned about security. Nearly as many (56 percent) simply do not understand why the app would need to know their location. This is true for the 67 percent of Generation Z consumers who cited this reason as well as the 48 percent of Generation X consumers who did the same.





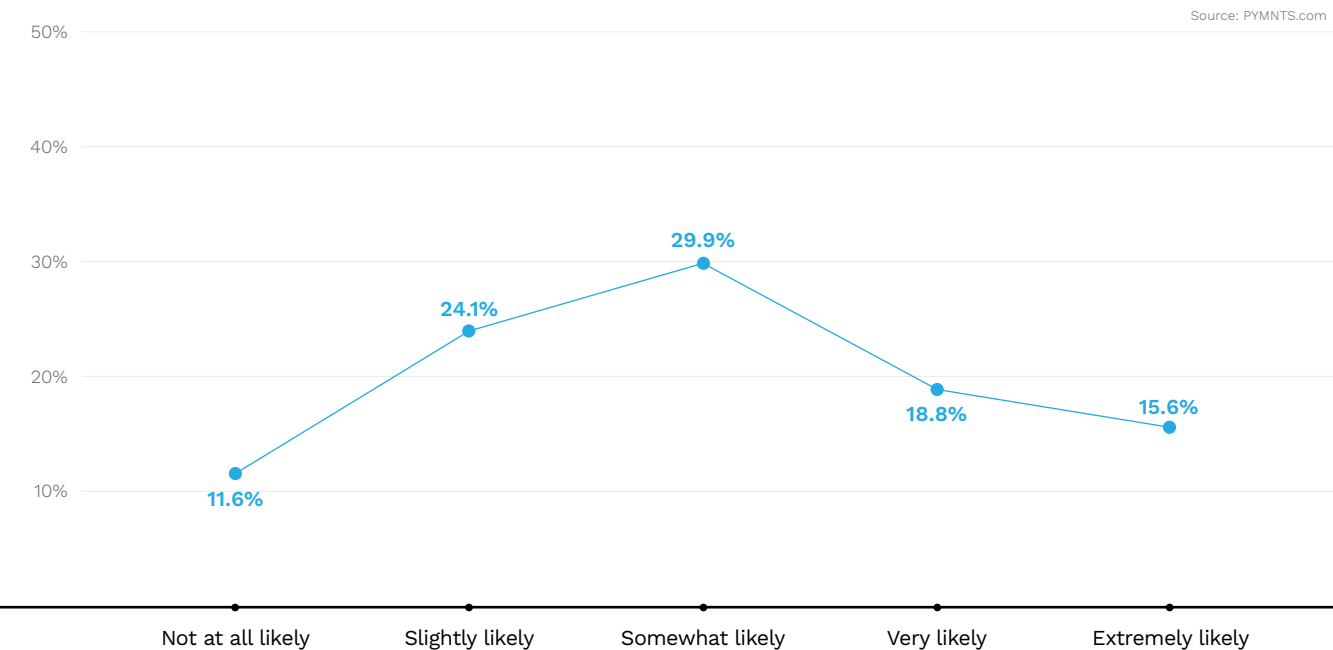
# CONSUMERS' WILLINGNESS TO SHARE LOCATION DATA WITH FIs



Consumers have varying attitudes toward sharing their location information with their FIs. Forty-eight percent of consumers feel confident about entrusting their information to their banks without having to worry about it being shared with third parties, but 15 percent think that their banks should not have access to their location data under any circumstances.

Our survey reveals that 70 million U.S. consumers (28 percent of the adult population) have already enabled location sharing with their card-issuing banks, while 32 percent of consumers have not yet done so. Millennials, bridge millennials and consumers who earn more than \$100,000 per year are most likely to have agreed to give their issuing banks access to their location data, at 36 percent, 35 percent and 31 percent, respectively.

