THE ROAD TO AUTONOMY

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Abstract

Scholars, activists, and advocates have long identified the "transportation gap" as a significant factor contributing to race- and class-based economic and other disparities. Carlessness correlates closely with race and poverty; meanwhile, widespread disinvestment in public transit results in low-income Black and Brown people suffering a disproportionate lack of access to opportunity and choice in almost every conceivable area of life.

State and local governments most often propose one of three solutions to correct the transportation gap: 1) renewing their investment in public transit; 2) increasing access to shared transit; and 3) making adaptations to the built environment. This Article demonstrates that these three proposals are all inadequate. Despite their many benefits, none of these solutions provide an equivalent substitute for private car ownership for individuals who need or want better transportation. Thus, any solution privileging public approaches to the exclusion of private options is doomed at the outset and will never completely suffice to close the gap.

The thinking that inspires the major public-approach proposals is in line with the current understanding of the constitutional right to travel, which judges and legal scholars contemplate as a negative right, blocking undue interference with interstate travel. A right to *intra*state travel is not universally recognized, but where it is acknowledged, it is also consistently framed as a negative right.

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This Article argues that, instead, advocates and lawmakers must design solutions that incorporate a *positive* right to autonomous mobility, allowing individual input and choice in the modes of transportation best suited to each person. The low-income, Black, and Brown people stranded in the transportation gap are not well served by top-down, one-size-fits-all solutions. Moreover, the public-approach proposals typically ignore private car ownership as a possible option, or outright discourage it, to stem the tide of the environmental and infrastructural problems associated with the popularity of driving. This dismissal imposes private burdens to solve societal problems; it yokes the most vulnerable to eliminate problems created by the most powerful.

Instead, courts, legislatures, business leaders, and the American public at large must affirm a positive right to autonomous mobility: to trust individuals to know their own needs and to meet them, even if those needs include private vehicle ownership. Only when the law expands to recognize this right and include private options can state and local governments design creative and principled solutions that have a chance of closing the transportation gap.

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Introduction

Tara¹ takes the bus to work full-time. Her kids stay at a neighbor's inhome daycare. One day the neighbor tells her they are moving away to live with family out of state. The closest daycare she can find in her budget and with open slots available for both her kids is in the opposite direction from work and requires two transfers.

Andre has a physical disability. His medical appointments are across town. The battery for his electric wheelchair does not hold a charge for very long and he is avoiding public transportation because very few people in his town wear masks during the pandemic. He is immunocompromised because of his condition and trying to stay healthy and continue living independently.

Jordan lives in a rural area and works at a big-box store forty-five minutes outside her small town. She does not mind because she gets rides from a good friend who works there on the same schedule. The friend gets fired, and Jordan does not know how she will continue getting to work. No one else from the store lives close to her and jobs in her town are scarce.

Robert is a teacher's aide at a small private school downtown. He lives in a run-down building, but can walk to work, restaurants, parks, and activities. His neighborhood begins to gentrify and rents are skyrocketing. He will be priced out soon and nowhere nearby has comparable rents.

Bri lives in a city with an efficient subway service—when it's working—but maintenance issues and delays are frequent and unpredictable. Between work, classes, and running errands for her grandparents, she spends multiple hours riding and waiting for trains every day.

* * *

At first glance, these five people would appear to have little in common. They live in different sorts of places, from urban to rural. Their family structures and daily lives look very different. But they have one important link. They are all caught in the "transportation gap": a widespread disparity of automobile and transit access between the poor and the affluent. This disparity has an additional significant racial component, with white people holding a stark advantage relative to people of color. Millions of people like the five described above are caught in the gap, experiencing negative socioeconomic outcomes across all facets of life simply because they lack reliable and independent transportation.

^{1.} The individuals described in this part of the Article are fictionalized representational composites.

Many scholars, activists, and advocates from various disciplines such as law, city planning, and sociology, have considered the deleterious effects of the transportation gap and how they might be remedied.² This Article takes a novel approach to the problem by rejecting exclusively public approaches and insisting that private, individual, positive rights be incorporated into the solution. Transportation justice is not just about moving people from one point to another. Instead, transit has major implications across many social justice landscapes, such as race, gender, disability, education access, employment, economic justice, environmental justice, and reproductive justice, all of which invoke individual rights. Thus, individual rights must form part of the solution.

The major proposed solutions to the transportation gap under a public approach include: (1) improving public transit access; (2) increasing the prevalence of shared transit; and (3) adapting the built environment to facilitate access to jobs and resources. Each proposed solution has merit but misses the mark due to foundational flaws. This Article traces those flaws to the theoretical underpinnings of the proposals and suggests that public approach proposals would be more successful if they were based upon an assumed individual positive right to autonomous mobility. Because the public-approach models are not equivalent substitutes for private vehicle ownership, privileging public approaches to the exclusion of any private options will always stymie progress toward closing the transportation gap.

The author expects this Article to launch a series of pieces defining and examining the positive right to autonomous mobility. Future Articles may address subjects not covered here, such as the transportation gap's development into an independent systemic platform for discrimination and hampering individual rights. While this Article begins to grapple with some significant downsides to recognizing the right to autonomous mobility, a future piece could expand and improve on the ideas presented here in much more depth and detail. Lastly, a future scholarly piece on the importance of incorporating the right into transportation justice efforts, could consider its role in racial reparations proposals.

Part I of this Article describes the features of the transportation gap and how it corrodes individuals' ability to realize positive outcomes in almost every aspect of life. Part II examines the advantages and drawbacks of the major proposed public-approach solutions. Part III considers the theoretical deficits that undermine the success of these proposals, by examining the existing understanding of the right to travel. Part III likewise contemplates

^{2.} See sources cited infra notes 6–7.

the exclusively negative constitutional rights to be free from undue interference and articulates the importance of a recognized *positive* right to autonomous mobility. Part IV concludes.

I. The Transportation Gap

A. Characteristics

There are nearly 104 million privately owned automobiles in the United States.³ A total of 91% of American households have cars, and about 58% have more than one.⁴ And yet the "transportation gap" exists and persists, a disparity of transportation access that contributes to lopsided outcomes for disadvantaged groups, particularly those in racialized poverty. This disparity includes three component problems: limitations within the built environment, persons who are involuntarily carless (also known as "carlessness"),⁵ and certain characteristics of public transportation that make public transportation an unsatisfying substitute for cars.

A wealth of scholarly commentary has been devoted to revealing and examining the origins of the transportation gap, widely acknowledging that its foundation rests upon systemic racism.⁶ Prominent legal scholars such as Richard Rothstein and Deborah Archer have illustrated how legal, residential segregation coupled with land-use policy isolates, stagnates, and

^{3.} FED. HIGHWAY ADMIN., U.S. DEP'T OF TRANSP., HIGHWAY STATISTICS 2020, § 7.3, tbl. MV-1 (2021), https://www.fhwa.dot.gov/policyinformation/statistics/2020/pdf/mv1.pdf ("State Motor-Vehicle Registrations – 2020") (table updated Feb. 2023). This number includes commercial vehicles. *Id.*

^{4.} See Popular Household Statistics – Vehicles Available, U.S. DEP'T OF TRANSP., FED. HIGHWAY ADMIN., https://nhts.ornl.gov/households (last visited Mar. 28, 2023) (accessible by clicking "Vehicles Available" from the list under "Popular Household Statistics").

^{5.} Voluntary carlessness is a growing movement which is not included as an aspect of the transportation gap because it represents people who were not otherwise subject to the gap, but who intentionally opted out of driving. It will be discussed in greater detail later in the Article.

^{6.} See, e.g., Karel Martens et al., A Justice-Theoretic Approach to the Distribution of Transportation Benefits: Implications for Transportation Planning Practice in the United States, 46 Transp. Rsch. Part A: Pol'y & Prac. 684, 684–89 (2012); Deborah N. Archer, Essay, Transportation Policy and the Underdevelopment of Black Communities, 106 Iowa L. Rev. 2125, 2131–48 (2021); Alex Karner et al., From Transportation Equity to Transportation Justice: Within, Through, and Beyond the State, 35 J. Plan. Literature 440, 440–43 (2020) (providing a literature review of scholarship relating to transportation justice and equity).

erodes Black communities. Residential segregation was supported by an interconnected network of public and private acts of discrimination in housing policy, selling, renting, and lending.8 The interaction of previously existing residential segregation with discriminatory land-use policy functioned both to prevent Black people from inhabiting existing desirable areas and to place desirable amenities as far from Black people as possible. For example, highway planners intentionally targeted Black neighborhoods, especially poor ones, to bulldoze for highway projects. These projects had a number of effects that destroyed Black communities. It created a physical barrier to insulate white residents from Black ones, but that was only the first layer of ruin. 10 Projects like this also destroyed the character of strong and thriving Black neighborhoods by displacing residents and scattering formerly close-knit neighbors to the winds. 11 They extracted Black wealth and stymied progress toward building generational wealth for many community members. Black residents whose homes these projects flagged for destruction were commonly not compensated at the home's full value,

^{7.} See Richard Rothstein, The Color of Law: A Forgotten History of How Our Government Segregated America 60-67 (2017); Lawrence T. Brown, The Black Butterfly: The Harmful Politics of Race and Space in America 12-16, 48-49 (2021); Deborah N. Archer, "White Men's Roads Through Black Men's Homes": Advancing Racial Equity Through Highway Reconstruction, 73 Vand. L. Rev. 1259, 1263–72 (2020).

^{8.} See ROTHSTEIN, supra note 7, at 77–91; BROWN, supra note 7, at 48-49; Archer, supra note 7, at 1263–64 ("In reality, segregated cities are the result of many factors, including federal, state, and local housing policies; private housing discrimination; migration patterns; public education systems; employment opportunities; mortgage practices; and the country's interstate highway system.").

^{9.} Archer, *supra* note 7, at 1265 ("Often under the guise of 'slum removal,' federal and state officials purposely targeted Black communities to make way for massive highway projects. In states around the country, highways disproportionately displaced Black households and cut the heart and soul out of thriving Black communities as homes, churches, schools, and businesses were destroyed."). In Tulsa, Oklahoma highway planners bulldozed the prominent Greenwood neighborhood home to "Black Wall Street" to make way for the interstate. *See* Steve Dubb, *What Really Destroyed Tulsa's Black Wall Street*, Nonprofit Q. (July 27, 2022), https://nonprofitquarterly.org/what-really-destroyed-tulsas-black-wall-street/ ("It took the building of Interstate 244, right through the middle of Greenwood, to bury what white mob violence in 1921 could not In some cases, the same business owners that saw their business establishments burned to the ground in 1921 had to sell to the highway builders a half century later.").

^{10.} See ROTHSTEIN, supra note 7, at 126–31; BROWN, supra note 7, at 152–53; Archer, supra note 7, at 1263–73.

^{11.} See ROTHSTEIN, supra note 7, at 126–31; BROWN, supra note 7, at 152–53; Archer, supra note 7, at 1263–73.

and once targeted, the value of any remaining homes plummeted.¹² Bulldozing also hampered Black mobility by making it harder for Black people to travel safely in and out of their home communities without cars.¹³

Despite the increased utility of cars, the racialized poor—particularly poor Black people—are those least likely to have them. Every nonwhite ethnic group is more likely than its white counterparts to be carless. ¹⁴ Most notably, Black Americans are three times as likely as white people to lack cars. ¹⁵ There are multiple reasons for this discrepancy. Income disparities, ¹⁶ sales discrimination, ¹⁷ problematic credit scoring processes, ¹⁸ and predatory

^{12.} See Archer, supra note 7, at 1263–73; see also Dubb, supra note 9 ("[R]edlining policies began to be implemented in the 1930s, and these made it difficult to secure loans to purchase and renovate property, thereby lowering real estate values in Greenwood. This, in turn, led to Greenwood's land being undervalued, 'which then led to the area being targeted for demolition "").

^{13.} Archer, *supra* note 7, at 1295 ("In many cities, the highway blocked pedestrian movement and cut off social interactions.").

^{14.} See Car Access: Everyone Needs Reliable Transportation Access and in Most American Communities That Means a Car, NAT'L EQUITY ATLAS, https://nationalequity atlas.org/indicators/Car access#/ [https://perma.cc/3CPJ-LK8Q] (last visited Apr. 10, 2023).

^{15.} See id. A total of 18% of Black households were carless, compared to 6% of white households.

^{16.} See Aditya Aladangady & Akila Forde, Wealth Inequality and the Racial Wealth Gap, BD. OF GOVERNORS OF THE FED. RSRV. SYS.: FEDS NOTES (Oct. 22, 2021), https://www.federalreserve.gov/econres/notes/feds-notes/wealth-inequality-and-the-racial-wealth-gap-20211022.htm.

^{17.} Marissa Armas, New Report Finds That Auto Dealerships Discriminate Against People of Color, NBC NEWS (Jan. 12, 2018, 10:48 AM CST), https://www.nbcnews.com/ news/latino/new-report-finds-auto-dealerships-discriminate-against-people-color-n837136 (citing a report indicating that "62.5 percent of the time, people of color who were more qualified than their white counterparts still received higher pricing offers from the dealer"); Derek Thompson, The Price Is Racist: When Minorities (and Women) Are Asked to Pay More, ATLANTIC (June 24, 2013), https://www.theatlantic.com/business/archive/ 2013/06/the-price-isracist-when-minorities-and-women-are-asked-to-pay-more/277174/; Mayra Rodriguez Valladares, As Auto Lending Delinquencies Rise, Discrimination Is Even More Dangerous to the Economy, FORBES (May 1, 2019, 1:45 PM EDT), https://www.forbes.com/sites/mayrarodriguezvalladares/2019/05/01/as-auto-lending-delin quencies-rise-discrimination-is-even-more-dangerous-to-the-economy; CFPB to Hold Auto Lenders Accountable for Illegal Discriminatory Markup, CONSUMER FIN PROT. BUREAU (Mar. 21, 2013), https://www.consumerfinance.gov/about-us/newsroom/con sumer-financial-protection-bureau-to-hold-auto-lenders-accountable-for-illegal-discrimina tory-markup; Lisa Rice & Erich Schwartz Jr., NFHA: Nat'l Fair Hous. All., DISCRIMINATION WHEN BUYING A CAR: HOW THE COLOR OF YOUR SKIN CAN AFFECT YOUR CAR-SHOPPING EXPERIENCE 7, 14 (2018), https://nationalfairhousing.org/wp-content/ uploads/2018/01/Discrimination-When-Buying-a-Car-FINAL-1-11-2018.pdf.

financing practices¹⁹ all combine to make cars less affordable for would-be drivers of color.

