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# Equitable and Sustainable Transit Is Critical to Reduce Emissions and Expand Economic Opportunity

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# Introduction

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Since the beginning of President Biden's term, his administration has been vocal about its goals to reduce greenhouse gas emissions, decrease the country's fossil fuel dependency, and broadly combat the effects of climate change and its implications on the economy and the most at-risk communities. On April 22, 2021, Biden set a target goal for the United States to achieve a 50-52 percent reduction from 2005 levels in economy-wide net greenhouse gas pollution in 2030. This goal would be met concurrently with the Biden Administration's top priority of reaching net-zero greenhouse gas emissions by 2050. These commitments are both necessary and ambitious, requiring critical investment in transforming fossil fuel-dependent industries and institutions into ones that are sustainable and accessible. One of the critical ways the U.S. can widely reduce greenhouse gas emissions is through the transportation sector.

Transportation-related emissions comprise over one-quarter of total greenhouse gas emissions in the U.S.; within transportation, light-duty vehicles generate an overwhelming majority (57 percent) of emissions. The Biden Administration has identified possible solutions to combating growing transportation-related greenhouse gas emissions and making more low-carbon choices available to travelers, including:

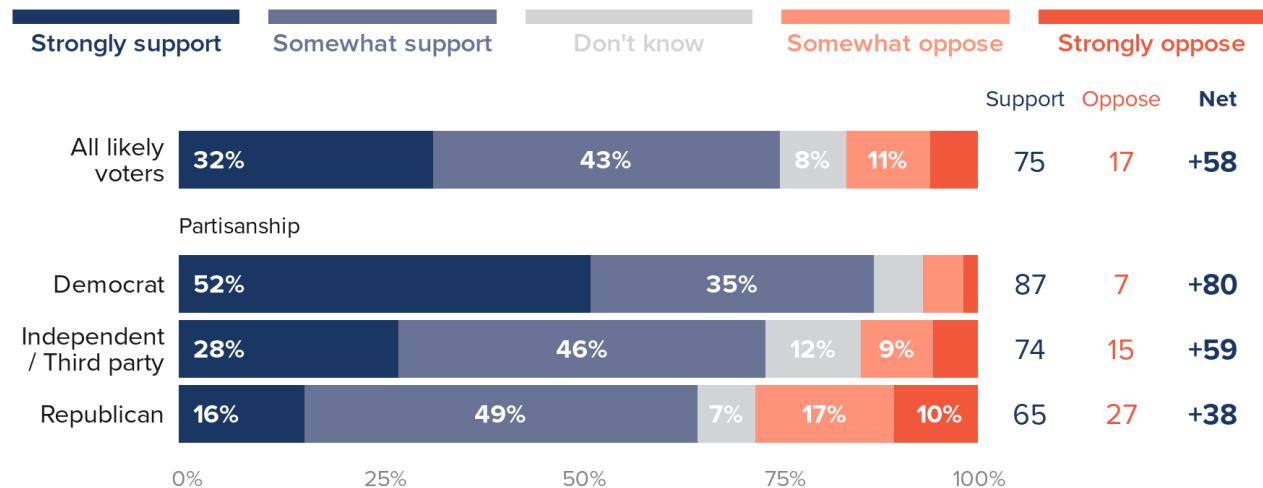
- Reducing tailpipe emissions and boosting the efficiency of cars and trucks;
- Providing funding for charging infrastructure; and
- Investing in a wider array of transportation infrastructure, including transit, rail, and biking improvements.

To meet the needs of accessible and reliable public transportation, Congress passed the Infrastructure Investment and Jobs Act (IIJA) in November 2021. In addition to its surface transportation reauthorization, which continues to fund existing transit programs for five years, this landmark law designates \$39 billion of new investment to modernize transit.. Specifically, IIJA will expand public transit options across every state in the country; replace thousands of deficient transit vehicles, including buses, with clean, zero-emission vehicles; and improve accessibility for the elderly and people with disabilities. In total, the surface transportation reauthorization and these new investments provide \$89.9 billion in guaranteed funding for public transit over the next five years — the largest federal investment in public transit in history.

Public transportation investments are overwhelmingly popular. Recent Data for Progress polling finds that 75 percent of likely voters support the U.S. government making investments to expand and maintain public transit infrastructure.

# Voters Support Government Investments in Public Transit Infrastructure

Would you support or oppose the U.S. government making investments in the expansion and maintenance of public transportation?



