

THE UPSHIFT

TO SMART MOBILITY ASSISTANCE

Connected Vehicles & the Road to Proactive Assistance



A Future Mobility Focus Report by Urgently

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INTRODUCTION

Industry experts predict that by the end of this decade, nearly all new vehicles sold globally will be connected. The ecosystem that is driving the connected car forward encompasses a wide range of players, technologies and use cases.

This new future mobility focus report from Urgently examines the potential for vehicle connectivity to provide safe, transparent and exception mobility assistance experiences.

The Upshift to Smart Mobility Assistance includes new data from **Urgently's Connectivity & Mobility Assistance Consumer Survey 2021**, providing directional insights on consumer understanding and preferences related to vehicle connectivity and smart mobility assistance.



EXECUTIVE SUMMARY

Since 1996, when OnStar was introduced by General Motors to provide emergency roadside response, connected car services have been evolving to include a growing array of safety and convenience features, including breakdown response, vehicle diagnostics and predictive assistance features, navigation, Internet connectivity, infotainment, payments and more.

Vehicle connectivity is making it possible to move beyond reactive roadside response, to power diagnostics and the ability to proactively deliver remote services to motorists before problems occur, avoiding the inconvenience of a breakdown.

McKinsey predicts value creation through connected car data will represent a \$250 billion to \$400 billion market opportunity by 2030. Service providers of connected car data, including automotive OEMs, insurers, technology companies and related mobility players must determine how to create the value, awareness and demand that will influence a consumer's willingness to pay for connected services.

Urgently's Connectivity & Mobility Assistance Consumer Survey 2021 found that *roadside assistance* is the first thing that comes to mind when consumers think about vehicle connectivity. Among those surveyed, **66 percent view vehicle connectivity as roadside assistance**. This suggests an advantage for those companies that are building out connected services that expand the concept of roadside assistance.

Among the most desirable connected features, **consumers expressed willingness to pay for preemptive/preventive services**, including *early collision detection, likely dead battery detection, and early repair detection*.

With data serving as the essential connective tissue of the connected car, adoption of connected services will require service providers to effectively assure consumers their data will be protected.

Mobility is being revolutionized, and with it, the very concept of roadside assistance is being redefined. Connectivity is powering **smart mobility assistance** services that will truly enhance the vehicle ownership experience.

THE RISE OF THE CONNECTED CAR

Industry experts agree – **the connected car is racing toward mainstream status.** By 2030, about 95 percent of new vehicles sold globally will be connected, up from approximately 50 percent today.ⁱ

The fact is, cars have been connected for some time, providing real-time traffic alerts, streaming music, connecting to smartphones and offering emergency roadside assistance. Analysts at Deloitte affirm, “*When it comes to connecting drivers and technology, the auto industry has a longer and richer track record than any other sector.*”ⁱⁱ

The connected car has been gaining traction since 1996,ⁱⁱⁱ when General Motors and Motorola Automotive partnered to integrate OnStar into Cadillac vehicles, providing the capability for vehicle-to-call center emergency assistance calls.

With the success of OnStar, other automakers followed with similar safety features connecting the car to emergency responders. Since then, advances in technology and changes in customer expectations have enabled new products and services that are revolutionizing vehicle ownership.

Connected car services have evolved to include a growing array of safety and convenience features, including breakdown response, vehicle diagnostics and predictive assistance features, navigation, Internet connectivity, infotainment, payments and more.



5G Fuels the Next Chapter

Just as connectivity is essential to future mobility, fifth-generation wireless technology, (5G) is a key enabling technology for more reliable vehicle connectivity.

Gartner forecasts the share of 5G-connected cars actively connected to a 5G service will grow from 15 percent in 2020 to 74 percent in 2023. According to the firm, this figure will reach 94 percent in 2028, when 5G technology will be used for cellular vehicle-to-everything (V2X) communications that enable messages to be sent and received within vehicles and between vehicles, infrastructure, pedestrian cyclists and more. The firm says that, “*Ultimately, connected cars actively connected to a 5G service will help keep traffic moving and improve road safety.*”^{iv}



The arrival of 5G is the latest step in the evolution of the connected car, which is poised to fulfill its promise of delivering smarter, safer and better driving experiences within this decade.

