# TRANSPORTATION

Transportation represents the largest source of carbon emissions in Virginia. In order to change that, we need a shift to a cleaner, balanced, and more equitable transportation system. However, a continued focus on highway construction and expansion, the lack of alternatives to driving, and no cap on greenhouse gas emissions mean that the Commonwealth still has a lot of work to do. In addition to making smarter land use decisions as described in our livable communities chapter, changes should include expanding public transportation, growing rail capacity, electrifying vehicle fleets, and curbing vehicle pollution.

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Potomac River Fall, Loudoun County, Va Image credit: Hugh Kenny

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# **EXECUTIVE SUMMARIES AND CONTACT INFORMATION**

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#### TRANSFORMING TRANSPORTATION

Virginia needs a cleaner, more equitable transportation system. Transportation is the state's largest source of carbon pollution, many roads and bridges need repair, and there are too few alternatives to driving — especially in marginalized communities. There has been recent progress in reorienting transportation around moving people, not just motor vehicles. However, state and regional transportation planning and funding continue to focus too heavily on highway expansion and construction — an approach that is costly to taxpayers, people's health, and the climate while doing little to relieve congestion in the long run. We need to transform this approach to favor cleaner, healthier mobility options that reduce traffic, strengthen our communities, and protect our environment.

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#### **GUARANTEEING TRANSIT EQUITY**

The past year and a half has shown that high-quality, reliable public transit service is essential for Virginians to access their jobs, schooling, healthcare, education, and shopping needs. Beyond transit's vital role in economic growth and social mobility, public transportation is critical to mitigating the climate crisis. Getting Virginians out of their cars and onto the bus, light rail, or Metro requires providing top-notch service and rethinking transit access and affordability. From benches and shelters to GPS live-tracking and zero-fare policies, public transportation can become Virginians' top way to get around with increased investments in our transit systems statewide.

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#### **BUILDING OUT RAIL CAPACITY**

Compelling energy, economic, and environmental benefits flow from maximum use of rail to move both people and goods. Virginia has made significant progress on passenger rail in recent years, but funding is needed to improve the speed, frequency, and reliability of service; extend service to new areas; modernize stations; and improve multimodal connections to them. There needs to be increased attention to freight railroads' needs as well. Rail is pivotal to helping us reach our decarbonization goals. Electrification of mainlines, strategies to switch more trucks to rail, and preservation of abandoned rail corridors for future growth are all vital planning objectives.

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#### ACCELERATING TRANSPORTATION ELECTRIFICATION



The transportation sector is the leading source of carbon dioxide pollution in the Commonwealth, and it produces a number of other pollutants that harm our health and environment. The General Assembly took an important step towards reducing these emissions by passing the Clean Cars bill in 2021, helping to make electric vehicles (EVs) more available in Virginia, but many more steps are needed. Rapidly transitioning from pollution producing fossil fuel-powered engines to electric-powered cars, trucks, trains, and buses will produce numerous public health, economic, and climate benefits, creating a cleaner mobility future for all Virginians.

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#### **CURBING VEHICLE POLLUTION**

Noxious exhaust from Virginia's millions of vehicles disproportionately harms the health of people of color and low-income communities and is the largest source of carbon emissions in the state. To fix both the public health and climate pollution problems, the Common-wealth must set a limit on total carbon emissions from tailpipes and tighten that limit annually. Binding limits on pollution also require that we fund clean transportation solutions. The General Assembly should authorize Virginia to join the Transportation and Climate Initiative Program (TCI-P) and reallocate existing transportation funds to support clean transportation while prioritizing overburdened and underserved communities.

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#### INCREASING ACCESS TO WALKING & BIKING



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# **TRANSFORMING TRANSPORTATION**

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#### **EXECUTIVE SUMMARY**

Virginia needs a cleaner, more equitable transportation system. Transportation is the state's largest source of carbon pollution, many roads and bridges need repair, and there are too few alternatives to driving — especially in marginalized communities. There has been recent progress in reorienting transportation around moving people, not just motor vehicles. However, state and regional transportation planning and funding continue to focus too heavily on highway expansion and construction — an approach that is costly to taxpayers, people's health, and the climate while doing little to relieve congestion in the long run. We need to transform this approach to favor cleaner, healthier mobility options that reduce traffic, strengthen our communities, and protect our environment.