July 13–17, 2022 survey of 1,304 likely voters

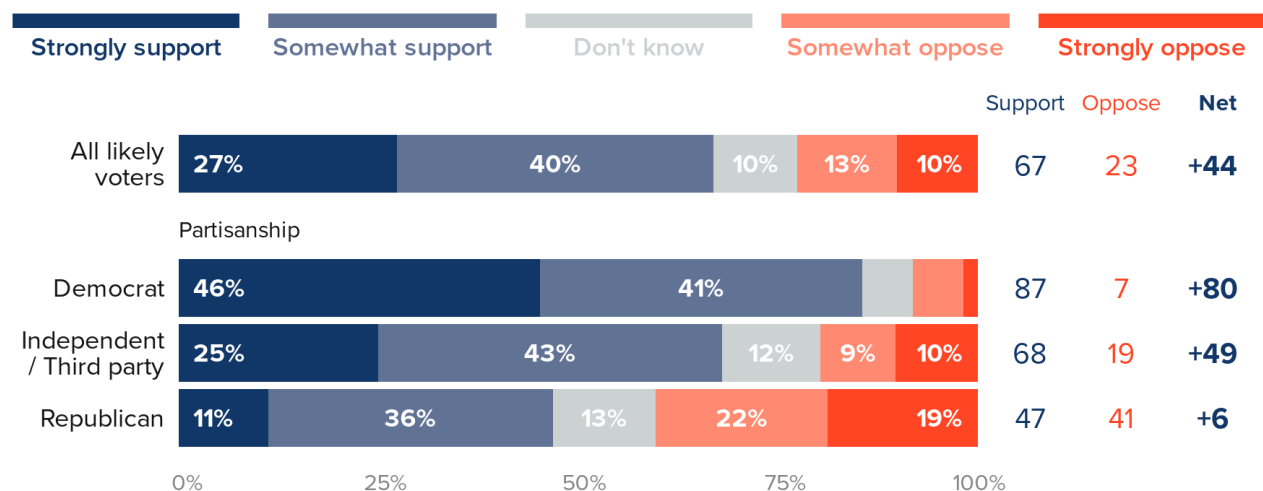
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Additionally, roughly two-thirds of voters (67 percent) support directing a certain percentage of federal funds to projects in communities that are in transit deserts or disproportionately impacted by pollution.

# Voters Support Directing Infrastructure Bill Funding to Underserved Communities

The Infrastructure Investment and Jobs Act will provide nearly \$90 billion in guaranteed funding over the next five years to allow states to modernize, expand, and improve public transportation systems.

Would you support or oppose directing a certain percentage of these funds to projects in communities that live further away from transit systems and are most significantly impacted by pollution?



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Despite IJJA's historic investment in transportation, some emissions modeling projects that the bill will likely do little to reduce greenhouse gas emissions — only achieving 9 percent of the emission cuts we need to meet our climate goals. Given that states will have meaningful discretion over funding implementation, IJJA's impact on carbon pollution depends entirely on how governors spend federal transportation grants — whether they choose to use new federal funding to build more roads and highways or to fully invest in public transit and sustainable transportation.

The recently introduced Inflation Reduction Act of 2022 provides additional investments for clean transportation. The bill allocates \$22.6 billion in tax incentives to decarbonize the transportation sector, mainly by extending the \$7,500 tax credit for the purchase of new electric vehicles (EVs) and \$4,000 for used EVs. The \$369 billion bill also invests in scaling up new clean energy technologies and jobs in America, offers landmark pollution reductions in disadvantaged communities, and is highly popular with likely voters. Notably missing from this bill, however, are significant investments in public transportation.

Investing in equitable and sustainable public transit infrastructure is central to reducing greenhouse gas emissions. However, public transit will need to be accessible and affordable to all communities to make a comprehensive impact and boost socioeconomic growth in the U.S.

## The Benefits of Public Transit on the Environment and the Economy

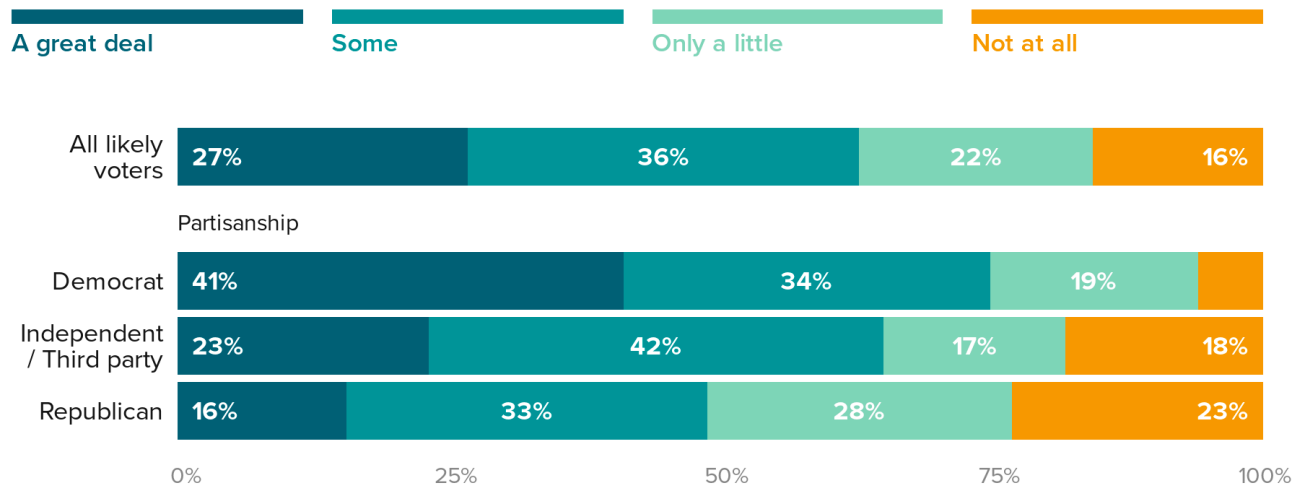
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Riding public transportation is a cost-effective and sustainable way to reduce greenhouse gas emissions. In 2018, public transportation in the U.S. saved approximately 63 million metric tons of carbon dioxide — which is equivalent to taking 16 coal power plants offline for a year. Passengers also contributed 55 percent fewer greenhouse gas emissions per mile by riding transit than those driving or ride-hailing alone. According to the American Public Transportation Association, communities with strong public transportation systems can annually reduce the nation's carbon emissions by 37 million metric tons. To achieve a similar reduction in carbon emissions, every household in New York City, Washington, D.C., Atlanta, Denver, and Los Angeles would have to completely stop using all forms of electricity. While the benefits of public transportation are far-reaching from a sustainability standpoint, transit is also beneficial for community access, development, and mobility.

