

S21 Interviews: Insights

A dark blue diagonal gradient bar that starts from the bottom left corner and extends towards the top right corner, covering the lower half of the slide.

Before the ride

It is important for users with spinal cord or back injuries to have an understanding of the vehicle height.

“Something that sits low to the ground becomes a little more challenging for me to get in and out of just because of having weak back muscles...If they're not riding in the chair, a lot of people have the same issue that I was describing with very low vehicles.” -IDC004

Many of our interviewees are accustomed to using phone calls to book rides, as this is how the access system is designed.

“Right now, you telephone in and talk to a an individual, you may be on hold for a while with them.” -IDC001

“if I knew that there was an accessible vehicle in general yeah it was easier to do is a phone call. And all this technology is great, but it can be confusing.”

-IDC005

Users take advantage
of the access system's
“standing order”
feature to make
consistent trips

“I historically did use a ‘standing order’. Which meant that every morning at the same time, I was picked up to go to work. And every afternoon at the same time was picked up to go home...I don't have to call in the day before every day each time because it's a scheduled series of rides. So once it's set up, the only time I ever would interact with anybody was if I want to cancel, right?” - IDC001

Many of our interviewees are apprehensive about getting into the correct vehicle

“And this goes for city buses and for access vehicles. I always like to know, what what is the access vehicle, what number of vehicle it is, it's my way of double checking.” - IDC001

“It's a funny story I was at the airport my, my mom was coming to pick me up at the airport and she drove a red car. So I came out with my luggage I put my luggage in the backseat of the first red car I saw got in the passenger side and looked over to my left, and said, ‘You're not my mother ’, and the guy said ‘No I'm not.’ So I have gotten in the wrong car before...And I wouldn't want to disclose because my vision is such that if you didn't know I had a vision problem. You wouldn't know I had a vision problem. I fake it really well.” -IDC006

During the ride

The two main forms of wheelchair securement are straps and locks. Users may have a preference for one or the other.

"I don't like being strapped into vehicles. It's more of a safety thing for me because if I ever needed to get out I want to be able to get out...I don't want to be wrapped up in anything and I don't see the purpose of it as long as I can secure myself...That's why I like subway. You're on your own you just go in there you position yourself" -IDC003

It is important for wheelchair users to be able to check at any point that their chair is secured.

“Safety's always the biggest. And if you're dealing with somebody who's in a wheelchair, and if they're staying in the wheelchair, one of the issues is that the chair is secure. So they have tie down systems or locking mechanisms that will lock the chair in place.” -IDC004

Users will want to be informed if the route is diverting or if the car is at a standstill for an extended period of time

"I have the luxury of I can ask a driver at this point. But if I was riding independently in a autonomous vehicle, yeah, I'd like to know why is it stopped and not moving? Or, you know, why is it seem like we're going slower? Or maybe, for example, I've been someplace a number of times, and I think I know the route. But today they seem taking a different route. I would like to know, or at least inquire, gee, I usually go straight down Liberty Avenue in the Western Avenue and go through the tunnel. Why have we turned left and not climbing a hill?" - IDC001

Users with guide dogs
need to be able to
easily move their
seats to accommodate
for the extra space.

“The only place [seat position] might be involved with would be in a car, and the sliding of the seat to make sure my dog has enough room.” -IDC001

Interviewees generally do not like the idea of giving an emergency contact control over their ride, but they may be more receptive to them giving suggestions.

"I would like the idea of suggestion [but] I don't necessarily like the idea of actual control. So maybe they could be involved in the process, but [with] control I [am a] little concerned with that, in my mind, any way that might open up more problems than are necessary." -IDC007

After the ride

A major concern for manual wheelchair users who drive is where to park in a place that is accessible

“What I usually do is I do a Google search first and take that in, especially if I don't know where I'm going. Just to have an idea of what the terrain looks like, if it does look hilly or doesn't look, their sidewalks so that curb cuts. And what are the chances of me getting a good parking spot. Or am I going to end up in a garage and if I end up in a garage how accessible is that garage to where I want to go and how helpful is it going to be, because there's been times where I parked in different places. And like garages are especially at tough because sometimes they don't have, you know, everyone takes up the HP spots...and I may be stuck to park in a regular spot. And the problem there is cars park so close. If I can't fully open my door, I can't get into my car. So a number of times I've had to ask other people to to go in and pull my car out so I could get in. Because somebody parked too close to me, so a lot of times, just the width of the regular spaces is not enough.” -IDC003

Weather is an important consideration for wheelchair users when exiting the vehicle.