#### CHALLENGE

Significant transportation reforms have been adopted in recent years, including increases in funding for transit, rail, and highway maintenance; the groundbreaking Transforming Rail in Virginia initiative; and the development of SMART SCALE to provide a more objective and transparent basis for selecting projects for funding. However, too much of our state and regional transportation funding continues to be spent on wasteful and damaging highway projects. Even accounting for recent transit and rail funding increases, roughly 73% of the FY2022-27 Six-Year Improvement Program is allocated to highways. This outsized investment in asphalt continues despite the fact that decades of studies and experience have shown that new and wider highways frequently fail to provide long-term congestion relief since they incentivize sprawling development and encourage people to drive more, thereby worsening the heavy traffic they were intended to fix.<sup>1</sup>

#### With over 85 billion miles driven each year in Virginia, transportation generates almost half of all statewide carbon pollution.

This asphalt-centered approach also has profound effects on our communities and environment. With over 85 billion miles driven each year in Virginia,<sup>2</sup> transportation generates almost half of all statewide carbon pollution,<sup>3</sup> and communities of color and under-resourced communities bear a disproportionate share of the health burdens from transportation-related pollution.4 In addition, the number of pedestrians hit and killed by cars is rising, and there has been a disproportionate impact on people of color as well as people walking in low-income communities.<sup>5</sup> Moreover, new roads destroy natural resources such as forests and wetlands, which absorb carbon and increase communities' resilience to sea level rise and flooding. New roads often do little to improve mobility and access for the hundreds of thousands of Virginians who do not own a personal vehicle and instead rely on other transportation methods.

#### SOLUTION

Meeting the climate crisis and improving the health, equity, and mobility of Virginians requires moving away from a transportation paradigm focused on ever-increasing asphalt. It requires focusing funding on maintaining existing infrastructure through a "fix it first" approach and shifting substantial amounts of our state and regional transportation budgets from highway construction to transit, rail, bicycle, and pedestrian projects, as well as telework. Such a shift is also essential for the Commonwealth to remain economically competitive. Affordable transit and other alternatives to driving can provide critical access to jobs, healthcare, and essential services. Today's businesses increasingly seek to locate in walkable communities with good access to public transportation, with Amazon's location of its second headquarters next to two Metro stations just one of many examples.

In addition to shifting state and regional transportation funding, we need policy reforms to make pollution reduction and addressing climate change a central component of our transportation planning and funding processes. We must strengthen consideration of the climate change effects of transportation plans and project proposals (as well as the impacts of climate change on transportation) and ensure that state and regional plans serve to reduce - rather than exacerbate - emissions of greenhouse gases and other pollutants. SMART SCALE and regional prioritization processes must give greater weight to greenhouse gas emissions and climate change-related effects. In addition, the Commonwealth must set a specific goal of reducing vehicle miles traveled (VMT) by investing in alternatives to driving, and step up efforts to accelerate the electrification of vehicles and expand charging infrastructure for the driving we continue to do.

# **POLICY RECOMMENDATIONS**

Increase the share of state and regional funding for transit, rail, bicycle, and pedestrian infrastructure to 50% by 2030.

Strengthen the "fix it first" requirement in Virginia Code § 33.2-358, to ensure that road funding first covers maintaining and repairing existing infrastructure.

Prioritize carbon pollution reduction in transportation planning and funding, including strengthening the review of climate change effects for major projects, requiring state and regional plans to cut carbon emissions and reduce vehicle miles traveled (VMT), and increasing the weight given to climate factors in funding prioritization processes.

Apply prioritization standards similar to SMART SCALE to all regional funding and strengthening environmental review processes for local and regionally funded projects.

Set a specific goal to reduce statewide VMT by 20% from 2021 levels by 2050.

Metro Station age credit: Robin Kent

# **GUARANTEEING TRANSIT EQUITY**

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#### **EXECUTIVE SUMMARY**

The past year and a half has shown that high-quality, reliable public transit service is essential for Virginians to access their jobs, schooling, healthcare, education, and shopping needs. Beyond transit's vital role in economic growth and social mobility, public transportation is critical to mitigating the climate crisis. Getting Virginians out of their cars and onto the bus, light rail, or Metro requires providing topnotch service and rethinking transit access and affordability. From benches and shelters to GPS live-tracking and zero-fare policies, public transportation can become Virginians' top way to get around with increased investments in our transit systems statewide.