Transit-oriented developments (TOD) are compact developments built around or within easy walking distance (typically a half-mile) of a transit station and contain a mix of land uses such as housing, offices, shops, restaurants, and entertainment. TODs provide increased economic opportunities and reduce fuel dependence for the residents of these communities. These transit-centered communities can also help lower household transportation costs, boost public transit ridership, reduce greenhouse gas emissions and air pollution, spur economic development, and make housing more affordable by reducing developer expenditures on parking and allowing higher-density zoning. Polling on TODs finds 63 percent of respondents believe their community would benefit “a great deal” or “some” from having a transit-oriented development.

# Voters Believe Their Communities Could Benefit From a Transit-Oriented Development

To what extent do you think your community would benefit from having a transit-oriented development?



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The culmination of longer commute times, inaccessible transit systems, and underinvested transit infrastructure all result in 45 percent of Americans having no access to public transportation. Unfortunately, many communities — particularly communities of color and low-income communities — are systemically priced out of developments that would help mitigate a number of barriers to transportation.

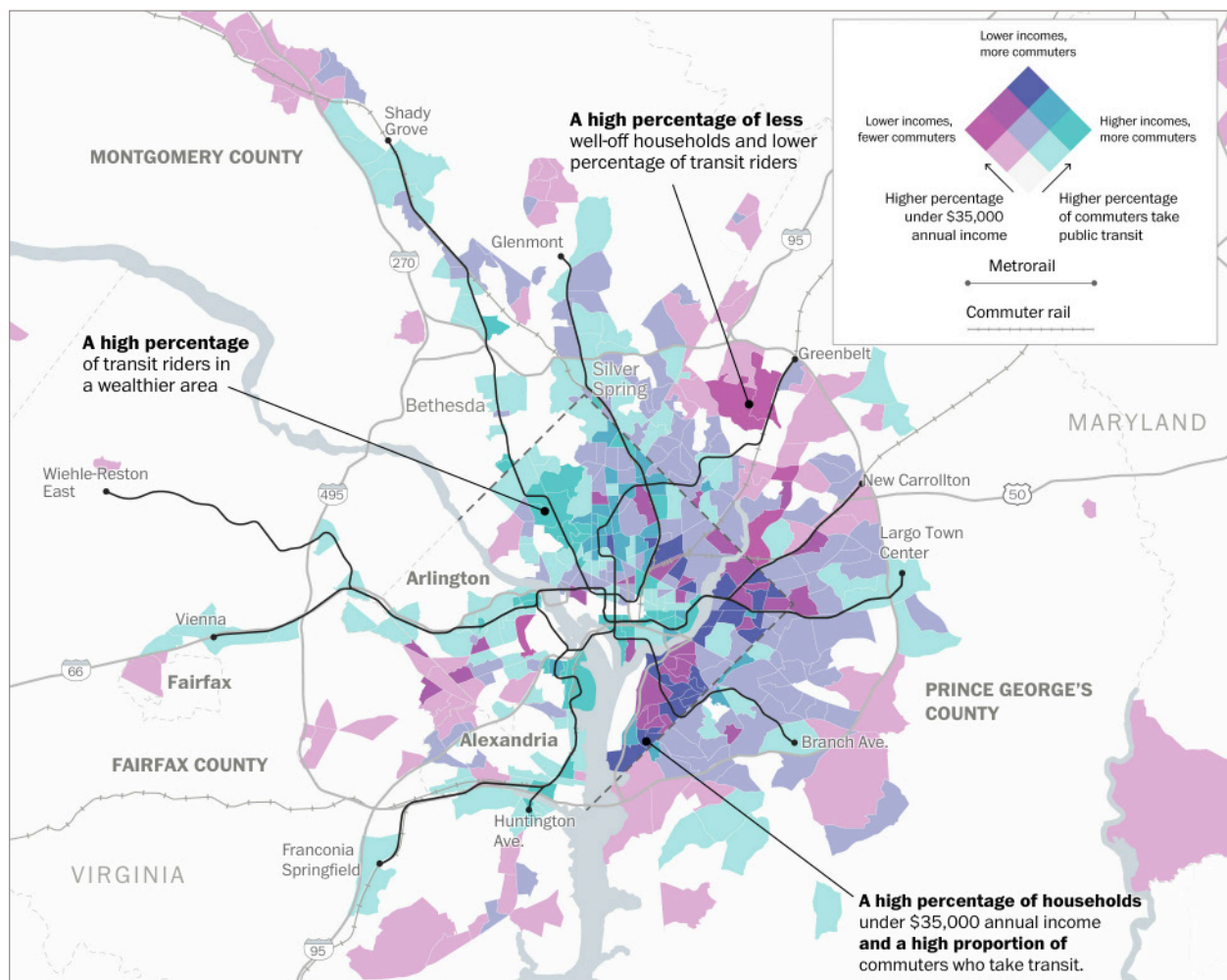
## The Inaccessibility of Public Transit for Communities of Color and Low-Income Communities

Communities of color in the U.S. have historically had unreliable mass transit systems, high transportation costs, and unequal access to public transportation in relation to their white counterparts. This has contributed to longstanding structural racism and associated socioeconomic barriers that have denied marginalized communities a range of opportunities. Many cities and neighborhoods have been shaped by racist and discriminatory policies such as redlining, deed restrictions, zoning and mortgage lending policies — all designed to keep neighborhoods, communities, and cities predominately white and segregated.

