

Building Communities That Work For Everyone



VITAL CONNECTIONS

**Civil Rights and Public Policy Issues
Affecting People with Disabilities
in Pursuing Inclusive, Accessible Transportation**

The Ability Center of Greater Toledo

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The Ability Center of Greater Toledo has always been a non-profit agency serving people with disabilities in northwest Ohio, but we have evolved alongside shifting disability policy in the United States. Since our founding, U.S. policy has shifted, mostly at the urging of people with disabilities, from a policy of segregation and seclusion to one prioritizing community inclusion and self-determination.

The Ability Center shifted its focus from a hospital for children with disabilities in 1920, to a school for children with disabilities in the 1960s, and finally, to a Center for Independent Living in 1990, an organization led and directed by people with disabilities. The passage of federal laws protecting people with disabilities from discrimination shifted our goals from seeking to establish policies of support and community inclusion to seeking to enforce those policies.

While comprehensive, widespread, and accessible public transit networks are vital to achieving full participation and community integration for people with disabilities, state and local policies regarding public transit are significantly lacking. The Americans with Disabilities Act required existing train and bus-based public transit networks to be accessible to people with disabilities. However, the reality is that many people with disabilities live in areas where public transit is too expensive to access or is non-existent. The laws that apply, the ADA and Section 504 of the Rehabilitation Act, are helpful to ensuring that existing transit networks are integrated, but disability advocates must reach outside of civil rights to ensure that public transit networks are funded and prioritized. We hope that this booklet helps people with disabilities and local governments learn about the rights of people with disabilities in public transit as well as how to expand existing systems to allow for true community integration for people with disabilities.

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Introduction:

Inclusive Public Transit: The Promise of the Americans with Disabilities Act

In 1984, the National Council on Disability recommended that the United States adopt a comprehensive national act on disability.¹ In its report, the NDC noted that over 35 million people with disabilities lived in the United States and called for, "government, private sector organizations, and all individuals," to act to keep the promises, "inherent in American democracy – to ensure lives of independence, productivity, and equitable mainstream social participation for all persons with disabilities."²

Because many people with disabilities cannot drive, access to public transportation was one pillar of this national policy. In a 1986 Progress Report, the National Council on Disability recommends, "amendments to Federal transportation legislation to achieve the Nation's established policy that 'disabled people have the same rights to use public transportation as non-disabled persons.'"³ At the time, most bus, rail, and air transit was inaccessible, which meant that many people with disabilities could not use them. Throughout 1986 report, removing barriers to people with disabilities' access to public transit was a re-occurring theme in the call for equal access and economic independence.⁴

That call was answered through the Americans with Disabilities Act of 1990 (ADA).⁵ The ADA made discrimination on the basis of disability in transportation unlawful and gave authority to the Department of Transportation to create regulations that would require transportation providers to meet non-discrimination standards.⁶ Public transit is arguably the most regulated system under the ADA with twenty-two subparts of our Code of Federal Regulations and a Department of Transportation Design Manual detailing the rights of people with disabilities in transportation.⁷

On paper, this has changed the face of public transit to make it more inclusive for people with disabilities, but in practice, a lack of accessible public transit remains one of the preeminent barriers to independent living for people with disabilities. Prior

to the ADA, 40% of buses were physically accessible to people with disabilities.⁸ That figure doubled to 81% in 2000 and 99.8% in 2010.⁹ The ADA also required all fixed line public transit systems to have a comparable paratransit service.

However, physically accessible buses is not enough. In practice, accessibility depends heavily on the maintenance of equipment and training of personnel, which varies widely among transit authorities.¹⁰ Accessibility also depends on the provision of reasonable modifications, curbside accessibility, and effective

Prior to the ADA, 40% of buses were physically accessible to people with disabilities.⁸ That figure doubled to 81% in 2000 and 99.8% in 2010.⁹

communication with passengers with visual, hearing, and intellectual impairments.¹¹ Public transit systems are often struggling, or not comprehensive enough, due to a lack of funding. Finally, technological innovations are changing the face of public transit – often in ways not anticipated by the ADA.

A study funded by the Ohio Developmental Disabilities Council in July 2017, found that while only 16% of respondents owned a car, 70% stated that they usually get their own transit or get a ride from family and friends rather than use public transit.¹² Open ended responses indicated that, if they used public transit, they were not picked up and dropped off on time; had overly-long rides; or did not have public transit in their area.¹³ Reliance on family and friends for transportation severely limits opportunities for employment, community participation, shopping, and independence.

This booklet seeks to be a tool for policy makers and advocates on strategies for making public transit systems more comprehensive and accessible. To truly meet the promise of the ADA, we must do better to make inclusive, accessible, and comprehensive transit systems available to people with disabilities.

Part One of this booklet lays out a summary of the rights of people with disabilities under Section 504 of the Rehabilitation Act and the Americans with Disabilities Act. Part Two addresses ways to advocate for increased transportation services. Part Three gives advocates and policymakers an overview of disability concerns in technology and the future of public transit.

Laws and Agencies Used in this Booklet:

This booklet uses the following laws in discussions of the accessibility and availability of public transit:

- **Titles II and III of the Americans with Disabilities Act;**
- **Section 504 of the Rehabilitation Act;**
- **FAST Act;**
- **Social Security Act;**
- **State and Local Accessible Taxi laws.**

It talks about or refers to the following federal agencies:

- **U.S. Department of Transportation;**
- **Federal Transit Administration, a division of the Department of Transportation;**
- **U.S. Department of Justice;**
- **Center for Medicaid and Medicare Services (CMS).**

Is public transportation a civil right?

One common cry among transit advocates is, "Public transit is a civil right!" Often, when stating this, advocates mean that state and local governments *must* fund public transit or allow it to exist in certain areas. Public transit is so fundamental to the self-sufficiency of people who cannot drive that many people think that our laws *must* protect them where it does not exist. Education, employment, medical care, shopping, and socialization are all difficult or impossible for those who have no reliable way to travel.

Is public transit a civil right? Most people who say that public transit *is* a civil right mean that it is so important that it *should* be a civil right. Civil rights are personal liberties guaranteed to U.S. citizens through our Constitution and by Acts of Congress.¹⁴ For adults with disabilities, most civil rights are established by Section 504 of the Rehabilitation Act and the Americans with Disabilities Act. The Americans with Disabilities Act does require existing public transit to be accessible.

However, no law requires state and local governments to ensure that public transit exists. So, yes, access to existing public transit is a civil right, but the existence of public transit is not. To make it so, advocates must get Congress to pass a law guaranteeing, or providing funding for, public transit systems across the country. Given the ties between public transit and economic self-sufficiency, it may be a worthy goal.

Part 1:

The Rights of People with Disabilities under the Americans with Disabilities Act

The Americans with Disabilities Act (ADA) establishes the right for people with disabilities to access public transit, and the Federal Transit Administration (FTA), a division of the U.S. Department of Transportation, issues regulations and enforces them based on the ADA requirements. This booklet seeks to summarize those rights as they apply to fixed-line buses and paratransit.¹⁵

The Right to be Free From Discrimination:

A transportation provider cannot deny a ride to a person with a disability or treat them differently based on their disability.

The Americans with Disabilities Act, in general, makes it unlawful to discriminate against people with disabilities. That general prohibition is applied to both private and public transportation providers under Titles II and III of the ADA and the regulations created by the U.S. Department of Transportation. In short, under the ADA, it is unlawful for any provider of transportation, public or private, to deny a ride or discriminate against a rider on the basis of their disability.¹⁶

What is discrimination on the basis of disability? Generally, discrimination occurs when transit providers, public or private, deny a ride to a person with a disability on the basis of his or her disability. The ADA lays out a long list of specific and general situations where this may happen.

In general: People with disabilities have the right to be treated equally by transit providers and benefit from transit.¹⁷

Transit providers cannot refuse to offer transportation to someone because of their disability. It also means that a transit provider cannot require something of a person with a disability that they do not require of other riders: seat belts or shoulder

harnesses; special body belts; disclosure of their disability; or that the person be accompanied by an adult or aid.¹⁸

A transit agency cannot deny rides to people with disabilities based on stereotypes or unfounded fears. A person with a disability cannot be excluded from a general service because there is a service available that is specific to disability or because a provider thinks a person is incapable of using a particular service; it thinks the service would be unsafe for that person; or the provider believes that it would be too burdensome to take a particular person.¹⁹

The ADA's prohibition on general discrimination includes a list of specific prohibitions. A transit agency:

- cannot require a person with a disability to use priority seating²⁰;
- cannot impose special charges on a person with a disability²¹;
- cannot require that a person with a disability be accompanied by an attendant²²;
- cannot discriminate against a person with a disability because their insurance company raises the rates or refuses to ensure them if they transport people with disabilities²³;
- must allow service animals to accompany individuals with disabilities in vehicles and facilities²⁴;
- must allow individuals to travel with a respirator or portable oxygen supply consistent with the DOT rules on the transportation of hazardous materials.²⁵

Transportation agencies, public and private, must allow people with disabilities to ride just like everyone else, without requiring extra or special steps because of their disability. They cannot turn a person with a disability away because of unfounded fears about safety or the burden of transporting a person with a disability.

Rider Conduct:

Can a transit agency deny a ride to a person with a disability based on their behavior?

ADA regulations specifically address how transportation providers must respond to the conduct, or behavior, of riders with disabilities. The regulations make a careful distinction between behavior that results from a person's disability that may annoy, offend, or inconvenience employees and behavior that is violent, seriously disruptive, illegal, or represents a direct threat to the health or safety of others.²⁶ Behaviors that are the result of a disability that may simply cause annoyance, offense, or inconvenience are not a lawful reason to refuse to allow a person to ride a service.²⁷ For example, involuntary noises or profanities that could be the symptom of Tourette's syndrome, or hygiene issues that may be the result of an intellectual disability are not reasons to deny a person with a disability a ride.²⁸

When can a transportation provider deny a ride based on behavior?

Transportation providers cannot turn someone away based on harmless behavior that is the result of a disability. But, there is an exception when it is *objectively clear* that a person poses a direct threat to other riders.

Under the ADA, transportation providers are able to prevent a person from riding if their behavior is violent, seriously disruptive, illegal, or represents a direct threat to the health or safety of others.²⁹ Because a refusal to transport someone based on a disability is a denial of a civil right, the threshold for seriously disruptive conduct is intentionally high.³⁰ Under the law, if a transit provider finds that someone is a "direct threat," they must have made an, "individualized assessment based on a reasonable judgment that relies on current medical knowledge or on the best objective evidence."³¹

They must look to determine:

- the nature, duration, and severity of the risk;
- the probability that potential injury will actually occur; and
- whether reasonable modifications of policies, practices, or procedures; or
- provision of auxiliary aids or services will mitigate the risk.³²

What does this mean? A transportation provider cannot assume that all people with a certain type of disability pose a direct threat – it must make a decision based on the history and behavior of the person in question.³³ The determination of “direct threat” must be based on objective evidence, not speculation or intuition. Also, the provider must try to work with someone before denying them service. In its guidance, the FTA recommends that a transportation provider attempt to resolve any issues and give written warning before telling someone that they cannot ride because they are a direct threat.³⁴

The Right to Challenge Service Denials

Finally, under ADA regulations, if a transit provider refuses to allow a person with a disability to ride because they constitute a direct threat, the transit provider must have a way for the rider to challenge the service denial.³⁵ The rider must be able to contest that decision, correct the situation, and resume service if they are successful.³⁶ As part of the process, riders must be able to present information to the transit agency demonstrating that issues have been resolved or present ways to mitigate any problems and have service reinstated.³⁷ If a rider determined to be a direct threat is required to ride with an attendant as a mitigating measure, he or she must also have a way to challenge their need for an attendant.³⁸

Other Transit Provider Obligations

Because, historically, transit providers have had a tendency to deny rides to people with disabilities, the FTA purposefully set out a high standard for ride denials based on disability. Also, if a person is denied the ability to ride, the FTA requires that they be able to challenge that decision.