Being carless bears a similar connection to poverty in a more general sense. Urban planning scholars David A. King, Michael J. Smart, and Michael Manville point out that being carless is increasingly associated with the most severe poverty levels.²⁰ Their work uncovers that:

Most American carlessness appears to be involuntary: carless households often live in places where walking and transit use are difficult, which suggests that absence of a vehicle is a constraint rather than a choice. The value of cars to low-income people is also evidenced by how eagerly the poor acquire them. Low-income households often convert even small increases in spending power—such as increases in the minimum wage—into vehicle purchases.²¹

In a prior publication, this author also observed that car owners prioritized their car payments above any other bills.²² "When money is tight, consumers will skip paying the mortgage and credit cards before they will default on their car payments. This indicates that consumers see the car payment as a more critical expense."²³

Even for members of marginalized groups who can obtain cars, the car's mere acquisition is not the final hurdle. Asset limits for many public benefits programs block the racialized poor from owning cars of too-high value at the risk of disqualification from benefits, creating an incentive for these drivers to forgo car ownership or purchase a less reliable vehicle as an

^{18.} Nicole K. McConlogue, *Discrimination on Wheels: How Big Data Uses License Plate Surveillance to Put the Brakes on Disadvantaged Drivers*, 18 STAN. J. C.R. & C.L. 279, 303–16 (2022) (mapping the process of credit scoring and identifying the points at which bias enters the scoring cycle).

^{19.} *Id.* at 301–02 (describing various forms of predatory lending relating to auto financing); DELVIN DAVIS, CTR. FOR RESPONSIBLE LENDING, AUTO LOANS: THE STATE OF LENDING IN AMERICA & ITS IMPACT ON U.S. HOUSEHOLDS 61, 71–74 (2012), https://www.responsiblelending.org/state-of-lending/State-of-Lending-report-1.pdf (describing various forms of predatory lending relating to auto financing).

^{20.} See David A. King et al., The Poverty of the Carless: Toward Universal Auto Access, 42 J. Plan. Educ. & Rsch. 464, 465 (2022).

^{21.} Id. at 471.

^{22.} McConlogue, *supra* note 18, at 293 (citing Ben McLannahan, *Debt Pile-Up in US Car Market Sparks Subprime Fear*, Fin. Times (May 29, 2017), https://www.ft.com/content/bab49198-3f98-11e7-9d56-25f963e998b2).

^{23.} Id.

alternative.²⁴ Additionally, maintenance and insurance are significant ongoing expenses. Insurance rates are frequently higher for the racialized poor,²⁵ and for some individuals in poverty, there is an annual or biannual risk of having the car's registration suspended for failure to pay administrative fees often unrelated to driving.²⁶ A litany of infractions may place drivers' licenses at risk, such as failing to appear in court²⁷ or to resolve arrearages for court fees,²⁸ taxes,²⁹ child support,³⁰ tolls,³¹ tickets,³² or fines.³³

^{24.} See Rebecca Vallas & Joe Valenti, Asset Limits Are a Barrier to Economic Security and Mobility, CTR. FOR AM. PROGRESS (Sept. 10, 2014), https://www.americanprogress.org/article/asset-limits-are-a-barrier-to-economic-security-and-mobility/ (outlining asset limits and consequent implications for government programs including Temporary Assistance for Needy Families, Supplemental Nutrition Assistance Program, Low Income Home Energy Assistance Program, Medicaid, and Supplemental Security Income).

^{25.} See McConlogue, supra note 18, at 299 (describing discriminatory auto insurance rate-setting practices).

^{26.} See Angie Schmitt, Car Dependence Is a Poverty Trap That States Exploit to Raise Money, Streetsblog USA (Sept. 29, 2017), https://usa.streetsblog.org/2017/09/29/cardependence-is-a-poverty-trap-that-states-exploit-to-raise-money/ ("There is a pronounced racial disparity in the application of license-based legal penalties.").

^{27.} Henry Grabar, *Too Broke to Drive*, SLATE (Sept. 27, 2017, 2:47 PM), https://slate.com/business/2017/09/state-lawmakers-have-trapped-millions-of-americans-in-debt-by-taking-their-licenses.html (highlighting personal stories and statistics on state laws restricting drivers' license for failure to appear in court).

^{28.} Justin Wm. Moyer, *Millions of Drivers Lost Their Licenses for Failing to Pay Court Fees, Study Finds*, Wash. Post (Sept. 26, 2017), https://www.washingtonpost.com/local/trafficandcommuting/millions-of-drivers-lost-their-licenses-for-failing-to-pay-court-fees-study-finds/2017/09/25/c495aed6-9f01-11e7-84fb-b4831436e807_story.html. An advocacy group reported in 2017 that forty-three states and the District of Columbia revoked driver's licenses for unpaid court fees, leading to the immobilization of 4.2 million people in just five states. Mario Salas & Angela Ciolfi, Legal Aid Just. Ctr., Driven by Dollars: A State-by-State Analysis of Driver's License Suspension Laws for Failure to Pay Court Debt 1–5 (2017), https://www.justice4all.org/wp-content/uploads/2017/09/Driven-by-Dollars.pdf.

^{29.} Consequences of Not Filing or Paying State Taxes, TAXCURE, https://taxcure.com/state-taxes/consequences-not-filing-or-paying (last visited Apr. 10, 2023) (noting that punishments for failure to pay taxes include tax liens, wage garnishment, and suspension of one's driver's, business, and even professional licenses, as well as placement on a public list of delinquent taxpayers).

^{30.} License Restrictions for Failure to Pay Child Support, NCSL: NAT'L CONF. OF STATE LEGISLATURES, https://www.ncsl.org/human-services/license-restrictions-for-failure-to-pay-child-support (last updated Oct. 14, 2020) ("All 50 states have statutory or administrative provisions authorizing the suspension or revocation of various licenses for failure to pay child support. The licenses affected generally are driver's, occupational, professional...").

Despite these issues, people need to get around regardless of their access to cars. Many individuals use public transportation modes such as buses, subways, trains, and other forms of mass transit. This may not be the preferred option for most. Indeed, transit user demographics reveal similarly strong links to race and poverty as those that are involuntarily without a car.³⁴ Studies reveal Black people ride public transit at double their share of the national population, while white ridership was much lower in comparison.³⁵ Similarly, households earning less than \$15,000 annually are disproportionately represented among transit users.³⁶

Considering the transportation gap, a picture swiftly develops of people and communities held hostage. A total of 40% of riders report needing public transportation when "they have no real alternative because they lack money or lack a vehicle, or that transit is the only transportation available to them." To further highlight the dependent relationship between public transit and many of its users, nearly a quarter of riders said that if their usual mode of transit were unavailable, they would simply not make the planned trip. Only 26% said they *preferred* transit or found it more convenient than driving.

^{31.} See Elaine S. Povich, State Authorities Face Challenges Holding Out-of-State Motorists Accountable for Toll Evasion, USA TODAY (Sept. 8, 2021, 10:47 AM ET), https://www.usatoday.com/story/news/nation/2021/09/08/states-work-hold-out-state-motor ists-accountable-tolls/5768632001/.

^{32.} See Justin Wm. Moyer, More Than 7 Million People May Have Lost Driver's Licenses Because of Traffic Debt, WASH. POST (May 19, 2018, 4:18 PM EDT), https://www.washingtonpost.com/local/public-safety/more-than-7-million-people-may-have-lost-drivers-licenses-because-of-traffic-debt/2018/05/19/97678c08-5785-11e8-b656-a5f8c2a9295d story.html.

^{33.} Moyer, supra note 28.

^{34.} Most of these statistics, and indeed, many statistics throughout this Article, are a snapshot of a pre-COVID-19 America. Given the typical temporal lag of statistical reporting, compounded with the lingering nature of the pandemic, it is too soon to make definitive assessments of COVID's impact on many of these phenomena. Conclusions and statements of fact throughout are presented with that in mind.

^{35.} HUGH M. CLARK, AM. PUB. TRANSP. ASS'N, WHO RIDES PUBLIC TRANSPORTATION 20 tbl.4 (2017), https://www.apta.com/wp-content/uploads/Resources/resources/reportsandpubli cations/Documents/APTA-Who-Rides-Public-Transportation-2017.pdf. In the study, Black Americans represented 24% of transit riders, despite being only 12% of the population. *Id.* White Americans were 63% of the national population, but only 40% of transit riders. *Id.*

^{36.} Id. at 4.

^{37.} *Id.* at 5. A total of 46% of riders indicated that they did not have access to a vehicle. *Id.* at 4.

^{38.} Id. at 5 (22%).

^{39.} Id. at 59 fig.44.

There are many reasons for this widespread distaste for mass transit. These modes of transportation are slow, siphoning hours from users' days. 40 Moreover, buses and trains do not run door-to-door, so riders must confront and plan around the "first/last mile issue," or the question of how they will actually get from their point of origin to the transit stop or station, and from the transit stop or station to their ultimate destination. 41

Additionally, public transportation modes do not adequately provide for users with disabilities or physical mobility challenges; despite extensive advocacy and lawmaking, there are still significant shortfalls. ⁴² Although the Americans with Disabilities Act (ADA) requires accommodation for people with disabilities, there are often extensive barriers to public transportation. ⁴³ The absence or condition of accessibility equipment, stop and station design, quality and frequency of stop announcements, and the ability and willingness of transportation employees to assist or accommodate all make public transit difficult for people with disabilities. ⁴⁴

40. The American Public Transportation Association links modal speeds to comparative ridership, noting that

Since bus passengers take shorter trips and buses operate at lower speeds compared with other modes, they carry fewer than two-fifths of all passenger miles traveled. In contrast, rail vehicles provide only 16 percent of vehicle revenue hours of service, but—due to their longer and higher-speed trips—account for 59 percent of all passenger miles traveled on public transit.

MATTHEW DICKENS, AM. PUB. TRANSP. ASS'N, 2021 PUBLIC TRANSPORTATION FACT BOOK 13 (2021), https://www.apta.com/wp-content/uploads/APTA-2021-Fact-Book.pdf. The density of the service area and the number of stops impacts this metric. See id. at 13–14. Transit vanpool and commuter rail, which commuters use for long trips and thus have fewer stops, are the fastest public modes of transportation, averaging 37.1 and 30.7 miles per hour respectively. Id. at 13. Heavy rail (subway) is the next fastest at 19.9 miles per hour, because it doesn't have to share roads with other traffic. See id. at 13–14. Modes running aboveground in street traffic are slower; bus services reaches an average speed of twelve miles per hour. Id. at 14.

- 41. Hossain Mohiuddin, *Planning for the First and Last Mile: A Review of Practices at Selected Transit Agencies in the United States*, 13 SUSTAINABILITY, no. 4, 2021, at 1, 1, https://doi.org/10.3390/su13042222 (article no. 2222).
- 42. Equity in Transportation for People with Disabilities, AM. ASS'N OF PEOPLE WITH DISABILITIES [hereinafter Equity in Transportation], http://www.civilrightsdocs.info/pdf/transportation/final-transportation-equity-disability.pdf (last visited Apr. 10, 2023).
- 43. *Id.* (PDF file page 1) ("Twenty years after passage of the ADA, transportation choices for people with disabilities are still limited.").
- 44. See Sandra Rosenbloom, Transportation Patterns and Problems of People with Disabilities, in The Future of Disability in America 519, 519–36 (Marilyn J. Field & Alan M. Jeffe eds., 2007); see also Matt Alderton, Nearly 30 Years After the ADA, the Nation's Transit Agencies Report Successes and Shortfalls, Wash. Post (June 26, 2020,

Moreover, people with disabilities find public transport even slower than other riders do, as they may have to travel well out of their way to locate accessible stops or stations. 45 One report indicates that "[u]nfortunately, adults with disabilities are twice as likely as those without disabilities to have inadequate transportation (31 percent vs. 13 percent). Of the nearly 2 million people with disabilities who never leave their homes, 560,000 never leave home because of transportation difficulties."46

Although door-to-door paratransit services are generally available under the ADA and Medicaid mandates, these services are plagued by deficits, delays, and logistical difficulties.⁴⁷ Many people with disabilities do not qualify for paratransit, so they must find ways to use mass transit successfully despite their mobility limitations.⁴⁸

Indeed, any mass transit user experiencing physical mobility challenges must figure out how to make do, even if their challenges are temporary. Injured riders, ⁴⁹ pregnant riders, ⁵⁰ parents with strollers, ⁵¹ and people who

- 45. Equity in Transportation, supra note 42 (PDF file page 2).
- 46. Id. (PDF file page 1).

- 48. See id. (PDF file pages 2-3).
- 49. See, e.g., Glenn McAnanama, Life on Crutches in NYC, STREETSBLOG NYC (Oct. 27, 2006), https://nyc.streetsblog.org/2006/10/27/life-on-crutches-in-nyc/ ("The subways are pretty much completely out of the question because of the lack of elevators and escalators between on my usual routes to work and other normal destinations."); Nigel Chin, Commuting with a Foot Injury Made Me Feel Bad for Every Needy Commuter I've Ignored on Public Transport, PRIDE (Jan. 22, 2020, 4:55 PM), https://pride.kindness.sg/commutingwith-a-foot-injury-made-me-feel-bad-for-every-needy-commuter-ive-ignored-on-publictransport/.
- 50. ADRIANNE MALASKY, FEDERAL TRANSIT ADMIN., FTA REP. No. 0211, ANALYSIS OF CHALLENGES FACING PREGNANT WOMEN RIDING PUBLIC TRANSIT 1-12 (2022), https://www. transit.dot.gov/research-innovation/analysis-challenges-facing-pregnant-women-riding-publictransit-report-0211.

years-after-ada-nations-transit-agencies-report-successes-and-shortfalls/2020/06/25/76e102d 8-af22-11ea-8758-bfd1d045525a story.html.

^{47.} Id. (PDF file pages 2-3). Paratransit refers to transportation specifically provided for individuals with mobility challenges as opposed to fixed-route transit like the other modes described above. See id. This often takes the shape of vans or minibuses that are available on call or by advance scheduling. Id. (PDF file page 2). However, paratransit services are characterized by a number of problems, including "restrictive eligibility criteria; unfair trip denials; tardiness or failure to show; slow service en route; inefficient and unfriendly telephone reservation systems; inaccurate information; failure to respond to complaints; lack of training for drivers; drivers' lack of respect for users; and punitive cancellation policies." Id. (PDF file page 3).

are transporting large items may struggle. In such situations, getting safely on and off buses or subway cars, then finding seats or enduring standingroom-only rides, all present significant hurdles for which riders must plan as best they can.

