

DEEP DIVE

RELIABLE TRANSPORTATION

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TRANSPORTATION & THE BUILT ENVIRONMENT

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TRANSPORTATION & THE BUILT ENVIRONMENT

Transportation for America (T4America), the transportation arm of Smart Growth America, is a national nonprofit seeking a transportation system that safely, affordably and conveniently connects people of all means and ability to jobs, services, and opportunity through multiple modes of travel. We do this work through direct technical assistance, research and analysis of existing transportation programs, and advocacy. T4America works in partnership with a coalition of other national organizations and members, a cross-sector group of about fifty cities, counties, metropolitan planning organizations (MPOs), chambers of commerce, transit agencies, businesses and civic organizations.

Since the COVID-19 pandemic, Transportation for America has worked with Smart Growth America's other programs and organizations around the country in three main areas to address emerging needs.

FUNDING FOR PUBLIC TRANSIT IN THE CORONAVIRUS AID, RELIEF, AND ECONOMIC STABILITY (CARES) ACT

When Congress started deliberations on what would become the CARES Act in March 2020, the bill included zero dollars for public transit. Due in part to T4America's advocacy, the CARES Act ultimately included \$25 billion for public transit to ensure that transit providers can continue safely moving essential workers each day, and be there to fuel recovery as more residents return to work. T4America has continued to push for additional transit operating funding and other support for transit.

CHRONICLING BEST PRACTICES FOR OPENING STREETS

Smart Growth America's National Complete Streets Coalition quickly worked to chronicle how cities are responding to the pandemic by opening streets to people and changing other policies. They also quickly pulled together city leaders and advocates to discuss how cities can and should respond.

SHARING LESSONS LEARNED FROM 2009 STIMULUS SPENDING

Smart Growth America produced data-based recommendations to help stabilize the economy in a way

that creates the most jobs per dollar spent and ensures the investments are equitable and support access to jobs and opportunity for all people. It also shows how the investments from the infrastructure spending in the 2009 stimulus act did not accomplish those desired outcomes.

This work during the pandemic—and the challenges and successes we have heard about from local agencies, federal leaders, community organizations, and others around the country—has shaped our understanding of what actions must be taken in the near and long terms to foster equitable and sustainable recovery.

T4America would also like to acknowledge the many other advocacy and research groups, community-based organizations, and individuals who have rapidly developed resources for transit providers and cities, collected examples of places trying innovative practices, and provided thought-leadership on how the transportation and planning fields can best meet the needs of the most vulnerable Americans and foster equitable COVID-19 response and recovery. These groups and individuals have heavily informed our work. Many are referenced and cited throughout this chapter.

CURRENT STATE

Understanding transportation needs during the COVID-19 response and recovery requires understanding how the physical characteristics of our communities have shaped everything from economic mobility to community health and quality of life in the decades before the pandemic, and what policies have directed how our communities grow.

It is difficult and unsafe to reach daily needs outside a vehicle in much of the United States. Transportation has long acted as an economic barrier in the United States. Car ownership is a prerequisite for accessing jobs, food, health care, and other necessities in many regions because of how our communities are built.

Homes are located far from major job centers, services, and stores, requiring multiple car trips daily to reach essential needs. This spread-out development makes

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public transportation inefficient to operate, producing infrequent, inconvenient, and unreliable service. Fewer than 10 percent of Americans currently live within walking distance of frequent transit.¹

Even in areas where homes, stores, and medical care are geographically close, car-oriented infrastructure and development can make it difficult or impossible to travel between destinations without a vehicle. Wide, heavily trafficked roads with narrow or no sidewalks and few places to cross safely make walking or biking unpleasant at best and deadly at worst. For people with impaired vision or mobility, navigating these communities can be impossible. The design of development in these areas also typically prioritizes car travel—for example, with large surface parking lots standing between stores, restaurants, medical facilities, walking to those destinations would require crossing that parking. These conditions make any walking trip hazardous, long, polluted, and noisy. Those same conditions make it difficult or impossible to safely walk to transit stops.

CAR-ORIENTED COMMUNITIES LEAVE MILLIONS OF AMERICANS VULNERABLE

The characteristics of our transportation infrastructure and development in many areas across the country make it so driving is the only viable option for anyone able to do so—yet this leaves a substantial portion of our population vulnerable. Approximately 28 million Americans (about 9 percent of the population) do not have a car, and lower-income people and People of Color are more likely to be car-less. Households with an annual income of less than \$25,000 are almost nine times as likely not to have a car than households with incomes greater than \$25,000.² In fact, some 20 percent of households in poverty don't have a car.³ Just 6.5 percent of white households did not have access to a car in 2015 according to the National Equity Atlas, compared to 19.7 percent of Black households, 13.6 percent of Native American households, and 12 percent of Latinx households.⁴

¹ http://t4america.org/wp-content/uploads/2020/03/20.03_GND-Transit_use_v4.pdf

² https://www.bts.gov/archive/publications/highlights_of_the_2001_national_household_travel_survey/section_01

³ https://nationalequityatlas.org/indicators/Car_access

⁴ *Ibid.*

⁵ Calculated using data for all counties in the US from the American Community Survey five-year estimates for 2014-2018. Accessed at: <https://data.census.gov/cedsci/table?q=dp&tid=ACSDP1Y2018.DP02>.

⁶ <http://t4america.org/2020/05/15/more-than-one-million-households-without-a-car-in-rural-america-need-better-transit/>

⁷ <https://www.prnewswire.com/news-releases/new-national-poll-inability-to-drive-lack-of-transportation-options-are-major-concerns-for-older-adults-people-with-disabilities-and-caregivers-300761774.html>.