The Right to be able to communicate effectively with transit providers: Accessible Information

One major barrier to riding public transportation can be the inability to understand how the routes work, when to get on and off, or information about what is happening on a bus in real time. FTA regulations require transit providers to make sure everyone who rides the bus is able to understand information given to them. Information must be: 1) adequate, and it must be 2) accessible.³⁹

To be adequate, individuals with disabilities must have access to enough information to understand schedules, routes, fares, service rules, and temporary changes.⁴⁰

To be accessible, information must be provided in accessible formats on request.⁴¹ This means that transit providers must have information available in alternate formats for those with sensory and intellectual disabilities.⁴² Alternate formats include:

- Large print;
- Braille;
- Audiotape; and
- Electronic files.⁴³

Transit providers do not always have to provide information in the format that a rider wants if they already have or can more easily produce an alternative format that the rider uses and can understand. But transit providers must ensure that the format provided is one that allows for effective communication.⁴⁴ FTA regulations for paratransit services also require paratransit materials to be in an accessible format.⁴⁵

Personnel Training:

The right to expect transit employees to know how to operate accessibility equipment, communicate effectively, and treat people with disabilities courteously and with respect.

Additionally, materials on a transit providers' website must always be accessible to screen reading software.⁴⁶ Transit providers must always have an alternative to regular phone service through a relay service or dedicated equipment such as telecommunications devices for the deaf.⁴⁷ And where there is a public address system (PA System) that lets riders know updates about the transit service through audible announcements, the same or similar information should be provided in a visual format, like on a TV or Board.⁴⁸ As part of their obligations under the ADA, transit providers must ensure that people with disabilities are given adequate and accessible information so that a lack of information does not act as a barrier to using the service.

FTA regulations also recognize that if a transit agency's personnel are not trained appropriately, policies related to ADA compliance will not be implemented correctly. Often, discriminatory actions take place on the front lines and in the moment: for example, it is unlawful under the ADA for a driver to refuse to help a person with a disability down the steps of a bus; for a paratransit driver to refuse to wait for a rider's pick-up window if the bus comes an hour early; or for a taxi driver to refuse a service dog. Similarly, employees working a transit station or dispatch must be trained on reasonable modifications and effective communication. A transit agency is responsible for its employees' compliance with ADA standards.

FTA guidance notes that, "a well-trained workforce is essential in ensuring that the accessibility-related equipment and accommodations required by the ADA actually result in the delivery of good transportation service to individuals with disabilities."⁴⁹

Who has to be trained?

Training requirements apply to all employees of any public or private transit agency. This includes transit that is scheduled based on riders' calls like taxi, demand-response, and paratransit transportation; and transit riding along a fixed route, like hotel shuttles, airport shuttles, and fixed line public transit.⁵⁰

What sort of training is required?

The FTA is clear that training must include proficiency in the technical aspects of a job, communication, and how to treat people with disabilities courteously and with respect.⁵¹ FTA regulations require transit agencies to ensure that personnel are, "trained to proficiency."⁵² More specifically, trained to proficiency includes:

- operating "vehicles and equipment safely,"⁵³ and
- properly assisting and treating, "individuals with disabilities who use the service in a respectful and courteous way, with appropriate attention to the differences among individuals with disabilities."⁵⁴

The FTA does not require a specific course or training schedule, but it does require that every employee of a transit provider is trained so that he or she knows what needs to be done to provide the service in the right way.⁵⁵ According to the FTA, "ignorance is no excuse for failure."⁵⁶ If a transit agency violates regulations because their personnel violate regulations, the agency can be held responsible if they did not train their employees properly.

Reasonable Modification of Policy:

The right to have public transit providers modify rules and procedures when it is necessary to accommodate a disability.

Living with a disability can make it impossible to follow transit agency policies, which can result in discipline, denied rides, or an inability to ride a transit agency service. Under the ADA, public entities that provide transit must make, "reasonable modifications in policies, practices, or procedures when modifications are necessary to avoid discrimination on the basis of disability or to provide program accessibility to their services."⁵⁷ Reasonable modification means that the nature of a person's disability cannot keep a public transportation provider from providing full access to the transportation service.⁵⁸

Because this language can be confusing, it is often best to describe reasonable modifications through examples. Some examples specifically given in FTA guidance are:

- **Snow and Ice:** The transit agency must modify a policy that a bus driver will not leave the bus when a person with a disability needs help traveling over snow and ice to get to the bus;⁵⁹
- **Pick Up and Drop Off Locations with Multiple Entrances:** A paratransit rider's request to be picked up at a certain entrance of his or her home should be honored, even if the transit agency has a policy of picking up riders at their front door;⁶⁰
- **Obstruction:** A fixed line rider's request to allow them to board the bus from a non-designated location when they cannot reach a bus stop due to sidewalk construction, ice, or snow should be honored, even if it is the transit agency policy to pick transit riders up at bus stops.⁶¹

The FTA gives twenty-seven specific examples of reasonable modifications including assisting a rider with paying a fare when it is difficult due to a person's disability; allowing a rider to eat and drink during a ride where a person has a condition that requires them to do so; allowing a rider to take medication during a ride; etc.⁶² However, the examples given by the FTA

are not all-inclusive. Transit providers must grant reasonable modifications of rules and policies any time that a person with a disability needs an exception to a rule or policy in order to use the service.

How do I make a reasonable modification request?

The FTA requires a transit provider to create and advertise a process for people with disabilities to make a modification request.⁶³ The public should be able to find the process through whatever means they usually discover information about the transit provider – website, rider handbook, schedules, etc. To make a request, a rider should be able to find the agency-created procedure and follow it.

The FTA recommends that transit agencies also ask about reasonable modifications during eligibility interviews and customer service inquiries to establish modifications in advance of a ride.⁶⁴ Hopefully, reasonable modifications can be recorded in a database that is accessible to all drivers and dispatchers.

While riders have to follow established procedures, the FTA does place some limitations on the request process. Transit agencies' obligations exist outside use of the specific term, "reasonable modification," and a transit agency cannot deny a reasonable modification request because a rider did not use that specific term.⁶⁵ A transit agency also cannot deny a request because it was not made in advance if it was impractical to do so.⁶⁶ For example, if there is snow blocking a bus stop, it would be impractical to make a request in advance to be picked up a different location.

If a modification request has to be decided in the moment, front line staff like drivers and dispatchers are allowed to consult with agency management before granting a modification, but they must have the power to make a decision themselves if they cannot reach someone.⁶⁷ In the example given above, a driver can call agency management to ask whether they are able to modify their pick-up stop because of snow, but if they cannot reach someone, the driver must have the authority to be able

to decide to pick up the rider at a different location than the normal bus stop. Most reasonable modification requests in a transportation context involve these sorts of common-sense assistance to riders with disabilities.

Exceptions to Transit Agency's Requirement to Provide Reasonable Modifications

There are three exceptions that transit agencies can use to deny a reasonable modification request: 1) granting the request is a fundamental alteration to the entity's services, programs, or activities; 2) Granting the request would create a direct threat to the health or safety of others; 3) Without the modification, the person making the request is able to fully use the entity's services, programs, or activities for their intended purpose.⁶⁸

What does this mean? A "fundamental alteration" would require a transit provider to *provide* something completely different than it ordinarily provides. For example, a request for a driver to assist a person who, due to their disability, cannot place a fare in a fare box by his or herself or cannot count out the correct fare due to an intellectual impairment, would be a reasonable modification.⁶⁹ However, a request from a rider to not pay at all would be a "fundamental alteration," because the transit service requires payment to ride.⁷⁰

Similarly, a request to pick up a person who uses a wheelchair at a place on a bus route other than a bus stop when his or her way is blocked due to sidewalk construction would be a reasonable modification.⁷¹ However, a request for a fixed route bus to pick up a person at home when their home is not on the fixed route would be a "fundamental alteration," because the transit service does not provide a bus route that passes by the person's house.⁷² Yet these are exceptions to the rule. Under the ADA, transit providers must grant reasonable modifications of transit policies to riders with disabilities when they need a modification in order to ride.

Accessible Buses, Bus Stops, and Facilities

Under the Americans with Disabilities Act, facilities that are inaccessible to people with disabilities also constitute a form of discrimination.⁷³ Transit providers, in particular, must work towards having accessible buses, bus stops, and transit facilities. While these obligations are spread over time, by the year of this booklet, 2020, thirty years have passed since the ADA was signed, and it is likely that all transit provider buses, bus stops, and transit facilities should have been made accessible. As of 2013, nearly 100 percent of transit buses were reported to be accessible.⁷⁴

This booklet will give an overview of accessibility requirements, but detailed measurements are beyond the scope of what we are going to review here. The Department of Justice and the Department of Transportation have each issued construction guidelines that establish designs that are considered accessible to people with disabilities:⁷⁵

- New⁷⁶ facilities used by state and local governments to provide designated public transportation services, including bus stops, bus stations, and rail stations, must comply with the Department of Transportation's ADA Standards (DOT ADA Standards);⁷⁷
- New⁷⁸ facilities used by private transportation companies that are open to the public must comply with the 2010 ADA Standards for Accessible Design;⁷⁹
- Vans and buses must meet the DOT's ADA Accessibility Specifications for Transportation Vehicles.⁸⁰

Maintaining and Assisting with Accessible Features

Each of these guidelines contains specific measurements and scoping provisions that should be used in all new construction, alterations, and updates of facilities. Instead of the specific construction guidelines, we will give an overview of what is required here. While there are also requirements for rail, we are only addressing buses and vans.

Accessible Buses and Vans

Any public transit agency purchasing a new van or bus after August 25, 1990 for a fixed line service must purchase an accessible bus or van.⁸¹ Accessible means built in accordance with the DOT ADA Accessibility Specifications for Transportation Vehicles.⁸² Used vehicles must be accessible unless the transit agency cannot get an accessible vehicle⁸³ or receives a vehicle through a donation.⁸⁴

In practice, given the amount of time that has passed since new vehicles have been required to be accessible, it is unlikely that a transit authority would not be able to find an accessible used vehicle with a good faith effort, and it is unlikely that they will get a donation of an inaccessible vehicle. Thus, it is a good bet that almost all fixed-line buses and vans must, and are, accessible as of the date of this booklet. This means that they must have a ramp or lift; slip-resistant floors; priority accessible seating; a public address system; stop requests; and other features found in FTA regulations.

Bus Stops

Section 810.2 of the DOT Standards applies to the construction, alteration, or relocation of bus stops.⁸⁵ Section 810.2 covers elements such as surface, dimensions, connections, and slope.⁸⁶ It also requires:

- New, altered, or relocated bus stops must have a firm, stable, surface and a specific, measurable, clear length and width (96 X 60 inch.);

- Bus stops must connect via an accessible path to streets, sidewalks, or pedestrian paths;
- Specific slope requirements for bus boarding and alighting areas.⁸⁷

Transit agencies can have issues complying with these requirements where bus stop construction is subject to control by another public entity or where there is no sidewalk. In these circumstances, the FTA encourages compliance to the maximum extent practicable.⁸⁸ For example, the transit agency should enter into an arrangement with a public entity or develop a route to the street if that is the accessible path to the nearest sidewalk or public right of way.⁸⁹

Accessible Facilities

Any transit agency facilities built after January 26, 1992 must comply with the 1991 ADA Standards for Accessible Design.⁹⁰ Any public transit agency facilities built after November 29, 2006 must comply with the DOT ADA Standards.⁹¹ Any private transit companies with facilities open to the public that were built after January 26, 1992 must comply with the 1991 ADA Standards for Accessible Design, or built after March 15, 2012, must comply with the 2010 Standards for Accessible Design.