B. Impact

The transportation gap impacts countless areas of life, and because the gap tracks so closely with race and class, it worsens outcomes for already disfavored groups. Many of these issues have already been the subject of extensive scholarly writing.⁵²

A lack of transportation severely limits employment opportunities for those caught in the gap. Roughly half of public transportation trips are devoted to commuters.⁵³ In 2019, 7.8 million Americans commuted by various modes of public transit.⁵⁴ Commute times have increased, with an average one-way commute time of almost twenty-eight minutes, and almost 10% of commuters endure one-way commutes of an hour or more.⁵⁵ One report notes that "[t]he longest average travel times were associated with various forms of public transportation."⁵⁶

This delay is especially true as the job sectors most filled by the racialized poor grapple with shifts in job density and overall job loss before and after the pandemic.⁵⁷ Low-wage workers suffered the most job losses during the pandemic, and as the economy recovers, those workers have

^{51.} See, e.g., Elena Cox, Navigating the City's Transit System Near Impossible for Parents and Caregivers, MEDIUM: TRANSIT N.Y. (Aug. 9, 2019), https://medium.com/transit-new-york/navigating-the-new-york-city-transit-system-near-impossible-for-parents-and-caregivers-c80c29b18a12 ("Navigating the New York City transit system with a stroller or young child can be a nightmare for parents and caregivers.").

^{52.} *See infra* notes 54–62.

^{53.} CLARK, *supra* note 35, at 5 (noting that 49% of persons use public transportation to get to or from work).

^{54.} MICHAEL BURROWS ET AL., U.S. CENSUS BUREAU, ACS-48, COMMUTING BY PUBLIC TRANSPORTATION IN THE UNITED STATES: 2019, at 1-2 (2021), https://www.census.gov/content/dam/Census/library/publications/2021/acs/acs-48.pdf.

^{55.} CHARLYNN BURD ET AL., U.S. CENSUS BUREAU, ACS-47, TRAVEL TIME TO WORK IN THE UNITED STATES: 2019, at 1 (2021), https://www.census.gov/content/dam/Census/library/publications/2021/acs/acs-47.pdf (noting statistics as of 2019).

^{56.} *Id.* at 4. One-way bus commutes averaged out at 46.6 minutes, and commutes involving long-distance train, commuter rail, and ferryboat presented a one-way average of 71.2 minutes. *Id.* Subway rides averaged out at 48.8 minutes. *Id.* at 5.

^{57.} See McConlogue, supra note 18, at 294-95 (describing the phenomena of job sprawl and labor suburbanization, as well as the overrepresentation of Black, Brown, and poor people in the industries most impacted).

enjoyed half as much recovery as their high-wage counterparts.⁵⁸ Similarly, the employment-to-population ratio fell the most for individuals without a bachelor's degree and for people of color.⁵⁹ The Bureau of Labor Statistics points out that:

The effects of the pandemic on the job market, while widespread, varied across race and ethnicity groups. For example, Blacks, Asians, and Hispanics were disproportionally affected by the pandemic-induced recession in the spring of 2020, in part reflecting their overrepresentation in some of the hardest hit sectors of the economy. In addition to the effects of the pandemic, there are long-standing labor market differences among the race and ethnicity groups. ⁶⁰

Even pre-pandemic, sectors disproportionately occupied by the racialized poor were subject to geographic changes in their job's location. The Brookings Institution reported that throughout the 2000s, the employment landscape had shifted. "The manufacturing, construction, and retail services industries were among the most suburbanized, with the majority of jobs in each industry located more than 10 miles away from downtown." As indicated above, the history of residential segregation and discriminatory mortgage lending meant that as these industries left city centers, white residents with home equity, marketable properties, and purchasing power were able to follow the jobs. Conversely, Black residents had more trouble selling their homes and buying new ones when needed.

^{58.} As of January 2021, the number of low-wage jobs was 20% below its prepandemic level, while the number of higher-wage jobs was only 10% below pre-pandemic levels. Bd. of Governors of the Fed. Rsrv. Sys., Monetary Policy Report: February 19, 2021, at 12-13 (2021), https://www.federalreserve.gov/monetarypolicy/files/20210219_mprfullreport.pdf.

^{59.} Id.

^{60.} U.S. BUREAU LAB. STATS., REPORT 1095, LABOR FORCE CHARACTERISTICS BY RACE AND ETHNICITY, 2020 (2021), https://www.bls.gov/opub/reports/race-and-ethnicity/2020/home.htm.

^{61.} Elizabeth Kneebone, *The Changing Geography of US Poverty*, BROOKINGS (Feb. 15, 2017), https://www.brookings.edu/testimonies/the-changing-geography-of-us-poverty/ (reflecting the author's "[t]estimony before the House Ways and Means Committee, Subcommittee on Human Resources, February 15, 2017").

^{62.} See Conrad Miller, When Work Moves: Job Suburbanization and Black Employment 2 (Nat'l Bureau of Econ. Rsch., Working Paper No. 24728, rev. 2023), https://www.nber.org/system/files/working_papers/w24728/w24728.pdf; ROTHSTEIN, supra note 7, at 64-65.

^{63.} See Miller, supra note 62, at 4; ROTHSTEIN, supra note 7, at 64-65.

Limited affordable housing options mean that the people caught in the gap are left stranded if their industry suburbanizes. The top seven "mismatched" metropolitan areas (areas where the growth of affordable housing has not kept up with job growth or vice versa) force households who make between \$35,000–\$50,000 per year to use over 70% of their household income to afford housing. 64 Without access to comprehensive transportation, their situation becomes more and more precarious.

A lack of transportation access also limits opportunities to penetrate higher-income job sectors by pursuing higher education. Relatively few postsecondary students live on campus, so most students need transportation to commute to attend class. Transportation costs are estimated to make up about a fifth of students' out-of-pocket college costs. Indeed, lack of transportation can present just as much of a barrier to successful degree completion as the overall cost of tuition.

Even as many people caught in the transportation gap are already working in often physically challenging fields,⁶⁹ the gap also undermines

^{64.} ERIC KOBER, MANHATTAN INST., THE JOBS-HOUSING MISMATCH: WHAT IT MEANS FOR U.S. METROPOLITAN AREAS 10 fig.4 (2021), https://media4.manhattan-institute.org/sites/default/files/jobs%E2%80%93housing-mismatch-what-it-means-metropolitan-areas-EK.pdf. Those seven metropolitan areas include: (1) San Jose-Sunnyvale-Santa Clara, CA (84.5%); (2) Los Angeles-Long Beach-Anaheim, CA (80%); (3) San Francisco-Oakland-Hayward, CA (78.3%); (4) New York-Newark-Jersey City, NY-NJ-PA (73.9%); (5) Boston-Cambridge-Nashua, MA-NH NECTA (72.3%); (6) Denver-Aurora-Lakewood, CO (72.2%); and (7) Riverside-San Bernardino-Ontario, CA (71.2%). *Id*.

^{65.} Charlotte West, A Surprising Reason Preventing Some Students from Finishing College: Lack of Transportation, Wash. Post (Dec. 10, 2021, 8:00 AM EST), https://www.washingtonpost.com/education/2021/12/10/college-students-transportation-struggles/; DEREK V. PRICE & DREW CURTIS, DVP-PRAXIS, OVERCOMING TRANSPORTATION BARRIERS TO IMPROVE POSTSECONDARY STUDENT SUCCESS 2, 12 (2018), https://www.dvp-praxis.org/wp-content/uploads/2018/02/Kresge-Higher-Education-and-Transportation-Brief.pdf.

^{66.} West, *supra* note 65. As noted in the article, sources estimate that 87% of first-year students live off-campus. *Id*.

^{67.} Id.

^{68.} KATE SABLOSKY ELENGOLD ET AL., UNIDOSUS, DREAMS INTERRUPTED: A MIXED-METHODS RESEARCH PROJECT EXPLORING LATINO COLLEGE COMPLETION 19-20 (2021), https://www.unidosus.org/wp-content/uploads/2021/09/unidosus unc dreaminterrupted.pdf.

^{69.} In 2020, over a fifth of the Black (21.7%) and Hispanic/Latinx (22%) workforce was employed in the service industry, compared to 15% of White workers. U.S. BUREAU LAB. STATS., *supra* note 60 (clarifying that that people classified as Hispanic/Latinx were of Hispanic ethnicity, but could be of any race). This represents a decrease from prior years, but that may be explained at least in part by pandemic-related job losses in this sector. *Compare* U.S. BUREAU OF LAB. STATS., REPORT 1088, LABOR FORCE CHARACTERISTICS BY RACE AND ETHNICITY, 2019 (2020), https://www.bls.gov/opub/reports/race-and-ethnicity/2019/home.htm

their physical health. A major determinant of a community's food security rate is its residents' proximity to large grocery retailers with fresh food on offer. Neighborhoods with a significant share of the population living more than a mile from any such retailer are classified as "food deserts." The ability of residents to travel necessarily contributes to health outcomes. Approximately 13.5 million people in the United States live in food deserts.⁷¹

Beyond limiting access to healthy, culturally relevant food, the transportation gap geographically restricts healthcare options available to those caught in the gap. Research indicates that lack of transportation presents a major barrier to health care access, even for the treatment of serious conditions.⁷² In 2017, almost six million Americans delayed health care for lack of transportation.⁷³

This is particularly significant as there is a well-documented history of medical discrimination against people of color.⁷⁴ When the racialized poor

(noting that in 2019, 23.8% of Black and 24.2% of Hispanic/Latinx workers were in the service

- 70. PAULA DUTKO ET AL., U.S. DEP'T OF AGRIC., ERR-140, CHARACTERISTICS AND INFLUENTIAL FACTORS OF FOOD DESERTS 5 (2012), https://www.ers.usda.gov/webdocs/ publications/45014/30940 err140.pdf ("[W]e define food deserts as low-income tracts in which a substantial number or proportion of the population has low access to supermarkets or large grocery stores.").
- 71. Ann Wright, Interactive Web Tool Maps Food Deserts, Provides Key Data, U.S. DEP'T OF AGRIC. (May 3, 2011), https://www.usda.gov/media/blog/2011/05/03/interactiveweb-tool-maps-food-deserts-provides-key-data#:~:text=The%20Locator%20identifies%20 about%2010,to%20sources%20of%20healthful%20food.
- 72. See generally Samina T. Syed et al., Traveling Towards Disease: Transportation Barriers to Health Care Access, 38 J. CMTY. HEALTH 976, 976, 987–88 (2013) (synthesizing a body of literature regarding transportation barriers to health care access).
- 73. Mary K. Wolfe et al., Transportation Barriers to Health Care in the United States: Findings from the National Health Interview Survey, 1997-2017, 110 Am. J. Pub. Health 815, 817 (2020).
- 74. See, e.g., David R. Williams & Toni D. Rucker, Understanding and Addressing Racial Disparities in Health Care, HEALTH CARE FIN. REV., Summer 2000, at 75, 76-79, 87; Paige Nong et al., Patient-Reported Experiences of Discrimination in the US Health Care System, 3 JAMA NETWORK OPEN, no. 12, 2020, at 1, 1, 6-7, http://doi:10.1001/jamanetwork open.2020.29650 (article no. 2020;3(12):e2029650); U.S. COMM'N ON C.R., RACIAL

industry, and 15.9% of White workers were similarly employed), with U.S. BUREAU LAB. STATS., supra note 60. More Black (17.1%) and Hispanic/Latinx (16.7%) workers were also employed in the production, transportation, and material moving industries, compared to 11.8% of White workers in 2020. Id. Additionally, 16% of Hispanic/Latinx workers were employed in the natural resources, construction, and maintenance industries, compared to 10% of White workers. Id.

do not have access to transportation, they may be forced to continue care with practitioners who dismiss their concerns or else go without care entirely.⁷⁵

Caretaking responsibilities also become more difficult without transportation. Some studies of transportation access assume an ability to walk or travel independently up to three-quarters of a mile to a bus stop to evaluate the level of accessibility that a particular census block presents. 76 Independent travel may not be possible for caregivers of children, elders, disabled people, or of anyone with limited mobility. Specifically concerning childcare, parents at the highest income levels (those most likely to have access to private transportation) have access to center-based childcare options within a geographic radius two miles larger on average than the radius available to the poorest families. 77 This wide range provides a substantially increased selection of choices for a commodity involving the high stakes of a child's safety and development. Transportation access also affects older adults and their caregivers. Relatively few older adults use public transit. 78 Transportation, however, remains a critical need for this age group. The most common inquiries on the Eldercare Locator, a national government-sponsored information and referral service, were in reference

DISPARITIES IN MATERNAL HEALTH 52-64 (2021), https://www.usccr.gov/files/2021/09-15-Racial-Disparities-in-Maternal-Health.pdf.

^{75.} This also comes with the proviso that access to health care coverage is already limited for these groups, and there are fewer practitioners sharing backgrounds with those in need

^{76.} KYLE DEMARIA, FED. RSRV. BANK OF PHILA., GETTING TO WORK ON TIME: PUBLIC TRANSIT AND JOB ACCESS IN NORTHEASTERN PENNSYLVANIA 5 (2018), https://www.philadel phiafed.org/-/media/frbp/assets/community-development/reports/0118-getting-to-work-on-time.pdf ("A neighborhood is considered to be accessible to transit if the majority of residents live within three-quarters of a mile of a bus stop.").

^{77.} NAT'L SURV. OF EARLY CARE & EDUC. PROJECT TEAM, U.S. DEP'T HEALTH & HUMAN SERVS., OPRE REP. No. 2016-10, How FAR ARE EARLY CARE AND EDUCATION ARRANGEMENTS FROM CHILDREN'S HOMES? 4-5 (2016), https://www.acf.hhs.gov/sites/default/files/documents/opre/distance_to_ece_factsheet_111716_b508.pdf. For children from birth to under three years, center-based childcare for the poorest families was an average of 3.2 miles from home versus just over five miles for the richest families; for children from three to five years of age, the poorest families used centers within 2.7 miles of home, versus 4.6 for the richest families. *Id.* at 4–5.