⁸ <https://www.bts.gov/topics/passenger-travel/travel-patterns-american-adults-disabilities>

People without access to a car do not just live in urban areas; more than one million households in primarily rural counties do not have a vehicle (6.2 percent of households in those rural counties).⁵ In fact, the majority of counties in the U.S. with high rates of zero-car households are rural.⁶ Carless residents in rural areas also face other challenges unique to rural America—for example, while many rural communities have transit service that plays a critical role in helping people reach healthcare and other needs, fewer communities have the type of scheduled, fixed-route transit that residents can use to get to work every day, making it especially hard for people without access to a car to access employment.

The design of our communities can also negatively impact other residents who cannot drive, including older adults and some people with disabilities. A 2018 survey from the National Aging and Disability Transportation Center found 40 percent of adults over age 65 cannot do the activities they need to do or enjoy doing because they cannot drive. Forty percent of the survey respondents cited access and availability of affordable transportation as a barrier, and respondents regularly described feeling dependent on others, frustrated, isolated, and trapped after giving up driving.⁷ An estimated 25.5 million Americans have disabilities that make traveling outside the home difficult, according to the Bureau of Transportation Statistics, and people with travel-limiting disabilities are less likely to have jobs.⁸

OUR ROADS ARE DEADLY FOR PEOPLE WALKING, ESPECIALLY FOR ALREADY-DISADVANTAGED POPULATIONS

In many communities, traveling outside a car can be a matter of life and death. Between 2008 and 2017, drivers struck and killed 49,340 people walking on streets nationwide, the equivalent of a jumbo jet full of people crashing every single month. The number of people struck and killed while walking increased by 35 percent in the past decade, with little to no increase in walking nationwide over that time period, and a drop in traffic deaths among motor vehicle occupants over that time

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period. The U.S. saw the highest numbers of people killed while walking since 1990 in 2016 and 2017.⁹

Older adults, People of Color, and people walking in low-income communities are disproportionately represented in fatal crashes involving people walking. Even after controlling for differences in population size and walking rates, drivers strike and kill people over age 50, Black or African American people, American Indian or Alaska Native people, and people walking in communities with lower median household incomes at much higher rates.¹⁰

The design of our roads produces these dangerous conditions for people walking: wide lanes, large distances between traffic signals, and long unobstructed lines of sight make it feel safe to drive fast—often significantly faster than the posted speed limit—and drivers unconsciously follow these visual cues. For people on foot, the likelihood of surviving a crash decreases rapidly as speeds increase past 30 mph.¹¹ Yet too often we rely primarily or exclusively rely on enforcement to manage speeding instead of addressing the causes of speeding like roadway design to change driveway behavior. This overreliance on enforcement disproportionately imperils Black motorists and other demographics subject to profiling and violence.

GROWING TRAFFIC, MORE POLLUTION, AND POOR HEALTH OUTCOMES

Car-oriented development has had other negative consequences for American communities: more driving means more transportation emissions, more traffic, and often poor health outcomes. Most of these impacts disproportionately harm People of Color and lower-income communities.

Transportation can both positively and negatively impact our health, as research continues to show. Combustion in vehicle engines causes pollution, including fine particles 2.5 microns in diameter or smaller, known as PM-2.5. These particles are small enough to get deep inside the lungs and cause damage to the lungs, cardiovascular disease, asthma, diabetes and other health problems. Pollution from PM-2.5 is responsible for approximately

⁹ <https://smartgrowthamerica.org/dangerous-by-design/>

¹⁰ *Ibid.*

¹¹ <https://www.nts.gov/safety/safety-studies/Documents/SS1701.pdf>

¹² <https://blog.ucsusa.org/dave-reichmuth/air-pollution-from-cars-trucks-and-buses-in-the-u-s-everyone-is-exposed-but-the-burdens-are-not-equally-shared>

¹³ Syed, S corresponding author Ben S. Gerber, and Lisa K. Sharp. (2013) Traveling Towards Disease: Transportation Barriers to Health Care Access. J Community Health. Retrieved from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4265215/>

¹⁴ *Ibid.*

¹⁵ <https://www.enotrans.org/eno-resources/u-s-vmt-per-capita-by-state-1981-2017/>

¹⁶ <https://www.bts.gov/content/average-fuel-efficiency-us-light-duty-vehicles>

3.15 million annual premature deaths worldwide. In a recent study which mapped PM2.5 exposure from the vehicles, the Union of Concerned Scientists found that Communities of Color are exposed to significantly higher levels of PM2.5 than White Americans.¹²

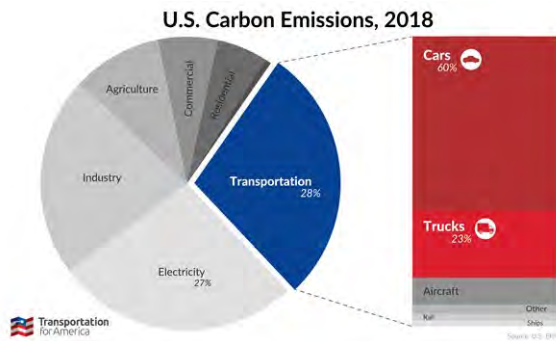
Further, most communities and roadways are designed to ensure cars can always drive quickly meaning less opportunity for physical activity, increased traffic crashes, increased exposure to air pollution, increased greenhouse gas emissions, and higher household transportation costs. Transportation is also a major barrier to accessing health care.¹³ Before the pandemic, approximately 3.6 million people living in the U.S. missed or delayed essential, non-emergency medical care because of transportation barriers. A number of studies have shown chronically ill residents, non-white residents, women, the elderly, and low-income individuals facing the largest transportation burden.¹⁴

Communities built for driving means those who drive must drive more than they would otherwise. From 1980-2017, annual per capita vehicle miles traveled (VMT), a measure of how many miles each person drives every year, increased by 46 percent.¹⁵ In absolute terms, VMT increased by 57 percent in the top 100 urbanized areas between 1993-2017, significantly faster than the 32 percent population growth in those areas. This exacerbates the health impacts listed above.