Enabling Smart Mobility Assistance

Vehicle connectivity is making it possible to move beyond reactive roadside response, to power diagnostics and the ability to proactively deliver remote services to motorists before problems occur, avoiding the inconvenience of a breakdown. These solutions include:

- **Preventive Maintenance:** Early repair detection; Likely dead battery detection; Mobile mechanic for battery check-up and maintenance
- **Problem Detection & Avoidance:** Early collision detection; Vehicle re-routing based on live traffic conditions; Driver fatigue detection and notification
- **Behavioral Insights:** Consumption (fuel/charge) based on driving behavior; Access to insurance policy discounts based on safe driving
- **Communications:** Contact authorities and emergency services upon a vehicle collision; Contact family or friends upon an incident with your location data; Contact your insurance company in the event of an accident
- **Information:** Ability to connect to your phone apps

With advances in connectivity, smart mobility assistance is within reach, positioned to deliver personalized services that truly enhance the ownership experience.

MARKET OPPORTUNITY

The connected car ecosystem encompasses and demands a variety of participants working in a highly interconnected way to deliver the promised customer experience. Key players include a variety of mobility companies, such as automotive OEMs, suppliers, dealers, insurers, fleets, technology companies and others.

As the number of connected vehicles multiplies globally, McKinsey predicts value creation through connected car data will likewise grow, representing a \$250 billion to \$400 billion market opportunity by 2030.^v The firm suggests the **value proposition of connected services is often created only by combining data assets and capabilities from various partners.**^{vi}



\$250B-\$400B Global Market Opportunity by 2030

This is certainly true for delivering smart mobility assistance, which requires interconnected partnerships between platform providers, infrastructure, and a range of OEM, insurance and technology partners.

Car Ownership and Driving Trends

Of course, the market opportunity for connected cars and related services cannot be realized without consumer adoption. Solutions need to drive or align with consumer needs and behaviors. For this reason, it's important to look at the factors that influence car ownership and driving trends. Economics, convenience and efficiencies enabled by technology, along with environmental considerations are all playing a part in today's consumer decisions about car ownership and driving.

Electrification

The auto industry is leaning in to its electrified future, bringing an increasing number of electrified vehicle (EV) models to market in 2021. According to Edmunds, we can expect to see 30 EVs from 21 brands, up from 17 models in 2020.^{vii}

This upward trend is driven in part by governments' adopting plans and incentives for phasing out gasoline-powered vehicles. Increasing consumer demand for EVs is also moving the needle. According to Deloitte, 41 percent of consumers in 2020 anticipated their next vehicle purchase would have "alternative powertrains," up from 29 percent in 2019.^{viii} These EVs will be equipped with new connected services intended to entice even more consumers to choose electrification.

Changing Generational Priorities

Young people in general have not been driving as much as prior generations at the same age. In 2018, about one-quarter of 16-year-olds were licensed to drive, down from more than 42 percent in 1983.^{ix} A variety of factors and sensibilities has given rise to car ownership alternatives, including ride-sharing and micromobility services.

However, research suggests Millennials (born between 1981 and 1996), who, until now, have tended to share cars rather than own vehicles, may see an increase in personal car purchases as they start families and move to communities with fewer public and alternative transit options. This trend very likely has accelerated as Millennials and Gen Z have fled cities and moved to the suburbs during the pandemic.^{xi}

In the next section, we'll examine how generational trends also come into play when examining consumer preferences related to specific connected car services.

Consumer Comprehension and Preferences

In our new **Urgently Connectivity & Mobility Assistance Consumer Survey 2021**, we found just over half (51%) of U.S. consumers looking to purchase a car within the next 12 months are **unaware that new vehicles have connectivity** functionality.

As the connected car ecosystem accelerates on all fronts, how much do consumers actually understand about *what a connected car is* and *what it means for them*? And what must service providers do to create value, awareness, and the demand that will result in a consumer's willingness to pay for connected services?