^{78.} CLARK, *supra* note 35, at 16. Adults over sixty-five years of age represented 7% of transit users, versus 17% this age group represents of the national population. *Id.* at 16–17. This may potentially be due to subgroups within this demographic who are physically immobile, are housebound, or reside in nursing homes.

to transportation needs, in particular, transportation for medical appointments.⁷⁹

Other familial and social relationships may be harder to develop and maintain as well. Transportation impacts parents' ability to be involved in their children's education.⁸⁰ Even if those impacted by the transportation gap manage to find free time, the presence of the gap may affect the availability of leisure activities.

Ultimately, the transportation gap affects all aspects of life. One regional community group studying transportation equity reported:

In nearly every discussion held . . . access to reliable transportation was discussed as a necessary component of economic mobility and quality of life. Many residents in northeastern Pennsylvania — especially lower-income or elderly residents — couldn't access employment, were missing doctor's appointments, couldn't get their children to child care, and couldn't participate in social, religious, and cultural events, all as a result of the lack of transportation. Residents from the region who did not own a car were stuck — literally and figuratively 81

II. The Public Approach

With transportation inextricably entwined with the markers of individuals' quality of life, many scholars, activists, and other commentators are concerned with closing the gap. 82 Public-access and community-based solutions appear most often. 83 Some such solutions

^{79.} ELDERCARE LOCATOR, ELDERCARE LOCATOR DATA REPORT: CONSUMER NEEDS IN AN AGING AMERICA (2018), https://eldercare.acl.gov/Public/About/docs/EL-Data-Report.pdf. Of the transportation inquiries, 75% expressed the need for health-care-related transportation. *Id.*

^{80.} See Timberly L. Baker et al., *Identifying Barriers: Creating Solutions to Improve Family Engagement*, Sch. CMTY. J., Fall/Winter 2016, at 161, 163-65, 176.

^{81.} Pedro Nicolaci da Costa, *There's a Major Hurdle to Employment That Many Americans Don't Even Think About — and It's Holding the Economy Back*, Bus. Insider (Jan. 27, 2018, 7:00 AM CST), https://www.businessinsider.com/lack-of-transport-is-amajor-obstacle-to-employment-for-americas-poor-2018-1 (quoting Laura Ducceschi & Erin Mierzwa, Fed. Rsrv. Bank of Phila., The Role of Transportation in Fostering Economic Mobility in Northeastern Pennsylvania (2017), https://www.philadelphia fed.org/-/media/frbp/assets/community-development/articles/the-role-of-transportation.pdf).

^{82.} See sources cited supra notes 6–7.

^{83.} See sources cited *supra* notes 6–7 (providing examples of transportation gap scholarship with community-based and public access oriented solutions).

include: 1) reinvesting in mass transit to make it a more effective and attractive option; 2) increasing the prevalence of modern shared transit models; and 3) adapting the built environment to make cars less necessary. This Article uses the umbrella term "the public approach" to refer collectively to all three of these proposed models.

The public-approach solutions offered have value and, if fully implemented, would improve the quality of life for many people currently stranded in the transportation gap. These commonly proposed initiatives are inadequate, however, and present drawbacks. Some of their detriments relate to inherent, fundamental characteristics which cannot be easily and completely negated. This Part will describe these proposals and examine their flaws from a best-case standpoint.

A. Enhance Mass Transit

First, commentators propose that state and local governments renew their investment in publicly available high capacity mass transit, commonly on cyclical routes with rider access points posted at regular intervals.⁸⁴ There was a time when mass transit modes such as streetcars, rail, and buses were the primary modes of transportation.⁸⁵ Many cities, however, disinvested in mass transit as private automobiles became increasingly popular.⁸⁶

The economic abandonment of public transportation contributed to the problem, and so some local and state governments assume embracing it anew can fix the damage. The American Public Transportation Association (APTA) argues that mass transit investment helps close the gap by making cars less necessary. APTA reports that "a 1 percent increase in public transit mode share corresponds to 0.02 fewer cars per household at the metropolitan area level (the equivalent of two out of every hundred households giving up a car)."⁸⁷ If mass transit investment persuades car owners to divest themselves of their personal vehicles, then using the same logic, people who are involuntarily carless might exit the transportation gap

^{84.} Karner et al., supra note 6, at 443 (noting approaches to the transportation gap advocating for "dramatically increasing levels of public transportation service").

^{85.} See Cliff Slater, General Motors and the Demise of Streetcars, TRANSP. Q., Summer 1997, at 45, 48, 50.

^{86.} See David W. Jones, Mass Motorization + Mass Transit: An American History and Policy Analysis 1-2 (2008).

^{87.} ECON. DEV. RSCH. GRP., AM. PUB. TRANSP. ASS'N, ECONOMIC IMPACT OF PUBLIC TRANSPORTATION INVESTMENT 5 (2020), https://www.apta.com/wp-content/uploads/APTA-Economic-Impact-Public-Transit-2020.pdf.

by intentionally committing to carlessness with more effective or frequent mass transit.

Most proposals to improve mass transit involve adding routes and stations and increasing the frequency and capacity of service. 88 Another critical step is repairing the existing infrastructure: United States mass transit systems have nearly a \$100 billion backlog of deferred repairs and maintenance. 89 Additionally, the perceived value of mass transit could be increased by building more and better protected outdoor shelters so that passengers are not exposed to the elements while they wait for their transportation. 90

A major deficiency of mass transit, however, is the lack of control over users autonomous mobility compared to that which private car owners enjoy. Mass transit riders are bound to service schedules and locations. Many modes of mass transit are not in operation twenty-four hours a day, and so those schedules could justifiably be viewed as curfews for the riders who depend upon the service. Thus, using mass transit requires layers of logistical planning above and beyond the inescapable first/last mile planning issue described above. 91 Note that the first/last mile issue is particularly stark for the rural poor. 92

Moreover, many mass transit options significantly reduced their passenger capacity in the COVID-19 pandemic to accommodate social distancing guidelines.⁹³ The same transits later slashed routes and service

^{88.} See, e.g., 40 Cities Climate Leadership Grp. & C40 Knowledge Hub, How to Make Public Transport an Attractive Option in Your City, C40 Knowledge (Aug. 2021), https://www.c40knowledgehub.org/s/article/How-to-make-public-transport-an-attractive-option-in-your-city?language=en US.

^{89.} Fact Sheet: The Bipartisan Infrastructure Deal, WHITE HOUSE (Nov. 6, 2021), https://www.whitehouse.gov/briefing-room/statements-releases/2021/11/06/fact-sheet-the-bipartisan-infrastructure-deal/; Rebecca Price, Public Transit Has an Exceptional ROI. Let's Get on Board to Speed Economic Recovery, ALL. TO SAVE ENERGY (May 6, 2020), https://www.ase.org/blog/public-transit-has-exceptional-roi-lets-get-board-speed-economic-recovery.

^{90.} See ECON. DEV. RSCH. GRP., supra note 87, at 11.

^{91.} See supra notes 40-43 and accompanying text.

^{92.} See generally Todd Litman, Am. Pub. Transp. Ass'n, Public Transportation's Impact on Rural and Small Towns: A Vital Mobility Link (2017), https://www.apta.com/wp-content/uploads/Resources/resources/reportsandpublications/Documents/APTA-Rural-Transit-2017.pdf (noting more pronounced transportation issues for impoverished persons outside of major metropolitan areas).

^{93.} Christina Goldbaum & Will Wright, 'Existential Peril': Mass Transit Faces Huge Service Cuts Across U.S., N.Y. TIMES (Dec. 6, 2020), https://www.nytimes.com/2020/12/06/nyregion/mass-transit-service-cuts-covid.html; see also Jeremy Sung & Yannick

schedules to save operating funds threatened by low ridership, conditions which likely exacerbated the existing gap. ⁹⁴ Riders who either chose to or needed to use the transit services had no control over their availability; their mobility was (and is) completely at the mercy of service providers. ⁹⁵ This subordination was already the case, but the pandemic revealed the extent of that truth.

Related to this sacrifice of control is the woefully insufficient provision for mass- and shared-transit users in emergency planning. Hurricane Katrina put this issue into stark relief when residents without private cars were unable to evacuate. ⁹⁶ Even years after this catastrophe, planning failures persist, and other cities have seen disparities between drivers' and transit users' options and outcomes when disaster strikes. ⁹⁷

Monschauer, Changes in Transport Behaviour During the Covid-19 Crisis, IEA (May 27, 2020), https://www.iea.org/articles/changes-in-transport-behaviour-during-the-covid-19-crisis (noting global statistics on lost ridership).

- 94. Goldbaum & Wright, supra note 93.
- 95. This is not intended as an argument against transit providers' decision making aimed at protecting riders in the face of a global pandemic, rather an acknowledgement that transit-dependent riders' mobility is not in their own hands and that they do not enjoy the same level of autonomy that drivers do.
- 96. Although the evacuation of residents with cars was generally successful, 100,000 people were left behind to face the storm. Almost all were carless, and many were elderly or disabled. Nina Easton, *La. Officials Criticized at House Hearing: GOP Legislators Say Residents Weren't Evacuated in Time*, BOSTON GLOBE (Dec. 15, 2005), http://archive.boston.com/news/nation/washington/articles/2005/12/15/la_officials_criticized_at_house_he aring; *cf.* Malka Older, *Hurricane Ida Damage Haunts Those Who've Evacuated. They Need Help Getting Home*, NBC NEWS (Sept. 3, 2021, 3:47 PM CDT), https://www.nbcnews.com/think/opinion/hurricane-ida-damage-haunts-those-who-ve-evacuated-they-need-ncna12784 20. Disaster planning has its genesis in military management of civilians; it is only within the last twenty years that planning experts and transportation engineers have been meaningfully incorporated into emergency management. JOHN L. RENNE ET AL., NATIONAL STUDY ON CARLESS AND SPECIAL NEEDS EVACUATION PLANNING: A LITERATURE REVIEW 2 (2008), https://scholarworks.uno.edu/cgi/viewcontent.cgi?article=1008&context=plus_rpts.
- 97. Some studies have explored the possibility of leveraging the sharing economy to improve evacuation outcomes, but acknowledge that extensive further study is needed to actualize these benefits:

While the sharing economy could offer more equitable outcomes for disaster response and relief, the STEPS equity framework and focus groups with four vulnerable groups – older adult, individuals with disabilities, low-income, and Spanish speaking – indicate that a substantial number of limitations remain. Indeed, we found that of the 18 identified vulnerable groups, all face at least one critical challenge in implementing shared resources with 10 groups experiencing three or more barriers to implementation.

Other safety concerns also abound, 98 as crime against mass- and shared-transit users is a significant problem under scrutiny by many cities. Although most trips occur without incident, crimes such as theft, robbery, or assault occur with some regularity. 99 Sexual harassment and assault on buses and trains are increasingly common; 100 sometimes including rape. 101

Stephen D. Wong et al., Can Sharing Economy Platforms Increase Social Equity for Vulnerable Populations in Disaster Response and Relief? A Case Study of the 2017 and 2018 California Wildfires, 5 Transp. Rsch. Interdisciplinary Persps., May 2020, article no. 100131, at 1, 13, https://www.sciencedirect.com/science/article/pii/S2590198220300427?via%3Dihub; see also Susan Shaheen, Can the Sharing Economy Be Leveraged in Disaster Relief?, Medium: Move Forward Blog (Sept. 12, 2019), https://medium.com/moveforward-blog/can-the-sharing-economy-be-leveraged-in-disaster-relief-lessons-from-califor nia-80857ef45150.

98. With respect to accidents and collisions, mass transit modes such as buses and trains (including subways) are some "of the safest mobility options, as there were 134 times more fatalities on highways (35,935) than on transit in 2018." DICKENS, *supra* note 40, at 21. For their part, ridesharing, bikesharing, and scooters present identical risks to using these options in a private context.

99. See, e.g., Taylor Mills, As Bus Ridership Climbs Again, So Does Crime, CROSSTOWN (June 30, 2021), https://xtown.la/2021/06/30/bus-crime/; John Greenfield, Can We End Violent Crime on Transit Without Over-Policing?, STREETSBLOG USA (Mar. 2, 2020), https://usa.streetsblog.org/2020/03/02/can-we-end-violent-crime-on-transit-with out-over-policing/; Janet Moore, Metro Transit Outlines Plans to Combat Crime on Trains, Buses, STARTRIBUNE (Minneapolis) (Feb. 13, 2020), https://www.startribune.com/metro-transit-outlines-plans-to-combat-safety-concerns-on-trains-buses/567810192/; cf. Christina Goldbaum, In Emptier Subways, Violent Crime Is Rising, N.Y. TIMES (Oct. 12, 2020), https://www.nytimes.com/2020/10/12/nyregion/nyc-crime-subway.html. The federal government has taken note of the issue and makes grant funding available for prevention projects. See 34 U.S.C. § 12301.

100. See, e.g., Martine Powers, Why the #MeToo Movement Is a Public Transportation Issue, Wash. Post (Oct. 20, 2017, 7:00 AM EDT), https://www.washingtonpost.com/news/dr-gridlock/wp/2017/10/20/why-the-metoo-movement-is-a-public-transportation-issue/; A. Weinstein Agrawal & A. Loukaitou-Sideris, Sexual Crime and Harassment on Public Transportation: A Study, METRO MAG. (May 14, 2020), https://www.metro-magazine.com/10111994/sexual-crime-and-harassment-on-public-transportation-a-study. A study of students at San Jose State University revealed that verbal, nonverbal, and physical sexual harassment and assault impacted roughly two-thirds of respondents, including both male and female riders. Asha Weinstein Agrawal et al., Mineta Transp. Inst., Crime and Harassment on Public Transportation: A Survey of SJSU Students Set in International Context 52 (2020), https://transweb.sjsu.edu/sites/default/files/1810-Agrawal-Crime-Harassment-Public-Transit-SJSU.pdf. Many respondents reported taking precautions to avoid these experiences, including traveling only during the day, being selective about which stops to use and where to wait, and avoiding using public transportation altogether. Id. at 52–53. Notably, all of these precautions serve to reduce

The real threat of crime can reduce mobility for people who prioritize personal safety, ¹⁰² particularly affecting an overwhelmingly female demographic.

The COVID-19 pandemic presented an additional safety issue for mass transit riders and shared transit users, putting riders in close quarters, unable to practice social distancing, and at risk for exposure to the deadly airborne virus. Mass and shared transit amplified this problem, because public-facing workers are disproportionately the most likely to encounter the virus at work. Even before the pandemic, mass-transit riders were six times more likely to contract acute respiratory infections than nonriders. Private vehicle ownership provided a physical barrier protecting drivers from exposure to communicable diseases, unavailable to the less privileged.