VMT growth is also contributing to climate change. Transportation accounts for the largest share of carbon emissions in the U.S., and those emissions are rising, even as emissions have decreased in other sectors. Emissions have risen despite increases in fuel economy standards and the beginning of electric vehicle deployment. The vast majority of those emissions—83 percent—come from the cars and trucks that people drive to the grocery store or school or that deliver our Amazon orders. Between 1990-2017, we saw an 18 percent increase in overall fleet fuel efficiency brought on by the implementation of CAFE standards.¹⁶ But even as the fleet overall got far more

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efficient, emissions still rose 22 percent over the same time period. Our increased driving overwhelmed all of those improvements in fuel efficiency.^{17,18}



Much of this design for fast moving vehicles has been in pursuit of reducing traffic congestion, but traffic has also increased over the past several decades. As Transportation for America found in our recent national report, *The Congestion Con*, billions of dollars invested in expanding highways have done little to solve congestion. In the 100 largest urbanized areas in the U.S., the number of freeway lane-miles grew by 30,511 between 1993 and 2017, an increase of 42 percent. That rate of expansion significantly outstripped the 32 percent growth in population in those regions over the same time period, yet annual hours of delay (a standard measure of congestion) grew by a staggering 144 percent.¹⁹ In fact, congestion increased in every one of those 100 urbanized areas, including those with stagnant or declining populations.

GROWING DEMAND FOR WALKABLE, TRANSIT-RICH COMMUNITIES PRICES OUT THOSE WHO MOST NEED AFFORDABLE TRANSPORTATION OPTIONS

While many communities across the U.S. are primarily car-oriented, Americans pay a premium today for housing in walkable communities and accessible to transit. Six out of 10 people said they drive because of a lack of other options in a 2017 survey, 62 percent of Americans reported that nearby transit would be important in choosing where to live and 54 percent cited nearby bike lanes and paths.²⁰ Companies of all sizes are also relocating to or deciding to start up in walkable downtowns and communities with

transit to ensure access to a high quality workforce.²¹

In spite of this demand, most local governments have zoning laws that make it illegal to build communities with amenities walking distance from home, and most transportation agencies have policies that make it against their standards to build roadways that make destinations close by walkable. As a result, the market has not been able to respond to the demand for walkable communities making them more expensive.

Due to the growing lack of affordable housing in cities and walkable places, low-income families and individuals have been pushed to the suburbs, where there are fewer options for traveling without a vehicle and people are disconnected from jobs and services. A study by the Brookings Institution found that residents in low-income suburban neighborhoods with access to transit can reach just 4 percent of metro area jobs with a 45-minute commute.²² This means many people without access to a car can't get to jobs without a car, further trapping them in a cycle of poverty.

COVID-19 AND TRANSPORTATION

THE COVID-19 CRISIS HAS HIGHLIGHTED PROBLEMS AND INEQUITIES THAT ALREADY EXISTED

The coronavirus pandemic has upended many aspects of daily life and mobility that many Americans previously took for granted. It has also made the stark inequities perpetuated by our transportation systems more apparent. Low-income communities, People of Color, and other disadvantaged populations have long experienced the most significant mobility challenges, as well the greatest harm caused by the negative impacts of our transportation infrastructure: exposure to pollution and noise, poor health outcomes, and more.

TRANSIT REVENUES HAVE PLUMMETED, BUT TRANSIT IS MORE ESSENTIAL THAN EVER

Transit agencies have been forced to drastically scale back service in the face of plummeting revenues. Early in the crisis, the public transportation foundation TransitCenter

¹⁷ <https://cfpub.epa.gov/ghgdata/inventoryexplorer/#transportation/allgas/source/all>

¹⁸ www.fhwa.dot.gov/policyinformation/travel_monitoring/tvt.cfm

¹⁹ Transportation for America. (2020). *The Congestion Con: How more lanes and more money equals more*

²⁰ <https://www.nar.realtor/on-common-ground/2017-community-preference-survey>

²¹ <https://smartgrowthamerica.org/resources/core-values-why-american-companies-are-moving-downtown/>

²² <https://www.brookings.edu/testimonies/the-changing-geography-of-us-poverty/>

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estimated that impacts from COVID-19 will cost U.S. transit agencies \$26-\$38 billion annually. This huge shortfall is a result of rapidly decreasing revenue from low ridership and reduced sales tax receipts and increased costs to combat the virus.²³ More recent analyses indicate these initial estimates were likely low.

Transit providers are working to adjust to rapidly changing circumstances to keep both drivers and riders safe and slow the spread of the virus, including [canceling fare collection](#) in order to keep operators safe. These necessary measures are further exacerbating budget shortfalls.

Yet while some Americans have been able to transition to long-term remote work and can run their periodic errands by car, millions of others do not have that choice. Transit continues to play a vital role in getting health care and other essential workers to their jobs and providing families with access to medical care, groceries, and other necessities. TransitCenter also found that 2.8 million transit riders before March 2020 were considered “essential workers,” underscoring just how necessary it is to keep transit running.²⁴

HOUSEHOLDS WITHOUT CARS ARE AT AN EVEN GREATER DISADVANTAGE DURING THE PANDEMIC

Individuals and families without access to a car find themselves unable to get tested for the virus or file for unemployment at drive-through only sites in some locations.²⁵ In New York, 45 percent of households have limited access to COVID-19 testing because they do not have a vehicle. In Florida, unemployment applications and testing have also been limited to drivers.