A good place to start is with current consumer perceptions about connected services. In our survey, we asked consumers about their understanding of seven use case categories of vehicle connectivity:

1. Internet accessibility
2. Roadside assistance
3. Traffic and weather alerts
4. Voice commands (e.g., Siri or Alexa in vehicle)
5. Vehicle control apps (e.g., Apple CarPlay or Android Auto)
6. Proactive assistance
7. Collision detection

The survey revealed that across all generations and genders, *roadside assistance* is the first thing that comes to mind when consumers think about vehicle connectivity. This is likely due in part to the success of early connected services, like OnStar, that focused on emergency roadside response.

Among those surveyed, **66 percent view vehicle connectivity as roadside assistance**. This suggests an advantage for those companies that are building out connected services that expand the concept of roadside assistance.

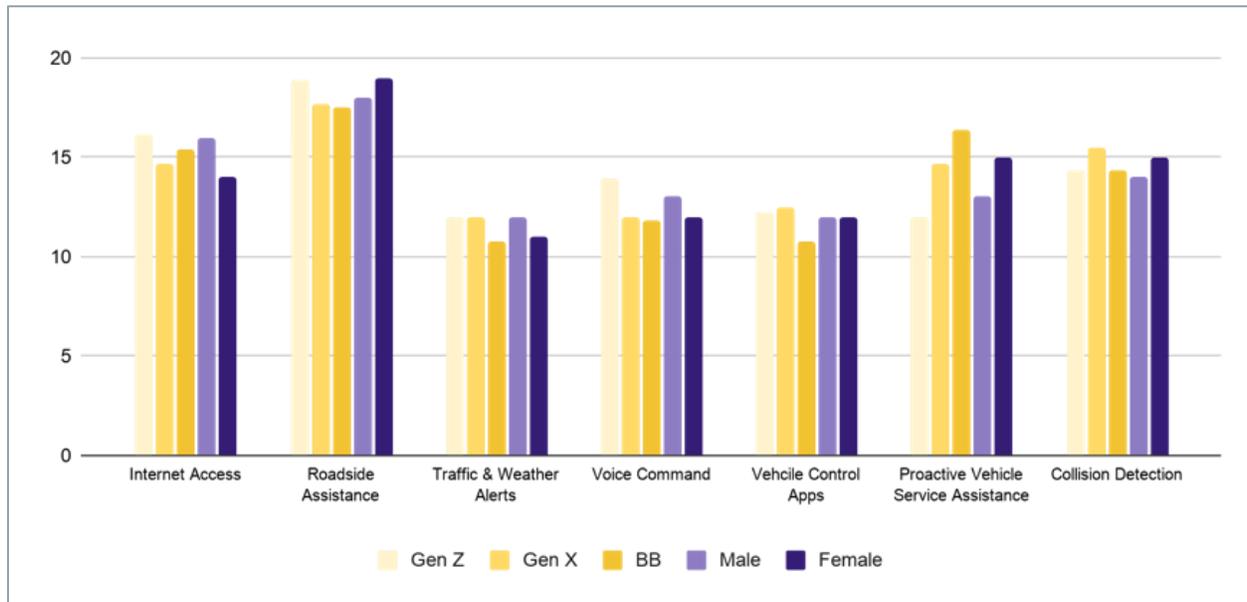
For two-thirds of U.S. consumers...

vehicle connectivity = roadside assistance



In examining generational leanings, Gen Z shows a slightly higher awareness of connected car Internet access and voice commands, compared with other segments. This could suggest that Gen Z is more focused on convenience than Gen X and Baby Boomers, who show greater awareness of proactive assistance and collision detection.

Consumer Perceptions of Vehicle Connectivity



Source: Urgently Connectivity & Mobility Assistance Consumer Survey 2021

Translating awareness into a willingness to pay for new connected features requires a deeper dive into consumer preferences and experiences. Deloitte’s 2021 Global Automotive Consumer Study^{xii} indicates a significant percentage of U.S. consumers are currently unwilling to pay more than around US\$500 for a vehicle with advanced technologies.

| TECHNOLOGY | U.S. CONSUMERS UNWILLING TO PAY |
|------------------------------|---------------------------------|
| Safety | 58% |
| Connectivity | 66% |
| Infotainment | 74% |
| Autonomy | 63% |
| Alternative Engine Solutions | 57% |