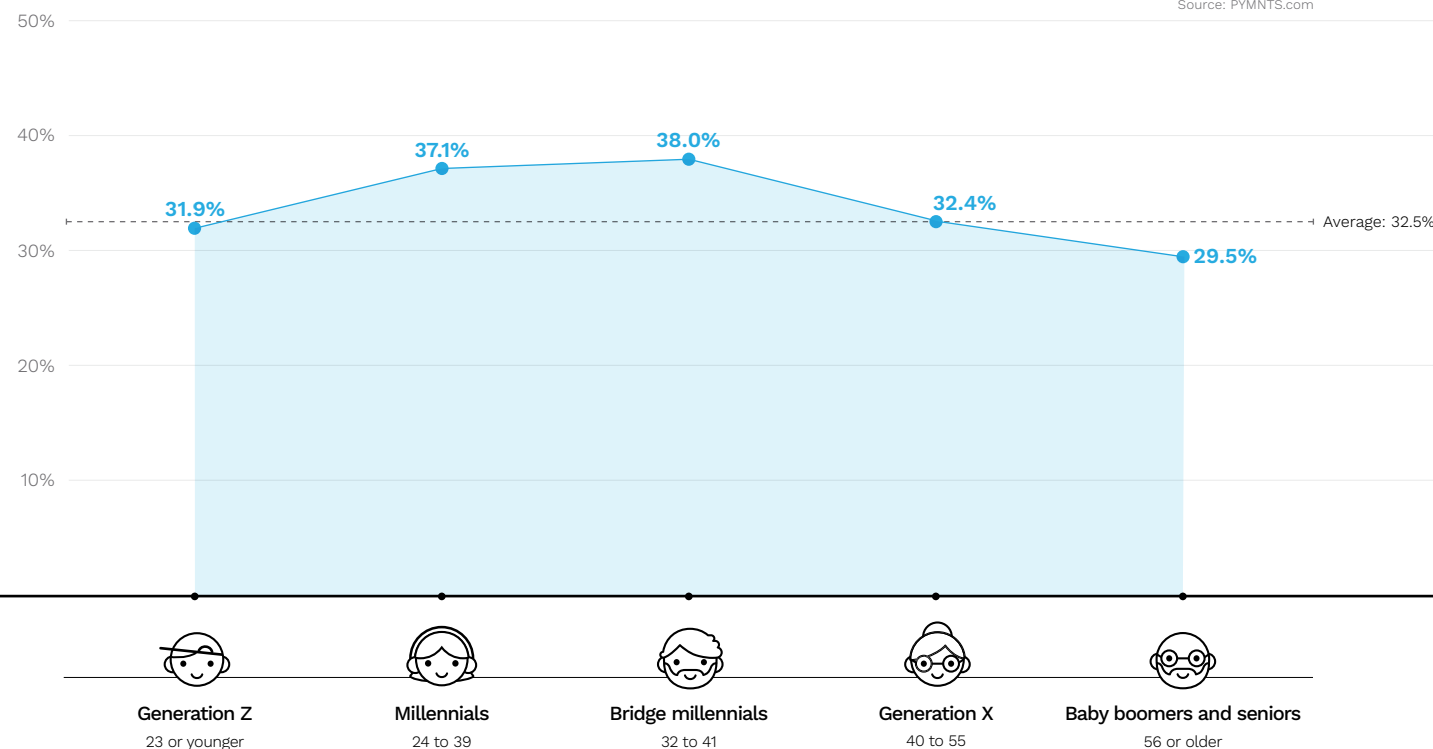
**FIGURE 5:**  
**Consumers' willingness to share location data if it reduced fraud and improved account protection capabilities**  
 Share of consumers who have experienced fraud or have had a card compromised who are likely to share location data to improve account security, by degree of willingness



Consumers' willingness to share their location data has a fairly strong relation to their security concerns, as 60 percent of credit card users and 62 percent of debit card users say that they are at least "somewhat" concerned about card-related fraud. These concerns are even more common among credit card users (64 percent) and debit card users (69 percent) who have already been affected by fraudulent transactions. Sixty-six percent of those who are at least "somewhat" concerned about fraudulent transactions are also at least "somewhat" likely to enable location sharing if their bank identified fraud reduction and better account protection as reasons why it wants to access their location when they use their cards.