WITH FEWER CARS ON THE ROAD, SPEEDING IS ON THE RISE, AS ARE TRAFFIC FATALITIES IN MANY CITIES

23 https://transitcenter.org/estimated-financial-impact-of-covid-19-on-u-s-transit-agencies-26-38-billion-annually/#_ftn6

24 <https://transitcenter.org/2-8-million-u-s-essential-workers-ride-transit-to-their-jobs/>

25 <https://www.businessinsider.com/new-yorkers-without-a-car-are-turned-away-at-drive-thru-testing-sites-2020-4>

26 <https://abc7news.com/chp-coronavirus-california-shelter-in-place-speeding-tickets/6157264/>

27 <https://krcgtv.com/news/local/speeders-take-advantage-of-empty-highways-during-coronavirus-pandemic>

28 <https://www.mprnews.org/story/2020/05/06/pandemic-brings-fewer-drivers-more-speeding-to-minnesota-highways>

29 <https://www.westword.com/news/covid-19-colorado-major-speeding-tickets-up-despite-stay-at-home-order-11696614>

30 <https://www.nytimes.com/2020/04/16/nyregion/coronavirus-nyc-speeding.html>

31 <https://wtop.com/dc-transit/2020/05/this-must-stop-reckless-driving-soars-amid-covid-19-closures/>

32 <https://www.wbur.org/bostonmix/2020/05/04/massachusetts-roadway-deaths-coronavirus>

33 <https://www.wsj.com/articles/the-roads-are-quieter-due-to-coronavirus-but-there-are-more-fatal-car-crashes-11588152600>

34 https://www.medrxiv.org/content/10.1101/2020.04.05.20054502v1?fbclid=IwAR3ZhanNrDMOmO7Sr3aHLAaXSSalTHbHo2mym1rCvrBx-8q2ZqqfWU_iAUos

35 <https://www.cdc.gov/mmwr/preview/mmwrhtml/su6203a8.htm>

Traffic volumes have plummeted since the pandemic. While that has led to [fewer crashes overall](#) in some states and cities, a growing number report large increases in speeding citations. In [California](#), the number of tickets issued for driving above 100 miles per hour was 87 percent higher between mid March and mid April 2020 compared to the same time last year.²⁶ Similar reports have emerged in [Missouri](#),²⁷ [Minnesota](#),²⁸ [Colorado](#),²⁹ [New York City](#),³⁰ the [Washington, DC](#)³¹ area, and more.

Some states are also seeing higher traffic fatality rates during the pandemic. In [Massachusetts](#), traffic dropped by 50 percent on average, but the rate of fatalities on state roads doubled in April.³² In [Missouri](#), traffic fatality rates increased while crash rates have declined, indicating more serious collisions. [Minnesota and Louisiana](#) have reported higher numbers of traffic fatalities during the pandemic compared to the same period last year, despite fewer drivers on the road.³³

EXPOSURE TO PARTICULATE POLLUTION IS INCREASING THE COVID-19 DEATH RATE

Research under review has found that exposure to pollution—including from motor vehicles—reduces the survival rate of individuals who have contracted COVID-19.³⁴ Those most at risk of death have underlying diseases which may be due to, or exacerbated by, long-term pollution exposure. Proximity to the source of pollution can play a role in increasing exposure. In urban areas, those living near high-volume roadways can have elevated exposure levels far beyond those living at a distance of 500 to 1,000 feet.³⁵ Long-term exposure to pollution can also contribute to many of the [diseases](#) that increase the risk of death from COVID-19.

People of Color and people with low incomes are disproportionately facing these effects. As the Center for

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Disease Control and Prevention notes:³⁶

“In the United States, it is widely accepted that economically disadvantaged and minority populations share a disproportionate burden of air pollution exposure and risk. A growing body of evidence demonstrates that minority populations and persons of lower socioeconomic status experience higher residential exposure to traffic and traffic-related air pollution than nonminorities and persons of higher socioeconomic status. Two recent studies have confirmed that these racial/ethnic and socioeconomic disparities also exist on a national scale.”

GETTING MEANINGFUL COMMUNITY INPUT IN DECISIONS HAS BECOME EVEN MORE CHALLENGING

Transportation decisions have often not addressed the needs of Communities of Color, those who cannot afford a car, or those who can or do not want to drive. Thanks to the work of community-based groups, some cities are moving towards incorporating more inclusive community engagement processes into their transportation projects. Yet COVID-19 is highlighting the challenges posed by the communities engagement practices used by many transportation agencies. In the era of social-distancing, decision-makers are struggling to develop processes to engage with households who may not have computer or broadband access, do not use English as a first language, or are overwhelmed with working and caring for their family.

COVID-19 HAS SPOTLIGHTED THESE PROBLEMS, NOT CREATED THEM

While the pandemic has highlighted these challenges, the problems—and their causes—already existed. Millions of Americans rely on infrequent, underfunded transit, but we are only now defining many of the workers who have always relied on transit as “essential.” Roads have long been designed to encourage and prioritize high-speed car travel above the safety of people walking; reduced traffic from the pandemic has simply made this more apparent. More people are witnessing the consequences of these roadway design choices now while maintaining social distancing on narrow sidewalks next to wide roads with high speed traffic, yet the phenomenon is not new, and it has already disproportionately harmed People of Color, older adults, and low-income communities.

³⁶ <https://www.cdc.gov/mmwr/preview/mmwrhtml/su6203a8.htm>

Exposure to pollutants has been found to reduce the survival rate among patients that contract COVID-19, disproportionately impacting the same disadvantaged communities that have long faced the most harmful impacts from transportation. Our communities will never recover while these inequities remain.

COVID-19 HAS ALSO SHOWN US THAT CHANGE IS POSSIBLE

At the same time, the pandemic has shown us that it is possible for communities to change the built environment and transportation services rapidly and responsively. Most people see transportation and development as essentially static and fixed. While they are not fixed (in fact, new construction or development can radically transform how a place feels) the decision-making processes that lead to those changes typically take years or decades with little public transparency or opportunities for community input.

During the pandemic, local communities have made changes rapidly, reforming transit practices and reallocating street and curb space to support essential businesses, provide access to those businesses, and create safer public spaces. These efforts have been imperfect in some cases, especially as cities are struggling to get meaningful community input in making these changes from people most vulnerable during the pandemic. Yet these changes show a glimpse of what real transformation could look like and what processes might be needed to make that transformation equitable.