Accessible Taxis

Private taxi providers are required to follow the ADA and regulations set out by the FTA, but they are not required to purchase accessible taxis if they are automobiles. If they own or lease vans as part of their taxi fleet, they are required to either purchase accessible vans or ensure that their fleet offers equivalent service to people with disabilities and people without disabilities. Some cities have adopted requirements for taxi providers to purchase a certain number of accessible taxis as part of their fleet. Buses that are required to pick up people with disabilities door to door or curb to curb.

Paratransit: Buses that are required to pick up people with disabilities door to door or curb to curb.

The ADA was designed to allow people with disabilities to use existing transit systems. However, the drafters of the ADA also recognized that there may be times when a disability makes it impossible to use to fixed line transit even if it is accessible. Because independent living is nearly impossible for many folks with disabilities without access to public transit, the ADA also requires that public transit agencies providing fixed-line service provide comparable paratransit service for people with disabilities unable to take fixed line service.⁹⁵

What is Paratransit?

When a public transit agency provides fixed-line bus service, they are required under the ADA to provide a door-to-door or curb-to-curb service for folks with disabilities who are unable to use fixed line service.⁹⁶ Under the FTA regulations, paratransit service must be “comparable” to available fixed line service.⁹⁷ FTA regulations provide a very strict eligibility test for paratransit service. It is only designed to provide transit for people with disabilities who cannot otherwise use existing fixed line service.

Eligibility for Paratransit Service

There are three levels of eligibility for paratransit service:

- Category 1: Inability to Navigate System Independently;⁹⁸
- Category 2: Lack of Accessible Vehicles, Stations or Bus Stops;⁹⁹
- Category 3: Inability to Reach a Boarding Point or Final Destination.¹⁰⁰

Based on the eligibility category, paratransit agencies are able to grant unconditional, conditional, or temporary eligibility.¹⁰¹

Other aspects of paratransit service are also strictly regulated.

Under the ADA, “paratransit” is “comparable transportation service required by the ADA for individuals with disabilities who are unable to use fixed route transportation system.”¹⁰² Comparability is measured by the following characteristics: hours and days of service; service area; response time; fares; operating without regard to trip purpose; absence of capacity constraints.¹⁰³

What does this mean?

Paratransit service needs to be available throughout the same hours and days as the entity’s fixed route service within $\frac{3}{4}$ mile of either side of a fixed route.¹⁰⁴ Paratransit riders should be able to schedule rides based on a request made the day before he or she needs a ride.¹⁰⁵ Fares cannot be more than twice the amount of fares for a comparable fixed ride trip.¹⁰⁶ Paratransit providers cannot prioritize particular trip purposes.¹⁰⁷ And paratransit providers cannot limit the availability of service with capacity constraints, i.e. waiting lists; restrictions on numbers of trips; or patterns of substantial numbers of untimely pick ups for initial or return trips; trip denials or missed trips; or excessive trip lengths.¹⁰⁸

Enforcement

If a rider with a disability believes his rights have been violated by a transit agency, he has the right to enforce those rights. They can pursue the procedure set up by his local transit agency. However, he also has the right to file a lawsuit in federal court with a private attorney. He has the ability to file an administrative complaint before the Federal Transit Administration, with or without an attorney.¹⁰⁹ Finally, a rider who believes his rights have been violated under the Americans with Disabilities Act has the right to file a complaint with the U.S. Department of Justice Civil Rights Division.¹¹⁰

The Americans with Disabilities Act set out key protections for people with disabilities in access to existing transit systems, both public and private. For those seeking to create a region that is accessible to folks with disabilities, compliance with the Americans with Disabilities Act is essential. Further information on these different issues is available through the Federal Transit Administration's Circular on the Americans with Disabilities Act, FTA C 4710.1¹¹¹ or on the Disability Rights Education & Defense Fund's Topic Guides on ADA Transportation.¹¹² There are also some additional resources on the Federal Transit Administration's website.¹¹³

To ensure that people with disabilities have access to regional transportation, local governments and advocates also must ensure that there is funding for comprehensive, multi-modal transportation and that they are tracking technological developments in public transit. The remaining two parts of this booklet examine those issues.

Part II: Beyond Inclusion: Expanding Transportation Options through Funding and Law

In The Ability Center's service area, the number one transportation complaint we receive is that people are unable to get to a certain location via public transit.¹¹⁴ Mostly, this is due to limited transportation hours, lack of a transit system at all in certain areas, or lack of a bus stop close to a facility.

The Ability Center's service area covers seven counties in northwest Ohio: one urban county, Lucas County, and six rural counties, Ottawa, Wood, Fulton, Henry, Defiance, and Williams Counties.¹¹⁵ None of the seven counties in The Ability Center's

While the ADA requires existing transit systems to be accessible, there is no mandate to create transit systems where they do not exist.

service area is fully served by a public transit system. Some transit systems are not county-wide, some have limited hours (such as ending at 4:00 p.m.), and some have limited eligibility.¹¹⁶ Some counties have no public transit system at all.¹¹⁷ A survey by the U.S. Department of Commerce shows that nationwide only 54.4% of American households have public transit available to them and 28.8% claim to have satisfactory public transit.¹¹⁸

Funding

The lack of public transit options is an issue for people with disabilities. In the past few years, two suburbs of the largest city in our service area, Toledo, have "opted out" of its urban regional transit authority, destroying the ability for transit-reliant folks to get from the City to the suburbs, and severely limiting the options of those who live within the areas that are no longer connected to our regional transit authority.¹¹⁹ While the ADA requires existing transit systems to be accessible, there is no

mandate to create transit systems where they do not exist. However, there are tools available for advocates seeking to increase transportation options in their area.

The reality of public transportation is that, while it is connected to community, and individual, economic development, it is a community service that needs to be subsidized by governmental sources. Yet, public transportation is underfunded at federal, state, and local levels to meet the need. If advocates want to ensure that they are encouraging strong public transit networks, they must be in contact with their federal, state, and local decision makers regarding the importance of a comprehensive public transit system.

Federal Funding

Federal funding for public transit is limited. The Fixing America's Surface Transportation Act, or "FAST Act," establishes a federal tax on fuel and taxes on trucks that are placed into the Highway Trust Fund.¹²⁰ The Trust Fund is divided into the Highway Account, which funds road construction and other surface transportation projects and the Mass Transit Account which supports mass transit, or public transportation (buses, rail, subway, ferries, and other modes of public transportation).¹²¹ Money from the FAST Act is distributed mostly through grant funding distributed by the Federal Transit Authority and Federal Highway Administration.

Traditionally, the majority of the money from the Trust Fund has been spent on highways rather than public transit. Between 1992 and 1999, states had more than 33.8 billion in federal funding available from the Highway Trust Fund, and only 12.5% of the funding was spent on public transit.¹²² In more recent years, federal road spending has exceeded transit spending by a margin of 4-1.¹²³

Advocates who wish to influence the amount of federal dollars going towards public transit must let their federal legislators know that it is a priority. Revenue from the gas tax is falling due to more fuel-efficient vehicles, and federal legislators must re-evaluate the Highway Trust Fund to determine if they want to switch funding sources, raise the gas tax, or simply provide less

money for roads and public transit.¹²⁴ Advocates must meet with their federal legislators to let them know their priorities.

Aside from meeting with federal legislators, advocates and policy makers can influence funds by getting involved in their Regional Metropolitan Planning Organization. Federal funds for mass transit are often distributed through Metropolitan Planning Organizations (MPO).¹²⁵ MPOs are required to represent localities in all urban and rural areas by putting together a transportation plan, or transportation improvement program, for their urbanized area.¹²⁶ A transportation plan is a list of upcoming transportation projects covering a period of at least four years.¹²⁷ All upcoming projects using federal funds must be included in the list.¹²⁸ MPOs are public agencies that must seek stakeholder participation and public comment in their actions and plans. Advocates who wish to help direct how federal funds are used in their region can seek to be involved in the transportation planning process through their local MPO. While the Highway Trust Fund is not the primary source of funding for public transit, it is important that funds from the FAST Act available for transit get routed in that direction. The best way to do this is for advocates and local policy makers to communicate with their federal legislators and get involved in the planning process with MPOs.

State and Local Funding

The majority of funding for public transit comes from state and local government sources. Even federal grants for public transit often require a state or local match, and are often limited to capital, which means they can only be spent on actual buses.¹²⁹ But running a transit company involves employee salaries and benefits, fuel, and overhead costs.

Many states use state fuel taxes to raise funding for public transit systems, highways, roads, and bridges. Thus, even at a state and local level, transit funding competes with highways, roads, and bridges for funding.¹³⁰ The best way to protect transit funding is to have a tax that raises money for transit specifically. It is important to learn how public transit funding is raised in your state. Advocates should ask for a dedicated

public transit fund, and a designated state tax that raises money for public transit. Some examples of states who have done this are:

Florida: In 1989, Florida enacted the Transportation Disadvantaged Trust Fund that supports service for elderly, disabled, and low-income populations.¹³¹ The money is distributed to county/ regional Community Transportation Coordinators tasked with coordinating transportation services that serve disadvantaged populations.¹³² The money comes from Florida's Public Transportation Block grant and a tax on vehicle registrations.¹³³

New Jersey: In 1978, New Jersey dedicated its Casino Revenue Funds to benefit older Americans and individuals with disabilities.¹³⁴ 8.5% of that revenue is allocated to a Senior Citizen and Disabled Resident Transportation Assistance Program where it is distributed to county committees that determine how to spend the money on transportation services.¹³⁵

Indiana: In 1980, the Indiana General Assembly established the Public Mass Transportation Fund to promote and develop mass transportation in Indiana, which provides funds to public transit systems throughout the state based on performance.¹³⁶ The fund receives money from .67% of 1% sales and use taxes throughout the state.¹³⁷

North Carolina, Oregon, and Pennsylvania also have designated sources of funding for public transit in their states.¹³⁸

How can advocates influence public transit funding in their state? Collect data and reach out to state legislators from your area to discuss specific issues you are having with accessing public transit. Work with local transit organizations and state level coalitions to ensure that the same message is being brought to legislators all over your state. Organize media events such as public forums, press conferences, and social media campaigns to draw attention to the issues. If advocates want to increase the availability of public transit in their area, they must increase the level of funding for public transit.

Medicaid and Non-Emergency Medical Transportation

Some funding for public transit can also come through federal benefits, like Medicaid. Federal Medicaid regulations require that states establish a plan to ensure that Medicaid covers *necessary transportation* to and from providers, or doctor's appointments, the hospital, or another medical office for Medicaid-approved care in both emergency and non-emergency situations.¹³⁶ In short, federal law requires each state to ensure that any person eligible for Medicaid has transportation to medical appointments covered by Medicaid.¹⁴⁰ According to a 2013 estimate, there are nearly 104 million non-emergency-medical transportation rides each year nationwide.¹⁴¹

In Ohio, the Department of Medicaid spends about \$71 million per year on county-administered non-emergency medical transportation for Medicaid consumers.¹⁴² In order to receive federal funding from the Center for Medicaid and Medicare Services (CMS), each individual state must submit a Medicaid plan, which then must be approved by CMS. Thus, individual states get to decide how to provide non-emergency medical transportation, and each state does so a little differently. Depending on the state plan, non-emergency medical transportation funds can be used for transit authority, taxi, and in some states, Lyft transportation.