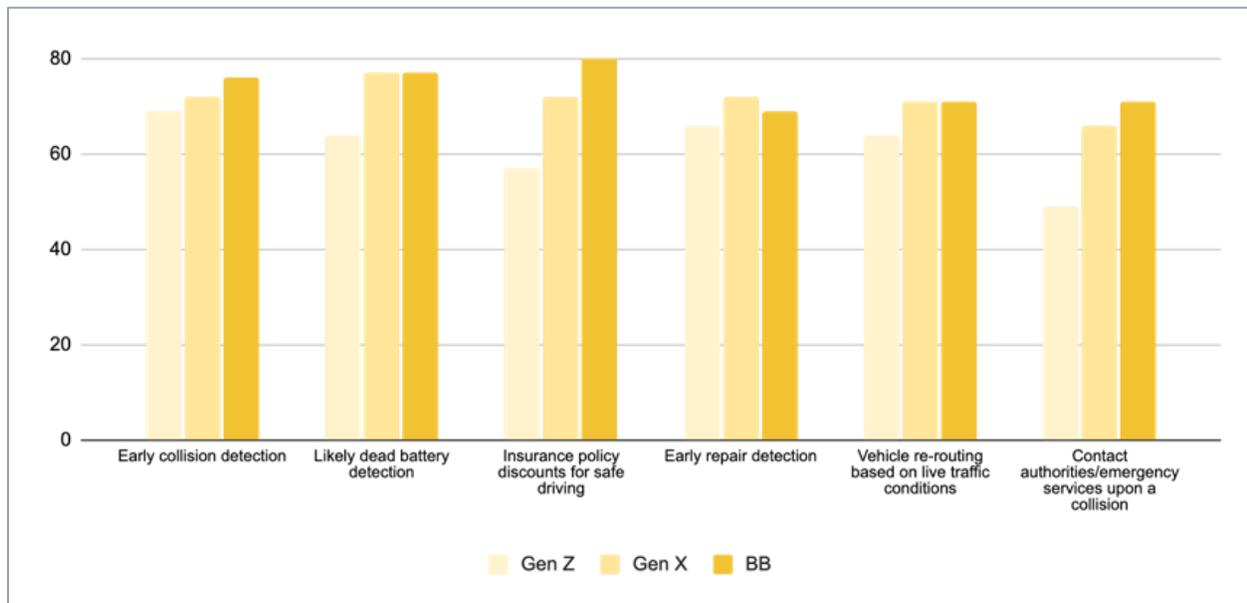
Source: Deloitte’s 2021 Global Automotive Consumer Study

So, what connected features do consumers want most, and which ones might they be willing to pay for? The top six most desirable connected assistance features identified by U.S. consumers in our survey are:

- Early collision detection (72.4%)
- Likely dead battery detection (72.2%)
- Insurance policy discounts for safe driving (69.7%)
- Early repair detection (68.9%)
- Vehicle re-routing based on live traffic conditions (68.4%)
- Contact authorities/emergency services upon collision (61.7%)

Percentages represent consumers who rated each feature “desirable” or “very desirable.”