HOW WE GOT HERE: THE ROLE OF POLICY

The physical built characteristics of our communities, including infrastructure and development patterns, are a result of decades-old transportation policies and funding systems at the federal, state, and local levels. These policies and funding systems encourage more and wider highways and sprawling development, pushing people to live further away from the things they need and the places they go, and causing most people to drive more every year to accomplish daily needs. These policies will need to change to support equitable and resilient communities as we recover.

TRANSPORTATION POLICY

Our current approach to transportation in the U.S.—modeled by our national surface transportation program and mirrored in state departments of transportation

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and other transportation agencies—prioritizes fast, freeflow vehicle travel and treats walking, biking and transit as afterthoughts. This focus on freeflow car travel is embedded in our policies, funding structures, performance measures, and it contributes to a feedback loop between our infrastructure and new development that pushes us to drive more every year.

Many of the standards and regulations used to make transportation decisions date back to the era when we were first building out the national interstate system and have not been substantively updated since. Those standards and regulations were developed for limited access highways, but get applied in some form to all roads today, including in contexts where an emphasis on free-flow traffic doesn't fit: commercial corridors with lots of development on either side of the road, local main streets, and residential neighborhood roads.

Designing roads primarily to keep cars moving as fast as possible creates unsafe and unpleasant conditions for people walking and drives our national reliance on car travel. By overwhelmingly supporting highway construction and incentivizing highway oriented development, development gets stretched out to the scale of a fast-moving car, not the person walking.

These conditions force people to drive even for short local trips, causing more congestion. Transportation agencies are primed by existing policies and political pressures to respond to congestion by widening and building new roads. Doing so does not solve congestion—in fact, there is a host of evidence indicating that expanding highways induces more driving and ultimately more congestion in a feedback loop referred to as “induced demand”³⁷—it simply continues to make walking even less safe and enables more spread-out development and ultimately more congestion in a vicious cycle. This cycle comes with heavy costs. It leads to unsustainable increases in infrastructure spending from all levels of government and raises household expenses through increased transportation costs.

LAND USE AND HOUSING POLICY

The policies that govern local land development decisions also help drive this feedback loop, thus producing more

spread out car-oriented development. Most local zoning ordinances follow the same basic formula, designating residential areas, commercial areas, industrial areas separately. This formula is based on an early 20th century model from the last time the federal government provided significant zoning guidance: the Standard Zoning Enabling Act of 1925. By separating these different types of development, traditional zoning codes increase the distance between daily needs, prompt more driving, and effectively ensure that new development will be car-oriented.

Today, government-mandated zoning requirements prevent the market from adding to the supply of walkable, transit-served communities to meet growing demand, driving up property values in these areas dramatically to levels that make these communities unaffordable to those who could benefit from them the most. Despite the demand for denser and more walkable neighborhoods, it is illegal to build anything except single-family detached houses on roughly 75 percent of land in most cities.³⁸ These laws have profound negative impacts. Artificially limiting the supply of urban housing directly leads to displacement of lower income residents, exacerbates inequality in the process, and drives sprawl, leading to longer car trips, more congestion, and more funds spent expanding roads to accommodate the additional traffic.

STRUCTURAL RACISM

Structural racism has guided many of the decisions made in the U.S. about transportation and housing for decades. The consequences of these decisions are still readily apparent in Communities of Color today. Federal policies and practices actively discouraged homeownership for People of Color, particularly for Black people, by restricting mortgages outside of exclusively white neighborhoods. The construction of the National Highway System disproportionately carved through Communities of Color when building these new high-speed arterials.³⁹ These and other policies have been mirrored at the local level, with far-reaching impacts on economic opportunity and community health, contributing to the racial COVID-19 health disparities we see today.

37 www.citylab.com/transportation/2018/09/citylab-university-induced-demand/569455/

38 <https://www.brookings.edu/research/gentle-density-can-save-our-neighborhoods/>

39 Coughenour C, Clark S, Singh A, et al. (2017). Examining racial bias as a potential factor in pedestrian crashes. *Accident Analysis & Prevention* 98: 96-100. Available from <https://www.sciencedirect.com/science/article/abs/pii/S000145751630361X>.

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PIVOTAL MOVES FOR ACTION IN THE NEXT 24 MONTHS

The United States needs to profoundly change how transportation and development decisions are made, and now is the time to make that change. Over the next 12 to 18 months, Congress will be passing multiple relief and recovery bills and a multi-year reauthorization of our national surface transportation program. With significant federal funding for transportation on the horizon, we have a window to either reorient the policies used to govern our national surface transportation program toward better outcomes or more deeply entrench the current approach. Policy directly leads to new infrastructure in communities that can produce decades of lasting negative impacts. The longer we continue to preserve current policies, the further into the future we will see these impacts.

The federal government can and should aid this shift. However, states and localities do not need to wait for federal action. A growing number of cities have already stepped up with innovative transportation strategies, listed below, in response to the pandemic.

T4America believes the following strategies will be most critical to addressing immediate needs and making long-term change.

PROVIDE SUSTAINED OPERATING FUNDING TO PRESERVE AND EXPAND TRANSIT

Transit agencies around the country have been forced to cut back service substantially. It is critical to preserve transit as an affordable and lower-emissions alternative to driving as the economy reopens, particularly for the most vulnerable residents. This will require providing space on buses and rail transit to ride safely while maintaining the recommended social distance, meaning running more buses more frequently, not fewer buses less frequently.