Non-emergency medical transportation money does not cover every Medicaid trip. Often people have to show that they: 1) are a recipient of Medicaid; 2) cannot drive; 3) have an immediate need for care; 4) have a verified appointment with a provider; 5) and that they have no other way to get to their appointment in order to get money for rides.¹⁴³

However, each state that accepts federal funds for Medicaid is legally responsible to ensure that Medicaid beneficiaries have transportation to and from providers.¹⁴⁴ If they do not, they are in danger of losing their federal funding. Some courts have held that individuals, or a class, can enforce a state's duty to provide transportation in a court.¹⁴⁵ Under a Sixth Circuit decision, that duty extends to a requirement to provide consumers with

written information about the availability of transportation assistance.¹⁴⁶

If a Medicaid consumer has been denied their right to transportation to covered medical appointments, they can request a hearing through their individual state's procedures to challenge the denial of a Medicaid service.¹⁴⁷ If there is a systemic violation, where the state's Medicaid plan does not ensure that Medicaid consumers will have transportation to providers, consumers may be able to bring a court action to change the plan.¹⁴⁸ If Medicaid-eligible consumers in a particular state are unable to access this funding for rides to doctor's appointments, they can request a copy of the Medicaid state plan and ask for the provisions to be changed.

Medicaid, Home and Community Based Services (HCBS) Transportation

Home and Community Based Services (HCBS) Waivers can also offer funding for transportation. HCBS Waivers are programs run by state Departments of Medicaid that allow people with long-term-care needs to receive care in their home and remain independent. Under the Social Security Act, individual states can apply to CMS for HCBS Waivers so that people who are eligible for Medicaid can use it to cover long-term services and supports in their home.¹⁴⁹

Medicaid is a state health insurance program originally designed to pay for health care for low-income individuals and people with long-term health care needs.¹⁵⁰ The program was developed when it was assumed that long term services and supports could only be provided in institutional settings, such as nursing homes and intermediate care facilities.¹⁵¹ As awareness grew that those supports could be offered in community-based settings, the government gave states the opportunity to apply for Waivers so they could offer long-term care services and supports in people's homes. Waivers allow state Medicaid to cover services that are non-medical but ensure someone can receive long-term care in their home.¹⁵² Potentially, one of those services is transportation.¹⁵³

Do HCBS Waivers in your state offer payment for transportation? As of 2017, 48 states operated HCBS Waiver Programs.¹⁵⁴ Each state has the flexibility to design eligibility for HCBS Waivers and the services provided.¹⁵⁵ Advocates can look up the HCBS Waivers available in their state on the CMS website to learn the details.¹⁵⁶ Advocates can also look at their own state Department of Medicaid website.

HCBS Waiver transportation coverage is different from NEMT. Under federal Medicaid rules, NEMT must be available to anyone eligible for Medicaid services, and NEMT is only available for medical appointments. On the other hand, transportation under an HCBS Waiver is only available to a person eligible for that HCBS Waiver, and the type of transportation, and limits on how much the Waiver will cover, will differ from Waiver to Waiver.

States have the ability to design HCBS Waivers to cover non-medical transportation that allows people with long-term-medical conditions to remain independent and receive services in home and community-based settings. For example, a Waiver targeted towards individuals with intellectual impairments or developmental disabilities may cover non-medical transportation as a way of ensuring respite for caretakers or that individuals can get to day or employment services. In Ohio, seven HCBS Waivers cover “supplemental” or “non-medical” transportation.¹⁵⁷ Each individual state will set the eligibility and limits on transportation coverage for each individual HCBS Waiver offered in that state.

Expanding Medicaid Funding for Transportation

Medicaid is an important source of funding for transportation because it allows people with disabilities to get transportation for free, and in areas where local transit authorities are not present, allows people to use cabs or other mobility options to get around. If individuals can use Medicaid funding for transportation, issues caused by a lack of transit can be alleviated.

It is important for advocates to be aware of the options available in their state and to be communication with state decision makers about the need for increased non-medical

transportation Medicaid coverage. States have the ability to place coverage for non-medical transportation into Waivers, but they need to hear stories letting them know that transportation is important to keeping people with disabilities independent. When states pass new Medicaid rules, they must get comments from the public on the rule. Often, they do this by asking for letters, having public forums, and putting together workgroups. Advocates should participate in these processes and ask for additional transportation benefits.

Advocates should be aware of which vehicles can be funded by Medicaid NEMT and HCBS Waivers in their state and should advocate for additional vehicles to be covered, for more options. Some states limit NEMT coverage to vehicles called ambulettes.¹⁵⁸ Ambulettes often have specific, expensive requirements such as driver training and on-board medical equipment that are unnecessary to transport many people with disabilities to doctor's appointments. Often, these regulations are based on over-protective attitudes towards folks with disabilities and limit the number of vehicles they can use for their Medicaid trips.

Public transportation has been connected to strong economic development, is necessary to attract businesses to certain regions, and ensures that people are able to work, but for public transit to be effective, it must be funded by federal, state, local, and other sources.

Many people with disabilities do not need an adaptive vehicle, or an ambulette, so states should widen Medicaid-eligible transit vehicles to include taxi cab options for Medicaid transportation. Some taxi cab companies also own accessible cabs that do not meet ambulette requirements but that could transport people with disabilities who do need adaptive vehicles. Finally, even ride sharing companies like Uber and Lyft have become qualified to provide Medicaid transportation in some states.¹⁵⁹ States should steer away from out-moded restrictions on who is qualified to transport folks with disabilities to ensure that public and private transit companies are able to take part in providing Medicaid rides and ensure the availability of vehicles.

Public transportation has been connected to strong economic development, is necessary to attract businesses to certain regions, and ensures that people are able to work, but for public transit to be effective, it must be funded by federal, state, local, and other sources. Monitoring and advocating for additional funding for public transit is a necessary step in ensuring inclusive communities for people with disabilities.

Part III: Changing Norms: Disability Concerns regarding Technological Innovation in Public Transit

How will the changes to public transit, brought on by technological innovations, affect the lives of people with disabilities? As a country, we are on the verge of a transportation revolution. Technology is transforming the way that people with disabilities access and use public transit – both making it easier and more available to use--and at times, more difficult and out of reach. We cannot predict with 100% certainty what will happen next, but we can try to get ahead of the changes to make sure they positively, rather than negatively, affect the lives of people with disabilities.

Shared Ride Services: Uber and Lyft

The issue with accessibility

Many think the future of public transportation is defined by Shared Ride services, like Uber and Lyft. Uber and Lyft allow automobile owners to act as taxi-cab drivers by connecting people who need rides to those who are willing to drive them through an application, or “app.”¹⁶⁰ This, the narrative goes, makes taxis more plentiful, more efficient, less expensive, and opens public transit to a larger group of people.

Uber and Lyft are known as taxi services to riders and technology companies to drivers.¹⁶¹ Through a smartphone app, a rider requests a ride and a nearby driver will accept the request. GPS capabilities allow both parties to know one another’s locations and the arrival time of the driver’s vehicle.¹⁶² Passengers then use the app to enter their preferred destinations, either before or during the ride. Once a driver is matched with a passenger, the app will provide basic information to the passenger: a driver’s name, vehicle type, and license plate number.

Uber and Lyft have changed the face of public transit by managing to avoid many of the regulations affecting traditional taxicab companies. Over and over, Uber and Lyft have argued that they are technology companies that invented apps which connect riders to ordinary people willing to drive them around, not transit companies. This circumvents much of taxi regulation and makes both running and using the service less expensive than traditional taxi companies.¹⁶³ Thus, these companies have been taking over the business of traditional taxicab and rental car companies.¹⁶⁴

However, it has taken some time for people with disabilities to benefit. A simple internet search uncovers a number of news articles detailing Uber and Lyft driver discrimination against people with disabilities, and more than eight lawsuits have been filed against Uber or Lyft alleging disability discrimination. Uber and Lyft drivers have denied people rides based on use of a mobility device or service animal, and few Uber or Lyft drivers own accessible vehicles.¹⁶⁵ Under public pressure, Uber has begun to offer two options for rides that can accommodate a wheelchair: uberWAV and uberASSIST.¹⁶⁶ uberWAV has wheelchair ramps or lifts; uberASSIST can accommodate mobility devices but does not have ramps or lifts. Likewise, Lyft has Wheelchair Accessible “mode”.¹⁶⁷ Yet, people with disabilities report that both options are inadequate – not enough accessible vehicles are available to allow many people with disabilities to use the service.

What are my rights?

People with disabilities’ rights regarding shared ride services like Uber and Lyft have not yet been determined. Because ridesharing apps were not around when the ADA was passed, judges must decide how, and if, the ADA applies to companies like Uber and Lyft. Traditional taxi companies fit within ADA regulations for, “private companies that provide transportation services.”¹⁶⁸ Places of public accommodation also have ADA obligations. However, in lawsuits, Uber and Lyft have claimed that they are technology, not transportation, companies that are not places of public accommodation.¹⁶⁹

As of the date of this booklet, there have been eight lawsuits against Uber or Lyft arguing that they should be covered by the ADA.¹⁷⁰ No court has affirmatively ruled either way – that ADA regulations apply to ridesharing companies or that they do not. However, courts have denied Uber and Lyft's attempts to dismiss advocates' claims, which suggests that courts may rule that ADA transportation provisions apply to ridesharing companies in the future.

If advocates are successful in getting courts to rule that the ADA applies to ridesharing companies, Uber and Lyft drivers would be:

- Prohibited from denying people rides based on their disability, as long as their car can reasonably accommodate the person;¹⁷¹
- Prohibited from refusing rides to people who have service dogs based on their dog;
- Required to offer reasonable modifications of policies and procedures to people with disabilities; and
- Prohibited from charging people with disabilities higher fares.

Whether taxi companies are required to own a certain number of accessible vehicles under the ADA is more complicated, and it is unclear at this time whether ridesharing companies would be required to maintain a certain number of accessible vehicles if they are found to be subject to the ADA.

What have Uber and Lyft done to make their service more accessible?

Even though Uber and Lyft have argued in court that the ADA does not apply to their services, both companies have taken steps to make their service more accessible. Both have adopted non-discrimination policies, and both Uber¹⁷² and Lyft¹⁷³ have accessibility pages on their websites explaining the steps they have taken to ensure the accessibility of their business.

- Riders can use Uber to request an UberWAV, or wheelchair-accessible vehicle;¹⁷⁴
- Riders can also request an UberASSIST vehicle to get a vehicle with drivers that have been specially trained to assist people with disabilities;
- Uber has committed to ensuring that its app is compatible with VoiceOver iOS, Android TalkBack, and wireless braille display;
- Uber has committed to having its app regularly tested by internal resources and AudioEye for accessibility;
- Uber's app is fully functional without sound and has options to turn on flashing light notifications and other visual signals;
- Uber has all drivers agree prior to becoming an Uber driver that they will accept service dogs and sends them notifications every three months regarding driving with service dogs;
- Riders can use "access Mode" in the Lyft app to request an accessible vehicle;
- Lyft has an accessible app called inaccessibility for blind riders;¹⁷⁵
- Lyft has a policy that drivers will be deactivated if they refuse to accept service animals;
- Lyft has app features for deaf drivers and riders.¹⁷⁶

In some cities, Uber and Lyft have also partnered with other providers to provide more accessible vehicles. Uber has partnered with third-party paratransit services in several cities.¹⁷⁷ This has sometimes been something negotiated by the city – in Portland, Oregon, part of allowing Uber to operate in the city was a commitment by Uber to offering accessible rides.¹⁷⁸ Satisfying the demand required Uber to supplement its capacity by partnering with a private paratransit provider.¹⁷⁹ This is an encouraging development, but some advocates have concerns that, in relying on third-party paratransit providers, Uber is not increasing the capacity of accessible cabs but just increasing the use of ones that are already overstretched.¹⁸⁰

Lyft has taken a similar model of partnering with a third-party provider but, instead of relying on over-stretched public transit for accessible rides, it is partnering with a third-party private provider. It recently launched a new, accessible Lyft program that partners with a private service, First Transit, to provide accessible rides to people with disabilities who wish to utilize Lyft.¹⁸⁴ Also, Lyft has been designated as a Non-Emergency Medical Transportation Provider in several states.