“When I'm doing a transfer with my transfer board and I'm on ice, my wheelchair will move, whether I have my brakes on or not so am I going to be sliding as I'm transferring. I worry about if it's wet. I've got to just keep in mind that there may be less friction, and my wheelchair may slide more because of just the water.”
-IDC003

The terrain of the drop-off point is an important consideration for manual wheelchair users.

"I don't mind pushing on a flat surface. But if I'm dropped off with a fixed route bus at the bottom of the hill, that's a problem, even if it's only like a quarter mile from where I want to go up the hill, that's a huge barrier for me." -IDC003

The wheelchair ramp should act as a bridge from the car to the curb, or should deploy where there is a curb cut.

“So if you're talking about an automated vehicle, that's going to be able to know that there's clear space for the ramp, and that somebody in a wheelchair not only can get out of the vehicle safely, but then can get onto the sidewalk. So they've either got to be able to park close enough to where the ramp acts like a bridge, or they've got to be able to be somewhere where there's an actual curb cut. So if it's an automated vehicle, it has to be able to sense that type of stuff.” -IDC004

Curb cuts are easier for users than deployment on a sidewalk

“Curb cuts are a lot easier than trying to find a good spot on a sidewalk. As you can deploy the ramp right at the bottom of the curb cut and then just roll right up.” -IDC004

“But one of the issues with that is getting off the bus...If a ramp doesn't deploy on a curb, that pitch, even though they lower the bus, is pretty steep and when you look down it in a wheelchair, it's a little bit different than what the pitch actually is. It's a little unnerving...I look for places where I can get off or they can pull to the curb, because it cuts down on that pitch.” -IDC005

If the wheelchair ramp does not act as a bridge to the curb, the user should be able to communicate this to the app to initiate a redeployment.

"It deployed, but it's not close enough to the curb for the ramp act like a bridge. So the ramp is actually deployed into the street, four inches below the curb, and the person is up on the curb, so the vehicle would actually have to get closer to the curb. " -IDC004

Blind users may benefit from having a fixed distance from the curb each time they are dropped off, or some other indication of how far the curb is from the car.

"I think the only negative I can think of sometimes the car would be closer to a curb than I realized .So I sort of stumbled but I mean that's just part of the program I haven't I wouldn't even really call that negative but you might." -IDC007

During drop-off,
users of the access
system appreciate
having an escort to
walk them from the
vehicle to the
destination

"It is a bit of a nice comfort to know in a strange area...So yes, having the the driver assist me to locating the entrance of an unfamiliar place is very much appreciated. And familiar territories or familiar places, I'm willing to be very independent and work my dog and go to my destination on my own." -IDC001

"Even in Allegheny County we have what's called a hand to hand, where the driver actually hands the person off to someone else. And that's what I've done a lot of places in the country" -IDC005

Wheelchair users should be able to redeploy the ramp if necessary.

“As the technology sits today, ramps tend to be a little bit finicky. So sometimes they may go to deploy and not fully come out or get caught out a little tiny pebble or something where they're still on a folded angle. And that's where a redeploy situation without moving anything is very common. you close it back up and you bring it back out again.” -IDC004

After leaving the vehicle, visually impaired users will need a descriptor of where to go to get to the destination itself.

“If the vehicle is not right in front of the door of where they're headed, they need to have some kind of descriptor of where they need to go. So they're getting out of the vehicle and the front door is to the right. or to the left and by 50 feet 100 feet.” -IDC004

When not using the access system, users research the destination ahead of time to find the most appropriate drop-off point

“Depending on the distance, I might also implement using a cell phone based GPS system...when I use the public buses to know something about where I'm going before I go. Which might involve asking questions of someone, the human being at the final destination, or maybe talking to a colleague or friend that maybe the sighted friend might look up on Google to see whether, hey, is your traffic light there? Or is it a four way intersection? Or I might maybe contact another blind friend that knows a good traveler and say, hey, what can you tell me about the intersection of you know, G and I streets? You know, what to expect?”
- IDC001

Other Insights

Our interviewees value independence

"It can be challenging, but that's where having I feel independent travel skills [can be important]. And if you are fortunate enough to have an accessible GPS, it helps keep you independent." - IDC001

"The less I have to depend on anybody else is the way I like to utilize my transportation options. I want to be the one in the control. It makes me feel more comfortable and more secure." -IDC003

"And I think because I was so used to being independent and going when I wanted to go where I wanted to go. I loved to drive loved it anytime anyplace anywhere... It was cathartic for me to drive." -IDC006

Many disabled individuals have to endure extremely inconvenient situations in order to acquire transportation.