The strategy

Congress provided \$25 billion in emergency transit operating funding in the Coronavirus Aid, Relief, and Economic Security (CARES) Act of March 2020. This emergency federal support for operations was monumental and unprecedented. Yet more funding will be needed. TransitCenter initially estimated that COVID-19 will cost U.S. transit agencies \$26-\$38 billion

⁴⁰ https://transitcenter.org/estimated-financial-impact-of-covid-19-on-u-s-transit-agencies-26-38-billion-annually/#_ftn6

⁴¹ <https://www.masstransitmag.com/management/press-release/21137639/mta-headquarters-new-york-mta-leads-coalition-of-15-us-public-transit-agencies-to-request-additional-emergency-federal-aid>

annually.⁴⁰ New York MTA more recently led a coalition of transit providers in asking for an additional \$35 billion in emergency assistance for transit operations, and we do not know yet how far-reaching the economic impacts for transit agencies will be.⁴¹ Funding for rural transit providers was reduced in the final version of the CARES Act, with more support desperately needed. The federal government and localities both have a role in providing funding support for transit.

Transit is an essential public service and we must start treating it like one. Most transit agencies have never stood a chance at covering their costs through fare revenues (or even local taxes in many cases), and that will only be more true as we recover from the COVID-19 crisis. Yet we have allowed that false standard and expectation to guide federal transit policy and funding decisions for decades. Now is the time to change course.

MAKE TRANSIT SAFER FOR RIDERS AND DRIVERS AND MORE RESPONSIVE TO NEEDS IN THE “NEW NORMAL”

It will be crucial to make transit safer for those who operate it and continue to rely on it, especially as more people return to work. As advocates and transit providers have pointed out, transit operators are on the front line during the pandemic, getting health care professionals and other essential workers to and from their jobs. Bus and train operators, transit maintenance workers, and cleaning staff are risking their lives as they support essential travel for millions of Americans.

We also need to adjust service and evolve transit’s role to respond to needs during and post-pandemic, particularly in supporting vulnerable riders.

The strategy

Some transit agencies around the country have already responded rapidly to emerging needs during the pandemic, making changes in an attempt to make conditions safer for riders and operators. According to interviews with transit agencies conducted by T4America, transit providers are already trying strategies like:

- Protecting transit vehicle operators with personal protective equipment and plexiglass shields.
- Changing ventilation systems.

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- Closing seats.
- Requiring backdoor boarding.
- Going fare-free.
- Requiring riders to wear face-coverings.
- Running “trailer-buses” or “plug buses” on high ridership routes to reduce crowding (this is when a transit agency runs two buses in tandem to provide extra space).
- Partnering with app-based ride-hail companies to provide rides for essential workers left stranded by cut routes.

The American Public Transportation Association has compiled other response strategies transit agencies around the country are using and other resources to support transit agencies during COVID-19.^{42,43}

Transit service providers will also need to adapt service to meet the biggest needs during the pandemic, and some of the necessary short-term service changes should likely be permanent. For example, before the pandemic, many urban and suburban transit agencies ran their most frequent service to cater to the heavy demand during morning and evening rush hour peaks. This helped to mitigate traffic congestion. Yet running service this way also prioritized the needs of “nine-to-five” commuters, particularly those working white collar office jobs, a fact made more starkly apparent during the pandemic with many of those Americans now working from home.

Ridership trends around the world have been upended during the crisis, with growing speculation that these changes will be at least somewhat permanent as teleworking becomes more common. Some workers who do return to the office might switch from transit to other commute options like driving, biking, or walking if they have a choice. As leading transit thought leaders have pointed out, running more frequent transit service during rush hour is expensive for a number of reasons—maybe needlessly expensive as we adjust to new realities.⁴⁴

Beyond responding to changing ridership demands, the pandemic has also provided renewed awareness that many riders are wholly dependent on transit despite the current risks of using it. A growing number of transportation advocates and policymakers are arguing that the needs of those riders should come first in a post-pandemic America. Some cities are already revamping their service with social equity as a priority. For example, Charleston, SC and San Francisco, CA have both updated transit routes during the crisis to ensure that people who rely on transit are prioritized and served appropriately.^{45,46} It may be time for other cities to follow.

REDUCE SPEEDING THROUGH OPEN STREETS, OPERATIONAL CHANGES, AND TACTICAL URBANISM

Our poorly designed roads have paved the way for a dramatic increase in speeding during the pandemic, putting other drivers and people walking and biking at risk. When we don’t address speeding through roadway design, we rely on enforcement.

At the same time, COVID-19 is demonstrating that people want or need to use public space for more than just driving—to exercise, and access jobs and other essential services.

The strategy

A number of cities across the country have rapidly made temporary adjustments to infrastructure to improve safe access to jobs and businesses and provide more outdoor space for exercise. These cities have used strategies like opening streets for physical distancing, extending sidewalks, and building temporary bike lanes.

The National Complete Streets Coalition and Smart Growth America have tracked trends in how cities across the country are adjusting their infrastructure to respond to COVID-19.⁴⁷ The National Association of City Transportation Officials (NACTO) has also released an evolving guide for managing and modifying street, sidewalk, and curb space during the pandemic, collecting examples from around the world.⁴⁸

42 American Public Transportation Association. (2020, April 13). The COVID-19 Pandemic Public Transportation Responds: Safeguarding Riders and Employees. https://www.apta.com/wp-content/uploads/COVID-19_Transit_Guide_FINAL_04132020.pdf

43 <https://www.apta.com/public-transit-response-to-coronavirus/>

44 <https://humantransit.org/2020/05/the-collapse-of-rush-hour-a-deep-dive.html>

45 <https://smartgrowthamerica.org/webinar-recap-complete-streets-responses-to-covid-19/>

46 <https://www.bloomberg.com/news/articles/2020-04-17/mass-transit-may-never-recover-from-the-coronavirus-pandemic?sref=fzXhHko>

47 <https://smartgrowthamerica.org/our-vision/covid-19/>

48 <https://nacto.org/streets-for-pandemic-response-recovery/>

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There are many cities who have taken initial steps to open streets and otherwise manage speeding using temporary changes to roadway design and traffic operations. For example:

- The City of Seattle, WA, which saw a 57 percent drop in vehicle traffic volumes accessing downtown Seattle,⁴⁹ adjusted its signal timing to give more time for pedestrians to cross streets and permanently closed 20 miles of its neighborhood streets to cars.
- Los Angeles, CA also adjusted the timing of its signals to slow down traffic.⁵⁰
- Washington, D.C. temporarily widened some [sidewalks](#) around grocery stores and other businesses to provide safer access.⁵¹
- Oakland, CA closed 74 miles of road to cars to give pedestrians and bicyclists exercise room during the city's stay at home order.⁵²
- In St. Louis, MO, advocacy group Trailnet launched a reporting tool to determine where overcrowding is occurring, and is continuing conversations with leaders about which street closures would prevent overcrowding.⁵³

Temporarily opening streets to active transportation can fundamentally shift how people see roads as public spaces, paving the way for longer-term change. Cities can make quick changes using a tactical urbanism approach—which involves using the temporary design features to convey the purpose of the changes to the public, providing easy ways for members of the community to offer feedback, and making relatively rapid adjustments. These temporary changes can ultimately be transformative.

However, the movement to open streets during the pandemic has received uneven support from community-based organizations. While organizations are supportive of reclaiming space for people, many have raised concerns about whether cities are implementing open streets equitably, how cities are engaging with residents to plan and implement closures, and whether the streets closures are actually helping essential workers access their jobs

49 <https://www.cnn.com/travel/article/seattle-streets-closed-stay-healthy-trnd/index.html>

50 <https://ladot.lacity.org/coronavirus/ladot-adjusts-signals-slow-excessive-speeding>

51 <https://ggwash.org/view/77199/dc-temporarily-widen-some-sidewalks-near-grocery-stores-businesses-coronavirus-open-streets>

52 <https://www.sfchronicle.com/bayarea/article/74-miles-of-Oakland-streets-will-close-to-cars-to-15191559.php>

53 <https://trailnet.org/2020/04/13/closing-streets-covid-19/>

54 <https://www.ite.org/publications/ite-journal/>

and health care.

Therefore, not all Open Streets efforts are created equal. As Emiko Atherton, Director of the National Complete Streets Coalition noted in a recent article for the Institute of Transportation Engineers, “how cities implement Open Streets, slow streets, and other transportation adjustments will be critical for building support for active transportation now and in the future. For example, we should:

- Ensure the temporary projects help provide people who are walking, biking, rolling, and taking transit, with access to jobs, health care, and other essentials services especially in communities that have experienced historic disinvestments.
- Make sure that all projects, temporary and permanent, are helping front line workers access their jobs.
- Allocate transportation resources and infrastructure equitably, not just to communities who are speaking the loudest.
- Work with artists and designers to make improvements high quality and easy to understand (while considering budgets) so that people have a positive experience with the changes.
- Employ COVID-19 transportation demonstration projects as communication tools, where cities can explain what it means to bring more active transportation to their neighborhood.
- Use the projects as opportunities to pilot new processes to inclusively engage the community, especially those who have limited access to computers, broadband, do not use English as a first language, or are not able to attend virtual convenings because of time constraints or lack of capacity. Be open to changing or iterating the projects based on community feedback.”⁵⁴

CATALYZING TRANSFORMATION OVER THE NEXT DECADE

Federal funding levels for surface transportation are typically authorized every five to six years. In September

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2020, the current federal transportation law—the FAST Act—expires, offering a rare opportunity to fundamentally shift the entire national transportation system. To make the necessary changes, the program needs to be shifted in three ways.

REORIENT OUR NATIONAL TRANSPORTATION PROGRAM AROUND ACCESS: CONNECT PEOPLE TO JOBS AND SERVICES

The point of transportation is to get people where they need to go. Since the dawn of the modern highway era, we have used vehicle speed as a poor proxy for access to jobs and important services like health care, education, public services, and grocery stores. The way we build roads and design communities to achieve high vehicle speed often requires longer trips and makes shorter walking or bicycling trips unsafe, unpleasant, or impossible.

Yet providing access has always been the purpose of our national transportation system. We must align how we invest in transportation infrastructure and services—and where we direct new development in communities—with that essential purpose. New technologies can now help us measure success by the primary thing that matters to real people: the ease of arriving at your destination. We can hold agencies accountable to deliver these connections.

The Strategy

We need to determine how well the transportation system connects people to jobs and services, and prioritize projects that will improve those connections. Congress should require USDOT to collect the data necessary to develop a national assessment of access to jobs and services and set national goals for improvement.

With these data, state departments of transportation and planning organizations can ensure federal investments are effectively connecting people to economic opportunity, particularly disadvantaged communities. Funding should go to projects that will improve these connections, regardless of mode: driving, transit, walking, or biking. State departments of transportation (DOTs) and metropolitan planning organizations (MPOs) should be held accountable by evaluating how well their investments help connect people to destinations and using the results to guide future funding decisions. Congress should require it.

DESIGN ROADS FOR SAFETY OVER SPEED

Access to safe, convenient transportation is a fundamental right. Today, most Americans are denied this right because their roads—not just highways—are designed to move vehicles at the highest speeds possible, and roads are not designed for people walking, biking, or taking transit as a priority.

Although people of all ages, races, ethnicities, and income levels suffer the consequences of dangerous street design, some neighborhoods and groups of people bear a larger share of the burden than others. We know older adults, People of Color, and people walking in low-income communities are disproportionately represented in fatal crashes involving people walking.⁵⁵

High speeds make sense on interstates and other highways, but fatalities occur when we design all streets for high speeds rather than to connect people and create value. Local and arterial roads must be designed to put safety first.

The strategy

A serious effort to reduce deaths on our roadways requires slower speeds on local and arterial roads. The federal program should require designs and approaches that slow traffic inside communities, provide safe places for those outside of an automobile and put safety first.