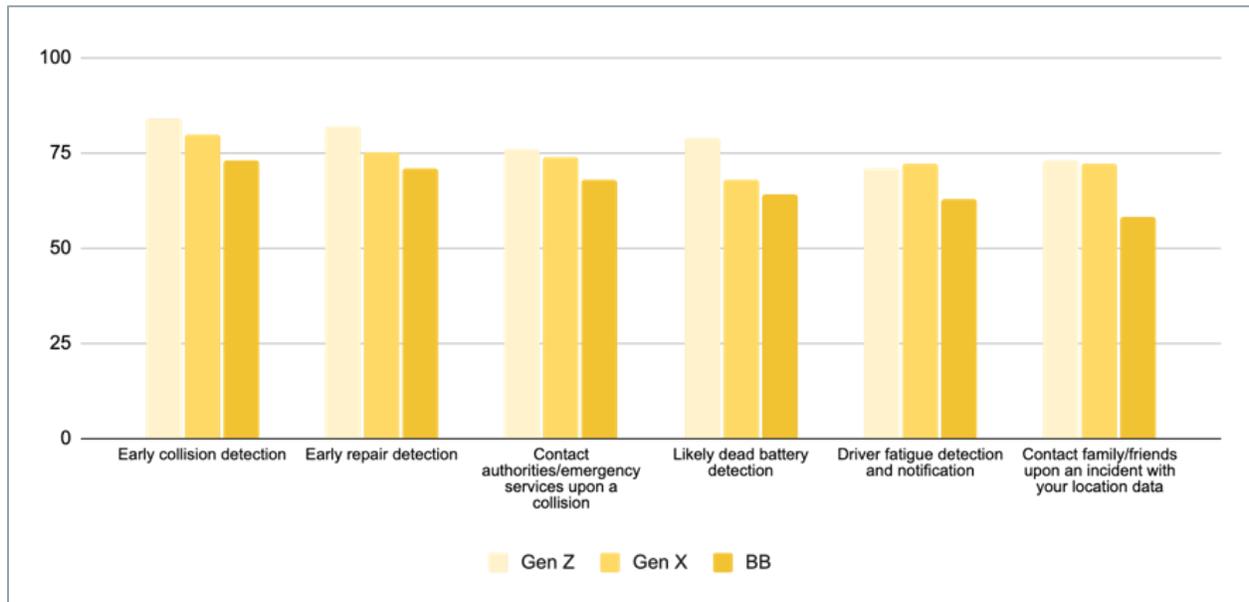
Most Desirable Connected Assistance Features



Source: Urgently Connectivity & Mobility Assistance Consumer Survey 2021

Among the most desirable connected features, **consumers expressed willingness to pay for preemptive/preventive services**, including *early collision detection*, *likely dead battery detection*, and *early repair detection*. They also would be willing to pay for the ability to *contact authorities or emergency services in the event of a collision*.

Connected Assistance Features: Willing to Pay For



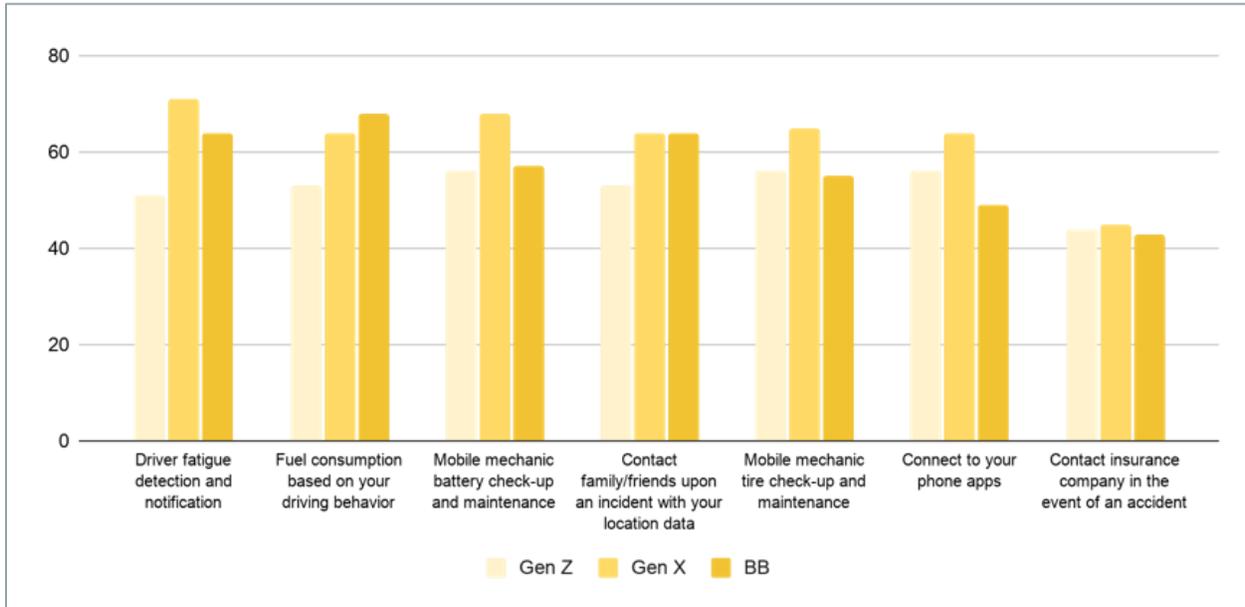
Source: Urgently Connectivity & Mobility Assistance Consumer Survey 2021