B. Increase Shared Transit

The second common proposal is to support or increase the availability of shared transit, also known as shared mobility. For the purposes of this Article, "shared transit" shall be used as an umbrella term encompassing several forms of transportation providing shared public access to many individual low-capacity vehicles (usually five or fewer occupants). ¹⁰⁵ The

mobility for the riders who employ them, as well as to highlight the lack of other available options.

101. In one shocking recent incident, a man raped a woman on a Philadelphia SEPTA train occupied by up to ten other passengers. Barbara Goldberg, *Philadelphia Subway Riders Witnessed Rape but Did Nothing, Police Say*, REUTERS (Oct. 19, 2021, 4:38 PM CDT), https://www.reuters.com/world/us/philadelphia-subway-riders-witnessed-rape-did-nothing-officials-say-2021-10-19/. There is some dispute as to how many other passengers were present and whether the other passengers attempted to intervene or alert law enforcement, but it is undisputed that the rape took place. *Prosecutor Casts Doubt on Account of Train Passengers Not Intervening in Rape*, N.Y. TIMES (Oct. 21, 2021), https://www.nytimes.com/2021/10/21/us/septa-assault-passengers.html.

102. See Agrawal & Loukaitou-Sideris, supra note 100.

103. See Saladi S. V. Subbarao & Raghuram Kadali, Impact of COVID-19 Pandemic Lockdown on the Public Transportation System and Strategic Plans to Improve PT Ridership: A Review, 7 Innovative Infrastructure Solutions, no. 1, 2022, article no. 97, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8601870/pdf/41062_2021_Article_693.pdf.

104. Joy Troko et al., *Is Public Transport a Risk Factor for Acute Respiratory Infection?*, 11 BMC INFECTIOUS DISEASES, article no. 16, at 1, 3–4, https://bmcinfectdis.biomedcentral.com/articles/10.1186/1471-2334-11-16.

105. These services are typically provided by privately owned companies, but fall under the "public approach" umbrella for the purposes of this Article due to their presentation as on offer to the general public. *Shared Mobility FAQs: Eligibility Under FTA grant programs*, FED. TRANSIT ADMIIN., https://www.transit.dot.gov/regulations-and-guidance/shared-mobility-faqs-eligibility-under-fta-grant-programs (last updated Dec. 7, 2016)

best example of shared transit is ridesharing or carsharing services, often app-based, through platforms such as Uber, Lyft, or Zipcar. These platforms are also frequently referred to as Transportation Network Companies (TNCs). Shared transit also includes "micromobility" options. Micromobility refers to modes of transportation under the umbrella of shared transit, but can only be used by a single occupant at a time, most often modes like shared bikes and scooters. Although many micromobility options are occupant-powered, some may also be electric or motor-powered.

Shared transit offers benefits that make it a more attractive option than mass transit. Unlike most mass transit, routes are not fixed, so there is more flexibility about where users can travel, and ridesharing options typically provide door-to-door service, effectively resolving the first-last mile problem. Shared transit can be used independently, but APTA leadership envisions that it can also complement mass transit. For example, "[i]ndividuals may use a TNC or a scooter to reach a train station. Or transit commuters may occasionally rely on TNCs on nights when they return home after transit service has ended." 109

Ridesharing provides significantly more privacy and comfort for users, who have more control over the environment as they ride. Drivers commonly adjust the temperature and noise level to the rider's preference and may provide amenities such as bottled water, mints, or access to phone chargers. 110 Ridesharing also largely eliminates the need to wait outdoors

(detailing that private shared mobility service providers may "provide shared ride service[s] to the general public").

106. What Is Shared Mobility?, SHARED-USE MOBILITY CTR., https://sharedusemobility center.org/what-is-shared-mobility/ (last visited June 1, 2023). Ridesharing and carsharing differ based on who is operating the vehicle: contract drivers transport rideshare users. In a carsharing model, the user has direct short-term access to operate the vehicle themselves, like renting a car on an hourly basis.

107. SCHALLER CONSULTING, THE NEW AUTOMOBILITY: LYFT, UBER AND THE FUTURE OF AMERICAN CITIES, at ii (2018), http://www.schallerconsult.com/rideservices/automobility.pdf.

108. Elliot Nesbo, *What Is Micromobility? 5 Ways It's Changing Transport*, MAKEUSEOF (Mar. 8, 2023), https://www.makeuseof.com/micromobility-is-changing-transport/; *Shared Micromobility in the U.S.: 2019*, NAT'L ASS'N CITY TRANS. OFFS., https://nacto.org/shared-micromobility-2019/ (last visited June 1, 2023).

109. See ECON. DEV. RSCH. GRP., supra note 87, at 7.

110. See Preferred Rides: Experience the Next Level of Ride Comfort, LYFT BLOG (Dec. 2, 2020), https://www.lyft.com/blog/posts/preferred-rides; What Do Riders Love to Find in the Car?, UBER BLOG (June 20, 2018), https://www.uber.com/en-US/blog/top-car-items-riders-love/.

for long periods, protecting riders from the elements and serving as a safety measure. Ridesharing, like mass transit, also allows the rider to focus on other tasks or leisure activities while someone else operates the vehicle. Micromobility users may enjoy a sense of independence and adventure by traveling via bikes and scooters, as well as exercising to enjoy improved health outcomes when using occupant-powered vehicles. Generally, shared transit provides many benefits of owning cars, bikes, and scooters without the long-term commitment and associated costs and headaches surrounding insurance, parking, and maintenance.

Shared transit may also be much cheaper than mass transit for municipalities wishing to make it widely available to residents. Rideshares and carshares are less expensive in every way including equipment, operating costs, maintenance, and infrastructure. ¹¹¹ In the case of ridesharing, the drivers bear most of the operating cost because they use their personal vehicles to earn money by providing the service.

Despite its advantages, shared transit presents many of the same concerns as mass transit with respect to riders' lack of control and heightened need for logistical planning. Even Zipcar, which grants the most independent, at-will access of the various mass- and shared-transit options, has limited locations and numbers of vehicles. Lack Carshare services like Zipcar make no guarantee that a car will be available to prospective users when and where the need presents itself. Carshares have even had frequent problems with shared cars being in the wrong place despite advance reservations, leaving travelers to scramble for backup solutions. While most shared transit services are door-to-door, thus sidestepping the first/last mile issue, some rideshare and many micromobility services also require users to walk to a particular pick-up spot, often in very busy or congested

^{111.} Compared to costly public transit projects, shared transit provides a more attractive option for municipalities because drivers are responsible for all of the cost of maintaining their vehicles and they operate their cars on existing road infrastructure. *Cf. Why Building Public Transit in the US Costs So Much*, NPR (June 26, 2023), https://www.npr.org/transcripts/1184420745 (providing transcript of recent NPR podcast detailing the increasing cost of public transit projects).

^{112.} Zipcar Locations Near Me, ZIPCAR, https://www.zipcar.com/cities (last visited Aug. 2, 2023) (noting that Zipcar currently has no locations in states like Oklahoma or West Virginia).

^{113.} Matt McFarland, *Zipcar's Customer Service Outrages Its Users, Draws Backlash*, CNN (July 14, 2020, 4:43 PM EDT), https://www.cnn.com/2020/07/14/tech/zipcarcustomer-service/index.html.

locations.¹¹⁴ Shared transit's ability to negate the first/last mile problem for the rural poor is limited. As a result, shared transit is just as difficult as mass transit for rural community members to access when and where they need it.

Mass and shared transit present other problematic commonalities as well. Sexual harassment and assault are less likely to occur on ridesharing platforms than on mass transit, but they are not immune. Additionally, shared transit mirrors mass transit's inadequacy for emergency evacuation purposes while presenting its own unique drawbacks.

Shared transit users often find themselves subject to price gouging by rideshare companies when fleeing emergencies such as public shootings. ¹¹⁶ Certainly, the rideshare drivers (typically low-income) ¹¹⁷ may jeopardize

^{114.} See Transit Auth. of River City (TARC), Micro Mobility Transit Study: Final Report 99 (2022), https://www.ridetarc.org/wp-content/uploads/2023/02/TARC-Micro-Mobility-Transit-Study-Report_FINAL_reduced.pdf ("[Micromobility] [d]ocked systems typically require riders to pick up and return their vehicle from dedicated facilities.").

^{115.} See Min-Seok Pang & Jiyong Park, Study Shows Cities with Ride-Hailing Services Report Lower Rates of Sexual Assault, TECHCRUNCH (Nov. 5, 2020, 12:03 PM CST), https://techcrunch.com/2020/11/05/study-shows-cities-with-ride-hailing-services-report-lower-rates-of-sexual-assault/; see also Shannon Bond, Uber Received Nearly 6,000 U.S. Sexual Assault Claims in Past 2 Years, NPR (Dec 5, 2019, 6:30 PM EST), https://www.npr.org/2019/12/05/785037245/uber-received-nearly-6-000-u-s-sexual-assault-claims-in-past-2-years (noting that complaints of sexual harassment, assault, and rape were reported on .1% of the 2.3 billion rides rideshare giant Uber facilitated in 2017 and 2018).

^{116.} See, e.g., Taylor Soper, Uber and Lyft Criticized for Automated Surge Pricing After Seattle Shooting, GEEKWIRE (Jan. 22, 2020, 10:37 PM), https://www.geekwire.com/ 2020/uber-lyft-criticized-automated-surge-pricing-seattle-shooting/ (noting that rideshare prices soared to hundreds of dollars in the immediate wake of a 2020 Seattle shooting that left one person dead and seven wounded and it took Uber an hour to turn off surge pricing in the one-mile radius surrounding the event). George Sandeman, 'Shame on You' Uber Accused of Cashing In on Bomb Explosion by Charging Almost Double to Take Terrified New Yorkers Home, Sun (Sept. 18, 2016. 1:45 PM), https://www.thesun.co.uk/news/180 5286/uber-accused-of-cashing-in-on-bomb-explosion-by-charging-almost-double-to-taketerrified-new-yorkers-home/ (noting that New York residents faced hurdles in their efforts to escape the site of a deadly bomb explosion when Uber prices swelled up to three times the usual rate). Some rideshare companies have arranged to curb pricing during official states of emergency, but that would not apply to these sorts of deadly, but short-term, bursts of violence. Javier E. David, Uber Hammered by Price Gouging Accusations During NYC's Explosion, CNBC (Sept. 18, 2016, 6:19 PM EDT), https://www.cnbc.com/2016/09/18/uberhammered-by-price-gouging-accusations-during-nycs-explosion.html.

^{117.} Additionally note that the drivers do not control the pricing. Pricing is automated within the rideshare apps. It is calculated based on an individual app's algorithmic response to fluctuations in supply and demand, which must be manually overridden. *See generally*

their safety by responding to ride requests. Still, avenues of escape should not be reserved for those who can afford to pay a king's ransom at a moment's notice. Our society should not rely upon nor accept a model where poor people are called to rescue the affluent so that they can leave other poor people to face the ongoing danger.

A less drastic but still-noteworthy flaw of shared transit is that some of these options require access to credit cards, which low-income or Black persons—the same demographics most likely to be carless—are less likely to use than their richer, whiter counterparts.¹¹⁹

Shared transit also presents unique problems for disabled users, who already face a panoply of transportation challenges. As shown above, rideshare companies strongly resist categorization as taxi services. A research study by a disability advocacy group noted this categorization is important because "[t]he ADA requires accessibility only in van-style taxis, not for sedan-style taxis," but rideshares argue they are exempt and have no obligation to provide wheelchair access. So, the needs of riders with

Marco Bertini & Oded Koenigsberg, *The Pitfalls of Pricing Algorithms*, HARV. BUS. REV. (Sept.-Oct. 2021), https://hbr.org/2021/09/the-pitfalls-of-pricing-algorithms (analyzing Uber's algorithm alongside similar algorithms in different industries).

118. I am not arguing that drivers should not be compensated for taking the risk, but rather that the cost of that compensation should not be borne directly by the riders. Placing the burden elsewhere, such as with the parent companies or building this into the existing cost-sharing structure, is the only way to ensure that these services are equally available on a first-come, first-served basis in emergencies.

119. Despite the increased prevalence of tap-and-go or swipe-and-go payment systems, 29% of consumers making under \$30,000 per year used cash for "all or almost all" of their purchases in a typical week in 2018. Andrew Perrin, *More Americans Are Making No Weekly Purchases with Cash*, PEW RSCH. CTR. (Dec. 12, 2018), https://www.pewresearch.org/fact-tank /2018/12/12/more-americans-are-making-no-weekly-purchases-with-cash/. Conversely, 41% of consumers making above \$75,000 per year favored cashless transactions, using cash for "none" of their purchases. *Id.* A total of 34% of Black consumers used cash for "all or almost all" purchases, compared to 15% of white consumers. *Id.*

120. See supra note 42 and accompanying text

121. See Char Adams, Disability Rights Groups Battle Lyft for Wheelchair Accessible Vehicles — Again, NBC NEWS (Aug. 22, 2022, 4:02 PM CDT), https://www.nbcnews.com/news/us-news/disability-rights-groups-battle-lyft-wheelchair-accessible-vehicles-rcna43999; see also Danny Connolly, Illinois: Bill Passes House Vote to Make Drivers on Rideshare Apps 'Common Carriers', WGN9 (Mar. 17, 2023, 4:38 PM EDT), https://wgntv.com/news/illinois/bill-passes-house-vote-to-make-drivers-on-rideshare-apps-common-carriers/ (noting Uber and Lyft's opposition to categorization of common carrier status similar to taxi services).

- 122. Equity in Transportation, supra note 42 (PDF file page 3).
- 123. See Adams, supra note 121.

disabilities are unlikely to be substantially met through rideshare options. For obvious reasons, the micromobility options discussed above are similarly unhelpful.

Finally, shared transit leaves much to be desired for parents with small children. Ridesharing does not provide a satisfactory alternative because rideshare drivers are not required to provide child car seats. ¹²⁴ Uber and Lyft allow riders to submit requests in "Car Seat Mode" to be matched with drivers equipped with car seats, ¹²⁵ but this option comes with many drawbacks. Car Seat Mode is only available in New York City with a \$10 fee above base fare; it can only accommodate one child over two years old per ride, and is not guaranteed to be available. ¹²⁶ Bringing a car seat (or more than one for multiple children) can cause significant physical and logistical hurdles, especially if there is only one adult traveler in charge of the child(ren) and/or the destination lacks storage for the car seat(s). Again, micromobility services such as bike shares are largely unequipped to accommodate this population. ¹²⁷ Although increased access to shared transit would provide some quality-of-life improvement for many, it is far from a universal panacea.