Roads surrounded by development should be designed to serve those areas with slower speeds because it dramatically decreases the likelihood of fatalities in a crash. Roadways through developed areas have lots of points of conflict (retail, services, driveways and intersections, not to mention bicyclists and pedestrians). Protecting the safety of all people who use the street must be a priority reflected in the decisions we make about how to fund, design, operate, maintain, and measure the success of our roads.

PRIORITIZE MAINTENANCE (AND JOB CREATION) OVER HIGHWAY EXPANSION

This keeps funding in existing communities and creates an opportunity to raise the state of local road repair. It allows a community to redesign the roadways for the needs of those in the community and not, as is often the case, those trying to get through that community.

⁵⁵ <https://smartgrowthamerica.org/dangerous-by-design/>

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We are not keeping up with road and bridge repair needs nationwide—between 2009 and 2017, the percentage of the roads nationwide in poor condition increased from 14 to 20 percent.⁵⁶ Yet states continue to spend billions expanding highways, adding to future maintenance liabilities and inducing more traffic. This sometimes means directing resources to build brand new communities instead of investing in the needs of existing (often underserved) communities.

This is not a sustainable path. In the age of COVID-19, transportation funds should be focused on retrofitting and equipping existing communities to handle the long term implications of this crisis rather than breaking ground on something new.

Roadway repair projects also create more jobs per dollar—a needed investment in our upcoming economic recovery,—and spend money faster and create jobs more quickly than building new capacity. Maintenance jobs are open to more kinds of workers, spend less money on equipment and more on wages, and spend less time on plans and permits. New capacity projects also require more funding for buying costly property, which has little or no stimulative or reinvestment value.⁵⁷ Repairing our existing infrastructure is also a priority for the American electorate. A recent poll conducted for Transportation for America showed that fully 79 percent of voters agreed that the government should fix existing roads before building new ones.⁵⁸

The strategy

At the federal level, the next reauthorization of our national surface transportation program should cut the maintenance backlog in half over the next six years by dedicating formula highway funds to maintenance. Changing how federal formula funds for roads are allocated would be transformative.

In addition, when building new road capacity, state agencies should be required to create a plan for maintaining both the new road and the rest of their system. This is common sense and is already required when building new transit projects. Roads should not be treated differently. On the highway side, it will be important to organize the program to better support repair. On the transit side, the program is organized well

⁵⁶ <http://t4america.org/maps-tools/repair-priorities/>

⁵⁷ <https://smartgrowthamerica.org/resources/recent-lessons-from-the-stimulus-transportation-funding-and-job-creation/>

⁵⁸ <http://filesforprogress.org/memos/gnd-for-transit-polling.pdf>

⁵⁹ <http://t4america.org/maps-tools/congestion-con/>

in terms of addressing maintenance needs but needs more resources.

States can make this change now without waiting for federal policy and guidance to help prompt this shift.

CONCLUSION AND KEY CONSIDERATIONS TO SUPPORT EQUITABLE RECOVERY

All across the United States, Black Americans are dying at much higher rates from COVID-19. Many of the factors that put Black Americans at increased risk are problems caused by the built environment—and the federal transportation and housing programs that created it.

It is a lot easier to be healthy when you don't breathe air polluted by highway traffic; when you have convenient access to grocery stores, doctor's offices, and pharmacies; when your daily commute doesn't involve crossing a deadly street. Communities of Color, majority Black neighborhoods in particular, have consistently been denied the public investments that make surviving COVID-19 more likely.

Federal transportation policy can be a powerful tool to remedy these massive health inequities if the success of transportation spending is measured by how it improves access and health outcomes for specific demographics. When we measure these transportation outcomes region-wide, we obscure whether our policies and investments are reducing inequities, perpetuating them, or making them worse.

Currently, the main metric for transportation success is vehicle speed, a measure that does not reveal how quickly people reached their destination, if they reached their destination at all, and who those people are. With speed as the metric for success, states, localities and the federal government spend precious transportation dollars on new road construction projects that are effectively guaranteed in many cases to reduce people's access to jobs and services over the long term—by creating more traffic and incentivizes sprawling land development where necessities are spread out and riding transit, walking and biking is incredibly inconvenient and oftentimes dangerous.⁵⁹

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Transportation infrastructure and the built environment overall—the buildings, streets, parks, and other features that compose the physical spaces where people work, live, and spend free time—are not broadly seen as upholders of systemic racism. Educating people on how the built environment contributes to inequities is essential because it can help them understand that our built environment is changeable. We do not need to accept dangerous roads, polluted air, and neighborhoods disconnected from jobs and services as the norm. We can no longer relinquish control of our built environments to the few people who work in the transportation and urban planning sector. It is critical to engage people on why the built environment matters so that everyone, no matter where they live or who they are, can enjoy living in a place that is healthy, prosperous, and resilient.

FURTHER RESOURCES

[Open Streets for Pandemic Recovery and Response](#) (The National Association of City Transportation Officials, 2020)

[Complete Streets and COVID-19](#) (The National Complete Streets Coalition, 2020)

[Emergency Stabilization and Economic Recovery Recommendations](#) (Smart Growth America, 2020)

[Exposure to air pollution and COVID-19 mortality in the United States: A nationwide cross-sectional study](#) (MedRxiv, 2020)

[Transit Is Essential: 2.8 Million U.S. Essential Workers Ride Transit to Their Jobs](#) (TransitCenter, 2020)

[Estimated Financial Impact of COVID-19 on U.S. Transit Agencies: \\$26-\\$40 Billion Annually](#) (TransitCenter, 2020)

[The Green New Deal for Transportation](#) (Data for Progress, TransitCenter, Transportation for America, other partners, 2020)

[The Congestion Con](#) (Transportation for America, 2020)

[The State of Transportation and Health Equity](#) (Smart Growth America, 2019)

[Repair Priorities](#) (Transportation for America, 2019)

[Dangerous by Design](#) (Smart Growth America, 2019)