Public transportation plays a large role in sustaining the legacy of these policies and excluding marginalized communities from affordable and safe housing, access to jobs, and wealth. For example, the development of suburbs was only made possible by massive public investment in freeways, infrastructure, and mortgage guarantees, during which time the government was underinvesting in urban neighborhoods that were home to a large share of people of color, thus making it harder for these residents to purchase homes.

Today, most communities of color rely heavily on public transportation, but still have varying levels of access and commute times. According to the [TransitCenter analysis of Census data](#), 44 percent of Black New Yorkers relied on transit to get to work in 2019, compared to 39 percent of Asian residents, 36 percent of Latina/o residents, and just 24 percent of white residents. The study also found that white New Yorkers have access to 86 percent more jobs than Black New Yorkers within a 45-minute commute via public transit based on where they live. For other New Yorkers of color, their access to jobs was also significantly lower than that of white residents in a 45-minute commute.

There are also racial and economic disparities in access to public transit and commute times to metro areas. Figure 1 compares Washington, D.C., metro area households that commute to work by commuter rail and transit rail trains with households that have an annual income of less than \$35,000 per year. The map displays a large percentage of households with higher incomes that are also reliant on public transit within city limits and closer to the city center, whereas households with lower incomes are farther away, yet still transit-reliant. Given Washington's unique position bordering Maryland and Virginia, the concentration of lower-income transit commuters is not only limited to D.C., but also throughout Prince George's County — a predominantly African-American county in Maryland.



Above: A map of Washington, D.C., with the percentages of households in the region that commute to work by public transit with the percentage of households with an annual income of less than \$35,000 per year. [Source: Washington Post](#)

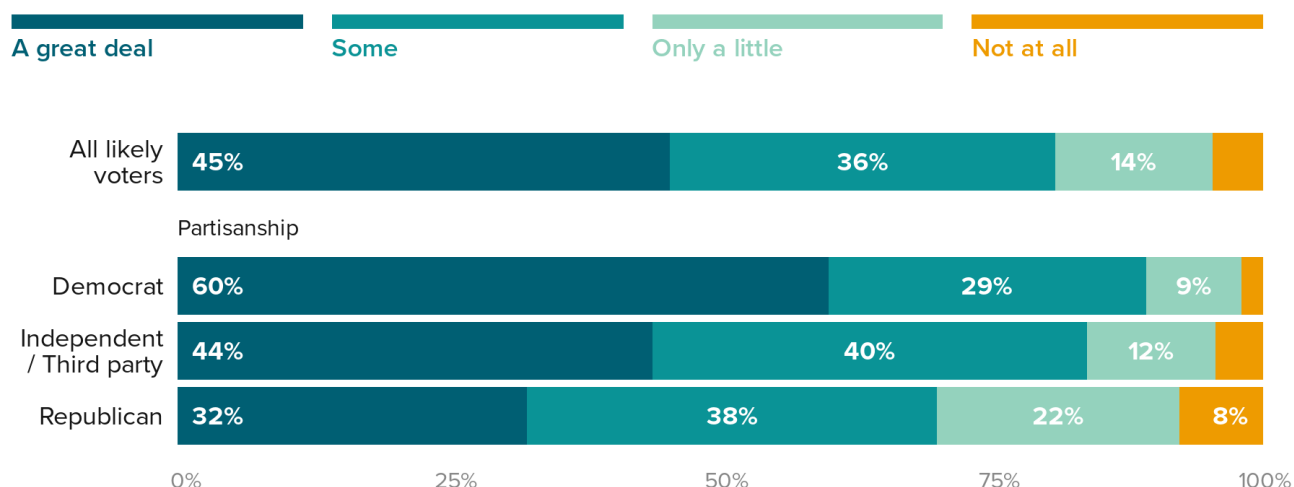
The farther away residents are from transit infrastructure, the more isolated they are from jobs and schools. Within D.C., the unequal access to transit can be largely seen across income lines. Without state, local, or federal intervention, future development in the nation's capital and other regions across the country with similar socioeconomic divides will only exacerbate the present inequities.

## Broad Investment in Public Transit Is Needed to Meet Equity and Climate Goals

Federal and local governments have an important role to play in unlocking the potential that public transit has to boost social, economic, and environmental well-being. Eighty-one percent of likely voters polled by Data for Progress believe that the United States would benefit from expanded and improved public transportation systems, such as trains and buses.

### Voters Believe the United States Would Benefit From Improved Transportation Systems

To what extent do you think the United States would benefit from expanded and improved public transportation systems, such as trains and buses?