Many people think the future of public transit lies in the hands of ridesharing companies like Uber and Lyft who have created a new model of taxi services that is less expensive and more accessible to the average rider. However, for people with disabilities to have access to ridesharing services, they must take action to ensure that ridesharing companies are operating their services in a way that does not exclude people with disabilities.

Automated Vehicles

All major carmakers, automotive technology companies, academic researchers, and Google are developing technology meant to eventually lead to fully automated vehicles where we are occupants instead of drivers.¹⁸² In March 2015, Delphi Automotive test-drove a fully automated Audit SQ5 from San Francisco to New York City.¹⁸³ Manufacturers such as Nissan have announced that the technology for fully automated vehicles is rapidly evolving and it expects to have technology in place by 2020. According to the manufacturer, Nissan automated vehicles are likely to be on the road sometime around 2025.¹⁸⁴

The time is now for people with disabilities to begin advocating for their needs regarding automated vehicles, as policymakers anticipate not just a new type of car but also anticipate that automated vehicles will bring a new model of community transit. The National Highway Traffic Safety Administration has divided automated vehicle technology into four levels.¹⁸⁵ Only the fourth level would enable use by people with disabilities who are unable to drive a vehicle, but people with disabilities

are likely to be passengers in vehicles that use all four levels of technology.¹⁸⁶

Advocates should be aware of what might be coming and should become part of the conversation. Advocates must pay attention to the prevailing accepted model of how automated vehicles will be used, encourage accessibility in the design of automated vehicles, and watch for policy barriers that might prevent people with disabilities from using automated vehicles.

Advocates must push the vision of an automated vehicle public transit fleet or shared ride options for individually-owned vehicles in order to ensure they are available to people with disabilities. Opponents of public transit have begun to argue that with the onset of automated vehicles, public transit will no longer be necessary.¹⁸⁷ However, for people with disabilities, that would be a disaster. For many people with disabilities, it is not just disability but also car ownership that is a barrier to driving. To ensure accessible communities, automated vehicles cannot be seen as a method of getting rid of public transit but as a way of increasing options for people with disabilities and making public transit more attractive and efficient.¹⁸⁸

What would a public transit fleet look like?

Instead of the elimination of public transit, public transit agencies and some policy makers looking to the future envision an automated vehicle public transit fleet. Individuals would have no need to purchase individual cars if transit agencies owned automated cars as part of a larger, public transit system. This eliminates up front cost barriers and requires individuals to pay per trip. Paratransit costs could be reduced by spreading costs among a larger group of on-demand, shared ride vehicles. Additionally, because public transit agencies are regulated by the ADA, vehicles that are part of a public transit fleet would have to comply with ADA requirements for accessibility.¹⁸⁹

Similarly, if individual car ownership continues, automated vehicles would produce more options for share rides. Private car owners may have more freedom to lend or share an automated vehicle when it is not being used. Shared ride applications that make sharing private cars easier, and the ability of a car to drive

itself to a new location while the owner is at work or otherwise does not need it, will make sharing vehicles easier. Either of these models, an automated vehicle fleet, or automated shared rides through technology, could open additional, less expensive, transportation options to people with disabilities.

Advocates must get in front of leaders in automated technology and public officials to ensure that all automated vehicle manufacturers express a commitment to accessibility.¹⁹²

Accessibility in Design

What accessibility challenges will people with disabilities face when automated vehicles become commonplace? People with disabilities who use mobility aids will not be able to use automated vehicles unless they are designed in an accessible way. Because of the reliance on technology that designates the vehicles from ordinary vehicles, there are some unique accessibility challenges. Engineers must take these into account in designing technology:

- Ensuring that user interfaces, how we give to and receive information from our vehicles, are accessible to all people;¹⁹⁰
- Ensuring that user controls are accessible to people with sensory or physical disabilities;
- AV systems must not compete with wheelchair ramps, lifts, or lockdown systems.¹⁹¹

Advocates must get in front of leaders in automated technology and public officials to ensure that all automated vehicle manufacturers express a commitment to accessibility.¹⁹²

Policy Barriers that could Affect People with Disabilities' Access to Automated Vehicles

The National Council on Disability notes nine significant policy and societal barriers to the use of fully automated vehicles by people with disabilities in its resource on automated vehicles: 1) driver's licensing, regulations, and model legislation; 2) cost and income disparity barriers; 3) attitudinal barriers; 4)

liability; 5) privacy; 6) ethical considerations; 7) cybersecurity; 8) infrastructure; and 9) communications.¹⁹³ Most importantly, disability advocates must watch how automated vehicles are regulated to ensure that regulations do not keep people with disabilities from using automated vehicles, advocate for shared ride models to ensure they are affordable, and ensure that people with disabilities are able to communicate with the vehicles.

If states require a license to operate an automated vehicle, folks with disabilities cannot be excluded from getting a license based on their disability.

Many people with disabilities cannot get a drivers' license because of their disability. For example, drivers' license eligibility tests usually have vision requirements that exclude blind and low-vision individuals. Yet, as it stands, all states require a drivers' license in order to drive a vehicle. If existing licensing laws are simply applied to fully automated vehicles, many folks with disabilities could miss out on the additional freedom that could come from vehicles that can drive themselves.

For people with disabilities to benefit from the leap in technology, licensing provisions for "operators" of fully automated cars must be different from those required of "drivers" of non-automated cars.¹⁹⁴ Some advocates are calling for a national standard for operation of automated vehicles, not requiring a drivers' license, in order to ensure that all states allow people with disabilities to operate automated vehicles.¹⁹⁵ However, laws are currently being developed state by state.

The National Council on Disability suggests the following wording for states developing automated vehicle licensing laws:

- Any natural person of legal driving age who solely by reason of disability is ineligible for a regular non-commercial driving license shall be eligible for an automation-only license.¹⁹⁶
-

Cost barriers could keep folks with disabilities from owning an automated vehicle.

Statistics show a correlation between disability and low income, and it is possible that many people with disabilities will continue to be unable to afford to own an automated car.¹⁹⁷ It is also likely that the initial cost of an automated car will be more than the average person can afford when they are first introduced due to the level of technology required to create them.¹⁹⁸ The cost will likely go down over time as car manufacturers work to bring down the cost and widen the market, but individual ownership may still be out-of-reach for many people with disabilities.¹⁹⁹

One potential solution to cost barriers is to push states to subsidize public transit and shared ride models for automated vehicles. The National Council on Disability recommends that automated vehicles circulate in a closed loop or be used as a fleet of car-share vehicles to keep the price down.²⁰⁰

Another option for lowering the gap between those with disabilities that have enough income to purchase a car and those that do not are programs that subsidize car purchases for low-income folks through grants or low-interest loans.²⁰¹

Outmoded beliefs regarding safety may encourage states to outright exclude folks with disabilities from being eligible to operate automated cars.

Generally, the public is skeptical about the safety of fully automated cars. Polls have shown that many people have safety concerns about automated cars that affect whether they, individually, want to own or use one.²⁰² Experts believe that as people become more familiar with automated cars, they will become more accepted.²⁰³ However, these safety concerns could extend to whether lawmakers believe it will be safe for people with disabilities to operate an automated car. Disability advocates need to ensure that speculation or over-protective stereotypes do not cause states to make folks with disabilities ineligible to operate automated cars.²⁰⁴

Concerns about manufacturer liability could cause states to keep people with disabilities from operating automated cars.

One of the major, ongoing debates about law and automated cars is who will be liable for damages in case of a car accident.²⁰⁵ In today's framework, a driver is generally liable when a court determines he or she was negligent in driving a vehicle and caused a car accident. However, where a driver is no longer in control of a vehicle, the manufacturer will likely hold at least some responsibility for an accident caused by the car itself.²⁰⁶

Because of this, state lawmakers may feel pressure to pass laws that limit manufacturers' liability. This pressure, coupled with outmoded beliefs about safety, could be another reason that lawmakers pass laws keep people with disabilities from being eligible to operate automated cars.²⁰⁷

Invasion of Privacy and Cybersecurity

It is likely that automated vehicles will collect a lot of data about their passengers. In order to operate correctly, the software driving automated vehicles will have to gather data about their surroundings and destinations. This produces many questions about who will have access to that data and how it will be used. For people with disabilities, the places they visit on a regular basis could include sensitive health information. For example, someone who visits a dialysis center three times a week likely has kidney disease. Advocates should watch how this data is regulated to ensure that people with disabilities' health information stays private.

Additionally, as early as 2010, researchers from the University of California and University of Washington demonstrated that it was possible to hack into an automated vehicle.²⁰⁸ Emerging technology needs to have the capacity to prevent breaches by malicious agents.

Ethical Considerations

Because automated vehicles will be driven by computer code, the National Council on Disability also warns against making disability part of the code that guides the automated vehicle.²⁰⁹ A person's disability should not affect the course of action that an automated vehicle takes in a potential collision.

Infrastructure

Connecting automated vehicles is likely to result in the need to re-envision our road infrastructure. The American Association of State Highway and Transportation Officials released "National Connected Vehicle Field Infrastructure Footprint Analysis for policymakers."²¹⁰ It is available online at sp.stsmo.transportation.org.

Potential Americans with Disabilities Act Issues

Advocates and policymakers must also be on guard because regulations that, in effect or directly, prohibit people with disabilities from operating automated vehicles could violate the Americans with Disabilities Act. Under the Americans with Disabilities Act, a public entity may not, "deny a qualified individual with a disability the opportunity to participate in or benefit from," an aid, benefit, or service.²¹¹ Also, a public entity may not, "administer a licensing or certification program in a manner that subjects qualified individuals with disabilities to discrimination on the basis of disability."²¹²

A, "qualified individual with a disability" is someone who, "with or without reasonable modifications to rules, policies, or practices, the removal of architectural, communication, or transportation barriers, or the provision of auxiliary aids and services, meets the essential eligibility requirements for the receipt of services."²¹³

This means that a state, likely, cannot keep someone with a disability from operating automated vehicles simply because he or she has a disability. There are a number of court cases that have addressed whether a person with a disability can be kept from getting a drivers' license, both from the perspective of a state ordinance and from an employment perspective.²¹⁴

Generally, prohibiting a person from obtaining a drivers' license on the basis of having been diagnosed with a disability has been considered discriminatory under the Americans with Disabilities Act but conducting an individual assessment based on safety concerns has not.

Under the ADA, whether a person can be excluded from operating automated vehicles because of a disability will hinge on whether a state could make the argument that the person constitutes a "direct threat" to the health or safety of others if allowed to operate an automated vehicle.²¹⁵ The Department of Justice Title II Technical Assistance Guide states, "Public entities may not discriminate against qualified individuals with disabilities who apply for licenses but may consider factors related to the disability in determining whether the individual is qualified."²¹⁶

The Department of Justice goes on, in its guide, to give specific examples. Vision requirements, which would exclude some people with disabilities, is an example of an "essential" requirement for safe operation of a vehicle that is permitted under the ADA.²¹⁷ However, denying a license to all people with missing limbs, if an individual can operate a motor vehicle safely without use of a missing limb, would be unlawful.²¹⁸ For automated vehicles, outmoded or unreasonable concerns about safety when a driver has a disability would violate the ADA. Any determination must be based on reasonable judgment that relies on current medical evidence or on the best available objective evidence.²¹⁹

Resources for automated vehicle policy.