Consumers also indicated their readiness for a broader range of connected assistance features, including:

- Fuel consumption based on your driving behavior (61.4%)
- Driver fatigue detection and notification (61.4%)
- Contact family/friends upon an incident with your location data (60.2%)
- Mobile mechanic battery check-up and maintenance (59.9%)
- Mobile mechanic tire check-up and maintenance (57.9%)
- Connect to your phone apps (55.9%)
- Contact insurance company in the event of an accident (43.9%)

Percentages represent consumers who rated each feature “desirable” or “very desirable.”

Connected Assistance Features Primed for Consumer Adoption



Source: Urgently Connectivity & Mobility Assistance Consumer Survey 2021

Early repair detection seems to resonate with those who have never experienced a breakdown. According to our survey, 76 percent of those who have not experienced a breakdown are “somewhat willing” or “willing” to pay for early repair detection. Preemption or prevention is also valued by those who have never experienced an accident, 82 percent of whom are “somewhat willing” or “willing” to pay for early collision detection.

The data suggest consumers are ready to embrace connected features that can diagnose, preempt or prevent accidents, breakdowns and other roadside inconveniences. What’s more, this consumer validation of smart mobility assistance has the potential to inspire greater trust overall in vehicle connectivity.

DATA PRIVACY & SECURITY

Following the unfortunate auto accident of legendary golfer Tiger Woods in February 2021, authorities determined the cause of the crash using data from the vehicle's black-box recorder. Initially, the Sheriff's department said it could not share the cause with the public, citing California privacy laws that require the driver's consent for release. Woods eventually waived his right to privacy and authorized the release of the report.^{xiii}

This circumstance highlights both the value and the potential vulnerability inherent in automobile data. Data is the lifeblood of connected vehicle services. This means ensuring data privacy and security of connected vehicle data is essential. According to Deloitte's 2021 Global Automotive Consumer Study, 64 percent of U.S. consumers fear someone hacking into their connected car and risking their personal safety.^{xiv}

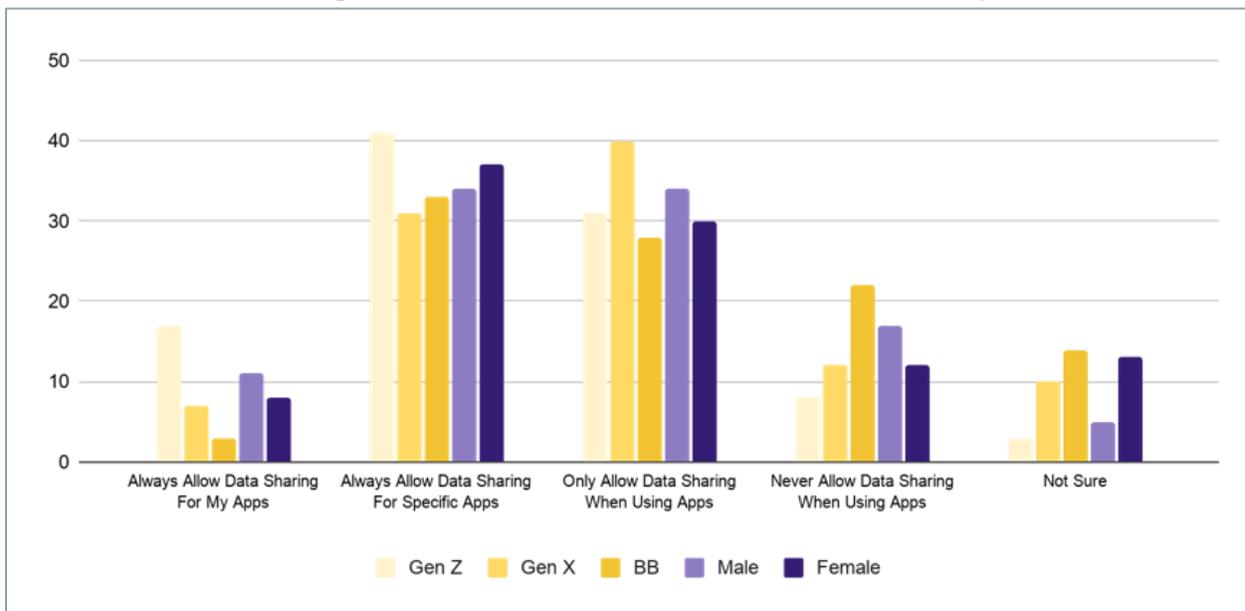
Assuring consumers that their data will be protected is critical for adoption of connected services. To gauge sentiment on sharing personal data, Urgently asked consumers to consider several use cases for providing consent. Their responses covered a range of tolerance levels related to sharing their personal data in exchange for app functionality.