“There is a share ride program here in Indiana County. But I have found it to be lacking.. And in fact I have tried to use it. More recently, because I was desperate for a haircut.. Then, I call it a few times to set up an appointment. I was told, ‘We can't do that at that time’...Even though it was two weeks in advance...I think my play might have been at two o'clock. They weren't able to accommodate that. And so I had to call and cancel my appointment. Last week, I took a day off work, and I used the share ride...it was an hour and 15 minutes late picking me up from my scheduled time, which made me a half an hour late to my appointment. And I only I knew to only use it for a one way trip because my appointment was at 11 o'clock. But I knew that I plan to be at the salon all day. And I was able to get a haircut and do the things they needed to do and my son just came and picked me up at the end of the day...because I knew better than to try to rely on the service to come home...either I would be sitting at the salon waiting, or I would be riding in the van for an hour and a half to get home...” -IDC006

Disabled users may
have reservations
for using
non-automated
rideshare services.

"I feel like sometimes I'm hesitant to disclose that I have the vision problem because I don't want to be taken advantage of. So if I'm telling a Lyft driver...that I have a vision problem I feel like that puts a red flag, or a flashing light above me: 'Take advantage of me.'"

-IDC006

Users with spinal cord injuries are more sensitive to cold temperatures.

“Quite often, especially with spinal cord injuries, temperature is a huge issue. Because spinal cord injuries usually can't regulate their body temperature, and are usually very cold. So it's very common for them to need a higher temperature in the vehicle than most people are comfortable with.” -IDC004

“It's a mixed bag. It depends on the weather. The older I've gotten the more weather affects me. Not that I'm not dressed to be outside, but it basically what happens if I'm out because of my muscle loss, the cold weather just affects your muscles. I don't have a lot of muscle mass to begin with. So I have to make a judgment about how I go” -IDC005

Interviewees prefer alternative methods of transportation to public transportation

“With a public bus there's no one that restricts anybody from getting on it. It's a public bus. So yeah, the access is a bit safer because you're either by yourself with a driver or in a vehicle with a few other people that are documented or scheduled to be there. To share that, you know, the level of the sense of comfort or security, I think is higher with riding and access.” -IDC001

“Public transportation doesn't take me where I really want to go” -IDC003

A working interviewee felt that a shared ride service should give priority to working individuals.

"Flexibility, I think is definitely something that needs to be improved especially for people who are working. And maybe this is just selfish on my part but I feel like people who are working, and dependent upon shared ride to get to and from work should take priority. I think that they should have greater flexibility. When life happens. You know, if I have to get to work because people are depending on me to be at work. Nobody would be depending on me to get my hair done if I was going to the hairdresser. So I think there has to be some flexibility and some prioritization, as to what the trip is for." -IDC006

Interviewees felt there needed to be more emphasis on disabilities other than low-vision, low-hearing, and mobility.

“If we create fully accessible vehicles... it doesn't mean that, you know, every single person with a very serious disability is going to be able to travel alone and every time. But I mean really vastly improving what we have now and paying attention to cognitive disabilities, sensory disabilities, as well as physical.”
-IDC002

“Some people in wheelchairs can speak without any problem. Some of them have issues that make their speech very difficult. A good example is cerebral palsy. And under those cases, a lot of times they can use their hands or have some kind of other interface that they deal with on a regular basis. Whether it's eye-controlled or a touchpad or something.” -IDC004

It is good practice
to keep buttons
spaced apart for
individuals without
fine motor control.

“Because [for] somebody with a disability, sometimes they're using something in their hand, or sometimes they don't have real fine motor control, so the buttons are a little further apart, it's easier for them to use them.” -IDC004