**FIGURE 6:**  
**Willingness to share location data for security purposes across generations**  
 Share of consumers who would be "very" or "extremely" likely to share location data for fraud reduction and account protection, by generation

Source: PYMNTS.com



Protection against fraud thus stands out as the most common reason to share location data with card-issuing banks. Our survey findings reveal that 50 percent of debit or credit card users who agreed to share or who are "very" or "extremely" likely to share their location data think their bank would be better equipped to protect them if it were to confirm their location at the time of a transaction. Nearly one-third of consumers also say they would be "very" or "extremely" likely to enable location sharing if the bank identified fraud reduction and better account protection as reasons for accessing their location information.

Communicating with consumers about these potential benefits would very likely prompt 38 percent of bridge millennials and 37 percent of millennials to enable location features. This suggests that financial institutions would benefit from communicating with their customers about how location data can be used to prevent fraud.

More than a third of consumers who are not willing to share their location information with their banks, on the other hand, often do not understand why their banks would need to confirm their location data. We found that 35 percent of credit card users and 37 percent of debit card users lack such an understanding. A slightly higher share of credit card users (37 percent) and debit card users (34 percent) believe that sharing their location data may actually compromise the security of their accounts. These are the top two reasons why consumers have not enabled location features.

# THE IMPORTANCE OF CUSTOMER EDUCATION








**F**inancial institutions can take certain steps to ease their customers' concerns about sharing their location data. Our findings reveal that assuring customers that their location data will be kept private and will protect their accounts or prevent fraud can go a long way.

Nearly 30 percent of consumers say that the first step their banks can take to make them feel more comfortable with sharing location data is to ensure their details will not be shared with third parties. This assurance would also make 27 percent of those credit card users who were not willing to share and 29 percent of those who have not been asked feel more comfortable about sharing location information. These assurances are especially powerful for millennial and Generation X consumers, as 36 percent and 36 percent, respectively, say the assurance would make them more willing to share location data with their banks, whereas only 26 percent of baby boomers and seniors felt the same.

TABLE 2:

**What financial institutions can do to increase consumers' willingness to share location data**

Share of consumers citing select actions that would make them more willing to share location data with their banks, by generation