| DATA SHARING CONSENT USE CASES | U.S. CONSUMERS |
|---|----------------|
| Only allow data sharing for specific apps | 35.1% |
| Only allow data sharing while using apps | 32.4% |
| Never allow data sharing for their apps | 14.4% |
| Always allow data sharing for their apps | 9.2% |
| Unsure | 8.9% |

Source: Urgently Connectivity & Mobility Assistance Consumer Survey 2021

A generational breakout of this data offers some important findings for connected services providers. There’s a noteworthy difference between Gen Z and Gen X regarding data sharing. The data suggest that for more than half of tech native Gen Zs, data sharing is embedded in their everyday use of apps. This is evidenced in the fact that *41 percent say they always allow data sharing for specific apps*, and another *17 percent always allow data sharing for their apps*. Gen X, on the other hand, is a bit more cautious about data sharing, as 40 percent say they *only allow data sharing while the app is being used*.

Data Sharing Sentiments: Gender & Generational Comparison



Source: Urgently Connectivity & Mobility Assistance Consumer Survey 2021

Our Urgently survey also found 14.7 percent of U.S. consumers were *willing to exchange their data for free services* and another 51.5 percent were *somewhat willing to share their data for conveniences*. Nearly one-quarter (24%) said they were *not willing to share their data*, and another 10.2 percent were unsure.