#### CHALLENGE

Virginia's forty-plus transit providers are made up of incredibly resourceful and dedicated public servants, but decades of underfunding and fiscal uncertainty have produced transit systems far from befitting our prosperous state with its annual GDP of \$556 billion. Too often, bus riders are treated like second-class citizens, forced to wait up to an hour without benches or shelters to protect them — and that's if the buses come at all. In 2018, riders of Hampton Roads Transit (HRT) had to deal with 18,653 scheduled buses that never showed up.<sup>1</sup>

# In 2018, riders of Hampton Roads Transit (HRT) had to deal with 18,653 scheduled buses that never showed up.

Virginia's transit providers are doing the best they can with limited funding for operational costs that in turn hinders service improvements and better wages; two of our state's biggest bus systems—HRT and the Greater Richmond Transit Company—were ranked two of the three worst-funded public transit systems in the country per capita.<sup>2</sup> In the absence of adequate funding and infrastructure improvements, such as better sidewalks and bus lanes, transit providers cannot invest in modernizing their systems to provide the opportunities needed for more reliable, safe, and affordable service. These include high-quality bus-stops and bike shelters, user-friendly apps, more full-time salaried bus drivers, electric fleets, increased accessibility for differently abled riders, and expanded operation hours that support lower-income workers.

When it comes to the climate crisis, the single worst contributor in the Commonwealth that has the largest impact per ton of emissions are light-duty passenger vehicles.<sup>3</sup> We simply cannot seriously meet our climate goals, without reducing the greenhouse gas emissions (GHG) from our transportation by 43% by 2030.<sup>4</sup> Even if the U.S. is able to switch 70 million drivers to EVs, we still need to reduce per-capita vehicle miles traveled (VMT) by 20% in the next nine years via solutions that include increased transit ridership.<sup>5</sup>

#### SOLUTION

If equitable climate change mitigation is an executive and legislative priority, as evidenced in Virginia's electric vehicle and fare free transit program commitments, the executive administration and state legislators must elevate transit as a climate policy priority so all Virginians reap the benefits of changes in our public transportation system that are designed to meet the climate crisis.<sup>67</sup>

Transit systems provide countless economic opportunities to small, large, rural, and urban municipalities alike. Transit agencies need coordinated state, regional, and local support to increase service access and affordability, rider and pedestrian safety, improve service amenities, and reduce local transportation pollution. Government support allocated in this manner must ensure people-of-color and low-income riders, who often rely on local transit systems and pay a disproportionate amount of their household income on transportation, directly benefit from these types of improvements.

To provide high-quality, reliable public transit service that also increases ridership and helps the state meet its climate change and resiliency goals, Virginia must continue to increasingly shift transportation funding into transit systems and transit-oriented development. This will develop a state budget that modernizes our transit systems and increasingly allocates funding to and builds service capacity in communities of color and low-income areas. These riders should directly benefit from these investments, having borne the burden of transportation emissions and relied on transit for generations to support their families, connect with their community, and meet daily and emergency food, health, and education needs.<sup>8</sup>

### **POLICY RECOMMENDATIONS**

Increase transit and rail capital and operating funding from the 2020 omnibus levels to at least 50% of the entire state transportation budget by 2030 (see also: *Transforming Transportation*, pg 67).

Remove the funding cap of 25% on Virginia's zero-fare program, and sustain its current funding levels, so transit systems can remain fare free over the next 3-5 years.

Advance recommendations from the Department of Rails & Public Transportation's Transit Equity & Modernization Study.

Through executive and legislative action, champion public transportation as a central strategy to meeting Virginia's climate change mitigation and resilience goals.

Require VDOT to support the conversion of arterial lanes to dedicated bus lanes to reduce VMT and GHG emissions through transit ridership.



# **BUILDING OUT RAIL CAPACITY**

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#### **EXECUTIVE SUMMARY**

Compelling energy, economic, and environmental benefits flow from maximum use of rail to move both people and goods. Virginia has made significant progress on passenger rail in recent years, but funding is needed to improve the speed, frequency, and reliability of service; extend service to new areas; modernize stations; and improve multimodal connections to them. There needs to be increased attention to freight railroads' needs as well. Rail is pivotal to helping us reach our decarbonization goals. Electrification of mainlines, strategies to switch more trucks to rail, and preservation of abandoned rail corridors for future growth are all vital planning objectives.