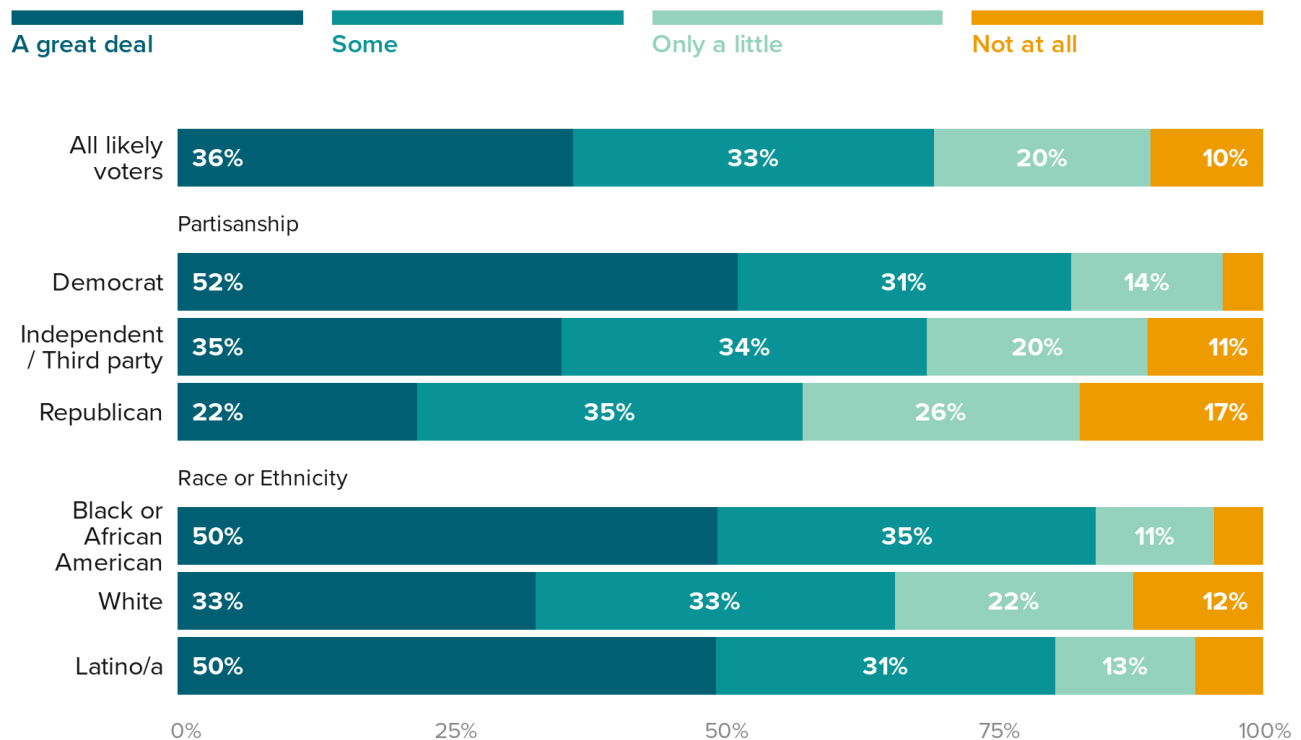
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On a community level, 85 percent of Black respondents and 81 percent of Latina/o respondents believe their own community would benefit “some” or “a great deal” from expanded and improved public transportation systems. Despite the benefits of investing in public transit, the level of investment rarely meets the level of need required to augment public transit infrastructure.

# Voters Believe Their Communities Would Benefit From Improved Transportation Systems

To what extent do you think your community would benefit from expanded and improved public transportation systems, such as trains and buses?



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Although IIJA makes historic investments in the modernization and expansion of public transit across the country, the funding allocated in the bill alone is still inadequate in addressing the critical transportation needs of the country and tackling greenhouse gas emissions in a significant way. The [American Society of Civil Engineers](#) estimates that U.S. public transit systems need about \$176 billion in work right now, and will need almost \$100 billion more in funding by the end of the decade to improve current transit systems that have struggled to be kept in working order due to insufficient funds.

Additionally, this bill also fails to address [the root of the problems](#) that public transportation is burdened with, including infrequency, limited access, delays — and decreasing ridership due to these issues. These problems are often a result of poorly conditioned public transportation systems and the lack of investment needed to keep them in working order. In 2017, the Department of Transportation [reported](#) that 36.4 percent of all facilities, 21.4 percent of systems, and 18.5 percent of vehicles were considered in “poor” condition over a 10-year period. This can lead to slower performances, train and bus malfunctions, and much more, causing more frequent transit delays and infrequency. Also, without robust investment to build new routes and train lines, communities farther from metropolitan areas and transit-oriented development communities will continue to be excluded from the social and economic benefits of living near public transportation.



For example, in 2017, transit ridership fell in 31 of 35 major metropolitan areas in the United States — with losses largely stemming from low ridership on buses but heightened by reliability issues on systems such as Metro in Washington, D.C. Metro specifically attributed about 30 percent of its ridership losses in 2017 to reliability issues, with riders choosing rideshare platforms or personal vehicles instead. In 2022, Metro ridership in D.C. has slightly increased — rebounding from the steep decline during the coronavirus pandemic — but not enough to alter financial projections and exceed pre-pandemic levels. With ridership declines, transit systems are often forced to make cuts that affect performance and reliability despite needing more funding to improve transit infrastructure.