C. Adapt the Built Environment

The third major proposed solution to the transportation gap endorses legislative reform aimed at adapting the built environment to become more hospitable to nondrivers. This option is closely connected to the shared-transit model that incorporates pedestrians, cyclists, and scooter riders as key beneficiaries to the adaptive solution. Advocates envision that state and local governments could accomplish this by constructing "human-centered"

^{124.} See, e.g., Car Seats, UBER, https://help.uber.com/driving-and-delivering/article/carseats?nodeId=885faa46-8db2-499f-8616-7a76bfc2c9e6 ("Per our Community Guidelines, it is a rider's responsibility to provide a car seat when riding with small children. Whether you choose to allow a child safety seat in your vehicle is completely up to, you may politely decline the ride if transporting a child without a car seat violates local laws or you are otherwise uncomfortable.") (last visited June 2, 2023).

^{125.} *Uber Car Seat, for Parents on the Go*, UBER, https://www.uber.com/us/en/ride/carseat/ (last visited June 2, 2023); *Car Seat Mode*, LYFT https://help.lyft.com/hc/e/articles/360 000722107-Car-seat-mode (last visited June 2, 2023).

^{126.} Uber Car Seat, for Parents on the Go, supra note 125; Car Seat Mode, supra note 125.

^{127.} Canaan Merchant, *How Can D.C. Make Bikesharing Family-Friendly?*, D.C. POLICY CTR. (Feb. 14, 2019), https://www.dcpolicycenter.org/publications/how-can-d-c-make-bikesharing-family-friendly/.

streets and walkways.¹²⁸ Another component of built-environment adaptation is rethinking zoning laws and locating important resources and businesses near where the beneficiaries reside, so transportation of any kind is less necessary.¹²⁹ The adaptive model generates benefits impacting the environment, and the health, safety, and employment of its users. The built-environment model also increases equity for members of the disabled community who use assistive devices and would benefit from safer roadways.

There is considerable overlap between mass-transit solutions and built-environment adaptations as well: significant reinvestment in mass transit will require equally significant infrastructural construction and reconstruction. Advocates also propose "transit streets" that blend a people-centered approach with the conversion of roadways to reduce driving speeds and privilege ground-level mass transit and high-occupancy or carpool vehicles. ¹³⁰ Additionally, dismantling some of the highways that have cabined low-income and racialized communities is a priority for some advocates. ¹³¹ Indeed, Deborah Archer imagines highway reconstruction as a critical driver of race equity, even a form of racial reparations. ¹³²

This solution, too, has its drawbacks. Adapting the existing structure is extraordinarily expensive, time-consuming, and labor-intensive. As it is so closely interconnected with the other two models, the built-environment approach also shares their deficits. Like the other models, this approach does not provide a sufficient solution for community members with disabilities. Additionally, while reevaluating the placement of resources could generate benefits for many people, it would not be *all* things to *all*

^{128.} Jon Larsen, Opinion, *A System of Safe, Human-Centered Streets*, STRONG TOWNS (Nov. 27, 2017), https://www.strongtowns.org/journal/2017/11/22/a-system-of-safe-human-centered-streets; *see also* Dohyung Park et al., *The Role of Destination's Built Environment on Nonmotorized Travel Behavior: A Case of Long Beach, California*, 38 J. PLAN. EDUC. & RSCH. 152, 152–55 (2017), https://journals.sagepub.com/doi/epdf/10.1177/0739456X16688 765.

^{129.} See Section 13. Enhancing the Built Environment Through Design, CMTY. TOOL BOX, https://ctb.ku.edu/en/table-of-contents/implement/physical-social-environment/neigh borhood-design-and-zoning/main (last visited June 2, 2023).

^{130.} Nat'l Ass'n City Transp. Offs., *Transit Street Design Guide*, C40 KNOWLEDGE (Apr. 2016), https://www.c40knowledgehub.org/s/article/Transit-Street-Design-Guide?language= en US.

^{131.} Hope Yen, *Buttigieg Launches \$1B Pilot to Build Racial Equity in Roads*, AP NEWS (June 30, 2022), https://apnews.com/article/race-and-ethnicity-racial-injustice-trans portation-pete-buttigieg-48e09f253781c89359d875f19fc70f9d.

^{132.} Archer, supra note 7, at 1298-300.

people. There will always be a need for longer trips outside the immediate community. Built-environment adaptation is not a meaningful option for rural areas with low population density. Finally, although providing a built environment that promotes walking and cycling may generate some health benefits, the extent of the benefit may be limited because people who are involuntarily carless already depend on these modes of transportation.

III. Proposal

Although public-approach models are valid and valuable, they cannot realistically form the sole basis of a solution for the transportation gap. This Part demonstrates why private individual solutions must be incorporated into any model that hopes to succeed. This Part also considers the current understanding of the constitutional right to travel and explain why it is necessary to expand this understanding to include positive rights alongside negative rights, which are the focus of the status quo.

A. Unringing the Bell of Automobile Supremacy?

More importantly and beyond their many individual operational drawbacks, the public-approach models are fundamentally and theoretically flawed. Every model involves a top-down perspective with powerful people imposing their values on the less-powerful people who are actually subject to the transportation gap. Each model leaves someone behind.

Ultimately, the public-approach proposals dance around the problem: they do not sufficiently recognize and accept the current circumstances of our society. To formulate anything that approaches a meaningful solution, each proposal must unwind generations of systemic inequality. A new model must execute total overhauls of existing systems and the built environment. At the center of this intractable problem is what noted law and transportation scholar Gregory Shill terms "automobile supremacy," or the dense web of law, policy, and infrastructure that rewards and prioritizes driving over other forms of transportation. ¹³³

Automobile supremacy in the early 1900s could not have been achieved because of a lack of infrastructure. "Roads were public places; they belonged to everyone, and everyone used them." Early drivers more often

^{133.} Gregory H. Shill, *Should Law Subsidize Driving?*, 95 N.Y.U. L. REV. 498, 502 (2020) [hereinafter Shill, *Should Law Subsidize Driving?*].

^{134.} Jeff Sparrow, *The Car Culture That's Helping Destroy the Planet Was By No Means Inevitable: On the Relentless Campaign to Force Americans to Accept the Automobile*, LITERARY HUB (Nov. 27, 2019), https://lithub.com/the-car-culture-thats-helping-destroy-the-planet-was-by-no-means-inevitable/?single=true.

had to submit to pedestrian use because "[t]he onus was on the traveler not to hit others. Elderly pedestrians walked where they chose; children used the street as a playground." Upon the introduction of automobiles, much of the public responded with outrage at wealthy drivers who jeopardized the safety of the public, mixed-use roads. 136

Private interests swept in to reconceptualize the streetways as being reserved for private use in the conventional wisdom. For example, jaywalking was wholly an invention of the automotive industry aimed at casting as incompetent the pedestrians who had till then freely and lawfully used the streets at will.¹³⁷ The industry also influenced media outlets to write about car accidents to paint pedestrian victims as at fault for walking in otherwise open roads.¹³⁸

The tipping point for car culture may have been after World War II, when factories stopped war production and changed to auto manufacturing, but retained many of the sleek design elements associated with aviation. ¹³⁹ For example, automotive manufacturers incorporated fins into their designs as a stylistic nod to fighter jets, capitalizing upon American patriotism and fascination with dashing war heroes and the miracle of flight. ¹⁴⁰ By that time, the postwar booms in auto manufacturing and highway construction had substantially facilitated the country's economic recovery. ¹⁴¹ By the advent of the postwar suburb, car culture had become an inextricable component of American society. ¹⁴²

^{135.} *Id*.

^{136.} *Id.* ("The upper classes used automotive violence to drive the working classes and urban poor from the streets—relatively wide open spaces in dense urban neighborhoods. Vigilantes responded with attacks on the millionaire motorists who raced through working-class neighborhoods.").

^{137.} *Id*.

^{138.} Id. ("[T]he National Automobile Chamber of Commerce sought to influence media coverage of traffic accidents, which up until that point had been uniformly hostile to drivers. It established itself as a clearing house, curating accounts of fatalities in ways that blamed pedestrians and then offering them up to newspaper editors.").

^{139.} Michelle Lea Dissman, America and the Automobile, Cars and Culture: The Cultural Impact of the American Automobile 1946-1974, at 5-8 (Spring 2010) (Honors thesis, Univ. of Florida), https://ufdcimages.uflib.ufl.edu/AA/00/06/00/31/00001/mdissman-Thesis- final draft.pdf.

^{140.} See id. at 6-8.

^{141.} See id. at 4-8; Sparrow, supra note 134.

^{142.} See Dissman, supra note 139, at 39–40; see also Jonathan English, Why Did America Give Up on Mass Transit? (Don't Blame Cars.), BLOOMBERG CITYLAB (Aug. 31, 2018), https://www.bloomberg.com/news/features/2018-08-31/why-is-american-mass-transit-so-bad-it-s-a-long-story.

Streetcar use then declined in favor of buses, which did not require the static electric rails. ¹⁴³ Rail-based systems that had to share space with cars and buses were especially vulnerable to market pressures:

It is not a coincidence that while almost every interurban and streetcar line in the U.S. failed, nearly every grade-separated subway or elevated system survived . . . The subways and els of Chicago, Philadelphia, New York, and Boston are all still around, while the vast streetcar and interurban networks of Los Angeles, Minneapolis, Atlanta, Detroit, and many others are long gone. Only when transit didn't need to share the road with the car, and frequent service continued, was it able to survive. 144

Eventually, shifting political priorities diverted funding and attention away from public modes of transit and toward automobiles, highways, and suburbs. 145 Much of the remaining public transit fell into disrepair. 146 The disinvestment of mass transit, coupled with ongoing pressure from automobile corporations drew the country's attention away from public transportation and toward private cars. 147

In defining automobile supremacy, Shill points out various ways that cars and driving have been subsidized, supported, and encouraged by legal and infrastructural developments over decades. Among these benefits are commuter subsidies, parking quotas, and zoning laws that favor single-family housing, mandate minimum residential lot sizes, suppress population density, and separate residential and commercial areas to exclude mixed-use development. There are slanted tort liability standards, regulatory

^{143.} Slater, *supra* note 85, at 51.

^{144.} English, supra note 142.

^{145.} See Shill, Should Law Subsidize Driving?, supra note 133, at 538; Sparrow, supra note 134; Jones, supra note 86, at 1-2; David J. St. Clair, The Motorization and Decline of Urban Public Transit, 1935-1950, 41 J. Econ. Hist. 579, 580 (1981); Slater, supra note 85, at 51.

^{146.} See English, supra note 142.

^{147.} See id.; Sparrow, supra note 134; see also Hiroko Tabuchi, How the Koch Brothers Are Killing Public Transit Projects Around the Country, N.Y. TIMES (June 19, 2018), https://www.nytimes.com/2018/06/19/climate/koch-brothers-public-transit.html (noting modern opposition to public transit projects by interested stakeholders profiting off the automobile industry).

^{148.} Shill, Should Law Subsidize Driving?, supra note 133, at 535–41.

^{149.} Id. at 540; Gregory H. Shill, Americans Shouldn't Have to Drive, but the Law Insists on It: The Automobile Took Over Because the Legal System Helped Squeeze Out the Alternatives, ATLANTIC (July 9, 2019) [hereinafter Shill, Americans Shouldn't Have to

failures relating to environmental impacts, testing standards that center vehicle occupants in auto safety (rather than considering people outside the car), and even tax structures that are complicit in pushing automobile supremacy. The resulting fabric is the product of innumerable, seemingly minute decisions, painstakingly woven by countless hands. Auto supremacy is not going anywhere anytime soon, or perhaps ever.

Let me be clear. This is not to say that the public-approach proposals currently on the table to address the transportation gap are without merit or that they should be disregarded. Indeed, local and state governments should absolutely adopt these proposals, enhancing the quality of life of many Americans. To be sure, there is a growing subculture of ecologically conscious Americans actively choosing to eschew or limit car use in support of the greater good. Some younger Americans are less interested in cars or balk at the high cost. On the whole, however, car culture is not going anywhere. Any solution to the transportation gap will be incomplete unless it also considers how to incorporate American car culture, firmly entrenched for the foreseeable future.

Transportation justice proposals simply cannot ignore cars. Advocates must broaden the conversation to include and incorporate cars rather than expect to eliminate them. In many respects, access to private vehicles is a prerequisite for full participation in the market, in democracy, in kinship networks, and autonomous individual health management. However pure the intention, advocates cannot divorce these needs from the call for transportation justice. As Shill notes, "driving is the price of first-class citizenship." To be fair, Shill's intent was to condemn the privileging of

Drive], https://www.theatlantic.com/ideas/archive/2019/07/car-crashes-arent-always-unavoidable/592447.

^{150.} Shill, *Should Law Subsidize Driving?*, *supra* note 133, at 556-57, 563-64, 569, 573; Shill, *Americans Shouldn't Have to Drive*, *supra* note 149.

^{151.} See generally, e.g., Katie Alvord, Divorce Your Car! Ending the Love Affair With the Automobile (2000); About Me, Car Free Am., http://carfreeamerica.net/sample-page/ (last visited June 2, 2023); CityLab Transp., What It Takes for These City Parents to Live Car-Free, Bloomberg (May 10, 2019), https://www.bloomberg.com/news/articles/2019-05-10/what-it-takes-for-these-parents-to-live-car-free; Jen Fuller, A Beginner's Guide to Living Car-Free, PBS: Peril & Promise (Oct. 4, 2018), https://www.pbs.org/wnet/peril-and-promise/2018/10/a-beginners-guide-to-living-car-free/; Robert Goodspeed, Making the Car Free Choice, Planetizen (June 25, 2009), https://www.planetizen.com/node/39437.

^{152.} Marc Fisher, *Cruising Toward Oblivion: America's Once Magical – Now Mundane – Love Affair with Cars*, WASH. POST (Sept. 2, 2015), https://www.washingtonpost.com/sf/style/2015/09/02/americas-fading-car-culture/.

^{153.} Shill, Americans Shouldn't Have to Drive, supra note 149.

driving above other forms of travel to the point of contrived necessity, with the implication that this privilege should be removed. This author thinks a legitimate secondary interpretation is that the privilege should instead be *matched*—that nondriving travel should be elevated to the level of privilege afforded to driving. However travel is democratized, first-class citizenship should be the baseline for everyone.