#### CHALLENGE

Virginia's investments between 2008 and 2019 in improving and expanding passenger rail service resulted in a 31% increase in passenger rail service, a 65% increase in ridership, and expanded daily Amtrak Regional service to 2.5 million more Virginians.<sup>1</sup> In 2019, our Regional trains carried over 924,000 passengers – taking over 187 million passenger miles off our roads, reducing fuel consumption by nearly 3.9 million gallons, and preventing the release of 35,000 metric tons of CO2 pollution.<sup>2</sup>

The passenger experience needs continued improvement. Train travel-times and reliability are less than ideal, many stations need repair and updating, and transit connections between rail stations and activity centers are often lacking.

Additional service is needed as well. Our passenger rail network is primarily set up for northsouth travel and there is very limited east-west service. Train travel is less polluting and more energy efficient than driving. Electrifying rail in Virginia would be much cleaner, but cost and other barriers have blocked this so far.

In terms of freight, a central challenge is that Class One railroads are privately owned and driven by a focus on maximizing returns to shareholders rather than the public interest. Recently, the freight railroads have focused on downsizing and disinvesting their assets and workforce, leaving our roadways and truckers to take on the additional freight movement.

#### SOLUTION

Since December 2019, the state has announced agreements with CSX and with Norfolk Southern to purchase a total of 412 miles of railroad rightof-way and 251 miles of railroad trackage, as well as construct 50 miles of new railroad trackage and double railroad capacity between Washington, DC and Virginia by expanding the Potomac River railroad crossing.<sup>3</sup> These agreements, called the Transforming Rail in Virginia program (TRVA), will allow six new roundtrip Amtrak Regional trains, extension of service from Roanoke to Christiansburg, and five more Virginia Railway Express trains on the Fredericksburg line (including weekend service). Additionally, in 2020 the Virginia General Assembly created the Virginia Passenger Rail Authority (VPRA) to own, maintain, implement, and operate the Commonwealth's passenger rail network.

# The Transforming Rail in Virginia program will reduce the travel time of our trains and increase their reliability.

Funding for the TRVA program is essential. In addition to increasing service, the projects identified in the TRVA should reduce the travel time of our trains and increase their reliability. Implementation of these and other projects also depends on continuing to set up the VPRA. The state is currently conducting a feasibility study for the return of direct east-west passenger rail service along the Commonwealth Corridor as part of their 2022 Virginia Rail Plan; and they are updating their station modernization and improvement plan.

The TRVA agreements will allow for future electrification of our rail service when the DC-Richmond-North Carolina corridor is fully built out. We should look for opportunities such as dual-mode engines and other technologies that will allow the state to begin constructing electrified portions of our rail corridors.

We should also look at incentives for moving freight from trucks to tracks while also being prepared for additional abandonments of rail lines by the Class One railroads and ensure the Commonwealth is ready to purchase them for future passenger and/or freight rail service. Elected representatives should be vigilant for opportunities to make freight railroads more responsive and responsible to public interest concerns.

# **POLICY RECOMMENDATIONS**

Protect rail funding and follow through on the Transforming Rail program and complete the Commonwealth Corridor feasibility study of returning east-west (New River Valley-Charlottesville-Richmond-Hampton Roads) passenger rail service across the state.

Modernize rail stations and provide affordable and reliable multimodal connections between stations and activity centers.

Authorize a state study of the opportunities to expedite the electrification of our rail corridors.

Fund a rigorous study of the economic and environmental life-cycle costs and benefits of adding new freight capacity on rail versus on the highway in the I-81 Corridor.

Protect any potentially abandoned rail corridors through public purchase for future service and/or rails with trails.

Virginia's investments in improving and expanding passenger rail service expanded Amtral Regional to 2.5 million more Virginians.

# **ACCELERATING TRANSPORTATION ELECTRIFICATION**

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#### **EXECUTIVE SUMMARY**

The transportation sector is the leading source of carbon dioxide pollution in the Commonwealth, and it produces a number of other pollutants that harm our health and environment. The General Assembly took an important step towards reducing these emissions by passing the Clean Cars bill in 2021, helping to make electric vehicles (EVs) more available in Virginia, but many more steps are needed. Rapidly transitioning from pollution producing fossil fuel-powered engines to electric-powered cars, trucks, trains, and buses will produce numerous public health, economic, and climate benefits, creating a cleaner mobility future for all Virginians.