In contrast, higher investment could lead to higher ridership. In Seattle, voters approved three high-priced initiatives to improve transit infrastructure: a \$50 million annual funding boost to bus service, a billion-dollar Bus Rapid Transit expansion, and a \$54 billion light-rail expansion plan that would build 62 miles of light rail. As a result, Seattle’s transit ridership has grown 33 percent since 2010, and as of 2018, over 40,000 Seattle passengers with low incomes had gained access to transit services under a reduced fare with Seattle’s ORCA Lift program.

For many metropolitan areas, increasing the level of investment to maintain and finance current transit infrastructure could lead to further expansion, access, and usefulness of domestic transportation systems. State and federal policymakers have the opportunity and responsibility to improve transit infrastructure in order to expand the benefits of public transit equitably and safeguard the public from rising greenhouse gas emissions.

## Policy Recommendations

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The improvement of transit infrastructure will require comprehensive investment and collaboration between federal, state, and local governments, as well as community members and organizations. To address the aforementioned gaps in transit equity, investment, and sustainability, we must commit to the following:

### RESTORE AND EXPAND PUBLIC TRANSIT INFRASTRUCTURE THROUGH FEDERAL POLICY AND INVESTMENT

IIJA is an essential first step in making historic investments in transit that can revolutionize our nation’s infrastructure while scaling investments in climate. However, targeted investment is required to meet the climate goals of the country and the transportation needs of our communities. To accomplish this, other federal policies have been introduced to address the underinvestment in this form of infrastructure. Primarily, the Green New Deal for Cities and the Public Transportation Expansion Act are federal bills that would expand investment in sustainable public transportation and prioritize cutting greenhouse gas emissions.

The Public Transportation Expansion Act (S.2726) is a bill that would create a federal grant program to fund the construction of new fixed guideway capital projects (i.e., rapid rail, commuter, light rail trains, and other forms of public transit), zero-emission bus rapid transit projects, or other public transportation projects to support access to affordable housing and enhanced mobility for residents in certain disadvantaged communities and low-income riders more broadly. This legislation serves to connect low-income communities and affordable housing facilities with transit networks, thus

strengthening transit-oriented development in areas that need it most. This bill would also allow large transit operators to use federal funds for operating expenses. The Public Transportation Expansion Act offers opportunities for cities and local governments to expand transit access, connect affordable housing and transit to communities earning low incomes, and provide zero-emission transit alternatives.

The [Green New Deal for Cities Act of 2021](#) (H.R.2644) is a bill introduced by Representatives Cori Bush and Alexandria Ocasio-Cortez, among others, that seeks to provide approximately \$1 trillion in relief and funding to state and local governments to respond to the climate crisis — surpassing the level of investment that Congress provided for state and local governments during the pandemic. The success of the policies passed during the pandemic followed the premise that increasing spending in the expansion of critical safety net programs would provide working families the urgent relief that they needed to withstand the effects of the pandemic. The Green New Deal for Cities presents an opportunity to provide significant funding and support to localities as we brace for another persistent global crisis — climate change.

Specifically, the bill requires a minimum of 50 percent of all funding to be used to support frontline communities and encourage local and state governments to strengthen climate mitigation through the funding of climate and environmental justice projects in line with the [Green New Deal](#). Other provisions include supporting collaborative housing stability measures between local governments and community members to prevent [displacement](#); creating new jobs; and protecting workers by including prevailing wage requirements, equitable and local hiring provisions, as well as apprenticeship and workforce development requirements. The Green New Deal for Cities provides state and local governments the opportunities to use their funding to address key challenges posed by climate change and forge sustainable infrastructure, including wind power procurement, clean water infrastructure, air quality monitoring, and public transportation.

Policymakers must prioritize passing the Public Transportation Expansion Act and the Green New Deal for Cities Act to allocate the critical funding necessary to strengthen public infrastructure, equity, and access. However, these two bills alone are insufficient to address the systemic issues prominent in U.S. transportation systems. We must also expand opportunities to reduce traffic congestion and greenhouse gas emissions to meet emissions goals and expand transit-oriented development.