Again, existing transportation proposals are valuable and necessary. Any solution, however, that does not include some proposal to enhance widespread access to private transportation will leave already marginalized individuals and communities waiting on the sidelines indefinitely. Transportation justice advocates would be forced to chip away at a pervasive and unyielding car culture. Walking back car culture, unwinding foundationally racist highway infrastructure, making other adaptations to the built environment, and extirpating legal schemes and structures that are slanted toward cars—all the while meeting vigorous resistance from their beneficiaries—is the work of decades, even generations. Indeed, it was the work of generations that established the problematic landscape of today. Advocates are unlikely to undo it much faster and the racialized and rural poor need answers now.

B. Accentuating the Positive: Mobility as an Individual Right?

The answer—or *an* answer—is to recognize and codify a positive right to autonomous mobility. "Autonomous" here means that individuals should be able to select their mode of mobility according to their own needs, abilities, and preferences. Users should be able to utilize those preferred modes at will without being subjected to anyone else's schedule or priorities. Despite our national preoccupation with liberty, that right does not currently exist for Americans, which none of the major transportation justice proposals envision or recognize. This Part examines the origins of a currently recognized negative right to travel without interference and distinguishes between the negative right and a novel positive right, which this Article advances.

The scholarship regarding individual rights to travel is instructive for defining and locating this right. Interstate travel has long been a protected constitutional right recognized by the United States Supreme Court. 154 This

^{154.} See Saenz v. Roe, 526 U.S. 489, 498 (1999) ("[T]he 'constitutional right to travel from one State to another' is firmly embedded in our jurisprudence." (quoting United States v. Guest, 383 U.S. 745, 757 (1966))); see also id. at 498 ("[T]he right is so important that it is 'assertable against private interference as well as governmental action . . . a virtually

jurisprudence ensures that citizens enjoy the right to move between states and enjoy the same rights as the citizens of the states to which they travel. Individual rights to travel *intra*state (within individual states), however, have not been so clearly established.

Prominent legal scholar Mitchell F. Crusto analyzes the federal cases concerning a right to intrastate travel through a historical lens, tracing the right-to-travel jurisprudence directly to the theoretical tension between liberty and enslavement at the country's founding.¹⁵⁵ He points out that in a recent district court case, *Dickerson v. City of Gretna*, the court illogically relied upon an assumption that an individual intrastate travel right could not exist because the Supreme Court had not expressly articulated one.¹⁵⁶ Crusto then identifies a split among the circuit courts that have considered the issue.¹⁵⁷ He also locates significant implicit Supreme Court support for this position from several standpoints.¹⁵⁸

unconditional personal right, guaranteed by the Constitution to us all." (quoting Shapiro v. Thompson, 394 U.S. 618, 643 (1969) (Stewart, J., concurring))).

155. See generally Mitchell F. Crusto, Enslaved Constitution: Obstructing the Freedom to Travel, 70 U. PITT. L. REV. 233 (2008) (critiquing and analyzing Dickerson v. City of Gretna, No. 05-6667, 2007 WL 1098787 (E.D. La. Mar. 30, 2007) (holding that local police could lawfully blockade Hurricane Katrina evacuees from leaving the city of New Orleans) by applying a substantive due process framework and interrogating the racist traditions and enslavement theory with which the Dickerson court intellectually aligns itself).

156. Id. at 245 (citing Dickerson, 2007 WL 1098787, at *2).

157. The First, Second, and Third Circuits have all explicitly recognized a right to intrastate travel. *Id.* (first citing Townes v. City of St. Louis, 949 F. Supp. 731, 734 (E.D. Mo. 1996); then citing Coles v. Hous. Auth. of Newport, 312 F. Supp. 692 (D.R.I. 1970), *aff'd*, 435 F.2d 807 (1st Cir. 1970); then citing Town of W. Hartford v. Operation Rescue, 991 F.2d 1039 (2d Cir. 1993); then citing King v. New Rochelle Mun. Hous. Auth., 442 F.2d 646 (2d Cir. 1971); and then citing Lutz v. City of York, 899 F.2d 255 (3d Cir. 1990)). Conversely, the Sixth and Eighth Circuits, both of which the court in *Dickerson* relied on, have refused to recognize a right to intrastate travel. *Id.* at 243, 245; *Dickerson*, 2007 WL 1098787, at *2 (first citing Doe v. Miller, 405 F.3d 700, 712 (8th Cir. 2004); and then citing Wardwell v. Bd. of Ed., 529 F.2d 625, 627 (6th Cir. 1976)).

158. Crusto, *supra* note 155, at 246 (quoting United States v. Wheeler, 254 U.S. 281, 293 (1920) (noting that the Articles of Confederation, precursor to the United States Constitution, recognized "the fundamental right, inherent in citizens of all free governments, peacefully to dwell within the limits of their respective states, to move at will from place to place therein, and to have free ingress thereto and egress therefrom")); *id.* (quoting Williams v. Fears, 179 U.S. 270, 274 (1900) ("Undoubtedly the right of locomotion, the right to remove from one place to another according to inclination, is an attribute of personal liberty, and the right, ordinarily, of free transit from or through the territory of any state is a right secured by the 14th Amendment and by other provisions of the Constitution.")); *id.* at 246-47 (quoting Kent v. Dulles, 357 U.S. 117, 126 (1958) ("The right to travel is a part of the 'liberty' of which the citizen cannot be deprived without the due process of law under the

Ultimately, Crusto determines that such a right must spring from the substantive Due Process clause of the Constitution, pointing to the detailed analysis of *Lutz v. City of York*. ¹⁵⁹ In *Lutz*, the Third Circuit examined six different potential constitutional sources of an intrastate travel right and concluded definitively that not only does the right exist but that it originates from the Due Process clause. ¹⁶⁰

At this point in the Article, it becomes necessary to distinguish between the intrastate travel right discussed thus far and the right to mobility which this author wishes to prescribe as a solution to the transportation gap. The right to intrastate travel under this discussion has been uniformly framed as a negative right, or a right to be left alone to do something. ¹⁶¹ Each intrastate travel case has concerned itself with the government's ability to restrict private citizens from traveling within the boundaries of one state. ¹⁶² Even Crusto's incisive commentary contemplates the right exclusively as a

Fifth Amendment. . . . In Anglo-Saxon law that right was emerging at least as early as the Magna Carta. . . . Freedom of movement is basic in our scheme of values.")); id. at 247 (quoting City of Chicago v. Morales, 527 U.S. 41, 53-54 (1999) ("On the other hand, as the United States recognizes, the freedom to loiter for innocent purposes is part of the 'liberty' protected by the Due Process Clause of the Fourteenth Amendment. We have expressly identified this 'right to remove from one place to another according to inclination' as 'an attribute of personal liberty' protected by the Constitution. . . . Indeed, it is apparent that an individual's decision to remain in a public place of his choice is as much a part of his liberty as the freedom of movement inside frontiers that is 'a part of our heritage' . . . or the right to move 'to whatsoever place one's own inclination may direct' identified in Blackstone's Commentaries." (citations omitted))); id. at 247 n.64 (quoting Aptheker v. Sec'y of State, 378 U.S. 500, 517 (1964) ("[F]reedom of travel is a constitutional liberty closely related to the rights of free speech and association ")); id. at 249 (quoting Bell v. Maryland, 378 U.S. 226, 255 (1964) (Douglass, J., concurring) ("The right of any person to travel interstate irrespective of race, creed, or color is protected by the Constitution. Certainly his right to travel intrastate is as basic. Certainly his right to eat at public restaurants is as important in the modern setting as the right of mobility. In these times that right is, indeed, practically indispensable to travel either interstate or intrastate." (citation omitted))); id. at 246 & n.56 (first citing United States v. Laub, 385 U.S. 475 (1967); and then citing Cafeteria & Rest. Workers Union Local 473 v. McElroy, 367 U.S. 886 (1961)).

159. *Id.* at 251 (analyzing Lutz v. City of York, 899 F.2d 255 (3d Cir. 1990) (articulating the existence of a fundamental right to intrastate travel and applying a First-Amendment time, place, and manner analysis to a local anti-cruising ordinance restricting the number of times residents could drive their cars around a particular urban loop)).

160. Lutz, 899 F.2d at 266-68.

161. See generally Jorge M. Farinacci-Fernós, Looking Beyond the Negative-Positive Rights Distinction: Analyzing Constitutional Rights According to Their Nature, Effect, and Reach, 41 HASTINGS INT'L & COMP. L. REV. 31, 42-46 (2018) (providing a definition of negative rights).

162. See, e.g., Lutz, 899 F.2d at 255–60; Dickerson, 2007 WL 1098787, at *1-3.

negative one, guaranteeing that citizens receive due process whenever the right is to be limited or infringed. As Archer and Rothstein both demonstrate in their groundbreaking analyses, the genesis of the transportation gap is a racist and classist co-evolution of law, policy, and the built environment collaborating to restrict the movement of Black, Brown, and poor people. And that process is ongoing: noted legal scholar Audrey McFarlane additionally demonstrates that with public transportation carrying a connotation of poverty and Blackness, some government leaders may score political points with wealthy and white constituencies by actively blocking public-approach projects and reinforcing the transportation gap. Begardless, a negative right does not solve the problem.

If a negative right is a shield, a positive right is a sword. Rather than prohibiting government interference, positive rights compel the government to *provide* something to its citizens. ¹⁶⁶ This Article proposes the recognition of a positive right to autonomous mobility: the right not just to travel where one desires, but to choose the mode of transportation best suited to individual needs and circumstances, and to have a slate of available options from which to choose. This positive right is the key to meaningfully accessing the previously acknowledged negative fundamental rights to interstate and intrastate travel. Without it, negative rights are diminished for large numbers of people. It has already played out in this way; that is how the existing structures got to this point. But with the positive right activated, the negative rights are realized and reinforced universally.

C. What Does the Right Look Like?

This Article has identified a positive right to autonomous mobility as the solution that will eliminate the transportation gap. To provide complete relief for people caught in the gap, transportation justice advocates must take this positive right as a base assumption in designing their solutions. If a positive right is taken as a given in advance, the right will be reflected throughout every corner of the resulting proposals. In the same way, the previously established baseline—that it is desirable to help people achieve

^{163.} See Crusto, supra note 155, at 233-40.

^{164.} See Archer, supra note 7, at 1274–84; ROTHSTEIN, supra note 7, at 64-65.

^{165.} See generally Audrey G. McFarlane, Black Transit: When Public Transportation Decision-Making Leads to Negative Economic Development, 106 IOWA L. REV. 2369, 2371–72 (2021) (discussing Maryland governor Larry Hogan's unilateral decision to decline nearly a billion dollars of federal funding for a "shovel-ready" urban transit project years in the making, that would have benefitted low-income residents of majority-Black Baltimore).

^{166.} Farinacci-Fernós, supra note 161, at 43.

mobility but that there is no inherent individual right to it—is currently reflected in every corner of the status quo and the major proposed solutions.

This shift does not necessarily eliminate the public access proposals but would result in them being executed in a more equitable and effective way. For example, recognizing the positive right could mean that the models are implemented without the expectation that they be profitable. In the case of mass transit, releasing the expectation of profitability means that transit planners could and should increase access by providing service expansively without primary regard to ridership. This change would also mean that more cities would offer twenty-four-hour service so residents are not subjected to a de facto curfew. ¹⁶⁷ Potentially, a positive right could require enacting measures to force transit services and agencies to justify any reductions in routes or schedules and open themselves to community feedback before finalizing the reduction. ¹⁶⁸

In terms of shared transit, a positive right might mean that rideshare and micromobility companies contract with state and local governments to

167. As of this writing, the District of Columbia ends Metrorail service at midnight or 1 A.M.; it is notable that these hours are actually slightly extended compared to before the pandemic. Metrorail: Rail Hours, WASH. METRO. AREA TRANSIT AUTH. (WMATA), https:// www.wmata.com/service/rail/#:~:text=Monday%20through%20Thursday%2C%205%3A00, a.m.%20until%2012%3A00%20a.m (last visited July 24, 2023). Similarly, Boston's subway and bus services end at 1 A.M. or 1:50 A.M., depending on the line. Beginner's Guide to the Subway, MASS. BAY TRANSP. AUTH., https://www.mbta.com/guides/subway-guide (last visited July 24, 2023); Beginner's Guide to the Bus, MASS. BAY TRANSP. AUTH., https:// www.mbta.com/guides/bus-guide (last visited July 24, 2023). In San Francisco, subway service ends at midnight; bus service shuts down at 1 A.M. San Francisco Subway, CIVITATIS SANFRANCISCO, https://www.sanfrancisco.net/subway (last visited July 24, 2023). The Los Angeles Metro Rail closes around 1:30 A.M. Los Angeles Metro Rail: Operating Times, CIVITATIS LOSANGELES, https://www.introducinglosangeles.com/metro-rail#:~:text= The%20Los%20Angeles%20Metro%20Rail%20runs%20approximately%20from%204%3A 30,minutes%20depending%20on%20the%20time (last visited July 24, 2023). Houston's light rail closes between 11:40 PM and 2:20 AM, depending on the day of the week. About Houston: Exploring Houston - Light Rail, CITY OF HOUSTON, https://www.houstontx.gov/ abouthouston/lightrail.html#:~:text=METRORail%20hours%20of%20operation%20are,to% 2011%3A40%20a.m.%20Sunday (last visited July 24, 2023). Although subway service is available 24/7 in Chicago, only a limited selection of bus routes maintain twenty-four-hour availability. Night Owl Service, CHI. TRANSIT AUTH., https://www.transitchicago.com/assets/ 1/6/ctamap OwlService.pdf (last visited July 24, 2023).

168. This could be achieved using a similar structure to the Community Reinvestment Act, which among other provisions, requires banks to confer with local communities before closing branch locations in low-income minority neighborhoods. *Community Reinvestment Act (CRA)*, BD. OF GOVERNORS OF THE FED. RSRV. SYS., https://www.federalreserve.gov/consumerscommunities/cra_about.htm (last visited June 2, 2023).

provide these services for area residents under a similar structure to public ambulance services, which are funded by a combination of taxpayer money and user fees. 169 Rideshare drivers could be classified as government contractors providing a public good, subsidized by governments, and perhaps enjoying more protections than private contractors to Uber and Lvft. 170

With respect to the built environment, recognizing this positive right would mean committing to infrastructural change and making it a priority rather than a back-burner issue. The right is consistent with proposals for mixed-use public roads, but requires broad inclusion of many transportation modes and precludes the total exclusion of cars.