#### CHALLENGE

The transportation sector generates almost half of Virginia's carbon dioxide emissions.<sup>1</sup> These emissions have negative climate, public health, and economic impacts, and disproportionately affect low-income populations and communities of color, who breathe 66% more air pollution from vehicles than white residents on average in the Northeast and Mid-Atlantic.<sup>2</sup> As the world finds itself in this decisive decade to avoid the worst impacts of climate change, these toxic emissions must be addressed as quickly as possible.<sup>3</sup>

Virginia-specific vehicular particulate pollution (PM<sub>2.5</sub>) accounts for 92 deaths, 2,600 cases of exacerbated asthma, and 10,000 lost workdays each year.<sup>4</sup> When considering transportation emissions in their entirety, these emissions led to 750 premature deaths in Virginia in 2016.<sup>5</sup> To comprehensively address carbon pollution, cleaner transportation alternatives such as transit and rail need to be expanded, and thoughtful land use incentivized and pursued, in order to reduce vehicle miles traveled (see *Guaranteeing Transit Equity*, pg 63 and *Increasing Access*  to Walking & Biking, pg 71), but we must also simultaneously accelerate transportation electrification to eliminate emissions from the vehicle trips that remain.

While electric cars and buses are far cheaper to own in the long run, and battery prices are falling, the higher upfront purchase price is keeping these benefits out of reach for many Virginians, particularly low- and moderate-income communities.<sup>67,8</sup> Many households also lack access to reliable charging infrastructure, as roughly 40% of U.S. households don't park within 20 feet of an electrical outlet, making access to public EV charging essential for widespread adoption.<sup>9</sup> Bridging these affordability and accessful and equitable transition to electric mobility.

#### SOLUTION

Every gas-powered vehicle that gets replaced with an electric model helps clean our air and supports the Commonwealth's climate goals. When powered by Virginia's current electricity mix, EVs produce up to 70% fewer emissions compared to internal combustion engine vehicles.<sup>10</sup> And as Virginia's grid gets cleaner and cleaner, the EVs on our roads will too. The more Virginia transitions to electrified transportation, the more the entire Commonwealth benefits.

#### When powered by Virginia's current electricity mix, EVs produce up to 70% less emissions compared to internal combustion engine vehicles.

By providing thoughtfully designed financial incentives that make EVs, electric buses, and e-bikes more affordable, Virginia can help put electric mobility within reach for more people and accelerate adoption rates.<sup>11</sup>

Reliable access to charging infrastructure for every neighborhood will also help accelerate transportation electrification. Current studies and investments are underway to help Virginia map out and implement further infrastructure developments, but simple fixes exist that can also help improve the accessibility of existing infrastructure.<sup>12,13</sup>

Virginia's government can also lead by example by electrifying its fleet. Progress is already underway in the City of Roanoke, where fueling and maintenance costs have been reduced by 80%. State and municipal fleets are uniquely poised to take advantage of the lifecycle savings EVs provide<sup>14</sup> Virginia needs a roadmap to ensure state and municipal vehicle fleets are electrified as soon as possible.<sup>15</sup>

From reduced greenhouse gas emissions and decreased dependency on foreign oil, to better air quality and the creation of new local jobs, transitioning to electric vehicles is good for both state residents and our economy as a whole. Supporting Virginians in this transition means making electric mobility options more accessible and affordable while leading by example.

### **POLICY RECOMMENDATIONS**

Allocate robust funding for financial incentives to expand access to electrified mobility and help Virginians overcome the higher upfront cost of EVs, electric school and transit buses, and e-bikes.

Improve access to charging infrastructure by providing funding for EV chargers, protecting EV charging stations, and streamlining EV charging signage.

Conduct a fleet electrification feasibility study of all publicly-owned vehicles in Virginia, including inventory, critical replacement list, cost analysis of EV fleet adoption targets, and identify opportunities to implement fleet pools and utilize vehicle-to-grid technology, prioritizing vehicles used in areas with the poorest air quality.

Ensure all efforts to accelerate transportation electrification prioritize under-resourced communities with higher levels of air pollution and respiratory illnesses.

Goose Creek, Fauquier County, Va

# **CURBING VEHICLE POLLUTION**

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#### **EXECUTIVE SUMMARY**

Noxious exhaust from Virginia's millions of vehicles disproportionately harms the health of people of color and low-income communities and is the largest source of carbon emissions in the state.<sup>1</sup> To fix both the public health and climate pollution problems, the Commonwealth must set a limit on total carbon emissions from tailpipes and tighten that limit annually. Binding limits on pollution also require that we fund clean transportation solutions. The General Assembly should authorize Virginia to join the Transportation and Climate Initiative Program (TCI-P) and reallocate existing transportation funds to support clean transportation while prioritizing overburdened and underserved communities.