The idea of automated vehicles is new, so federal and state lawmakers are currently trying to figure out what they will look like. It is an exciting time for disability advocates to make their concerns known before laws are developed. Most motor vehicle laws in are in the hands of individual states, and many states are in the midst of conversations about what those will look like. To see current state legislation regarding automated vehicles, look at the National Conference of State Legislators', *Autonomous Vehicles: Self Driving Vehicles Enacted Legislation*.²²⁰

The National Highway Traffic Safety Administration is developing a national regulatory framework for automated vehicle operations that states can use. In 2015, it provided funding to the American Association of Motor Vehicle Administrators (AAMVA) to establish an Autonomous Vehicle Best Practices Working Group.²²¹ The workgroup developed a manual called *Guidelines for Testing Drivers in Vehicles with Advanced Driver Assistance Systems* and a library of other best practices and resources regarding automated vehicles.²²²

Addressing our Public Transit Problem

Our country has taken huge strides toward community inclusion for individuals with disabilities since passing Section 504 of the Rehabilitation Act and the Americans with Disabilities Act. Yet until state and local governments in the U.S. embrace supporting comprehensive public transit networks, individuals with disabilities who cannot drive will struggle to meet the ADA's promises of equality of opportunity, full participation, independent living, and economic self-sufficiency. Addressing these issues means enforcing people with disabilities' rights under Section 504 and the ADA; expanding funding for public transit at a federal, state, and local level; and ensuring that individuals with disabilities are at the table as our policy makers anticipate the effects of new technology on transit. Each of these is a necessary part of disability rights in transportation.

More Information:

If you need more information, you can contact:

Your Regional ADA Center

Phone: 1-800-949-4232

Website: <https://adata.org/find-your-region>

Federal Transit Administration, Office of Civil Rights

Phone: 1-888-446-4511

Website: <https://www.transit.dot.gov/regulations-and-guidance/civil-rights-ada/civil-rightsada>

For Local Assistance, try:

Your Local Center for Independent Living:

Website: <https://www.ilru.org/projects/cil-net/cil-center-and-association-directory>

E-mail: ILRU@ilru.org

Your Legal Aid Organization:

Phone: 202-295-1500

Website: <https://www.lsc.gov/what-legal-aid/find-legal-aid>

Endnotes

1. National Council on the Handicapped, *National Disability Policy: A Progress Report –January 1984 (1984)*, https://ncd.gov/progress_reports/Jan1984) (accessed /2/2020).
2. Id.
3. Id.
4. Id.
5. 42 U.S.C. 12132; 12182.
6. 49 C.F.R. 37-39.
7. Id.
8. Blanck, Goldstein, & Myhill, *Legal Rights of persons with Disabilities: An Analysis of Federal Law*, Section 7, at 2 (2003).
9. Id.
10. Id.
11. Id.
12. Tumin, *Ohio Colleges of Medicine, Transportation Challenges for Ohioans with Disabilities: A Report to the Ohio Developmental Disabilities Council*, 19 (July 2017), <https://ddc.ohio.gov/Portals/0/transportation-challenges-7-17.pdf> (accessed 3/10/2020).
13. Id. at 20.
14. Merriam-Webster, *Definition of Civil Rights*, <https://www.merriam-webster.com/dictionary/civil%20rights> (accessed 8/12/2019).
15. Trains, Over-the-Road Busses, and Passenger Vessels are also covered. See U.S. Department of Transportation, Federal Transit Administration, *FTA C 4710*. (Nov. 5 2015) https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/Final_FTA_ADA_Circular_C_4710..pdf (accessed 5/6/2019); See also Disability Rights Education and Defense Fund, *Topic Guides on ADA Transportation* (June 2010) <https://dredf.org/ADAtg/> (accessed 5/6/2019).
16. 42 U.S.C. 12132; 12182.
17. U.S. Department of Transportation, Federal Transit Administration, *FTA C 4710*, 2- (Nov. 4, 2015) https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/Final_FTA_ADA_Circular_C_4710..pdf (accessed 3/10/2020).