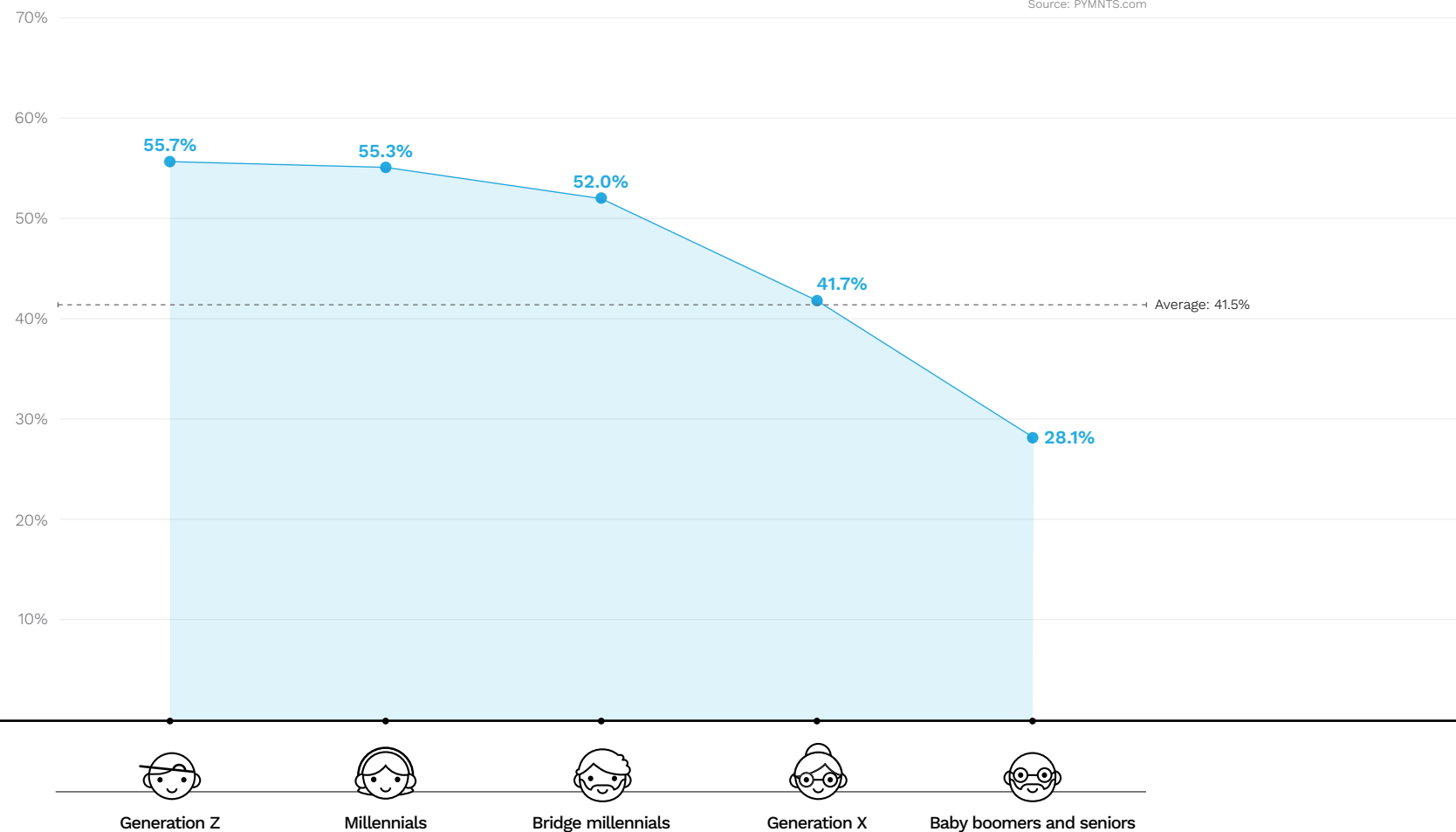
	 Generation Z	 Millennials	 Bridge millennials	 Generation X	 Baby boomers and seniors
Ensure that data will not be shared with third parties	30.6%	35.7%	35.4%	36.5%	25.9%
Inform that data will be used for fraud prevention	11.3%	14.7%	13.6%	16.0%	24.4%
Inform that data will be used for account protection	15.8%	14.9%	17.9%	16.9%	19.5%
Ensure that data will not be used for tracking	25.7%	14.5%	16.0%	15.7%	14.7%
Ensure that data will not be stored	15.4%	18.0%	14.6%	11.9%	10.1%
Other	1.2%	2.3%	2.6%	3.1%	5.3%

Source: PYMNTS.com

A relatively small share of consumers (18 percent) say that the bank should inform them that the data will be used to prevent fraud, and nearly as many (17 percent) say that the bank should inform them that it will use location data to protect their accounts. Overall, ensuring that location data will not be used for tracking is the most important action that a bank can take for 16 percent of all consumers and 26 percent of Generation Z consumers.

**FIGURE 7:**  
**Consumers' willingness to switch to an FI that offers location features**  
 Share of consumers who are at least "somewhat" likely to switch to an FI that offers location features, by generation

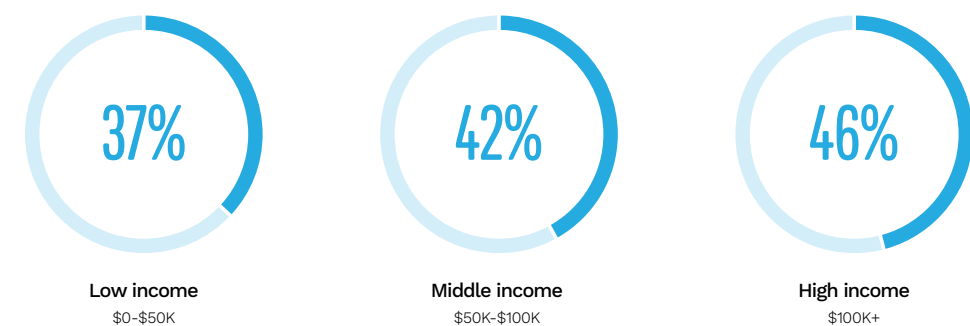
Source: PYMNTS.com



Banks that offer location features could help attract and retain a fair share of consumers, provided they explain to their customers why they need access to their location data. We found that 42 percent of consumers would be at least "somewhat" likely to switch to a financial institution that offers location-confirmation capabilities.