#### CHALLENGE

A fundamental problem with our transportation system is that the people who suffer the worst from its pollution tend to enjoy its conveniences the least. Transportation is the largest source of carbon dioxide pollution in Virginia.<sup>2</sup> The deceptively cheap price of gasoline and diesel encourages more driving, while the low-income communities most vulnerable to the added stressors of climate change are the ones most likely to be impacted by them.<sup>3</sup> In addition, the health problems caused by the soot, smog, and ozone from car exhaust are inflicted on people who live and work in close proximity to high-traffic areas. Those communities are disproportionately BIPOC and low-income.<sup>4</sup>

Two policy gaps exacerbate these inequities. First, the true cost to society of burning gasoline and diesel is not reflected in the price at the pump. This encourages people to buy more gasoline than they would if the full cost and health harms of gasoline were incorporated into the price. Many of the people buying the fuel do not pay the unfair health costs associated with the pollution their driving causes, though they do enjoy the benefits.

Second, Virginia has no policies in place to prevent transportation pollution from increasing. Fuel efficiency standards and state inspections provide some limit to pollution, but the total vehicle miles traveled in Virginia continues to increase, and with it, total air pollution, causing 750 premature deaths annually.<sup>5</sup>

This pattern of ever escalating dependency on polluting cars and trucks will continue, unless the policies that created it are changed.

#### SOLUTION

#### Limiting carbon emissions from tailpipes and tightening that limit annually is essential. That binding limit on pollution also requires that we fund clean transportation solutions.

In addition to reallocating funding away from carbon-intensive transportation priorities, a boost from new funding is essential to swiftly transition to low-carbon transportation, while also increasing equity and reducing air pollution in overburdened and underserved communities.

Similar to the Regional Greenhouse Gas Initiative (RGGI), additional transportation funding can be provided by the Transportation and Climate Initiative Program (TCI-P), which would limit carbon emissions from transportation fuel. That limit would gradually tighten every year. As a further benefit, other pollutants from vehicle exhaust would also decrease, resulting in improved public health. Under TCI-P, gasoline and diesel wholesalers would pay a fee for the carbon pollution caused when end users burn the fuel. The fees are expected to result in an average \$300 million a year<sup>6</sup> in proceeds to Virginia, providing the necessary resources to invest in projects that reduce vehicle miles traveled and expand Virginians' ability to engage with their communities both economically and socially.

The resulting price increase at the gas pump would be substantially less than regular fluctuations in gas prices (see *Figure 1*) below. That modest increase would be a small nudge to drivers to choose alternatives: combine trips, buy more fuel-efficient or electric vehicles, or take public transit. The \$300 million/year in proceeds will make those alternatives more prevalent and accessible, especially for people who have been historically underserved or overburdened.

| Figure 1

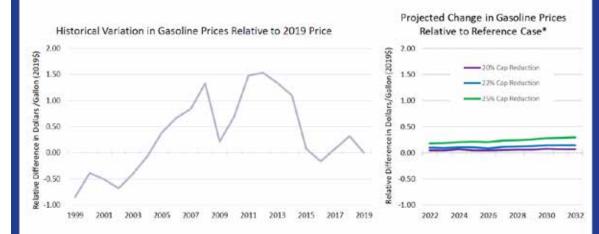
### **POLICY RECOMMENDATIONS**

Authorize Virginia to join the Transportation and Climate Initiative Program (TCI-P) and dedicate all proceeds from its carbon pollution fees towards projects that reduce transportation emissions, prioritizing overburdened or underserved communities.

Reallocate transportation funds to fully support equitable access to reliable transit, new walking and biking infrastructure, and a swift transition to electrified transportation (see *Transforming Transportation*, pg 61).

Allocate \$2 million for localized air quality monitoring of PM<sub>25</sub> levels at high-traffic areas in overburdened neighborhoods.

### Modeled Gasoline Prices in Policy Scenarios Compared with historical variations



\*If fuel companies decide to pass on allowance costs it could mean an incremental price increase in 2022 of \$0.05, \$0.09 or \$0.17 / gallon in the 20%, 22% and 25% Cap Reduction Scenarios, respectively. This is not a prediction of gasoline prices in the future. Several factors affect future gas prices, including policy and market forces.