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18. Id.
 19. Id.
 20. 49 CFR 37.5(c).
 21. Id. at (d).
 22. Id. at (e).
 23. Id. at (g).
 24. Id. at (d).
 25. 49 C.F.R. 37.167(h). Specific rules regarding hazardous materials can be found at 49 CFR 177.870(e). These apply only to compressed oxygen cylinders.
 26. 49 CFR 37.59(h).
 27. Id.
 28. U.S. Department of Transportation, Federal Transit Administration, FTA C 4710., 2-5 (Nov. 4, 2015) https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/Final_FTA_ADA_Circular_C_4710..pdf (accessed 3/10/2020).
 29. 49 CFR 37.59(h).
 30. U.S. Department of Transportation, Federal Transit Administration, FTA C 4710., 2-5 (Nov. 4, 2015) https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/Final_FTA_ADA_Circular_C_4710..pdf (accessed 3/10/2020).
 31. 49 CFR 37.3, Appendix D.
 32. Id.
 33. U.S. Department of Transportation, Federal Transit Administration, FTA C 4710., 2-5 (Nov. 4, 2015) https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/Final_FTA_ADA_Circular_C_4710..pdf (accessed 3/10/2020).
 34. Id. at 2-6.
 35. Id.
 36. Id.
 37. Id.
 38. Id.
 39. 49 CFR 37.167(f).
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40. U.S. Department of Transportation, Federal Transit Administration, FTA C 4710., 2-19 (Nov. 4, 2015) https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/Final_FTA_ADA_Circular_C_4710..pdf (accessed 3/10/2020).
 41. 49 CFR 37.167(f).
 42. U.S. Department of Transportation, Federal Transit Administration, FTA C 4710., 2-19 (Nov. 4, 2015) https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/Final_FTA_ADA_Circular_C_4710..pdf (accessed 3/10/2020).
 43. *Id.*
 44. *Id.*
 45. 49 CFR 37.125(b).
 46. U.S. Department of Transportation, Federal Transit Administration, FTA C 4710., 2-19 (Nov. 4, 2015) https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/Final_FTA_ADA_Circular_C_4710..pdf (accessed 3/10/2020).
 47. *Id.*
 48. 49 CFR 810.7; U.S. Department of Transportation, Federal Transit Administration, FTA C 4710., 2-20 (Nov. 4, 2015) https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/Final_FTA_ADA_Circular_C_4710..pdf (accessed 3/10/2020).
 49. 49 C.F.R. 37.173, appendix D.
 50. *Id.*
 51. *Id.*
 52. 49 C.F.R. 37.173.
 53. For operators of over-the-road busses, there are additional regulations, and training must include, "proper operation and maintenance of accessibility features and equipment, boarding assistance, securement of mobility aids, sensitive and appropriate interaction with passengers with disabilities, handling and storage of mobility devices, and familiarity with the requirements of this subpart. 49 C.F.R. 37.209.
 54. 49 C.F.R. 37.173. FTA guidance recommends that transit providers use people with disabilities and disability agencies as part of their training.
 55. 49 C.F.R. 37.173, Appendix D
 56. *Id.*
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57. 49 C.F.R. 37.169(c).
 58. Id.
 59. 49 C.F.R. 37.169(c), Appendix E.
 60. Id.
 61. Id.
 62. Id.
 63. 49 C.F.R. 37.169.
 64. Id.
 65. Id.
 66. Id.
 67. Id.
 68. Id.
 69. 49 C.F.R. 37.169(c), Appendix E.
 70. Id.
 71. Id.
 72. Id.
 73. 49 C.F.R. 35.149.
 74. U.S. Department of Transportation, Federal Transit Administration, FTA C 4710., 4- (Nov. 4, 2015) https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/Final_FTA_ADA_Circular_C_4710..pdf (accessed 3/10/2020).
 75. The definition of "accessible" in the 2010 ADA Standards for Accessible Design is, "A site, building, facility, or portion thereof that complies with this part." U.S. Department of Justice, 2010 ADA Standards for Accessible Design, 106.5 (2010) <https://www.ada.gov/regs2010/2010ADASTandards/2010ADAstandards.htm#106> (accessed 4/24/2019).
 76. Facilities built on or after January 26, 1992.
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77. U.S. Department of Transportation, ADA Standards for Transportation Facilities (2006) <https://www.access-board.gov/guidelines-and-standards/transportation-facilities/ada-standards-for-transportation-facilities/single-file-version> (accessed 4/24/2019); U.S. Department of Transportation, Requirements to Remember for ADA Compliance in Construction Projects (2014) https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/Tips_for_ADA_Compliance_4-22-14.pdf (accessed 3/10/2020).
 78. Facilities built on or after January 26, 1992.
 79. U.S. Department of Justice, 2010 ADA Standards for Accessible Design (2010) <https://www.ada.gov/regs2010/2010ADASTandards/2010ADAstandards.htm> (accessed 3/10/2020).
 80. 49 C.F.R. 38.
 81. 49 C.F.R. 37.71(a).
 82. 49 C.F.R. 38.
 83. Transit agencies must be able to demonstrate a “good faith effort” to find a used, accessible vehicle under 49 C.F.R. 37.73(c).
 84. 49 C.F.R. 37.71(a); soliciting inaccessible donated vehicles is not acceptable.
 85. U.S. Department of Transportation, ADA Standards for Transportation Facilities, Section 810.2 (2006) <https://www.access-board.gov/guidelines-and-standards/transportation-facilities/ada-standards-for-transportation-facilities/single-file-version> (accessed 4/24/2019).
 86. Id.; U.S. Department of Transportation, Federal Transit Administration, FTA C 4710., 3--3 (Nov. 4, 2015) https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/Final_FTA_ADA_Circular_C_4710..pdf (accessed 3/10/2020).
 87. Id.
 88. Id.
 89. Id.
 90. U.S. Department of Justice, 2010 ADA Standards for Accessible Design (2010) <https://www.ada.gov/regs2010/2010ADASTandards/2010ADAstandards.htm> (accessed 3/10/2020).
 91. U.S. Department of Transportation, Federal Transit Administration, FTA C 4710., 3--3 (Nov. 4, 2015) https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/Final_FTA_ADA_Circular_C_4710..pdf (accessed 3/10/2020).
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92. 49 CFR 37.29.
 93. *Id.*
 94. For example, New York City and Cincinnati have passed laws requiring a certain number of taxis to be accessible
 95. U.S. Department of Transportation, Federal Transit Administration, FTA C 4710., 4- (Nov. 4, 2015) https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/Final_FTA_ADA_Circular_C_4710..pdf (accessed 3/10/2020).
 96. *Id.* at 8-2.
 97. *Id.*
 98. *Id.* at 9-2.
 99. *Id.* at 9-3.
 100. *Id.* at 9-7.
 101. *Id.* at 9-9.
 102. *Id.*
 103. *Id.* at 8.4.
 104. *Id.* at 8.4.
 105. *Id.* at 8.4.5.
 106. *Id.* at 8.4.6.
 107. *Id.* at 8.4.7.
 108. *Id.* at 8.5.
 109. Riders with disabilities who believe they have been discriminated against can file a Complaint with the Federal Transit Administration here: <https://www.transit.dot.gov/regulations-and-guidance/civil-rights-ada/file-complaint-fta>.
 110. Riders with disabilities who believe they have been discriminated against can file a Complaint with the Department of Justice here: <https://www.justice.gov/actioncenter/submit-complaint>.
 111. U.S. Department of Transportation, Federal Transit Administration, FTA C 4710., 8.5 (Nov. 4, 2015) available at https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/Final_FTA_ADA_Circular_C_4710..pdf (accessed 3/10/2020).
 112. Disability Rights Education & Defense Fund, Topic Guides on ADA Transportation, available at <https://dredf.org/ADAatg/>.
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113. See <https://www.transit.dot.gov/regulations-and-guidance/civil-rights-ada/civil-rightsada>.
 114. Transportation Survey, The Ability Center of Greater Toledo (available on request).
 115. See The Ability Center of Greater Toledo website, <https://www.abilitycenter.org/who-we-are/mission-history/> (accessed 8/12/2019).
 116. Lucas, Wood, Henry and Ottawa county have some form of transit authority that does not provide service to the entire county, where not every person is eligible for service, or where hours are limited. Fulton, Defiance, and Williams County have no transit authority at all. See Ohio Department of Transportation, Ohio Statewide Transit Needs Study, Final Report, 6-8 (2015) <http://www.dot.state.oh.us/Divisions/Planning/Transit/TransitNeedsStudy/Documents/OhioStatewideTransitNeedsStudyFinalReport.pdf> (accessed 8/12/2019).
 117. Lucas, Wood, Henry and Ottawa county have some form of transit authority that does not provide service to the entire county, where not every person is eligible for service, or where hours are limited. Fulton, Defiance, and Williams County have no transit authority at all. See Ohio Department of Transportation, Ohio Statewide Transit Needs Study, Final Report, 6-8 (Jan. 2015) (available at <http://www.dot.state.oh.us/Divisions/Planning/Transit/TransitNeedsStudy/Documents/OhioStatewideTransitNeedsStudyFinalReport.pdf>) (accessed 8/12/2019).
 118. Michael Lewyn, Campaign of Sabotage: Big Government's War Against Public Transportation, 26 Colum. J. Envtl. L. 259, 263(2001).
 119. Gabrielle Russon, Perrysburg Opts Out of Bus Service, The Blade, (March 7, 2012), <https://www.toledoblade.com/local/2012/03/07/Perrysburg-opts-out-of-bus-service.html> (accessed 8/12/2019).
 120. U.S. Department of Transportation, Federal Highway Administration, Fact Sheet: Fixing America's Surface Transportation Act or "FAST Act", <https://www.fhwa.dot.gov/fastact/factsheets/htffs.cfm> (accessed 8/12/2019). Money from the U.S. GRF and the Leaking Underground Storage Tank Trust Fund are also deposited into the Highway Trust Fund.
 121. Peter G. Peterson Foundation, The Highway Trust Fund Explained, (Jan. 27 2018) <https://www.fhwa.dot.gov/fastact/factsheets/htffs.cfmhttps://www.pgpf.org/budget-basics/budget-explainer-highway-trust-fund> (accessed 8/12/2019).
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122. Michael Lewyn, Campaign of Sabotage: Big Government's War Against Public Transportation, 26 Colum. J.Env'tl.L. 259, 263(2001).
 123. Id. at 275.
 124. Peter G. Peterson Foundation, The Highway Trust Fund Explained (Jan. 27 2018) <https://www.fhwa.dot.gov/fastact/factsheets/htffs.cfmhttps://www.pgpf.org/budget-basics/budget-explainer-highway-trust-fund> (accessed 8/12/2019).
 125. See Federal Transit Administration, Metropolitan Planning Organization, <https://www.transit.dot.gov/regulations-and-guidance/transportation-planning/metropolitan-planning-organization-mpo> (accessed 8/12/2019).
 126. Id.
 127. Federal Transit Administration, Transportation Improvement Program, <https://www.transit.dot.gov/regulations-and-guidance/transportation-planning/transportation-improvement-program-tip> (accessed 8/12/2019).
 128. Id.
 129. Ohio Department of Transportation, Ohio Statewide Transit Needs Study, Final Report, 6-8 (Jan. 2015) <http://www.dot.state.oh.us/Divisions/Planning/Transit/TransitNeedsStudy/Pages/StudyHome.aspx> (accessed 8/12/2019).
 130. Between 1920 and 1929, every state adopted a fuel tax. Most fuel taxes are earmarked for highways, bridges, construction projects, and public transit. Michael Lewyn, Campaign of Sabotage: Big Government's War Against Public Transportation, 26 Colum. J.Env'tl.L. 259, 268(2001).
 131. Ohio Department of Transportation, Initiative: Dedicated Transit Funding, 7, <http://www.dot.state.oh.us/Divisions/Planning/Transit/TransitNeedsStudy/Documents/InitiativePaper-DedicatedTransit-Funding.pdf> (accessed 8/15/2019).
 132. Id.
 133. Id. at 7-8.
 134. Id.
 135. Id.
 136. Id. at 9.
 137. Id.
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138. *Id.*
 139. 42 C.F.R. 431.53.
 140. For Ohio advocates, Ohio has recently moved this program, called Non-Emergency Medical Transportation from the Ohio Department of Jobs and Family Services to the Ohio Department of Medicaid. To learn more about the program, contact Marjorie Yano, Assistant Policy Director at the Ohio Department of Medicaid, <https://ddc.ohio.gov/Portals/0/transportation-policy-align.pdf>.
 141. JoNel Aleccia, Kaiser Health News, Medicaid Nation: No Car, No Care? Medicaid Transportation At Risk In Some States (January 30, 2018) <https://khn.org/news/no-car-no-care-medicaid-transportation-at-risk-in-some-states/> (accessed 8/16/2019).
 142. Ohio Department of Transportation & Ohio Department of Medicaid, Statewide Policy Alignment to Enable Coordination & Enhance Mobility <https://ddc.ohio.gov/Portals/0/transportation-policy-align.pdf> (accessed 8/20/2019).
 143. Center for Medicaid and Medicare Services, Fact Sheet: Let Medicaid Give You a Ride, <https://www.cms.gov/medicare-medic-aid-coordination/fraud-prevention/medicaid-integrity-education/downloads/nemt-factsheet.pdf> (accessed 8/16/2019).
 144. 42 C.F.R. 431.53; See *Boatman v. Hammons*, 164 F.3d 286, 289(6th Cir.1998).
 145. *Boatman v. Hammons*, 164 F.3d 286, 289 (6th Cir.1998)(finding that the Medicaid requirement to provide transportation was enforceable by a class); *Morgan v. Cohen*, 665 F.Supp (E.D. Pa.1987); *Bingham v. Obledo*, 195 Cal. Rptr. 142(Cal. Ct. App.1983); *Fant v. Stumbo*, 552 Supp.617(W.D. KY 1982); *Smith v. Vowell*, 379 F. Supp(W.D.C. TX 1974); *Daniels v. Tennessee*, 1985 WL 56553(See also *Harris v. James*, 127 F.3d 993 (11th Cir.1997)(finding that the Medicaid requirement to provide transportation was not enforceable by the class).
 146. *Boatman*, 164 F.3d 286, 289 (6th Cir.1998).
 147. See *Boatman*, 164 F.3d 286, 289 (6th Cir.1998).
 148. *Boatman*, 164 F.3d 286, 289 (6th Cir.1998); *Harris*, 127 F.3d 993 (11th Cir.1997).
 149. Medicaid.gov, Home & Community Based Services 1915(c) <https://www.medicaid.gov/medicaid/hcbs/authorities/1915-c/index.html> (accessed 8/22/2019).
 150. *Id.*
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151. Id.
 152. Id.
 153. For a full list of types of HCBS care, see CMS.gov, Home-and-Community-Base Services, <https://www.cms.gov/Outreach-and-Education/American-Indian-Alaska-Native/AIAN/LTSS-TA-Center/info/hcbs.html> (accessed 8/22/2019).
 154. Arizona, Rhode Island, and Vermont offer more limited HCBS through an amendment to their state plan under the Social Security Act, 1915(i).
 155. Musumeci & O'Malley Watts, Kaiser Family Foundation, Key State Policy Choices About Medicaid Home and Community Based Services, Appendix Table 2 (April 4, 2019) <https://www.kff.org/report-section/key-state-policy-choices-about-medic-aid-home-and-community-based-services-appendix-tables/> (accessed 8/22/2019).
 156. Medicaid.gov, State Waivers List, <https://www.medicaid.gov/medicaid/section-1115-demo/demonstration-and-waiver-list/index.html> (accessed 8/22/2019).
 157. Medicaid.gov, Ohio Waiver Fact Sheet, <https://www.medicaid.gov/medicaid/section-1115-demo/demonstration-and-waiver-list/Waiver-Descript-Factsheet/OH-Waiver-Factsheet.html#OH0337> (accessed 8/22/2019).
 158. Merriam-Webster, Ambulette, "a van or similar vehicle equipped for transporting people with limited mobility (such as wheelchair bound patients) in nonemergency situations." <https://www.merriam-webster.com/dictionary/ambulette> (accessed 3/10/2020).
 159. Zhai Yun Tan, Medical Providers Try Uber, Lyft For Patients With Few Transportation Options, Kaiser Health News (Aug. 17, 2016) <https://khn.org/news/medical-providers-try-uber-lyft-for-patients-with-few-transportation-options/> (accessed 8/22/2019).
 160. See <https://www.uber.com/> (accessed /22/2020) and <https://www.lyft.com/> (accessed /22/2020).
 161. Elizabeth A. Mapelli, Comment: Inadequate Accessibility: Why Uber should be a Public Accommodation Under the Americans with Disabilities Act, 67 Am. U. L. Rev.1947,1954(2018).
 162. Id.
 163. See *A White & Yellow Cab, Inc. v. Uber Techs., Inc.*, N.D.Cal. Case. No. 15-CV-05163,2017 U.S.Dist. LEXIS 171795(Oct. 17, 2017) (an example of a traditional taxi legal challenge to Uber, claiming de facto taxi status).
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164. Wolf Ritcher, Uber and Lyft are Gaining Even More Market Share Over Taxis and Rentals, Business Insider (July 30, 2018) <https://www.businessinsider.com/uber-lyft-are-gaining-even-more-market-share-over-taxis-and-rentals-2018-7>(accessed /22/2020).
 165. Elizabeth A. Mapelli Comment: Inadequate Accessibility: Why Uber should be a Public Accommodation Under the Americans with Disabilities Act, 67 Am. U. L. Rev.1947,1954(2018); The-CNN-Wire, Blind Woman Says Uber Driver Denied Ride Because of Service Dog(January 26, 2019), <https://pittsburgh.cbslocal.com/2019/01/26/blind-woman-service-dog-uber/>; WFTX, Blind Uber Customers Say They Were Denied Rides in Florida Because of Their Service Dogs (March 21, 2019), <https://www.thedenverchannel.com/news/national/blind-uber-customers-say-they-were-denied-rides-in-florida-because-of-their-service-dogs>; Michael Finney and Renee Koury, ABC News, Uber driver sees passenger in a wheelchair, takes off (May , 2019), <https://abc7news.com/technology/uber-driver-refuses-to-pick-up-passenger-in-wheelchair/5278327/>.
 166. Elizabeth A. Mapelli Comment: Inadequate Accessibility: Why Uber should be a Public Accommodation Under the Americans with Disabilities Act, 67 Am. U. L. Rev.1947,1961-62 (2018); help.uber.com, Accessibility (accessed 9/23/2019); help.lyft.com, Wheelchair Policy (accessed 9/23/2019).
 167. Help.lyft.com, Lyft Ride Modes Overview (accessed 9/23/2019).
 168. 42 U.S.C. 12184; 49 C.F.R. 37.29(a).
 169. See Rachael Reed, Disability Rights in the Age of Uber: Applying the Americans with Disabilities Act of 1990 to Transportation Network Companies, 33 GA. ST. U. L. Rev.517, 520(2017).
 170. Ramos v. Uber Techs, Inc. W.D. TX, Case No. SA-14-CA-502-XR, 2015 U.S. Dist. LEXIS 20914,(Feb. 20, 2015); Lowell v. Lyft, 352 F. Supp.3d 248(S.D.NY 2018); McPhail v. Lyft, Inc., W.D. TX Case No. A-14-CA-829-LY, 2014 U.S. Dist. LEXIS 165173, (Nov. 25,2014); Nat'l Fed. of the Blind of Cal. V. Uber Techs, Inc., 103 F.Supp.3d 1073(N.D.Cal.2014); Access Living of Metro. Chi. V. Uber Techs., Inc., 351 F.Supp.3d 1141(N.D.Ill.2018); Namisnak v. Uber Techs., N.D. Cal. Case No. 17-CV-06124-RS, (2018 U.S. Dist. LEXIS 221054,(October 3, 2018); Crawford v. Uber Techs., Inc., N.D Cal. Case No. 17-CV-02664-RS, 2018 U.S. Dist. LEXIS 33778, (March , 2018); Salovitz v. Uber Techs., Inc., D.C.W.TX., Case No. A-14-CV-823-LY,, 2014 U.S.Dist. LEXIS 147898, (Oct. 16, 2014).
 171. Elizabeth A. Mapelli, Comment: Inadequate Accessibility: Why Uber should be a Public Accommodation Under the Americans with Disabilities Act, 67 Am. U. L. Rev.1947,1952 (2018).
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172. <https://accessibility.uber.com/> (accessed 9/26/2019).
 173. <https://help.lyft.com/hc/en-us/articles/115013081668-Accessible-vehicle-dispatch> (accessed 9/26/2019).
 174. <https://accessibility.uber.com/> (accessed 9/26/2019).
 175. <https://www.iaccessibility.com/apps/blind/index.cgi/product?ID=260> (accessed 9/26/2019).
 176. <https://blog.lyft.com/posts/empowering-lyfts-hard-of-hearing> (accessed 9/26/2019).
 177. See Rachael Reed, Disability Rights in the Age of Uber: Applying the Americans with Disabilities Act of 1990 to Transportation Network Companies, 33 GA. ST. U. L. Rev.517, 546(2017).
 178. See Rachael Reed, Disability Rights in the Age of Uber: Applying the Americans with Disabilities Act of 1990 to Transportation Network Companies, 33 GA. ST. U. L. Rev.517, 546(2017).
 179. See Rachael Reed, Disability Rights in the Age of Uber: Applying the Americans with Disabilities Act of 1990 to Transportation Network Companies, 33 GA. ST. U. L. Rev.517, 546(2017).
 180. See Rachael Reed, Disability Rights in the Age of Uber: Applying the Americans with Disabilities Act of 1990 to Transportation Network Companies, 33 GA. ST. U. L. Rev.517, 546(2017).
 181. <https://blog.lyft.com/posts/lyfts-commitment-to-accessibility>(July 9, 2019); Lyft blog Lyft’s commitment to accessibility.
 182. National Council on Disability, Self-Driving Cars: Mapping Access to a Technology Revolution, 13 (November 2,2015) (https://ncd.gov/sites/default/files/NCD_AutomatedVehiclesReport_508-PDF.pdf).
 183. National Council on Disability, Self-Driving Cars: Mapping Access to a Technology Revolution, 13 (November 2,2015) (https://ncd.gov/sites/default/files/NCD_AutomatedVehiclesReport_508-PDF.pdf).
-