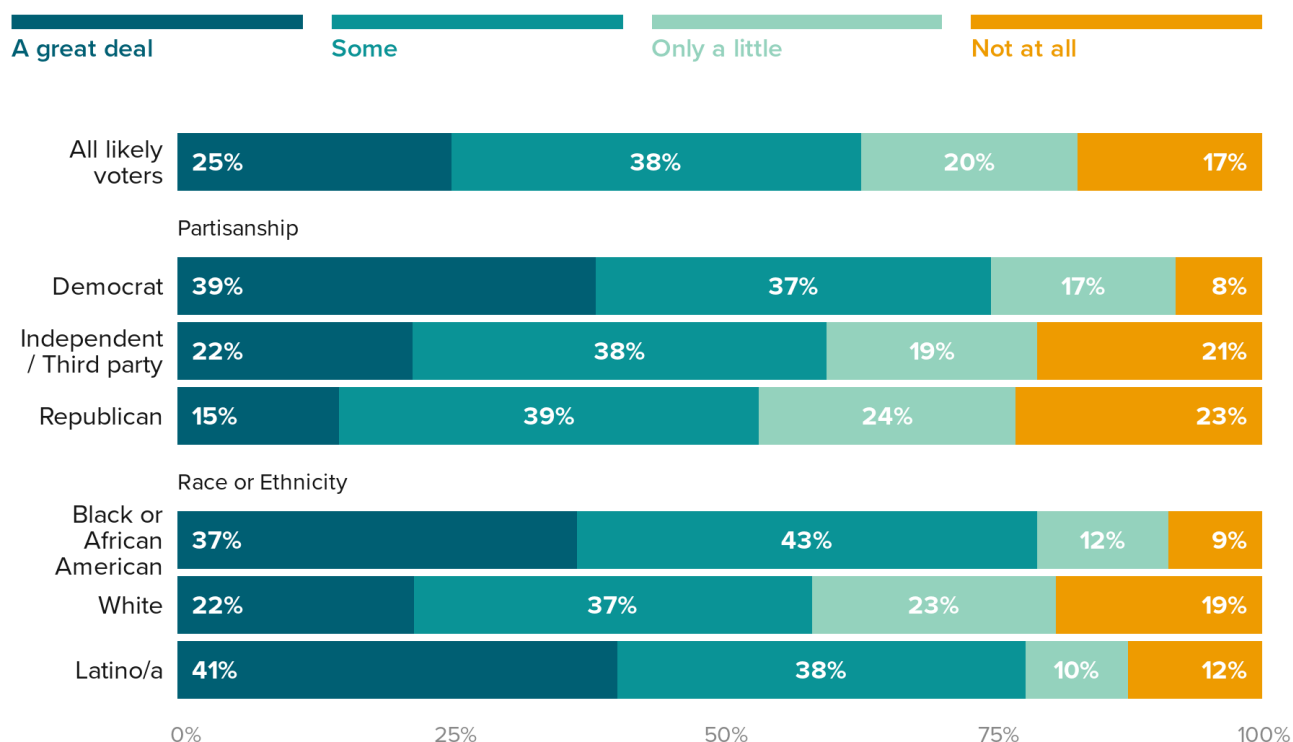
## EXPAND BUS RAPID TRANSIT SYSTEMS TO REDUCE TRAFFIC CONGESTION AND EMISSIONS

Legislation that would create a grant program to fund efficient, publicly owned Bus Rapid Transit (BRT) systems across the country would be transformative for improving and expanding high-quality bus service and transit infrastructure more broadly. BRT systems can improve traffic patterns by avoiding traffic by way of designated lanes, thereby freeing up roads from congestion as well as providing substantial benefits for the environment. BRT systems can reduce greenhouse gas emissions, considering that a full bus emits [only 14 pounds of CO2](#) compared to a passenger car carrying one person, which emits 89 pounds of CO2 per 100 passenger miles. Sixty-three percent of voters indicate that their own community would benefit “some” or “a great deal” from having a BRT system. Among African-American and Latina/o respondents, this share rises to 80 percent and 79 percent, respectively. These results indicate that a majority of likely voters support BRT systems and similar efforts to strengthen transit-oriented developments. Furthermore, in an effort to cut greenhouse gas emissions, BRT solutions should

also include additional climate measures such as requiring all new buses to be electric, ensuring existing buses meet emissions standards, and installing charging infrastructure powered by renewable energy.

## Voters Believe Their Communities Would Benefit From a Bus Rapid Transit System

To what extent do you think your community would benefit from having a BRT system?



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To bolster the previously described efforts for making public transportation systems in the U.S. more accessible and sustainable, proposed federal solutions should also support community-based measures such as housing in collaboration with community members.

### CONNECT TRANSIT INVESTMENT TO COMMUNITY DEVELOPMENT THROUGH STRATEGIC COLLABORATION WITH COMMUNITY MEMBERS

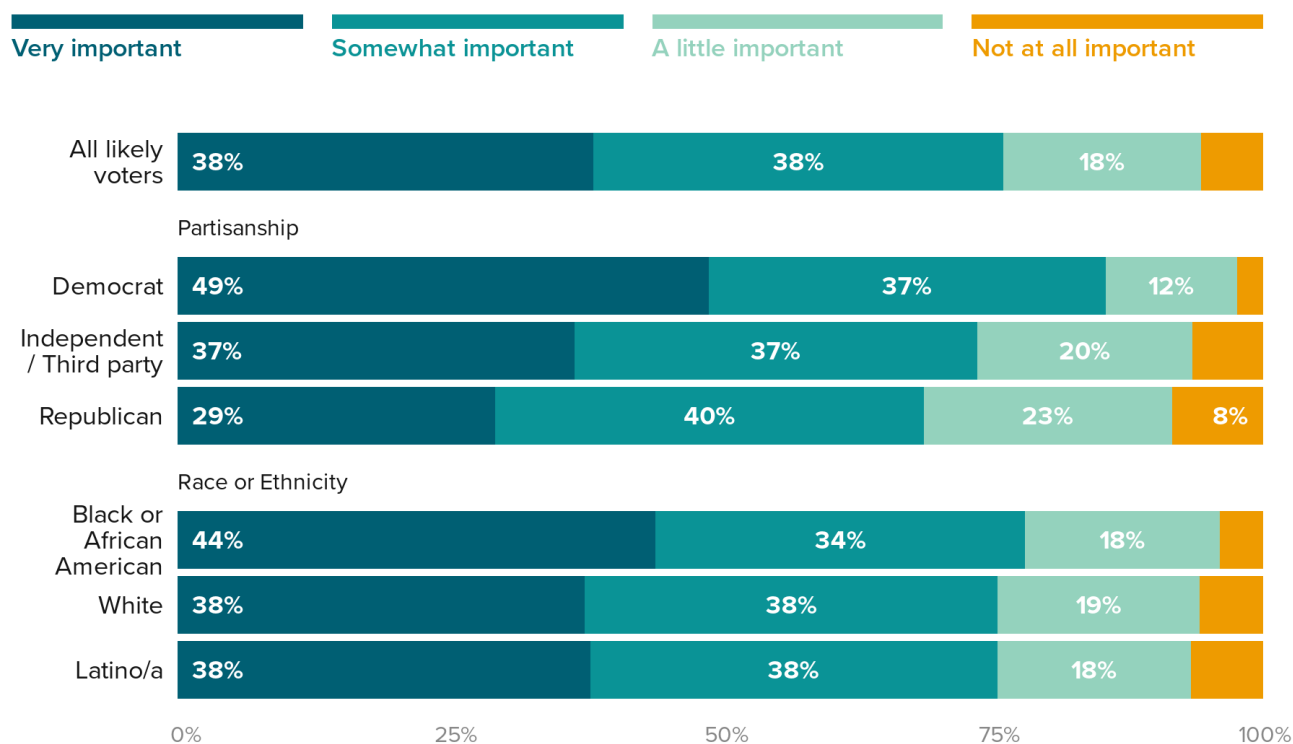
Federal solutions could be supplemented by connecting transit investment to housing security measures and community consultation to prevent displacement and ensure stable and reliable housing options for existing residents. Providing affordable housing near transit is an equity solution that saves on commute times, distance, and money, since the cost of transit is less than that of vehicle ownership. Policies that seek to address this need include the Build More Housing Near Transit Act (H.R.2483), introduced by Rep. Scott Peters in 2021. The bill encourages the construction of low- and middle-income housing in transit-served, walkable locations. The primary goals are to facilitate the construction of more housing to meet demand, increase transit ridership, and maximize federal investments. This legislation also aims