Recognizing a positive right to autonomous mobility would also require eliminating paternalistic priority setting that starts from the assumption that vehicle ownership is to be discouraged for the greater good. Thus, it would require increasing widespread access to cars. ¹⁷¹ It certainly requires that activists, advocates, and lawmakers trust the involuntarily carless to know their own needs and to meet those needs on the same terms enjoyed by more privileged groups. Recognizing the positive right to autonomous mobility also responds to the prohibitive prices well out of reach for many people. Lawmakers should investigate the ever-skyrocketing costs of cars and insurance and push back on manufacturers and insurers. ¹⁷²

^{169.} See Emergency Medical Services (EMS) Home Rule State Law Fact Sheet, CDC, https://www.cdc.gov/dhdsp/policy_resources/ems/home_rule.htm (last updated Jan. 31, 2022). The author acknowledges that this is far from a perfect model, as ambulance services often result in high costs and debt burdens for people who have just suffered a medical emergency. FAIR HEALTH, GROUND AMBULANCE SERVICES IN THE UNITED STATES (2022), https://s3.amazonaws.com/media2.fairhealth.org/whitepaper/asset/Ground%20Ambulance% 20Services%20in%20the%20United%20States%20-%20A%20FAIR%20Health%20White% 20Paper.pdf. Certainly a preferable option would see rideshare and micromobility services funded at no cost to the individual user, but adopting the ambulance funding model would be an incremental improvement.

^{170.} Rideshare drivers are classified as independent contractors rather than employees. Tim Mullaney, *Is the Uber, Lyft and Gig Economy Battle over Workers Nearing Its End Game?*, CNBC: The BOTTOM LINE (Oct. 16, 2022, 10:00 A.M. EDT), https://www.cnbc.com/2022/10/16/how-the-uber-lyft-gig-economy-battle-over-drivers-ends.html.

^{171.} The details of how the carless would realize this access, and what property rights governments would confer in providing access, are beyond the scope of this Article. They will be addressed later in the series.

^{172.} See Shannon Pettypiece, *The Cost of Owning a Car Keeps Rising, but a Price Drop Could Be on the Horizon*, NBC NEWS (Apr. 8, 2023, 6:00 AM CDT), https://www.nbcnews.com/politics/economics/cost-owning-car-keeps-rising-rcna78377.

Imagine if this right had been in force all along. Would it have prevented the racially animated perversion of the built environment? If lawmakers had had an affirmative obligation on the books to provide meaningful alternatives to impacted residents, would they have set aside their destructive highway projects? Would the positive right have prevented the abandonment of mass transit investment? Or if it did not prevent these developments, could it have softened their impact? What could the national travel landscape look like if the positive right to autonomous mobility had been clearly articulated at the outset?

D. But What About...?

Of course, any idea has its drawbacks and counterarguments. Naturally the threshold objection is whether recognition of the positive right to autonomous mobility is at all realistic. First, it relies upon an analogy to a right that has not been legislatively enacted, nor enumerated by the Supreme Court, nor uniformly adopted by the federal courts. Second, it additionally relies upon the substantive Due Process clause, recently and substantially eroded by the Supreme Court, which hinted that its remaining protections might soon be on the chopping block. However, innovation requires optimism, and if anything, the *Dobbs* decision proves that few things are yet written in stone. At the time of this writing, it remains to be seen whether Congress will act to codify the doctrine of substantive due process or any of the rights the doctrine has formerly guaranteed.

There are other, similarly compelling counterarguments to consider; to be sure, this author is herself admittedly uncomfortable with some of the

^{173.} See supra Section III.B.

^{174.} Dobbs v. Jackson Women's Health Org., 142 S. Ct. 2228 (2022) (overturning Roe v. Wade and holding that there is no constitutional right to abortion). While the majority opinion purports to have left substantive due process jurisprudence unrelated to abortion undisturbed, both the dissent and Justice Thomas' concurring opinion link the majority opinion's rationale to other substantive due process decisions. See id. at 2319 (Breyer, Sotomayor, and Kagan, JJ., dissenting) ("[N]o one should be confident that this majority is done with its work. The right Roe and Casey recognized does not stand alone. To the contrary, the Court has linked it for decades to other settled freedoms involving bodily integrity, familial relationships, and procreation. Most obviously, the right to terminate a pregnancy arose straight out of the right to purchase and use contraception. In turn, those rights led, more recently, to rights of same-sex intimacy and marriage. They are all part of the same constitutional fabric, protecting autonomous decisionmaking over the most personal of life decisions.") (citations omitted); id. at 2301 (Thomas, J., concurring) (asserting that substantive due process has no constitutional basis and affirmatively indicates that the majority opinion does, or should, open the door to "reconsider[ing] all of this Court's substantive due process precedents").

implications of the proposal this Article advances. Ensuring access to a car for anyone who wants one would take a significant toll on the already-precarious environment. Even now, transportation is the largest single contributor to the United States' greenhouse gas emissions (29%), and those emissions have steadily increased for the last thirty years. ¹⁷⁵ Although fuel economy has progressively improved, the public's taste shifting away from sedan-style vehicles and toward larger, less-efficient sport utility vehicles has undermined the headway gained through those technological advancements. ¹⁷⁶ Recall about 9% of households are carless, a figure approaching eleven million households. ¹⁷⁷ Even deducting for households whose members cannot or do not wish to drive, it is likely that recognizing a positive right to autonomous mobility would put a significant number of additional cars on the road.

Additionally, a sudden and dramatic increase in the number of cars on the road would bring our crumbling infrastructure to its knees. Over 40% of American roads and highways are already in poor or mediocre condition.¹⁷⁸ The status quo finds the average driver spending fifty-eight minutes in the car daily.¹⁷⁹ Indeed, the annual cost of road congestion in terms of wasted time and fuel ranges from around \$420 million for smaller urban areas to \$948 million for large urban areas.¹⁸⁰ Creating an entitlement to car access for people who want it would surely only increase this number along with the amount of traffic.

^{175.} Carbon Pollution from Transportation, EPA, https://www.epa.gov/transportation-air-pollution-and-climate-change/carbon-pollution-transportation (last updated May 11, 2023). Of transportation-related emissions, almost two-thirds are attributable to personal vehicle use, compared to one quarter associated with commercial uses. Emissions of Carbon Dioxide in the Transportation Sector, CONG. BUDGET OFF. (Dec. 2022), https://www.cbo.gov/publication/58861

^{176.} EPA, EPA-420-R-21-023, THE 2021 EPA AUTOMOTIVE TRENDS REPORT: GREENHOUSE GAS EMISSIONS, FUEL ECONOMY, AND TECHNOLOGY SINCE 1975, at 16-17 (2021), https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P1013L1O.pdf.

^{177.} See Popular Household Statistics – Vehicles Available, supra note 4. Note that that figure represents carless households, not carless individuals. Id.

^{178.} Am. Soc'y of Civ. Eng'rs, 2021 Infrastructure Report Card: Roads 108 (2021), https://infrastructurereportcard.org/wp-content/uploads/2017/01/Roads-2021.pdf.

^{179.} FED. HIGHWAY ADMIN., U.S. DEP'T OF TRANSP., SUMMARY OF TRAVEL TRENDS: 2017 NATIONAL HOUSEHOLD TRAVEL SURVEY 54 (2018), https://www.fhwa.dot.gov/policyinformation/documents/2017_nhts_summary_travel_trends.pdf.

^{180.} Annual Highway Congestion Cost, BUREAU OF TRANSP. STAT., https://www.bts.gov/content/annual-highway-congestion-cost (last visited June 19, 2023) (using data sourced from Texas A&M Transp. Inst., 2021 Urban Mobility Report (2021), https://static.tti.tamu.edu/dti.tamu.edu/documents/mobility-report-2021.pdf).

Not to be overlooked is that the cost of meeting this right would be enormous, and the logistics daunting, such as paying for the cars themselves, plus insurance, training, and maintenance. Does a positive right to autonomous mobility mean a positive right to a full gas tank?

And yet, why must the viability of our environment, infrastructure, and economy hinge upon the subjugation of the racialized poor? Affluent white people have primarily been in the driver's seat and created these problems; affluent white people have also been the primary beneficiaries.¹⁸¹ Moreover, many of these problems developed gradually over time, with plenty of warnings available, and the people in power were unable or unwilling to avoid or mitigate them.¹⁸² How can the disenfranchised racialized poor do better? And why should they be expected to take on that responsibility?

Another especially troubling concern for this author with respect to this Article's proposal is that as pervasive as car culture is, its origins are rooted in capitalist profit-driven actions that permanently undermined the role of transportation as a public good and the open, public nature of the roadways. This author is disquieted by the prospect of signaling approval of this corrosive history by promoting universal, on-demand access to private automobiles. History may be reinforced by participating in the existing automobile supremacy, but it is, regrettably, more likely that our society is too far gone on that path to reverse course. All along, affluent white people have had the benefit of automobile access and the attendant journey of collective cultural self-discovery which the racialized poor have largely been denied. Car culture may be toxic, but it is undeniably American. Everyone should have access and choice to determine whether and how to participate.

E. But What About Autonomy?

Ultimately, advocating for a defined right to autonomous mobility is not a pro-car argument nor is it anti-transit. Inherent in autonomy is choice; there is no autonomy if individuals cannot select from the full menu of options. Many individuals, with improved access and if given the option, might independently choose to use buses, scooters, subways, or rideshares as their primary mode of transportation.

Many, however, would likely choose cars. Public transportation, bikes, rideshares, and other solutions are already options for many people, and they

^{181.} See ROTHSTEIN, supra note 7, at 77–91; BROWN, supra note 7, at 48-49.

^{182.} See ROTHSTEIN, supra note 7, at 77–91; Brown, supra note 7, at 48-49.

have not independently eliminated mobility problems. ¹⁸³ If transportation justice advocates are not prepared to account for the people who would make that choice, they are not truly advocating for justice. Instead, they are subjecting people already disadvantaged by the transportation gap to further marginalization. Blocking those people from their preferred mode of transportation undermines their self-determination and unilaterally sacrifices their needs to others' interests.

This subjugation is a common trope in our national problem-solving. Disadvantaged people and communities are continually called upon to correct societal issues that impact everyone. These are often problems created and perpetuated by other, more powerful groups. The more powerful then shame the marginalized if they do not comply and "get on board" with the agenda of the moment. This dynamic is even more dramatic as the powerful ignore and dismiss the concerns of the disadvantaged. Our society promotes sexual assault awareness by teaching potential victims how to avoid rape, rather than educating potential perpetrators about boundaries on a large scale. Racial injustice is spoken of as a problem for racial minorities to consider and solve, rather than a construct of white oppressors, which white people must take an active, if not primary, part in dismantling. 185

The same cycle is perpetuated here. The history of American transportation is a deeply racist and classist one, and to the extent that the particularly racialized poor, Black people have had access to transportation, that access has always been limited. But calls for corrective justice continue assuming that no right to autonomous mobility exists, thus perpetuating a two-tiered system. Note that at this stage, the affluent and

^{183.} See supra Part II.

^{184.} Dana Bolger, *Smart Study Finds "Resistance Program" Helps Women Avoid Rape*—but at What Cost?, FEMINISTING (June 11, 2015), http://feministing.com/2015/06/11/smart-study-finds-resistance-program-helps-women-avoid-rape-but-at-what-cost/.

^{185.} B.L. Wilson, I'm Your Black Friend, but I Won't Educate You About Racism. That's on You, WASH. POST (Jun. 8, 2020, 6:00 AM EDT), https://www.washingtonpost.com/outlook/2020/06/08/black-friends-educate-racism/.

^{186.} See Crusto, supra note 155 (outlining the enslavement mentality that has been a constant in the nation's development and always sought to restrict Black travel); see also Evan Andrews, The Green Book: The Black Travelers' Guide to Jim Crow America, HISTORY.COM (Mar. 13, 2019), https://www.history.com/news/the-green-book-the-black-travelers-guide-to-jim-crow-america (noting prominent book providing "advice on safe places to eat and sleep when [Black Americans] traveled through the Jim Crow-era United States"); Erin Blakemore, Erin Blakemore, A Black American's Guide to Travel In the Jim Crow Era, SMITHSONIAN MAG. (Nov. 3, 2015), https://www.smithsonianmag.com/smart-news/read-these-chilling-charming-guides-black-travelers-during-jim-crow-era-180957131/.

white people who do use public transit do so by *choice*, often to make a sociopolitical point. People of color living in poor neighborhoods have no meaningful choice in the matter. The affluent and white riders may keep a car as backup and opt back into the more-advantaged tier whenever public transit becomes inconvenient.¹⁸⁷ Poorer people of color people are trapped in the carless tier.

Americans have reorganized the national infrastructure around the automobile, but none of the primary solutions to the transportation gap contemplate improved access to cars, and certainly not a personal, positive right to them. To reiterate, executing this right does not equate to giving everyone a car. If the point is to provide everyone with an equal ability to engage in self-determination, a one-size-fits-all solution is necessarily inadequate. People might desire different solutions in different locations, circumstances, or seasons of their lives. Choosing for them would only undermine the independence this Article hopes to unlock; solutions without autonomy, choice, and equity at their center cannot hope to succeed.

Mass transit frameworks must adopt a clearer national problem-solving framework. Here, the framework could start with acknowledging the positive right to autonomous mobility as its governing principle. As with the examples above, punting the issue of the transportation gap to the less powerful group to address only allows the problem to persist and its beneficiaries to evade accountability. Recognizing a positive right to autonomous mobility for every American will allow us to reframe our problem-solving surrounding the transportation gap, and perhaps create a model which is replicable as a lens to reexamine other societal problems.

Conclusion

Despite significant ongoing attention, the transportation gap between the rich and poor, Black/Brown and white, persists largely unimpeded. Commentators typically advance three main proposals to solve it: improving mass transit, increasing shared transit, and adapting the built environment. These solutions all suffer from baseline assumptions and theories that detract from the autonomy of the people caught in the gap. To correct the transportation gap effectively, our solutions must spring from a foundation assuming an individual right to mobility. Although a negative right to unimpeded intrastate travel has been considered, even adopted by several

^{187.} They may also use their networks to get rides, which Black and Brown people in poverty may also do, but the affluent white networks of affluent white transit users present a starting point better set up for success in that endeavor.

federal circuits, a positive right to autonomous mobility has never yet been recognized. Recognizing such a right and adopting a framework assuming autonomy, choice, and equity may influence societal problem-solving broadly, in the long term, and for the better.

* * *