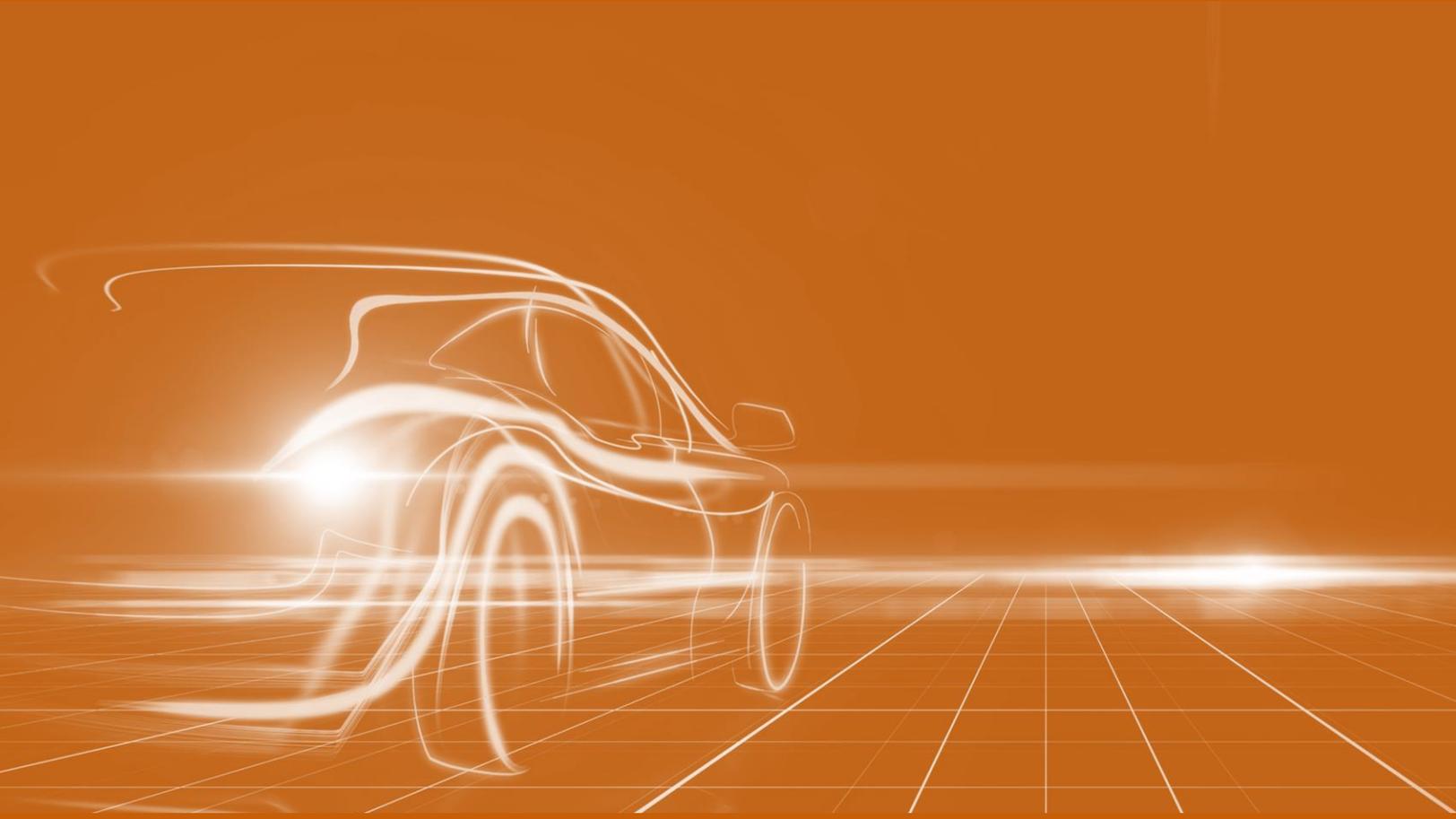
These findings suggest that for those companies involved in creating connected car experiences, the way in which data consent is proposed will be consequential.

CONCLUSION

Mobility is being revolutionized, and with it, the very concept of roadside assistance is being redefined. Connected vehicles are enabling an entirely new set of advanced innovative services that will enhance the ownership experience and offer OEMs, insurance companies and other mobility companies new growth opportunities and customer connection points at key moments of need.

The value proposition of connected services requires interconnected partnerships, an understanding of changing car ownership trends, consumer preferences for specific connected services, and an intense focus on data privacy and security.

Companies like Urgently are at the forefront of defining and developing this new connected ecosystem, intent on fulfilling the potential for connected services to deliver safe, transparent and exceptional mobility assistance experiences.



SURVEY METHODOLOGY

The Urgently Connectivity & Mobility Assistance Consumer Survey of an independent panel of 431 U.S. adults was conducted online, in March 2021. It was commissioned to provide directional insights on consumer understanding and preferences related to vehicle connectivity and how it can provide safe, transparent and exceptional mobility assistance. Generational analysis of responses identified trends for Gen Z: ages 18-34, Gen X: ages 35-54, and Baby Boomers: ages 55+.

ABOUT URGENTLY

Urgently is the leading Smart Mobility Assistance™ Platform at the center of expanding mobility and emerging connected assistance ecosystem for consumers, automotive, logistics and technology companies. Urgently delivers help through a seamless, end-to-end digital platform, viewable by every stakeholder in real time. Its innovation and growth have placed Urgently at the forefront of the rapidly emerging connected assistance ecosystem and atop the lists of the world's most trusted business ranking organizations, including the Deloitte Technology Fast 500 (2020, 2019), Financial Times' The Americas' Fastest-Growing Companies (2021, 2020), the Inc. 5000 (2020, 2019), and Forbes' List of America's Best Startup Employers. Urgently is the choice of leading global brands trusted by millions of consumers across automotive, insurance, telematics and new technology transportation companies in North America, Europe, Asia and Australia.

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