This willingness to switch to get access to location features is seen across consumers from different age and income groups. Gen Z consumers and millennials show the highest interest, as 56 percent and 55 percent, respectively, are at least "somewhat" likely to switch. Only 28 percent of baby boomers and seniors, on the other hand, would be likely to switch to a financial institution that offers location data features. Consumers who earn more than \$100,000 per year are more likely than other income groups to switch to an FI that offers location features, at 46 percent, while only 37 percent of consumers with annual incomes below \$50,000 are likely to switch.

**FIGURE 8:**  
**Consumers' willingness to switch to an FI that offers location features**  
 Share of consumers who are at least "somewhat" likely to switch to an FI that offers location features, by income



# MAIN TAKEAWAYS



## COMFORT

Sharing location data is an everyday practice across all aspects of consumers' lives, and the majority of consumers already share location data with a variety of mobile apps.



## SECURITY

Consumers are willing to share their location with their FI if it helps reduce fraud and improve account security.



## LOYALTY

Consumers are willing to change their FI if another FI uses their location data to protect them against fraud.



## TRUST

Ensuring that the location data is stored securely and would not be shared with third parties can help FIs win the trust and consent of their customers.



## CONSENT

Once consumers are made aware of the reasons and benefits of sharing location, they are more willing to share the information with their FI.

LOCATION,  
LOCATION,  
LOCATION

# CONCLUSION

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**C**onsumers today own numerous internet-connected devices that can seamlessly make transactions with registered credit or debit cards. These connected shopping and payment experiences, however, are also vulnerable to security risks. Financial institutions can reduce these risks by using geolocation technology that can help prevent fraud by confirming the true location of the device used for the transaction. Using this technology, however, requires FIs to convince their customers to share their location data. PYMNTS' research shows that consumers would be willing to do so if banks assure them that their location data will not be shared with third parties and that the information will be used to protect them from online fraud. Location features can be an important differentiator for financial institutions, as long as they clearly explain to their customers how sharing location data can be a key tool in securing their transactions and preventing fraud.

# LOCATION, LOCATION, LOCATION

## METHODOLOGY

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Location, Location, Location: How Location Data Can Help Banks Prevent Online Fraud is based on an online survey of 2,141 U.S. consumers who have mobile devices and regularly use a credit or debit card. The survey asked consumers about their attitudes toward location sharing with their card-issuing banks when transacting online and their interest in switching to financial institutions that offer such capabilities. The survey was conducted online between Sept. 27 and Sept. 28, 2020.

# ABOUT

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## PYMNTS.com

[PYMNTS.com](#) is where the best minds and the best content meet on the web to learn about “What’s Next” in payments and commerce. Our interactive platform is reinventing the way in which companies in payments share relevant information about the initiatives that shape the future of this dynamic sector and make news. Our data and analytics team includes economists, data scientists and industry analysts who work with companies to measure and quantify the innovation that is at the cutting edge of this new world.

## GEOGUARD

At [GeoGuard](#), a division of GeoComply Solutions Inc., we focus solely on geolocation-based security, fraud detection and the protection of digital content. As the independently-rated market leader for VPN and Proxy detection, we help a wide range of industries (streaming video broadcasters, content rightsholders, banks and payment processors, cryptocurrency exchanges, etc.) guard against geo-piracy and location-based fraud. GeoGuard provides a suite of geo-filtering and fraud detection solutions, combined with human intelligence, to stop internet users from spoofing their location.

GeoGuard’s solutions are based on the award-winning geolocation compliance and geo-protection technologies that GeoComply developed for the highly-regulated and complex digital gaming industry. Our software is installed in over 300 million devices worldwide, putting GeoGuard in a uniquely powerful position to identify and counter both the current and newly emerging geolocation fraud threats.

With GeoGuard, fraud has no place to hide.

We are interested in your feedback on this report. If you have questions, comments or would like to subscribe, please email us at [feedback@pymnts.com](mailto:feedback@pymnts.com).

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