184. National Council on Disability, Self-Driving Cars: Mapping Access to a Technology Revolution, 13 (November 2,2015) (https://ncd.gov/sites/default/files/NCD_AutomatedVehiclesReport_508-PDF.pdf). At the same time, five hundred AV experts attending the Transportation Research Board 2014 Automated Vehicle Symposium were asked when they would trust a fully robotic car to take their children to school. More than half responded 2030 at the very earliest, a fifth said not until 2040, and roughly 1 in 10 said never. National Council on Disability, Self-Driving Cars: Mapping Access to a Technology Revolution, 13 (November 2,2015) (https://ncd.gov/sites/default/files/NCD_AutomatedVehiclesReport_508-PDF.pdf).
 185. National Highway Traffic Safety Administration, Preliminary Statement of Policy Concerning Automated Vehicles, 4-5, available at https://www.nhtsa.gov/staticfiles/rulemaking/pdf/Automated_Vehicles_Policy.pdf (accessed 8/29/2019).
 186. National Highway Traffic Safety Administration, Preliminary Statement of Policy Concerning Automated Vehicles, 4-5, available at https://www.nhtsa.gov/staticfiles/rulemaking/pdf/Automated_Vehicles_Policy.pdf (accessed 8/29/2019).
 187. National Council on Disability, Self-Driving Cars: Mapping Access to a Technology Revolution, 18-19 (November 2,2015) (https://ncd.gov/sites/default/files/NCD_AutomatedVehiclesReport_508-PDF.pdf).
 188. National Council on Disability, Self-Driving Cars: Mapping Access to a Technology Revolution, 19 (November 2,2015) (https://ncd.gov/sites/default/files/NCD_AutomatedVehiclesReport_508-PDF.pdf).
 189. Symposium: The Transformation of Transportation: Autonomous Vehicles, Google Cars, and Vehicle Talking to Each Other: The Legal Obligations, Obstacles, and Opportunities for Automated and Connected Vehicles to Improve Mobility and Access for People Unable to Drive, 2017 Mich. St.L.Rev.75
 190. National Council on Disability, Self-Driving Cars: Mapping Access to a Technology Revolution, 21 (November 2,2015) (https://ncd.gov/sites/default/files/NCD_AutomatedVehiclesReport_508-PDF.pdf).
 191. National Council on Disability, Self-Driving Cars: Mapping Access to a Technology Revolution, 22 (November 2,2015) (https://ncd.gov/sites/default/files/NCD_AutomatedVehiclesReport_508-PDF.pdf).
-

192. National Council on Disability, Self-Driving Cars: Mapping Access to a Technology Revolution, 21 (November 2,2015) (https://ncd.gov/sites/default/files/NCD_AutomatedVehiclesReport_508-PDF.pdf).
 193. National Council on Disability, Self-Driving Cars: Mapping Access to a Technology Revolution, 25 (November 2,2015) (https://ncd.gov/sites/default/files/NCD_AutomatedVehiclesReport_508-PDF.pdf).
 194. National Council on Disability, Self-Driving Cars: Mapping Access to a Technology Revolution, 26 (November 2,2015) (https://ncd.gov/sites/default/files/NCD_AutomatedVehiclesReport_508-PDF.pdf).
 195. National Council on Disability, Self-Driving Cars: Mapping Access to a Technology Revolution, 26 (November 2,2015) (https://ncd.gov/sites/default/files/NCD_AutomatedVehiclesReport_508-PDF.pdf).
 196. National Council on Disability, Self-Driving Cars: Mapping Access to a Technology Revolution, 27 (November 2,2015) (https://ncd.gov/sites/default/files/NCD_AutomatedVehiclesReport_508-PDF.pdf).
 197. Monica Pinilla-Roncancio, Disability and Poverty: two related conditions. A review of the Literature, Rev. Fac. Med. 2015 Vol. 63 Supl. : S113-23 (5/5/2015)(available at https://pdfs.semanticscholar.org/c3dd/1bfd483165608f459ba335c3a8de2dbf17a8.pdf?_ga=2.126398477.1457072484.1580243137-1112808542.1580243137)(accessed /28/2020).
 198. National Council on Disability, Self-Driving Cars: Mapping Access to a Technology Revolution, 28 (November 2,2015) (https://ncd.gov/sites/default/files/NCD_AutomatedVehiclesReport_508-PDF.pdf).
 199. National Council on Disability, Self-Driving Cars: Mapping Access to a Technology Revolution, 28 (November 2,2015) (https://ncd.gov/sites/default/files/NCD_AutomatedVehiclesReport_508-PDF.pdf).
 200. National Council on Disability, Self-Driving Cars: Mapping Access to a Technology Revolution, 28 (November 2,2015) (https://ncd.gov/sites/default/files/NCD_AutomatedVehiclesReport_508-PDF.pdf).
 201. The Annie E. Casey Foundation, Affordable Car Ownership Programs: Transporting Families Toward Financial Stability and Success (Jan. , 2007), available at <https://www.aecf.org/resources/affordable-car-ownership-programs/> (accessed /28/2020).
-

-
202. National Council on Disability, Self-Driving Cars: Mapping Access to a Technology Revolution, 29 (November 2,2015) (https://ncd.gov/sites/default/files/NCD_AutomatedVehiclesReport_508-PDF.pdf).
 203. National Council on Disability, Self-Driving Cars: Mapping Access to a Technology Revolution, 29 (November 2,2015) (https://ncd.gov/sites/default/files/NCD_AutomatedVehiclesReport_508-PDF.pdf).
 204. National Council on Disability, Self-Driving Cars: Mapping Access to a Technology Revolution, 29 (November 2,2015) (https://ncd.gov/sites/default/files/NCD_AutomatedVehiclesReport_508-PDF.pdf).
 205. National Council on Disability, Self-Driving Cars: Mapping Access to a Technology Revolution, 29 (November 2,2015) (https://ncd.gov/sites/default/files/NCD_AutomatedVehiclesReport_508-PDF.pdf).
 206. National Council on Disability, Self-Driving Cars: Mapping Access to a Technology Revolution, 30 (November 2,2015) (https://ncd.gov/sites/default/files/NCD_AutomatedVehiclesReport_508-PDF.pdf).
 207. National Council on Disability, Self-Driving Cars: Mapping Access to a Technology Revolution, 30 (November 2,2015) (https://ncd.gov/sites/default/files/NCD_AutomatedVehiclesReport_508-PDF.pdf).
 208. National Council on Disability, Self-Driving Cars: Mapping Access to a Technology Revolution, 31 (November 2,2015) (https://ncd.gov/sites/default/files/NCD_AutomatedVehiclesReport_508-PDF.pdf).
 209. National Council on Disability, Self-Driving Cars: Mapping Access to a Technology Revolution, 31 (November 2,2015) (https://ncd.gov/sites/default/files/NCD_AutomatedVehiclesReport_508-PDF.pdf).
 210. American Association of State Highway and Transportation Officials, National Connected Vehicle Field Infrastructure Footprint Analysis, Final Report (Dec. 27, 2013)(available at http://sp.stsmo.transportation.org/Documents/Task%206a%20AASHTO_CV_Footprint_Deployment_Scenarios_v2.pdf) (accessed 2/19/2020).
 211. 28 CFR 35.130 (i).
 212. 28 C.F.R. 35.130 (b)(6).
 213. 28 CFR 35.104.
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214. See *Clarkson v. Iowa DOT*, 2005 U.S. Dist LEXIS 37890, *28 (N.D.Iowa 2005); *Briggs v. Walker*, 88 F.Supp.2d 1196(D.C.KS.2000); *Bates v. UPS*, 2004 U.S. Dist. LEXIS 21062(N.D.Cal.2004); *Boert v. Euclid Bev.*, 954 F.Supp.170 (N.D.Ill.1997); *Therault v. Flynn*, 162 F.3d 46 (1st Cr.1998).
 215. *Clarkson v. Iowa DOT*, 2005 U.S. Dist LEXIS 37890, *28 (N.D.Iowa 2005), quoting 28 C.F.R pt. 35, App. A at 481-82(1999).
 216. Department of Justice, Title II Technical Assistance Manual, II-2.8000 (1993).
 217. *Id.* at 3.7200.
 218. *Id.*
 219. *Id.*; 28 C.F.R. 36.208(c).
 220. National Conference of State Legislators, <http://www.ncsl.org/research/transportation/autonomous-vehicles-self-driving-vehicles-enacted-legislation.aspx> (accessed 8/29/2019).
 221. <https://www.aamva.org/Autonomous-Vehicle-Best-Practices-Working-Group/>; National Council on Disability, *Self-Driving Cars: Mapping Access to a Technology Revolution*, 26 (November 2, 2015). (https://ncd.gov/sites/default/files/NCD_AutomatedVehiclesReport_508-PDF.pdf).
 222. American Association of Motor Vehicle Administrators, called *Guidelines for Testing Drivers in Vehicles with Advanced Driver Assistance Systems* (August 2019), available at <https://www.aamva.org/Autonomous-Vehicle-Information-Library/>(accessed 8/29/2019).
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Notes



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