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# **INCREASING ACCESS TO BIKING & WALKING**

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#### EXECUTIVE SUMMARY

Every trip in Virginia starts off on foot. Walking and biking are important modes of transportation on their own but prove even more critical as first- and last-mile connections to rail and transit. Most Virginians don't walk or bike as much as they would like because our infrastructure does not allow them to do so. Biking on our roads often feels unsafe and pedestrian fatalities have surged across the Commonwealth over the last decade. The General Assembly needs to dedicate funding and enact policies that not only keep Virginians safe while walking and biking but actually expand access to these two healthy, affordable, and sustainable ways of getting around.

#### CHALLENGE

Virginia will not achieve its climate goals until walking and biking are safer. As transportation investments continue to be made in rail and transit systems, Virginians need safe ways to access these networks while reducing their carbon footprints.

# 43% of people report the desire to ride bicycles more<sup>1</sup> but many are limited by safe cycling infrastructure access.

Forty-three percent of people report the desire to ride bicycles more<sup>1</sup> but many are limited by safe cycling infrastructure access. Additionally, there is a high percentage of low-income families who rely solely on walking and biking for transportation. Pedestrian deaths per billion vehicle miles traveled (VMT) in Virginia increased in 2020, although car traffic was reduced overall, highlighting a need for safer infrastructure.<sup>2</sup> As road and pedestrian fatalities continue to climb, Black and brown pedestrians are up to twice as likely to be killed.<sup>3</sup> Virginia's dedicated trail budget is a great start but falls short of making major infrastructure changes that will save lives by physically separating people biking and walking from drivers. Furthermore, bicyclists need the proven crash reduction benefits from having the freedom to yield at stop signs.

Virginia is one of four states that regularly denies crash victims damages and recourse due to our contributory negligence law, which states a party to a crash found to be even 1% at fault is not entitled to damages that would cover medical bills. This especially impacts the pedestrian and biking communities, particularly those of low-income populations or populations of color, who must go to great, sometimes impossible, lengths to prove their innocence. These populations are also the least likely to be insured or be able to pay expensive medical bills.

#### SOLUTIONS

# Increased funding for multi-use trails with a transportation focus

Nothing is safer for people biking and walking than physical separation from drivers. Localities need funding from all government levels to build solutions to increased traffic fatalities.

# Allow bicyclists and pedestrians more freedom<sup>4</sup> to choose their safest course

The Safety Stop, which allows bicyclists to yield at stop signs, was shown to contribute to a 23% reduction in bike crashes at intersections in a Delaware 5-year study.

#### More e-bikes

According to the Federal Highway Administration, automobiles are used for 46% of trips under three miles. E-bikes help to break the cycling barrier for people of different physical abilities and fitness levels. E-bikes also provide the benefits of access to employment, education, and utility that cars do at a small fraction of the upfront price and maintenance costs.<sup>5</sup> However, the upfront cost of e-bikes remains an additional barrier.

#### Equilibrate access to post-crash damages

Join 46 other states in replacing contributory negligence with comparative negligence, allowing financial coverage comparable to fault for injured parties in a crash. Medical bills for an injured pedestrian struck while in a crosswalk shouldn't be denied because of "1% fault", which could be arbitrarily determined related to things such as the lighting or time of day.

# A commitment to ending traffic fatalities in Virginia across all agencies and policies

The safer transportation, the more freedom we have to choose cleaner modes. It will take every level to achieve Vision Zero, a resolution to lower traffic fatalities in Virginia to zero.

## **POLICY RECOMMENDATIONS**

Increase annual multi-use trail budget to \$20 million, providing access to life-saving projects across the Commonwealth.

Enact "Safety Stop" policy, allowing bicyclists to reduce crash probability.

Establish an e-bike rebate program, increasing access to transportation for all, e.g. a 30% rebate, up to \$450, on the purchase price of a qualifying e-bike.

Enact a Comparative Negligence policy for vulnerable road users, removing barriers to damages and increasing medical coverage for injured pedestrians and bike riders.

Commit to reaching Vision Zero by 2050, with a 50% reduction in death by vulnerable road users over 2009 levels by 2035. Focus on our most vulnerable, prioritize reducing speeding, and increase dedicated walking and biking infrastructure.





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