to significantly reduce greenhouse gas emissions and tackle climate change. Some [research indicates](#) that building houses near transit lines reduces travel distances, which thus reduces greenhouse gas emissions. Congress must pass the Build More Housing Near Transit Act to meet the housing and transit needs of communities.

These community-defining measures are pivotal in expanding equity more broadly, but would also need to collect feedback from community members that allows for the development of infrastructure that sufficiently meets their needs instead of uprooting and disrupting their communities. When asked about the process of designing and implementing changes in public transportation, 78 percent of Black respondents and 76 percent of Latina/o respondents indicate it is “very important” or “somewhat important” that local community members are involved in this process.

## Voters Want Local Community Members Involved in Designing Public Transportation Changes

How important or not important do you think it is that local community members are involved in the process of informing local public transportation options and policies?



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Community engagement and feedback are key in assessing the demand, impact and implementation of programs and policies. The intersectional investment in transit and housing requires centering the voices of residents to build a more inclusive, transit-oriented community.



## PROMOTE TRANSIT-ORIENTED DEVELOPMENT BY EXPANDING THE USE OF GREEN VEHICLES AND DEVELOPING MORE WALKABLE COMMUNITIES

Federal, state, and local governments should also expand sustainable transportation alternatives to driving, such as expanding walkable communities and increasing the supply of green vehicles (such as e-bikes and e-scooters), electric buses and taxis, and light rail systems. These parallel efforts would create more accessible and sustainable communities as well as make the investments in public transit infrastructure much more effective. Expanding walkable communities offers more transportation choices (thus reducing strain on public transportation systems), higher levels of social interaction, greater opportunities for physical activity, and reduced emissions from automobile travel. It can also connect people to a larger share of shops, housing, and schools within a short distance, thus reducing the reliance on driving for many of these needs and activities. Local governments should also encourage the use of some of these green vehicles through protected and optimized lanes that could significantly reduce traffic congestion and streamline transit. In particular, studies from cities across North America show that adding protected bike lanes significantly increases bike ridership on those streets, with rates ranging from 21 percent to 171 percent. The increased ridership by bike lanes can result in fewer cars on the road and consequently lower transit-related greenhouse gas emissions. Supplemented with federal policy, these measures offer even more sustainable options for transit, and together, bolster the benefits of transit-oriented developments.

Collectively, these opportunities would not only improve transit infrastructure broadly, but also include integral housing, job, and climate mitigation measures ensuring that communities are equipped with the infrastructure to be economically secure and sustainable for years to come.

## Conclusion

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Revitalizing public transit infrastructure alone will not reverse the acute effects of climate change nor uproot the systemic exclusionary policies that have made public transit and transit-oriented communities inaccessible to communities of color and communities earning low incomes. However, public transportation is essential in connecting people to their communities and the socioeconomic benefits therein. People rely on public transportation for vital activities including work, healthcare, and schooling, but many have faced stringent barriers to access, making public transportation widely unreachable to communities that have needed it the most. Consequently, our environment has suffered as a result, with far more people relying on cars and private transportation, leading to growing greenhouse gas emissions.

Public transit infrastructure desperately needs the funding to improve and expand operations so communities may better utilize the benefits of public transit as well as provide a cost-effective, sustainable, and reliable form of transportation that can cut greenhouse gas emissions significantly. Passing federal policies that expand public transit infrastructure, expand bus rapid transit systems, connect transit to housing security and development measures, and amplify the use of green vehicles and walkable cities will lay the foundation for actualizing a more sustainable and equitable public transit future. Together, these measures will provide communities with the infrastructure to meet their economic and social needs.

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